

CALIFORNIA COASTAL COMMISSION
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NORTH CENTRAL COAST
REGIONAL COMMISSION

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June 13, 1979

RECEIVED

TO: STATE AND REGIONAL COMMISSIONERS, AND INTERESTED PUBLIC

FROM: MICHAEL L. FISCHER, EXECUTIVE DIRECTOR

SUBJECT: RESOLUTION ON PUBLIC WORKS PLAN AND SPECIFIC PROJECTS PROPOSED BY
SAN FRANCISCO WASTEWATER MANAGEMENT PROGRAM

STAFF NOTE:

This public works plan and several specific projects of the San Francisco Wastewater Management Program present both procedural and substantive issues which are complex and difficult. If it were not for overwhelming public benefit of much-improved bay and ocean water quality resulting from this proposal, a more cautious approach would be appropriate. But the momentum of the San Francisco Wastewater Management Program, after many years of inertia, must not be stalled. The Commission has expedited its review of this proposal to the fullest extent possible under the Coastal Act.

The Commission can approve this program without causing delays, but must require reasonable and necessary conditions to redirect the City's efforts in order to protect coastal resources and public recreational access. The proposed conditions modify several aspects of the program; the most controversial change relates to the Westside Storage and Transport Structure and its effect on Ocean Beach.

A sandy recreational beach is the quintessential coastal resource. Its protection is among the highest priorities of the Coastal Act. Locating the Transport on the dynamic shoreline at Ocean Beach requires the most conservative and prudent measures to preserve a usable shoreline. The probability of the structure's exacerbating the documented erosion of the beach has been verified by the preponderance of scientific evidence. However, the extent, degree and chronology of this process remains the subject of legitimate debate among experts. Such uncertainty can be accepted as long as the result of this Commission's action is not a shoreline bereft of sand.

The changing supply of sand is both the problem and the solution to erosion. A natural beach and dune system is the most effective protection for the shoreline, far better than any manmade seawall. The recommendation requires that a strategy to restore such a system be incorporated into the project. The City is required to make every feasible effort to accomplish the following:

- Nourish the beach from available offshore sand supplies
- Restore the beach and dunes with excess sand from the projects' excavations
- Maintain this sand in the system by effective plantings and maintenance
- Periodically replenish the sand when storm waves threaten the transport and highway
- Locate all permanent structures as close to the natural shoreline "equilibrium line" as is feasible

One of the most significant mitigation measures included in the City's application is the reconstruction of the Great Highway as a gently curving, attractive recreational road with greatly improved pedestrian underpasses. While the location of

the Westside Transport to the east side of the corridor will require a less sinuous roadway than the City proposed, all of the attractive features of the proposed plan can be located within this narrower corridor. But the improved beach access in the plan would be futile if the beach is not usable after the project is constructed.

Only with these good faith efforts, combined with mitigation measures to minimize the impacts of six years of massive construction work on coastal zone resources and access, can approval of this program be consistent with the Coastal Act of 1976.

Adopted June 6, 1979

PUBLIC WORKS PLAN RESOLUTION

I. Approval with Conditions

The Commission finds that the proposed San Francisco Wastewater Public Works Plan is, as conditioned below, in conformity with Chapter 3 of the California Coastal Act of 1976 (commencing with Public Resources Code, Section 30200); and that there are no feasible alternatives, or feasible mitigation measures, as provided in the California Environmental Quality Act, available which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

II. Conditions

A. Construction Mitigation Conditions. All specific projects proposed as part of this public works plan shall include evidence satisfactory to the Executive Director that the following mitigation measures are to be implemented:

amended
1. Shuttle Bus. Institution of a shuttle bus system during construction of the Westside Transport. This system shall provide bus service along the upper Great Highway from Fulton Street to a parking lot at Fort Funston (south of Sloat Blvd.) between the hours of 7:00 a.m. and 7:00 p.m. Headways shall be no greater than ten minutes on weekends, and holidays and at construction workers' shift changes. At all other times headways shall be no greater than 30 minutes. The City shall provide a report on ridership of the shuttle to the Commission six months after commencement of construction. If service is inadequately used, the Executive Director may authorize termination of service.

2. Pedestrian Crossings. Provision of at least 7 pedestrian accessways across the upper Great Highway between Fulton Street and Fort Funston. These may be temporary and shift in location as construction schedule dictates.

3. Through Traffic Lanes. Provision of at least one lane of traffic in each direction for public transit and private autos on the upper Great Highway during construction.

4. Workers' Parking. Provision of at least 300 parking spaces for construction workers on the treatment plant site and 275 spaces within the construction zone on the upper Great Highway during the Westside Transport construction phase. These spaces may be provided by each contractor in their respective job sites, with location changing as the work progresses. An alternate which provides remote worker parking with a shuttle bus system may be substituted to meet these requirements.

5. Street Excavation Scheduling. Coordination of street excavations, and construction of utilities and other facilities to prevent multiple disruption of sites to the maximum degree feasible.

6. Visual Screening. Retention of existing berms and minimizing removal of mature trees. Screening of pump station and treatment plant sites by constructing and planting permanent berms as material is excavated. If replacement trees larger than five-gallon size are not grant-eligible, all trees shall be purchased at the commencement of construction so they will achieve some additional growth by project completion.

7. Truck Routing. Prohibition of construction trucks from using Park Road, Zoo Road, or Skyline Blvd. fronting the Recreation Center for the Handicapped, except for construction of Crosstown Tunnel.

8. Noise Barrier. Installation of a 15-ft.-high noise barrier at the north-east border of the treatment plant site, extending along the site boundary from opposite the Recreation Center for the Handicapped building; north and west to the pretreatment influent line. The noise barrier should be of nonporous material with a surface weight of at least 4 lbs./sq. ft. (e.g., 1/4-inch plywood, etc.) and should be devoid of gaps or cracks. A combination berm and barrier would also be suitable, provided the specific height above grade and specifications are attained. An alternative proposal which accomplishes this purpose may be submitted to the Executive Director for his review and approval prior to construction at the Treatment Plant site.

9. Construction Noise Enforcement. Requirement of a performance bond from the contractor to assure that construction activity does not exceed City noise standards and monitoring of the contractor to assure strict adherence to noise standards.

10. Dust Control. Wetting down soil and sand to be excavated or distributed at least twice each day and more frequently on windy days: All haul truckloads shall be covered with a tarpaulin. All temporary stockpiles of sand shall be fenced and covered by plastic or fabric.

11. Recreation Center Air Filtration. Prior to initiation of any construction in the vicinity of the Recreation Center for the Handicapped, the City shall complete a thorough study of the air filtration needs of the Center done by a licensed mechanical engineer. Based on this report, the City shall install and maintain additional air filters and/or fans in the Center's ventilation systems. The City shall regularly monitor the performance of the system and change filters as required to maintain internal air quality.

12. Day Camp Site. Provision of an alternative temporary day camp site for the Recreation Center for the Handicapped, if requested to do so by the Center's Board of Directors. This provision shall include an offer to defray all reasonable relocation and additional transportation expenses. It is understood that this provision would be effective only if relocation was due to construction impacts.

13. Groundwater Monitoring. Throughout the construction of all specific projects, groundwater levels and ground surface elevations shall be measured at least monthly by a person acceptable to the Executive Director of the Commission. Records of measurements shall be submitted to the Commission and made available to the public. The independent engineer shall determine the area to be monitored during construction and afterward. If the engineer determines that groundwater or ground surface elevations are changing such that there is a risk damage to surrounding structures, the City shall expeditiously implement measures to eliminate the risk.

14. Placement of Suitable Excavated Material on Beach. Excavated material from any onshore construction site that is not needed for backfill, berm construction, or other on-site work, shall be placed on the beach landward of the surf zone, if it meets National Park Service standards for beach nourishment materials. Materials excavated offshore during outfall construction shall be deposited so as to provide the maximum benefit to the Ocean Beach littoral system. The site of deposition shall be determined by an independent coastal engineer selected by the City and approved by the Executive Director. This sand shall be deposited consistent with a plan approval in advance by the National Park Service.

B. Siting Conditions for Public Works Plan.

1. No Sand Removal from Beach. As of the effective date of this Commission action, sand removal from the beach shall be prohibited. Any sand that accumulates on streets or any other surface other than the beach or dunes, shall be collected and placed on the beach, landward of the surf zone as directed by the National Park Service.

2. Recreation Center Expansion Site. Specific project plans for the treatment plant and crosstown tunnel shall locate those facilities as far as possible from the Recreation Center for the Handicapped and shall provide for an expansion area for the Recreational Center for the Handicapped. This expansion area shall be approximately three acres in size and in a location that is of the same general nature and scale of the Center's 20-year expansion program (dated April, 1979).

3. Lake Merced Transport Alignment. The only alignment of the Lake Merced Transport approved as part of this plan is that along Skyline Blvd. and the Great Highway Extension (alignment C).

4. Routing of Treatment Plant Traffic. The Treatment Plant shall be designed so that all operational traffic (i.e., chemical deliveries, employee access) shall be via Skyline Blvd.

5. Treatment Plant Screening. All above-ground treatment plant areas shall be screened with landforms, trees, and shrubs to minimize visual impacts.

6. Control of Odors and Noise from Plant Operations. Provide air filtration, vibration and sound reducing techniques in the treatment facility to mitigate odor and noise problems to the maximum extent feasible. Project plans shall include the best available odor scrubbing agents for use during periods of plant operational "upsets".

7. Geotechnical Evaluation. For each component of the plan, geologic and engineering reports, approved by the Executive Director, shall be provided containing the following:

a. A geotechnical report which describes in detail the site conditions and the anticipated seismic response, including the characteristics of shaking and the potential for liquefaction and ground failure, and a description of how these factors may affect the project component or the safety of persons near the component;

b. A structural engineering report which describes the adopted design criteria, the structural system and how it is expected to resist forces caused by earthquake-inducing shaking and ground failure;

c. A statement signed by an independent registered engineer stating that:

i.) He/she has made a complete review of the design details, calculations, and construction drawings; and

ii.) In his/her opinion the component is designed to withstand a Richter magnitude 8.3 earthquake on the San Andreas fault (epicenter at point closest to the project site) and to protect the safety of persons exposed to the component, that the structural design takes into account the geotechnical hazards described in the geotechnical report and that architectural details and mechanical elements of the component are designed so that they are not a risk to human lives.

III. Public Works Plan Findings and Declarations

The Commission finds and declares as follows:

1. Plan Description and History. As do many older cities, San Francisco has a combined wastewater system, one in which sanitary sewage, industrial effluent, and storm runoff are collected and treated in one system. Revisions to combined systems in order to comply with current water quality standards are difficult and costly. With the existing San Francisco wastewater system, even very light rainfall (0.02 in. per hour) results in untreated effluent flowing directly into San Francisco Bay and the ocean. These overflows now occur on an average of 114 times a year through several outfalls on the City's shoreline.

The existing treatment facility in the coastal zone is the Richmond/Sunset Water Pollution Control Plant located in Golden Gate Park (Exhibit 1). This plant provides advanced primary treatment only of dry weather flows. The treated effluent is discharged into the ocean near Mile Rock, which is an Area of Special Biological Significance (Exhibit 1).

Both the dry and wet weather discharges fail to meet present State or Federal water quality standards. As a result, the City is currently subject to several enforcement actions aimed at improving the bay and ocean water quality. In order to comply with these requirements, the City has developed a Wastewater Master Plan. This plan provides for new treatment plants and wastewater storage and transport facilities throughout the City (Exhibit 2). The planning and construction of such a system is, of course, complex, and the City has divided it into components. Construction has already begun on the bayside portion, which is not in the coastal zone.

In mid-1977, the City of San Francisco applied for a coastal development permit for the Westside Transport and Storage Project and Pump Station, one component of the Wastewater Program. The transport was proposed to extend from Golden Gate Park south along the beachfront road, Great Highway, to the City zoo (Exhibit 2). The City also presented a conceptual plan for the redesign of the surface above and adjacent to the facility. Because all local approvals were not then granted and additional design work was necessary, the North Central Coast Regional Commission did not act on the application. However, the Regional Commission did hold public hearings on the proposal, and Regional staff and Commissioners participated in many meetings with various agencies and community groups concerned with the project.

The application before the Regional Commission at that time did not include the Wastewater Program components which would bring the effluent into the proposed structure nor the treatment facilities and outfall downstream. The structure itself was proposed to be 30 ft. wide in front of Golden Gate Park and approximately 60 ft. wide under the Great Highway. Along its 2½-mile length, the consolidated sewer would slope from north to south, reaching a depth of approximately 30 ft. A 20-ft.-high pump station, 200 ft. long by 65 ft. wide, would be sited adjacent to the City's unused Fleischaker Pool.

At the Regional Commission meeting of September 7, 1978, the Regional Commission staff recommended approval of the proposed transport. Opponents of the project contended it could restrict recreational access to the adjacent Golden Gate National Recreation Area and raised shoreline erosion issues. After the public hearing, including the City's response to opponent's concerns, the Regional Commission unanimously denied a permit for the project (Exhibit 3).

The City appealed the Regional Commission denials. The State Commission staff, after extensive discussion with the City staff, recommended an accommodation so that the Wastewater Program might be expedited and at the same time, the issues raised by the Regional Commission resolved. On November 28, 1978, the State Commission asserted in-

initial jurisdiction over all of the Wastewater Program components in the coastal zone, and the City withdrew its appeals. The Commission directed the staff to work with the City to develop a comprehensive application and to work with community groups to assure adequate citizen participation.

Attempting to meet these objectives, the City, working with the Commission staff, undertook the following:

- Hired an independent shoreline processes expert to re-evaluate the dynamics of Ocean Beach and suggest an engineering solution.
- Participated in a series of three public meetings sponsored by the State Coastal Conservancy, providing a forum for public participation in the redesign plan for the Great Highway.
- Instituted a Design Jury composed of design professionals representing the Commission, the City, and the National Park Service to review the redesign of the Great Highway corridor.

After the Regional Commission action, the City petitioned the Regional Water Quality Control Board and the State Water Resources Control Board to grant it an exception to the State Ocean Plan's water quality standards. In March, 1979, the State Board, concurring with its Regional Board's decision, granted a waiver from the standard of one annual overflow, allowing the City to design for an average of eight annual overflows. The result will be a significant cost-saving to the City and a much-reduced project. (For example, the West Side Transport and Storage structure diameter need now be only half the size of that proposed to the Regional Commission). The application now before this Commission meets the new standard.

2. Plan Area Description. Unlike the large sewer projects previously reviewed by this Commission and its predecessor, this proposal will not shape the character of future development but is instead intended to improve water quality in the State's most important estuary, San Francisco Bay, and an Area of Special Biological Significance in the ocean waters. In Orange County (Appeals No. 61-76 and 62-76); Humboldt County (Appeal No. 117-76); San Mateo County (Appeal No. 313-77); and northern San Diego County (Appeal No. 15-76), sewers were proposed prior to urban development of large areas and, in large measure, determined the kind of development and the degree of coastal access and protection of coastal resources in those areas. Growth-inducement is not a major issue in the San Francisco sewer system. The City is an urban developed area, with existing communities, historical patterns of recreational use and artificial alterations to coastal resources. The Coastal Act requires that the design and location of San Francisco's wastewater facilities be responsive to and protective of the built environment as well as the natural environment. The western portion of San Francisco is primarily residential with extensive public park and recreational facilities. Lands End, Lincoln Park and Sutro Heights Park bound the Richmond residential District on the north. Golden Gate Park separates the Richmond from the Sunset District. South of the Sunset is the Zoo and Lake Merced. The area prior to residential and recreational development was rolling sand dunes with cliffs and hilly areas on the north.

Ocean Beach is an important coastal area because it is a significant visitor destination and it provides existing housing and recreational opportunities for low- and moderate-income persons. Section 30213 of the Coastal Act provides:

Lower-cost visitor and recreational facilities and housing opportunities for persons of low and moderate income shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Furthermore, Section 30221 states that:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Also, the Coastal Act provides, in Section 30253(5), that new development shall:

Where appropriate, protect special communities and neighborhoods which because of their unique characteristics are popular visitor-destination points for recreational uses.

The shoreline west of the Great Highway is administered by the National Park Service as part of the Golden Gate National Recreation Area (GGNRA). Throughout San Francisco history Ocean Beach has been an important recreational resource. A succession of resorts and visitor-serving facilities such as the Cliff House restaurant and the former Playland at the Beach amusement park have supported beach-related recreational activities. The National Park Service estimates that each year over a million and a half visitors view Ocean Beach from the existing Cliff House. In its Assessment of Alternatives for the General Management Plan the Park Service characterizes the use of the area as follows:

The beach, which is often cool and windy, and the surf, which is usually dangerous and cold, draw a curious mixture. All ages, ethnic groups, and economic classes come to the beach to sun, surf, swim, walk, fish, and explore the dunes. From the cliffs at Fort Funston, adventurous hang gliders sail out over the water. These diverse user groups comprise a social phenomenon unique to GGNRA and the urban beach setting.

The beach as well as the existing eight-lane Great Highway along it are located on fill which has existed for approximately 50 years. Erosion has been a continual problem, and rubble has been dumped on the beach to protect the highway. Sand-blowing has also been a problem. Four lanes of the Great Highway are presently covered with sand, and the entire road has been closed due to blowing and drifting sand about 80 days a year. Access across the Great Highway to the beach is provided by four crosswalks at Fulton Street, Lincoln Way, Noriega Street, and Sloat Boulevard and by four pedestrian underpasses at Judah, Taraval, and Wawona Streets and at the end of Golden Gate Park. The beach and the landscaped trail inland of the Great Highway link the zoo and Golden Gate Park, two important visitor destinations. There are four parking areas in the project area. The median of the Great Highway between Fulton and Lincoln Way (in front of Golden Gate Park) contains about 800 parking spaces. There are two parking lots on the west side of the Upper Great Highway south of Sloat Boulevard, each accommodating about 100 vehicles. The Lower Great Highway can accommodate 425 vehicles along the west curb and 300 vehicles along the east curb. Many of the curb spaces along the Lower Great Highway are used by residents of the area.

The project area is served by several east-west transit lines which terminate at the beach. Bus service is available on several major streets paralleling the Great Highway. The only service on the Great Highway itself is a short segment on the No. 18 bus line which uses the Great Highway between Lincoln Way and Fulton Street.

Adjacent to the zoo and approximately 100 yds. from the proposed wastewater treatment plant site is the Recreational Center for the Handicapped. The Center provides recreational and social services on the 5½-acre site. The Center uses both the beach and nearby Lake Merced in its programs which serve over 1,300 disabled and retarded persons. The Commission finds that the Recreational Center for the Handicapped is a unique recreational resource in the coastal zone deserving protection under Sections 30213 and 30240(b) of the Act.

Also important is the character of the neighborhood adjacent to the project. Census figures and other data cited in the reports by SPEAK Housing in the Sunset: A Community in Transition show that this area provides housing opportunities for persons of moderate income. The housing cost figures found in the EIR for the Westside Transport and Storage Project confirm this. In the late 1960s, the blocks along the Great Highway from Lincoln Way to Moraga Street were included in a Federally-Assisted Code Enforcement Program. According to the City's report, FACE-First Phase-A Summing Up, approximately \$500,000 of public subsidies were invested to improve the housing stock. In order to protect these coastal resources as required by the Coastal Act, the public works plan approval must be conditioned to include the maximum feasible mitigation measures. Access to Ocean Beach and the adjacent recreational resources must be sustained during the six-year construction period, and the plan must restore recreational opportunities after construction (Sections 30211 and 30240(b) of the Act). The residential character of the adjacent community likewise must be protected by distributing traffic impacts evenly. Only with the reasonable and necessary conditions imposed above and described below can the Commission find this plan consistent with Sections 30213, 30221, 30240(b) and 30253(5) of the Coastal Act.

3. Plan Description. The public works plan before this Commission has evolved over many years and consists of several components (Exhibit 4). Three of the components proposed in the coastal zone have been designed in sufficient detail to be reviewed as specific projects under Section 30605 of the Coastal Act: The Westside Transport and Pump Station, Restoration of the Great Highway and the Ocean Outfall. They are considered in the attached project recommendation. The following components can be reviewed in concept only:

a. Richmond Transport. The sewer line is proposed to transport sanitary wastes and storm water from the northern sector of the City, the Richmond District, to the Westside Transport and Storage Facility proposed in the Sunset District. The City expects the diameter of the line to be between 9 and 13 ft. and prefers an alignment in the coastal zone, that would parallel the northern shoreline under parkland (Exhibit 5) and allow gravity flow of wastewater. The tunnel would surface at the base of Sutro Park on the Playland at the Beach Site. From that point the transport would run under the Great Highway to the Westside Transport at Fulton Street. An alternate route for the Richmond Transport would be along Fulton Street to the Great Highway so that only a short portion of the line would be in the coastal zone (Exhibit 6). Either alignment would have minimal effect on coastal zone resources and both are thus consistent with the Act's mandates.

b. Lake Merced Transport. This line would carry sewage and storm water from the existing sewers at the intersection of John Muir Drive and Lake Merced Blvd. in the southwestern part of the City to the southern end of the Westside Storage and Transport Facility. The existing sewers are connected to an overflow structure on the beach at Fort Funston (Exhibit 7). The purpose of the Lake Merced Transport is to reduce overflows from the current annual average of 114 to the 8 which would conform to the water quality standards. The City expects it to be 9 ft. in diameter. The City has summarized the status of this transport as follows:

The Facility Plan and EIR are scheduled to begin this fall; thus, the project location can be described only conceptually. An alternative utilizing gravity flow to the Westside Transport would begin at a large by-pass structure, intercepting the Lake Merced Outfall at the southern shore of Lake Merced. Tunnel routes could store and transport the flow via several possible routes:

(1) John Muir Drive, Skyline Boulevard, Great Highway Extension and connect to the westerly side of the Westside Transport upstream of the Westside Pump Station, or

(2) John Muir Drive, Skyline Boulevard, Sloat Boulevard, and connect to the east side of the Westside Transport, or

(3) John Muir Drive, Skyline Boulevard, the easterly berm of the proposed Southwest Water Pollution Control Plan, then follow Zoo Road to the Great Highway Extension to westerly connection of Westside Transport.

Another alternative which may be dictated by high tunnel costs may be a storage facility in John Muir Drive from which the sewage would be pumped directly to the Southwest Water Pollution Control Plant.

The alternative routes would have different impacts on coastal zone resources. One route would bisect the relatively pristine Fort Funston portion of the GGNRA. Three other alternatives each would abut the Recreation Center for the Handicapped, which would, in conjunction with the other plan projects, surround the Center with excavation (Exhibit 7). To prevent these adverse impacts, the Commission can only approve the alternative which orients the transport to the Great Highway Extension. This will concentrate construction impacts in the Great Highway corridor such that they can be mitigated in a comprehensive fashion while approving the shortest, most direct route. This corridor would minimize alterations to natural landforms and protect coastal recreational resources consistent with Coastal Act policies.

c. Crosstown Tunnel. The purpose of the tunnel (proposed diameter 13 - 14 ft.) is to transport bayside, wet weather flows to the proposed Southwest Water Pollution Control Plan for treatment. In addition, it would transport bayside dry weather flows from the Southeast Treatment Plant to the Ocean outfall for discharge. The tunnel may also be used to transport sludge and/or chemicals between plants.

The portion of the tunnel extending into the coastal zone is expected to be several hundred ft. long; it would be located under Zoo Road and Sloat Blvd., between the zoo and the Recreation Center for the Handicapped (Exhibit 8). The Commission finds that this project is essential to the plan in that it will greatly improve water quality of the San Francisco Bay, a portion of the federally-defined coastal zone, and the most important estuary in the State (Section 30008 of the Act). If the plan did not provide for significant improvements in the water quality of San Francisco Bay, the Commission would have to re-examine the coastal impacts of the project to determine whether the benefits of the plan offset its impacts on coastal resources (Section 30007.5 of the Act).

d. Southwest Treatment Plant. The development of the 42-acre site adjacent to the S. F. Zoo and the Recreation Center for the Handicapped will take place in three steps. Wastewater will be responsible for the first two, and the Zoo and San Francisco Recreation and Park Department the third:

(1) Construction of South West Water Pollution Control Plant.

— The Wastewater Program plans to construct dry-weather and wet-weather facilities. The project is in Step I Facilities Planning and conceptual plans are as follows:

— Dry-weather plant with approximately 22 million gallons a day (mgd) capacity to provide secondary treatment for all wastewater flows from the westside of the City.

— Wet-weather plant with 400-480 mgd capacity to provide citywide chemically-assisted primary treatment.

- All treatment facilities will be enclosed (i.e., inside buildings) to control noise and odor.
- In accordance with voter approval (Prop. A, November, 1975), at least 2/3 of the buildings will be underground.
- Final plans are subject to approval by Recreation and Park Commission. (Exhibit 9)

(2) Site After Construction

- Following construction, Wastewater Program will regrade the land surface as agreed with the Recreation and Park Commission. The City contends that will be a major improvement over the existing site condition which is tire-rutted, littered, and barren.
- Most of the buildings will be covered with 3 to 12 ft. of earth to enable tree planting and Zoo exhibits above the treatment plant.
- A wind berm will be constructed along the westside of the site and hydromulched.
- Planning coordination is proceeding with the Zoo, Recreation and Park and the Wastewater Program to accommodate site development needs within budgetary constraints. Recreation and Park Commission must approve final plans.

(3) Zoo Expansion

- Zoo and Recreation and Park Department will be responsible for final development of the site, which will greatly expand the Zoo.
- Plans are to construct Zoo, exhibits, observation vistas and visitor amenities over the entire site (Exhibit 10).

Representatives of the Recreation Center for the Handicapped have objected to the location of the plant on this site because of the extreme sensitivity of their clients to noise, vibration, and odors. They contend that both construction and operation of the plant will have adverse effects on the recreational opportunities provided by the Center.

The City contends that:

The following mitigation measures were incorporated into the design of the Treatment Plant to reduce long-term impacts on the Recreational Center for the Handicapped:

- The facilities were located as far south on the parcel as was judged feasible by the engineers to increase the distance between the proposed plant and the Recreation Center for the Handicapped. This allows most of the vegetated hillside across Park Road from the Recreation Center for the Handicapped to remain intact and serve as a buffer.
- Vehicular access to the Treatment Plant would be from Skyline Boulevard at the intersection with Harding Way. Truck and Employee automobile traffic would not use Park and Zoo Roads.

— An odor control system is proposed as part of the ventilation system of the plant; all air exhausted from the facility would be deodorized before release to the atmosphere. This system would eliminate most potential odor impacts in the vicinity of the operating plant.

— The Treatment Plant will be two-thirds underground to reduce the visual impact of the plant on the surrounding area.

The City has analyzed three alternative sites: the existing treatment plant site in Golden Gate Park, Harding Park east of Lake Merced, and Fort Funston, just south of the proposed site. The City contends that these sites are infeasible because of jurisdictional problems in converting other park land to sewage plant use. The City also claims that the alternatives are infeasible on hydrologic and engineering grounds.

The preferred 42-acre site is currently used by the National Guard as an armory and contains six Army housing units. The City has been negotiating relocation of these uses with the Army. The majority of the site is vacant, and the only public use has been for overflow parking for the zoo.

Upon completion of this treatment facility, the existing sewage plant in Golden Gate Park will be demolished, and its 4.5-acre site will then revert to park use. Extensive supporting information has been submitted to justify the proposed treatment plant site as environmentally preferable and cost-effective (Addendum to Wastewater Application May 9, 1979). The following table illustrates the additional cost factors involved in alternative plant locations:

ABBREVIATED TECHNICAL SUMMARY
OF ALTERNATIVE WESTSIDE PLANT SITES

Site	Location	Flow conditions at Southwest WPCP		Energy usage, annual KWH above base condition	Additional pipelines above base condition, ft
		Bayside flows ^a	Westside flows		
Lake Merced	On direct route from Southeast plant to ocean outfall	Gravity inflow Gravity discharge	Pumped inflow Gravity discharge	Base condition	Base condition
Harding Park	Approximately 1 mile south of direct route	Pumped inflow Pumped discharge	Pumped inflow Pumped discharge	18,400,000	5,000 Bayside inflow 5,000 Westside inflow 5,000 Bayside and Westside outflow
Golden Gate Park	Approximately 2-3 miles north of direct route	Pumped inflow Pumped discharge	Pumped inflow Pumped discharge	3,300,000	1,000 Bayside inflow 14,000 Bayside and Westside outflow
Fort Funston	Approximately 1/2 mile south of direct route	Pumped inflow Gravity discharge	Pumped inflow Gravity discharge	8,600,000	2,000 Bayside inflow 2,000 Westside inflow 2,000 Bayside and Westside outflow

a. Pumping of Bayside flows at Islais Pump Station is common to all alternatives. Conditions stated are in addition to the initial lift.

Source: Metcalf & Eddy Southwest Water Pollution Control Plant Project, Draft Project Report, April, 1979

The Superintendent of the Golden Gate Recreational Area has reiterated his objections to the use of Fort Funston as a treatment plant site. Congressional authorization would be necessary to allow the land to be used as a plant site. In contrast to the proposed site, Fort Funston is relatively pristine, and its ultimate development as

part of the GCNRA offers a potential significant coastal recreation resource. Its high elevation would pose hydrologic problems for a treatment plant but, if retained as a park, will provide a dramatic recreational area.

The Golden Gate Park and Harding Park alternatives would remove recreational areas from active use. The existing soccer fields and golf course at those sites would be difficult to incorporate into treatment plant design. Either location would require approximately 15,000 ft. of additional pipeline which would further disrupt the coastal zone. Therefore, the Commission finds that the siting of the treatment plant at the proposed location, as conditioned to protect adjacent recreational resources and coastal access, is consistent with the policies of the Coastal Act of 1976 and with Section 13096(b)(4) of the Commission's regulations.

4. Geologic Issues of Proposed Plan. Section 30253 (1) (2) of the Coastal Act states:

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 geologic issues raised by this proposed plan involve three major areas:

- Seismic - the plan area is approximately two miles from the San Andreas fault.
- Shoreline Processes - the plan area is along a sandy beach.
- Groundwater - planned subsurface projects could obstruct groundwater flow and raise groundwater levels.

These geologic processes and how they relate to the specific projects, i.e., Westside Transport, Pump Station, Great Highway Restoration and Ocean Outfall are discussed in the attached project findings. The geologic concerns regarding conceptual elements of the plan are discussed below:

a. Richmond Transport. This component is an underground transport and storage sewer for sewage and rain runoff from the Richmond District. The applicant states that the exact location of the transport is not yet determined. Geological concerns in the general area are seismic hazards and groundwater levels.

As with all components of the Westside Wastewater Program, the San Andreas fault is the basis for major seismic hazards. The applicant's consultants state that soil and rock slope stability along the transport site during a major earthquake would not endanger the sewer unless liquefaction occurred; the consultants concluded that within the coastal zone liquefaction could occur in localized pockets of loose soil but that these areas would "probably be of minor extent and would not represent a serious risk to the sewer (Dames and Moore, 1979, p. 25)."

The applicant's consultants noted critical areas that will require additional strength and ductility, including areas of potential soil liquefaction, abrupt transition zones from rock to soil, hard soil to soft soil, and shallow soil to deep soil, and abrupt changes in structure section geometry (e.g., sharp bends in the tunnel, and junctions with other pipes). In conclusion, the consultants stated: ". . .it is our

opinion that the risk of earthquake-induced damage to the sewer is slight to moderate, provided special attention is paid to the critical areas mentioned above (Dames and Moore, 1979, P.)." To date, the application contains no specific design criteria to address earthquake hazards.

A rise in groundwater levels, caused by the proposed structure impeding groundwater flow, may be possible and could result in increased potential of liquefaction and structural damage.

b. Lake Merced Transport. The Facility Plan and EIR for this project are scheduled to begin in late 1979. Therefore, site specific hazards cannot be assessed at this time. However, geologic concerns for the Lake Merced area include seismic hazards (ground motion, surface failure, liquefaction), site stability (landslides), and groundwater levels. The San Bruno Fault passes directly under Lake Merced but is considered inactive by the applicant's consultants (Woodward-Clyde, April, 1976, P. 8).

c. Crosstown Tunnel. The proposed Crosstown Tunnel will carry sewage from the east side of San Francisco to the Southwest Treatment Plant. Geologic concerns with respect to this component are seismic hazards, site stability, and potential groundwater level rises. Potential hazards associated with an underground pipeline should be addressed in the planning and design of the project. The applicant has stated that the EIR for this project is just beginning, with certification expected in June, 1980.

d. Southwest Treatment Plant. This component of the wastewater program will be situated on a 42-acre site bounded by the Great Highway, Skyline Blvd., and Zoo Road. Geologic concerns for this site include site stability and geotechnical considerations, seismic hazards, and effects on groundwater levels.

The applicant's consultants have concluded: (1) the native medium dense and dense sands have good strength properties and are relatively incompressible, (2) existing fill areas will require excavation and replacement, and (3) differential settlement of the site is expected to be gradual. With respect to site stability, the consultants recommend: (1) soldier pile and lagging shoring bracing of excavations, and (2) permanent fill slopes no steeper than 2:1 (horizontal to vertical) (Woodward-Clyde, August, 1978, P. 10, 11). The applicant states that specific plans for excavation, slope configuration, and disposition of excavated material will be set forth in the design phase not yet complete.

Seismic hazards related to ground motion at the site include ground shaking, displacement and settlement, and lateral pressures. The consultants recommend that the proposed plant be designed to withstand a Richter magnitude 8.3 earthquake.

The consultants concluded that liquefaction potential at the site would be limited to localized pockets of medium dense sands and that lateral movements associated with localized liquefaction would be unlikely to exceed several inches across the site (Woodward-Clyde, August, 1978, P. 20). With respect to liquefaction-caused settlement the consultants stated that structures and conduits of the proposed plant are anticipated to have settlements on the order of 1 in. in 100 ft. following an earthquake of design magnitude.

The consultants noted that earthquake forces on buried structures can be large, and they referred to a buried structure that suffered extensive damages during the February, 1971, San Fernando earthquake. Engineers studying that earthquake concluded that many of the failures that occurred could be mitigated by more careful structural design.

The proposed Southwest Treatment Plant may act as a barrier to groundwater flow from the east to the ocean, thus increasing the potential for hazards described previously. However, according to the consultants' report, the assumed flowline levels in the plant will range from +5 ft. to +25 ft., while the groundwater elevations at the site are generally below +3 ft.

In order to assure conformity to Coastal Act Section 30253(1) and (2), a comprehensive geologic and engineering report is required for each plan component. These reports will use existing data and information generated in the forthcoming specific project design process to demonstrate that these geologic factors have been incorporated into the projects' plans. Also, groundwater levels will be monitored to minimize risks to nearby structures. The Commission finds the plan, as conditioned, consistent with the Coastal Act's mandates to minimize geologic hazards.

5. Recreational Access Issues. Ocean Beach provides substantial public recreational opportunities. Among the highest priorities of the Coastal Act are that such areas be protected for recreational use and that access to these areas be maximized (Sections 30210, 30224). The City contends that the project will improve the recreational character of Ocean Beach. The Commission concurs that, in the long run, restoration of the Great Highway and Ocean Beach will improve access to the shoreline and will increase land available for public recreation. (See specific project description below). The conjunctive recreational use of the proposed pump station and treatment plant as an observation deck and a zoo expansion area will mitigate the siting of these facilities on recreational land. The ocean outfall's emergency outlet structure, however, will impede public access along the Fort Funston segment of the GGNRA. The underground transport structures will, after construction, have no impact on recreational access. The possibility of exposure of the Westside Transport due to shoreline retreat would have an adverse effect on shoreline access unless the structure is designed to allow access over the box (See specific project description below).

Moreover, because of the extent of construction and the 6-year construction period, the public access and recreational opportunities will be adversely impacted for a significant period. The proposed construction schedule for the treatment plant provides for construction to take place 12 hours a day, six days a week. Maximum trips per day for construction vehicles will be approximately 1100. In addition, worker commutes will contribute another 900 daily trips. In order to mitigate the adverse impact of this additional traffic on coastal roads which will be continually reduced in capacity due to construction excavations, the plan is conditioned to provide public transit throughout the shoreline construction zone (Sections 30211 and 30240(b) of the Act). This will link existing transit terminals which end at the Great Highway, encourage transit use and use by workers and provide access for beach goers. Section 30240(b) of the Coastal Act provides that:

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

Another impact of the plan might be the preemption of an expansion area for the Recreation Center for the Handicapped. The treatment plant siting and the proposed zoo expansion, combined with the natural constraint of Lake Merced near the Center would effectively preclude adjacent expansion unless an expansion area is incorporated into the plan. The Center has an expansion program which would use the land over the Crosstown Tunnel on Zoo road and a portion of the zoo expansion area. By providing expansion area for the Recreation Center, as conditioned above, the plan is consistent with the Coastal Act's public recreation and access priorities.

6. Construction Impacts. During the 6-year construction phase of this project, much of the coastal zone will be impacted by excavation, grading, and erection of plan components. Much of the work is located over public streets which provide access to the recreational areas. These streets will be temporarily closed, traffic diverted, and access impaired continually throughout the City's coastal zone.

The noise, vibration, and dust generated by construction activities will have an effect on the neighborhood and on the Recreation Center for the Handicapped. The City proposes to mitigate these impacts as follows:

The San Francisco Wastewater Program construction contracts contain Standard Specifications and Special Provisions which require the contractor to comply with noise and air-quality standards. The Wastewater Program would monitor the construction operations and would have the authority to halt construction if the regulations detailed in the Standard Specifications and Special Provisions were not complied with.

The San Francisco Noise Ordinance, S. F. Municipal Code, Part II, Chapter VIII, Section 1, Article 29, sets criteria for construction noise levels. The maximum allowable noise level is expected to be 64 dBA for steady noise sources between 7:00 a.m. - 7:00 p.m., and 70 dBA for single events between 7:00 a.m. - 7:00 p.m. The contractors will be bound not to exceed noise limits.

The San Francisco Standard Specifications and Bay Area Air Pollution Control District Regulations require that the best available method be used to control dust generation during construction. Adequate measures will be taken during construction to insure that air-quality standards are met. Dust control measures for construction of the Westside Transport and the Treatment Plant would primarily include control of windblown sand. Mitigation measures to reduce windblown sand could include: (1) Stockpile sand from excavation that could be watered or could be covered with a weighted plastic or fabric cover to avoid being transported by the wind. (2) For the Westside Transport a temporary sand fence west of the trench would reduce windblown sand problems in the trench and could provide some protection from sand to residential areas. (3) After completion of a segment of the Westside Transport and backfilling of the trench, some form of sand control would be needed until the Upper Great Highway could be reconstructed and landscaped. Covering the sand with burlap (similar to that used in highway construction) would be effective.

Prior to start of construction of the Westside Transport, buildings lining the Lower Great Highway would be inspected by a joint survey team consisting of representatives from the City's Wastewater Program, Construction Management Division, and the construction contractor. The contractor would be liable for damages to the buildings resulting from construction-related activities in accordance with the provisions of the California Civil Code, Section 832.

The large numbers of construction workers in the coastal zone will require the provision of adequate parking to prevent conflicts with beach parking. For example, the City has stated that the contractor will be required to provide adequate parking on site for the anticipated 150 - 250 workers at the treatment plant site.

The plan is conditioned to mitigate these impacts to the maximum degree feasible to protect the recreational resources of Ocean Beach. The Commission finds that the plan must be conditioned to provide adequate construction worker parking and public transit in order that, during construction, public recreational access is not preempted contrary to the policies of the Coastal Act.

7. Scenic Impacts of the Plan. Section 30251 of the Coastal Act provides:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Many of the projects in this public works plan, as proposed, would be completely or partially underground. Through the use of various berms and landscaping, the City has attempted to mitigate the scenic impact of the visible projects. The success of these efforts will depend on the detailed site planning and landscaping for each project. Conditions imposed in this plan approval require that all surface structures be screened to minimize visual intrusion into recreational and scenic areas. The Commission finds that, as conditioned, the plan will protect the scenic resources of the coastal zone in a manner consistent with Section 30251 of the Coastal Act.

8. Water-Quality Impacts. Section 30412 of the Coastal Act clearly gives the State Water Resources Control Boards prime responsibility for coastal water quality. The limits of Commission review are specified in Sections 30412 of the Coastal Act:

(a) In addition to the provisions set forth in Section 13142.5 of the Water Code, the provisions of this section shall apply to the commission and the State Water Resources Control Board and the California regional water quality control boards.

(b) The State Water Resources Control Board and the California regional water quality control board are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate the provisions of this section. Neither the commission nor any regional commission shall, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.

Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, regional commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out the provisions of this division.

(c) Any development within the coastal zone or outside the coastal zone which provides service to any area within the coastal zone that constitutes a treatment work shall be reviewed by the commission and any permit it issues, if any, shall be determinative only with respect to the following aspects of such development:

(1) The siting and visual appearance of treatment works within the coastal zone.

(2) The geographic limits of service areas within the coastal zone which are to be served by particular treatment works and the timing of the use of capacity of treatment works for such service areas to allow for phasing of development and use of facilities consistent with this division.

(3) Development projects which determine the sizing of treatment works for providing service within the coastal zone.

The commission shall make these determinations in accordance with the policies of this division and shall make its final determination on a permit application for a treatment work prior to the final approval by the State Water Resources Control Board for the funding of such treatment works. Except as specifically provided in this subdivision, the decisions of the State Water Resources Control Board relative to the construction of treatment works shall be final and binding upon the commission and any regional commission.

The secondary, or growth-inducing impacts of new sewer projects on coastal zone resources are not a major issue in this application. San Francisco's coastal zone is fully developed with the exception of the former Playland site. Recent downzoning of residential areas limits the potential for redevelopment of existing coastal neighborhoods. Portions of San Mateo County are also in the project's service area, but they are located outside the Coastal Zone.

Thus, the Commission's review should focus on impacts of the location and design of the proposed facilities on coastal zone resources and access. The construction impacts of this proposal merit particular attention because of the length of construction from 1980 through 1985. Several alternative facility locations and designs have been proposed during the evolution of this program. The City and the State Water Resources Control Board have analyzed and rejected these proposals. They prefer the plan before this Commission, based on considerations of cost-effectiveness and environmental impact mitigation.

The Sunset Coalition has recently presented an alternative wastewater storage and transport system. The City has analyzed this proposal and rejected it as infeasible and too costly. The State Water Resources Control Board independently evaluated the proposal and concurs with the City. The State Board contends that this plastic pipe-retention basin alternative would not be grant-eligible. Given the limited responsibilities of the Commission in technical water quality issues, the Commission must concur with the findings of the State Board.

The State's policy on water quality matters in the coastal zone is contained in the following Section of the Water Code:

13142.5 In Addition to any other policies established pursuant to this division, the policies of the state with respect to water quality as it relates to the coastal marine environment are that:

(a) Wastewater discharges shall be treated to protect present and future beneficial uses, and where feasible, to restore past beneficial uses of the receiving waters. Highest priority shall be given to improving or eliminating discharges that adversely affect any of the following:

- (1) Wetlands, estuaries, and other biologically sensitive sites.
- (2) Areas important for water contact sports.
- (3) Areas that produce shellfish for human consumption.
- (4) Ocean areas subject to massive waste discharge.

Ocean chemistry and mixing processes, marine life conditions, other present or proposed outfalls in the vicinity, and relevant aspects of area-wide waste treatment plans and programs, but not of convenience to the discharger, shall for the purposes of this section, be considered in determining the effects of such discharges. Toxic and hard-to-treat substances should be pretreated at the source if such substances would be incompatible with effective and economical treatment in municipal treatment plants. . .

(d) Adequately treated reclaimed water should, where feasible, be made available to supplement existing surface and underground supplies and to assist in meeting future water requirements of the coastal zone, and that consideration, in statewide programs of financial assistance for water pollution or water quality control, shall be given to providing optimum water reclamation and use of reclaimed water.

The Ocean Beach area qualifies as a high-priority area because the beneficial uses of its waters include all those cited in the Water Code above except shellfish production. As to the possibility of reclaiming the treated wastewaters from this plan, no decision has yet been made.

In order to protect marine resources, the San Francisco Bay Regional Water Quality Control Board is committed to implement a post construction discharge monitoring program. Effluent from the ocean outfall and the overflow structures will be tested for toxicity to meet the concerns of the Department of Fish and Game.

The Commission finds that the improvement of Ocean and Bay water quality, resulting from the implementation of this plan is a broader policy mandate than any conflicting Coastal Act policies. As it is conditioned, this water quality plan will be, on balance, more protective of significant coastal resources in accordance with the Legislative intent of Section 30007.5 of the Coastal Act.

9. Implementation and Coordination of Planning Efforts. The City has submitted documents showing that the public works plan is consistent with the City's Master Plan, Zoo Plan, and Plan for Golden Gate Park. The National Park Service must issue a permit and come to jurisdictional agreements regarding those portions of the plan affecting the Golden Gate National Recreational Area. The City has summarized the Park Service's concerns as follows:

- (1) The need to monitor the quality of sand to be placed on Ocean Beach from the Westside Transport excavation.
- (2) The need to have a viable wave erosion and sand stabilization program incorporated into the Redesign Plan.
- (3) The protection of the natural scenic value of Ocean Beach.

(4) The need for an agreement on the division of maintenance responsibilities between the City and GCNRA.

The City is currently attempting to resolve these issues with the Park Service. The North Central Coast Regional Commission's proposed Interpretive Guidelines address the plan as follows:

Wastewater Treatment Facilities

Development proposals should meet the following criteria:

- (a) The Southwest Wastewater Treatment Plan should be situated primarily underground and designed to be visually and physically compatible with its surroundings.
- (b) All components of the treatment facilities should be designed to withstand potential seismic forces without undue risk of massive pollution.
- (c) Restoration of coastal resources and provision for coastal access should occur as an integral part of wastewater treatment project plans.
- (d) IF the West Side Transport is approved and reconstruction of the Great Highway becomes a reality, the Commission would require the highway design adequately reflect the Coastal Act's mandate that public access be maximized consistent with the objective of minimizing disruption of natural (and man-made) dune areas along the coast.

The Regional Commission encourages restoration of the area's sand dunes to their original natural look and function. The Regional Commission policy would encourage highway design which recognizes that the roadway primarily services the coastal user and be designed to incorporate a low-speed parkway design approach.

The Commission encourages restoration of the area's sand dunes to their original natural look and function. The Commission policy would encourage highway design which recognizes that the roadway primarily services the coastal user and be designed to incorporate a low-speed parkway design approach.

Coastal Act references: 30230; 30231; 30251; 30253; 30210; 30211

These concerns are incorporated into the City's Local Coastal Program Issue Identification and are reflected in the proposed plan. Therefore the Commission finds that this public works plan will assist in large measure the ability of San Francisco to implement a Local Coastal Program consistent with the policies of the Coastal Act.

Adopted June 6, 1979

SPECIFIC PROJECTS . RESOLUTION

I. Approval with Conditions

The Commission determines that the Westside Storage and Transport, Pump Station, Restored Great Highway, and Southwest Ocean Outfall, as conditioned, are consistent with the certified public works plan for the San Francisco Wastewater Program. The Commission finds that projects, as conditioned, are in conformity with Chapter 3 of the California Coastal Act of 1976 (commencing with Public Resources Code, Section 30200), will not prejudice the ability of local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976; the developments are in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act of 1976, and there are no feasible alternatives, or feasible mitigation measures, as provided in the California Environmental Quality Act, available which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

II. Conditions

Prior to the commencement of each phase of development, final working drawings, construction contract specifications, and other required documents shall be submitted to the Executive Director of the Commission for his review and approval in writing to assure the following:

1. Mitigation of Adverse Construction Impacts. Inclusion of the applicable construction mitigation measures specified in the public works plan approval.
2. Cul-De-Sac Construction. Construction of the cul-de-sac on the Lower Great Highway as proposed in the restoration plan or temporary closing of the intersection shall be accomplished prior to the excavation of the Upper Great Highway. A traffic management plan shall be submitted for approval by the Executive Director to demonstrate how traffic will be routed in the coastal zone to ensure equitable distribution of traffic in the Sunset District during construction of the Westside facilities.
3. Phasing of Restoration. Each phase of the construction of the Westside Transport shall include restoration of the highway and creation of the dune field for that portion of the shoreline.
4. Boardwalk. The elimination of the plazas on the beach and the provision of alternative public accessways through construction of wooden boardwalks connecting the underpasses to the sandy beach and recreational trails.
5. Dune Planting. The contractor shall provide an irrigation system and guarantee the success of dune planting for a period of five years. Design of the irrigation system, final contours, planting and fertilization schedules, and plant selection shall be approved by the National Park Service.
6. Groundwater Monitoring. Construction of the Transport and Storage Structure shall include a drain system to allow for the flow of groundwater from the east under it to the west. A permanent groundwater monitoring system providing quarterly measurements shall be included as part of the project. If the water table rises more than two ft. above existing levels at any point, additional drainage facilities shall be installed to lower the level to pre-project conditions. The existing groundwater level shall be defined as the groundwater level prior to any construction, as determined by a registered engineer's analysis of borings drilled coincident with the east-wall alignment of the transport and storage structure.

7. Access Over Overflows. The design of the emergency overflow structure shall incorporate steps on the north and south sides and a railing on top or other measures to provide lateral access along the beach. The existing overflow structures shall be modified to provide decking, railing, and steps on the north and south to allow lateral access landward of the surf zone.

8. Relocation of Westside Transport and Restored Great Highway. Consistent with the City's proposed alignment, transport shall be located with the mid point of the structure 108 ft. east of the west curb of the existing upper Great Highway. No part of the reconstructed highway shall be west of the transport's west wall. Similarly, the restored recreational corridor shall be shifted to the east in the same manner as the restored Great Highway provided that all features of the restored recreational corridor shall be consistent with plans on file in the application except for the location in relation to the shoreline. The highway itself shall be up to four lanes with two bike lanes and the curvilinear configuration modified to fit within these constraints.

9. Future Shoreline Protection Measures. All existing rubble shall be removed from the beach between Lincoln Way and the shoreline in front of the proposed pump station. Future placement of rip-rap or rubble is prohibited. The City shall place at least one row of monuments, markers, or other distinguishable features 50 ft. west of the highway-transport alignment at a depth of 20 ft. above mean sea level. The markers shall be of permanent construction and located every 50 ft. When these features are exposed, the City shall replenish the lost sand, replace and contour the dunes 50 ft. seaward of the roadway/transport's west wall. Implementation and enforcement of this condition shall be evidenced by a binding Clean Water Grant condition which requires the City's Wastewater Revenue Program to provide an annual ~~sinking~~ fund adequate to provide at least 100,000 cu. yds. of sand.

10. Annual Beach Nourishment. The City shall use its best efforts to implement the Corps of Engineers S. F. Bar Dredge spoil dumping within the littoral system of Ocean Beach. The Commission staff is authorized to assist in this effort in any way possible.

11. Analysis of Oceanographic Forces. For the Transport and Storage structure, the emergency overflow structure, and the ocean outfalls, there shall be reports, acceptable to the Executive Director, containing the following:

a. A report which describes in detail the site conditions, maximum credible oceanographic conditions, waves, currents, etc., and a description of how these conditions may affect the project component or persons exposed to the component;

b. A structural engineering report which describes the adopted design criteria and how the structural system is expected to resist the forces of wave and tidal action;

c. A statement signed by an independent registered engineer, acceptable to the Executive Director, stating:

i). that he/she has made a complete and independent review of the design, details, calculations, and construction drawings; and

ii). that in his/her opinion the structure is designed to withstand the maximum credible oceanographic conditions described in the oceanographic report and that, as designed, the plan component will not adversely affect natural coastal processes.

12. Monitoring of Offshore Processes. The City shall be responsible for a program of collecting data on coastal processes and for making the information available to interested parties. The program tasks and operating details are described more fully in Exhibit 20 and shall be approved by the Executive Director. At a minimum the program shall include measurement of deep-water and nearshore wave conditions for a period of five years, quarterly measurement of beach profiles at four locations during construction and for five years after the dunes are graded to their final contour, analysis of beach sand sizes, aerial photography, offshore hydrography, and daily visual observations of the littoral environment. A less extensive program shall be continued indefinitely. The National Park Service shall be encouraged to participate in this program to the maximum extent feasible.

13. Standard Enforcement Condition. All final working drawings shall be accompanied by a Landscape Architect and Engineer's Certificate that said drawings are in substantial conformance with preliminary plans submitted to the Commission and the attached conditions.

III. Findings and Declarations

The Commission finds and declares as follows:

1. Description of Projects. At this time three of the projects of the proposed plan can be reviewed in detail. The State Water Resources Control Board has certified that the Westside Transport, Pump Station and Recreational Restoration of the Great Highway, and the Ocean Outfall are covered by Final Facilities Plans and EIR's.

a. Westside Transport and Pump Station. This project, along with the recreational restoration of the Great Highway, was denied a permit by the North Central Coast Regional Commission (Exhibit 3). The major project component is the storage/transport sewer under the Great Highway from Fulton Street to 200 ft. south of Sloat Blvd. The concrete line would be rectangular in cross section. The center of the "box" is proposed to be 108 ft. east of the existing west curb of the Great Highway. Along its 2.3-mile length, the top of the transport would be level at +12 elevation (San Francisco Datum where Elevation 8 = 8.6 ft. above mean sea level). The bottom of the sewer would slope southward, dropping about two feet per 1000 feet of length. Thus, the south end of the transport would be at -26.7 feet, allowing for gravity flow of sewage to the proposed pump station.

The transport would be 30 ft. wide on the segment between Fulton and Lincoln Way. Between Lincoln Way and Judah Street and between Vicente and the pump station it is proposed to be 60 ft. wide to allow required baffling of overflows at existing overflow outfalls. The two existing overflow outfalls at Lincoln and at Taraval (a third is located to the south at Fort Funston) extend across the beach to the surf zone. Under the planned project they would continue in use, but the frequency of raw sewage discharge onto the beach would be greatly reduced to an average of 8 times per year. The structures are covered with graffiti and at high tide interfere with lateral shoreline access. The project proposes no improvement in their appearance nor any extension of the pipes beyond the surf zone. The conditions require that the outfalls be modified to better facilitate lateral beach access. By providing steps, decking, and railing, beach goers will be able to walk along the shoreline without entering the surf zone or trampling the proposed dune field. At Lincoln Way, Noriega, Rivera, and Vicente Streets, sewer mains will be constructed two blocks inland to connect with existing lines.

The pump station is proposed to be located at the south end of the Transport at a point about 200 feet south of Sloat Blvd. The bulk of the station would be below ground with a bottom elevation of about -44 ft. The above-ground portion of the station would be 200 ft. long, 65 ft. wide, and 20 ft. high. The length of the station would be oriented in a north-south direction between the existing Fleishhacker Pool Bathhouse and the Great Highway extension. The pump station would actually extend into the easternmost traffic lane of the Great Highway, requiring a slight realignment of the roadway. There would be service vehicle entrances at both the north and south ends of the pump station. A public observation deck is proposed for the roof of the station (Exhibit 11).

In order to lessen the effect of height and bulk of the station and to provide wind protection to the Zoo which lies immediately to the east, an earth berm is proposed. The berm would be twenty ft. high and would partially enclose the station. The berm would extend from a point on Sloat Blvd. opposite 47th Ave. south to the boundary of the existing Zoo property. The total length of the berm would be 992 ft. (including the 226 ft. occupied by the pump station itself) (Exhibit 12). The berm would be constructed of broken pavement covered with sand removed by construction of the Westside Transport. The berm would have sloping sides and would extend into the site of the Fleishhacker Pool Bathhouse and the Pool itself. Construction of the berm would also require removal of about 300 Monterey Cypress trees with trunks of more than 4 inches in diameter. There would be replaced by 700 Monterey Cypress trees (five-gallon size) planted in a layer of topsoil. The conditions attached to the public works plan require that all trees be purchased at the commencement of construction so that they will be larger and healthy when planted. Thus, the visual resources of the coastal zone shall be protected consistent with Section 30251 of the Act.

The City states that preliminary agreement with the National Historic Advisory Council staff has been reached on the disposition of Fleishhacker Pool, the Bathhouse, and the Mother's Building at the Zoo. A photographic documentation of the pool and bathhouse, both of which will be demolished, has been agreed to by the Advisory Council. EPA funds for the restoration of the Mother's Building are available, and its maintenance is guaranteed by the Recreation and Park Commission who will continue to use the facility.

b. Recreational Restoration of Great Highway. The City has described the proposed restoration project between Lincoln Way and Sloat Blvd. as follows:

1) Dune Restoration and Planting

The single ridge dune profile is proposed to be regraded to establish a wider, multiple ridge dune system. The dune area would be expanded from an existing average of 100 feet to an average width of 250 feet north of Noriega and 150 feet south of Noriega. The dunes would be a densely planted, landscaped area wide enough to absorb wind-blown sand from the beach reducing blowing sand to the adjacent residential areas. The exposed seaward slopes of the multiple ridge system would be planted with Holland Dune Grass to retain the sand in place and to trap freshly blown sand from the beach. In the wind shadows native California dune plantings would flourish including varieties of Lupine, Poppies, Sand Verbena, Indian Paint Brush, Dwarf Coyote Bush and Lizard Tail. Windbreaks of Monterey Cypress and Myoperum, set perpendicular to the wind at intervals wide enough to preserve and enhance views, will provide additional wind protection.

Landscaping with irrigation is an integral part of stabilizing the proposed profile since it would encourage quick plant growth as well as help to control wind-blown sand. The plantings would be protected from pedestrian encroachment by signing and an attractive barrier adjacent to recreational trails and other access points.

2) Roadway

The four lane divided roadway which is recommended by the 1979 Concept Plan conforms to the general criteria of San Francisco's Comprehensive Plan for the establishment of a scenic parkway following a curvilinear alignment.

The road would be designed to provide an interesting experience and changing views for the motorist moving along it. Wherever possible the northbound and southbound lanes would be aligned independently with the northbound lanes slightly higher than the southbound lanes to improve the views to the ocean. The variations in horizontal and vertical alignment will affect the width of the median strip making it an interesting feature of the roadway design. Two eleven foot wide lanes are placed on either side of the median strip with a four foot wide concrete bicycle lane on the outer edge of the roadway. The bicycle lane would be raised 1-2 inches above the roadway for separation and would be signed and striped for the use of bicyclists.

3) Recreational Corridor

Trails for equestrians, pedestrians and bicyclists would extend the full length of Ocean Beach connecting with trails in Golden Gate Park and other parts of the Golden Gate National Recreation Area. In the area of greatest erosion, between Lawton and Taraval, the trails would be located between the Lower Great Highway and the reconstructed roadway. At all other locations the trails would be located to the west of the reconstructed roadway adjacent to the restored dunes. In addition, where there is no recreational corridor, a continuous footpath is provided to the east of the reconstructed roadway. Equestrians and joggers would be provided with an eight foot wide trail, surfaced with decomposed granite. Five to twenty feet east of the soft-surfaced trail and separated from it by native plantings, would be an eight foot wide path for walking and bicycling surfaced with asphalt. The trails adjacent to the dunes would be separated from them by an attractive barrier. Sand fencing could also be installed for additional drift protection.

The majority of this route would be visually separated from the road by at least fifteen feet of contoured landscaped area. At Lawton and Taraval the trails would cross the roads by means of the underpass. At all other underpass locations the trails would cross the underpasses on the same elevation as the road. All of these trails would connect to beach access routes, vista points and rest areas which would be provided with benches, litter containers, hitching posts and locking bicycle racks.

4) Beach Access

Convenient paths leading to the beach access points would connect with every east-west street which now terminates at the Lower Great Highway. There would be seven pedestrian access points consisting of five underpasses and two at-grade pedestrian crossings which would be located at Lincoln and Sloat which are signalized intersections. Access walks and underpasses would be oriented in a northeast-southwest direction - perpendicular to the prevailing wind - for maximum shelter wherever possible.

The underpasses would be designed as attractive portals which would average 65 feet in length as opposed to the 174-224 foot length of the existing narrow tunnels. They would be wide and high enough to receive natural light through their portals.

Due to their relationship to public transit, the underpasses located at Judah, Taraval and Noriega would receive special visual enhancement. The road would bridge over the access trails and the dunes to the west of the roadway would drop down to permit direct views to the ocean from the Lower Great Highway. The area immediately surrounding these three major access points would be developed to provide opportunities for beach-related activities which require shelter from the wind. Grassy park areas, which could be used for informal recreation, would be developed to the east of the underpasses. Plantings of trees would be used to frame and enhance views of the ocean and to provide additional wind-breaks. Restrooms would be located near these transit access points.

One vista point parking area for 35 cars has been provided west of the reconstructed roadway in an area where erosion is less severe. This parking area has convenient access to the recreational trails, picnic areas and the beach.

The project from Lincoln to Fulton is described as follows:

In this area the link between Golden Gate Park and the beach would be enhanced by the addition of two broad, landscaped bridges. The road would be depressed under these landscaped crossings to facilitate access to the recreational trails linking Golden Gate Park and Fort Funston for pedestrians, equestrians, joggers and bicyclists. The esplanade behind the sea wall would be expanded to accommodate a variety of beach-related activities including portable recreational rentals and food carts.

The gently curving, divided four lane roadway is meant to serve as a transition between the curvilinear recreational roadway south of Lincoln and the existing linear alignment north of Fulton. 500 parking spaces are provided for motorists, with one 300 car parking area west of the roadway for southbound motorists and one 200 car east parking area for northbound motorists. Landscaping and mounding will soften parking area views and help to merge this area with Golden Gate Park and the Esplanade. (Exhibit 13)

The Commission finds that this proposed recreational restoration is consistent with the Coastal Act's recreational and public access policies. However, because of the erosion problems described below, the restored Great Highway must be realigned to be landward of the west wall of the transport. Therefore, approximately 90 ft. of additional beach and dunes will be provided for public use. The profile proposed for the segment between Lawton and Taraval would then be typical of the entire corridor from Lincoln to Sloat, but with the recreational trails remaining west of the highway as proposed (Exhibit 17). The conditions eliminate the several proposed plazas on the beach because the rip-rap necessary to protect them will intrude on the sandy beach, alter the natural shoreline processes, and may increase erosion on adjacent areas contrary to Sections 30235 and 30253 (1) and (2) of the Coastal Act. However, the conditions require boardwalks from the underpasses to link the north-south recreational trails in order to provide shoreline access, yet discourage trampling of the dunes.

c. Ocean Outfall. This project consists of a headworks at the site of the proposed sewage treatment plant and three 9 1/4 ft. diameter pipes under the Great Highway, Ocean Beach, and under the ocean floor for a distance of 4 1/2 miles. Treated dry weather flows will be discharged through a diffuser at that point, 4 1/2 miles offshore, and wet weather flows will be discharged through 2 diffusers 2 1/2 miles offshore (Exhibit 14). As a result of the recent Regional and State Water Board actions, the project has been reduced from a capacity of 1000 mgd to 670 mgd. At Fort Funston Beach two auxiliary structures are being proposed. There would be a short access tunnel with a gate from the bluff to the headworks and a berm proposed to conceal the tunnel. An emergency discharge structure is also proposed there with diffusers for

emergency discharge of effluent into the surf zone. This would be connected to the plant by a separate, 13-ft. diameter pipeline under the Great Highway. The structure itself would be approximately 50 ft. by 35 ft. and is proposed to be protected by 20 ft. of rip rap in the surf zone. All of this is to be located at Fort Funston on National Park Service land (Exhibit 15).

2. Geologic and Natural Coastal Processes. Natural processes which may affect and be effected by the Westside Transport/Pump Station and Highway Redesign include: shoreline erosion, blowing sand, groundwater flow, and earthquakes (including liquefaction). Section 30253 (1) and (2) of the Coastal Act states:

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.

Because all analyses of local shoreline processes conclude that the proposed transport is to be located seaward of the natural shoreline equilibrium profile, Section 30235 of the Act also must be considered. It reads in part:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.

a. Shoreline Processes. Based on consultants' and staff's study of data concerning the shoreline condition at Ocean Beach, the Commission finds that the project site is an eroding shoreline. The proposed Transport and Storage structure and the Great Highway Redesign are located within the corridor of the existing Great Highway, which is mostly seaward of natural high-water shorelines in recent historic times. This is because the Great Highway was constructed on artificial fill that extended as much as 200 ft. seaward of the natural shoreline. The independent coastal engineer, Dr. Galvin, has explained that that because of the artificial fill, the existing beach profile is oversteepened and out of equilibrium. Dr. Galvin states, further, that in its effort to balance the profile, the ocean will attempt to erode the oversteepened profile until the seaward and landward portions of the beach profile are in balance; Dr. Galvin has concluded that if this were allowed to occur, the shoreline will be roughly equal to the 1852 shoreline or in the vicinity of the lower Great Highway (Exhibit 18, top).

Unless protective measures are taken, this relationship between the proposed project alignments and the location of the 1852 shoreline will result in the exposure of the proposed structures to wave attack; although the exact time of initial exposure as well as the duration of exposure is not identifiable, it would be limited and the beach would recover. In his report, Dr. Galvin states that unless protected, in less than three years the existing upper Great Highway would be undermined at Pacheco Street, in 15 years, waves would reach the existing highway at Moraga Street, and within 50 years the waterline along Ocean Beach would be roughly coincident with the west edge of the upper

Great Highway; after 50 years, Dr. Galvin believes the shoreline would continue to retreat toward the 1852 profile. Because of the predicted extent of shoreline retreat, Dr. Galvin has recommended protection of the proposed development by designing the transport as a wave absorbing, accessible seawall.

The percentage of time throughout the year that the transport will be exposed depends on its distance seaward of the 1852 shoreline and efforts to nourish the beach. With a protective structure along the current GGNRA boundary (where protection will be needed if the proposed highway alignment is approved), Dr. Galvin believes that during severe storm conditions there would be no beach (i.e., the ocean would reach the protective structure), but after the storms subsided the beach would accrete and would stay at these wider widths until subsequent storms narrowed it.

Richard Ecker, a coastal engineer who has studied Ocean Beach for the Army Corps of Engineers and the National Park Service, has elaborated on Dr. Galvin's shoreline scenario. Mr. Ecker agrees with Dr. Galvin in that the present shoreline will recede toward the 1852 shoreline until it halts at the transport structure. After this occurs, Mr. Ecker believes that the structure's interruption of the shoreline's natural retreat toward the 1852 shoreline would result in a vertical regression of the beach profile (i.e., loss of usable recreational area) until the elevation of beach on the seaward side of the structure equals that of the 1852 shoreline profile (Exhibit 18, middle).

At the Ocean Beach Erosion Conference conducted by the National Park Service, the panel of experts concluded that for every vertical foot of exposed structure, about 30 horizontal ft. of beach would be lost.

In summary, the shoreline condition at Ocean Beach can be described as follows: Given that construction will take place between the existing shoreline and the natural historical shoreline approximately at the lower Great Highway, the farther east the hard line protection is, the longer a recreational beach will exist, and the useable beach will be wider. This situation is explained visually by Mr. Ecker's graphic representation of the various Ocean Beach profiles (Exhibit 18) and was emphasized by the erosion conference panel when they stated:

If the objective is to protect the existing beach width and the recreational benefits it provides for the greatest possible period of time, the line should be constructed in the most eastward location possible.

The conditions at Ocean Beach can be altered by man. The beach could be stabilized by constructing groins or a breakwater, beach nourishment, or a combination of these. In a draft report, the Corps of Engineers has proposed to protect the Ocean Beach dunes with "toe of slope" protection. The National Park Service has stated, however, that its policy is to retain the beach in a natural configuration as long as possible. In addition, a transport or Great Highway redesign location, which will clearly require protective structures, is in conflict with Section 30253 of the Coastal Act, which states that new development shall not "in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs."

Dr. Galvin has proposed the possibility of enhancing natural sand supply processes by disposing sand dredged from the main ship channel of the San Francisco Bar nearer to Ocean Beach. If this proposal works and if Congress would authorize such a project, the result would be to flatten the oversteep beach profile and minimize exposure of the proposed structures. The condition requiring placement of excavation materials from the out-

and transport construction on the beach will extend the beach and slow the erosion process. However, because Ocean Beach is an eroding shoreline, eventually an ongoing program of periodic nourishment will be needed.

Mr. Ecker and Army Corp's personnel have questioned Dr. Galvin's dredge disposal proposal (Exhibit 19). Without any ability to require Corps action, Dr. Galvin's suggestion remains only a very attractive possibility to be pursued vigorously by the City and Commission staffs.

The Commission has reviewed a number of permit applications for protective structures on sandy beaches. On beaches such as Mussel Shoals in Ventura County and Oceanside, the Commission has granted permits for construction of protective devices to protect existing structures; these permits have been conditioned to assure that lateral and vertical access to the beach is maximized and that the protective structure is designed to maximize dissipation of wave energy in order to minimize scouring of the beach (Appeal Nos. 279-78, 282-78, 286-78, 287-78, in Oceanside and 374-78, 486-78, 495-78, 497-78, and 501-78 in Mussel Shoals). In granting a permit to construct a seawall in Isla Vista (Appeal No. 2-79), the Commission found that the permit was a response to immediate needs; the Commission also found that a comprehensive solution to the region's erosion problem would clearly protect coastal resources and endangered structures and expressed support for regional solutions to erosion problems.

As proposed, the west wall of the Transport is smooth and vertical. In the event of the wall's exposure, such a surface would greatly impede vertical access and endanger lateral access along the beach; as Dr. Galvin suggests, "It would be risky to allow people right on the beach during storms." Such impacts would be in conflict with Sections 30211 and 30240(b) of the Act. In addition, a smooth vertical surface would not be effective in dissipating wave energy, thus, potentially accelerating erosion in conflict with Section 30235 of the Act. Therefore, measures must be implemented to assure that the Transport wall is not exposed or that it is designed to dissipate wave energy and provide access.

Dr. Galvin's recommendation to the City was to design the west wall of the Transport as a sloped seawall with wave dissipation devices. The City estimated the cost of such a design to be \$12,000,000 above the existing costs and, because of a probability but not certainty of exposure, concluded that a seawall design was not cost effective or necessary. Wave damage to the structure could lead to high repair costs and severe health hazards. The City's consultants have concluded that even if the Transport were completely exposed to waves, the structure is designed to withstand maximum credible wave attack. As conditioned, with beach nourishment program to prevent exposure and cut off wall to prevent undermining of the transport, the proposed structure is consistent with Section 30253 of the Coastal Act. In addition to the coastal processes evaluation, this project, as well as all other projects of the plan, will be evaluated and designed to withstand the maximum credible seismic forces.

Given the uncertainty of a permanent offshore sand nourishment program, all reasonable and necessary measures must be taken to protect the transport from exposure to wave action. Accordingly, the project has been conditioned to require that all excess excavation sands, suitable for beach use shall be added to the dune fields (Sections 30235 and 30253 (2)). The City has agreed to Dr. Galvin's suggestion that a cut off wall (i.e., sheet pile wall driven below mean lower low water) be incorporated into the project design where the transport is above mean sea level, and the project has been modified accordingly. In addition to locating the transport in the easterly-most feasible location, which uses distance to delay erosion reaching the structures, the project must include remedial actions necessary when the transport and the highway are threatened by erosion. By requiring sand replenishment measures to be incorporated into the wastewater revenue program and triggered when the waves reach within 50 ft. of the transport of protecting the structures in a manner consistent with the Coastal Act is assured.

b. Blowing Sand. Prior to its development, the entire west side of San Francisco from the beach to Twin Peaks was sand dunes. The blowing sand problem that continues today is not uncommon in natural dune areas of temperate latitude coasts around the world. The factors favoring blowing sand in such areas, such as active sand supply, impeded littoral transport, strong onshore winds, low precipitation and humidity, low beach profile, and low tidal ranges, hold true, or are at least typical at Ocean Beach.

Dr. Galvin's report and a draft report by the Corps of Engineers state that typical sand transport rates by wind range from 1 to 10 cubic yards/linear foot of shore/year. Dr. Galvin adopted 2 cubic yards/linear foot beach/year in his sediment budget analysis, which is the median rate of the national average of 1-3 cubic yards/linear foot/year stated in the Corp's draft report on Ocean Beach. In that report, the Corps calculated a rate of 8 cubic yards/linear foot/year, an estimate based on wind records, physical characteristics of the beach, and mathematical equations.

The range of 2 to 8 cubic yards/ linear foot beach/year gives a qualitative measure of the severity of the problem. During construction of the proposed project, excavated material will increase the potential for wind blown sand. The erosion conference concluded that there will be:

...severe blowing sand problems around the construction site and within the neighboring community. Therefore, steps must be taken to stabilize the excavation scars as well as the surface disposal area...It should be clearly understood that a program of continuing maintenance to control blowing sand will be required for the near future.

Dr. Galvin has concluded that (assuming no protection) as the shoreline erodes, net transport south will decrease, which will increase the amount of sand available for wind transport.

In addressing methods to reduce the amount of sand blowing landward from Ocean Beach, Dr. Galvin recommends that the following steps be taken:

- (a) prohibit sand mining from the beach in any form, and require that sand collected from the highway be put back on the shore.
- (b) choose the Great Highway redesign that will maximize the highway elevation fronting the shore.
- (c) plant European beachgrass to control blowing sand, and shrubs or woody plants (*Myoporum* is suggested) nearer the highway, or in embayments in the highway, if curvilinear. This program requires a long term commitment for annual fertilization of inactive beach grass, and protection against blowing sand for the younger woody plants.
- (d) strictly prohibit foot traffic across the dunes. Both Dr. Galvin and the erosion conference panel recommend control strategies for short-term use during construction, such as plastic fabric used to cover loose sand prior to planting.

These measures are either included in the applicant's proposal or required as conditions. The retention of the maximum volume of sand on the shoreline is essential to protect the transport and highway in a manner consistent with Coastal Act policies 30253 (1) (2) and 30235.

c. Monitoring Conditions at Ocean Beach. Both the erosion conference panel and Dr. Galvin recommend that a data collection and beach monitoring program be established. The erosion conference panel recommended: (1) quarterly resurveys referenced to points that will not be disturbed during construction; (2) controlled vertical color aerial photography, taken coincident with the surveys; (3) wave, beach, and longshore current observations made twice daily; and (4) initiation of a program such as the Littoral Environment Observation program.

Dr. Galvin's recommended program consists of onshore and offshore data collection. This program suggests tidal current data offshore of the beach should be collected, as well as wave, wind, and longshore current measurements on Ocean Beach. Dr. Galvin explains that the study of offshore tidal currents will allow the best timing and placing for offshore sand dumping (which will aid in supplying sand to the beach), while the study of waves, winds, and longshore currents on the beach will allow better future judgments concerning coastal processes at Ocean Beach. As conditioned, the applicant is required, and the National Park Service encouraged, to establish such a monitoring program to assure protection of the Ocean Beach in a manner consistent with Sections 30211, 30235, and 30240(b) of the Act.

d. Seismic Hazards. Earthquake hazards affect virtually any project designed for coastal California. The environmental impact report (July, 1977) for the applicant's original proposal states that there are 3 active fault zones in the San Francisco Bay area (including secondary fault systems) capable of generating destructive earthquakes. The San Andreas fault is of major concern to the proposed project due to its proximity (1½-2 miles at its closest point) to the site and the potential magnitude of an earthquake along the fault (the 1906 earthquake had a Richter magnitude of 8.3). With respect to ground shaking at the proposed site, the final EIR states:

The project site lies in an area of potential severe earthquake-induced ground shaking. Since the San Andreas fault is relatively close to the site, ground acceleration resulting from an earthquake would be high, depending on the magnitude and the distance to its epicenter. The maximum ground acceleration two miles from an earthquake of Richter magnitude 8.3 would be 0.3g (g = gravitational acceleration at sea level).

The applicant's consultants have concluded that the main effect of shaking would be the increase in lateral earth forces on buried structures. Particular concern was expressed by the consultants about tunnels passing through bedrock to soil transition zones, junctions of tributary pipes with the main structure and other joints or connections where increased lateral stress could cause displacement and damage. However, the consultants conclude that proper design can make allowances for the shaking hazard, "in order to prevent significant structural damage."

Shaking may also cause liquefaction of surface and subsurface soils. The applicant's consultants have concluded hazards associated with liquefaction include: (1) loss of strength of supporting soils which could allow settlement of structures or instability of slopes, and (2) raising the free ground water surface which could cause shallow buried structures to emerge above the ground surface.

The applicant's consultants have concluded that the potential for liquefaction along the project alignment is small, limited to the northerly 4000 ft. of the site, and the risk of significant damage is small. The consultants indicated that in the event of liquefaction, the rigid structure could resist high lateral pressures and the structure's floor would resist temporary hydrostatic uplift forces; any lurching of the slope adjacent to the beach would be limited both vertically and laterally and would not affect the structure.

The applicant's consultants also have concluded that ground shaking could cause densification of loose, dry sands, resulting in subsidence of the ground surface. While they conclude this process would have negligible effects on the more deeply buried transport and storage structures, they recommend that surface structures be designed to reduce the potential for structural damage.

Tsunamis are long period waves generated by earthquakes or other disturbances that affect the sea floor. Although tsunami heights in the open ocean may be no greater than one or two feet, tsunami wave heights in shallow water can increase greatly and may cause localized flooding. Tsunami predictions provide an estimate of potential areas of inundation. However, tsunami prediction is not an exact science, and margins of error of +/- 40% are not uncommon.

The final EIR for the Westside Transport/Storage Project states:

For coastal areas adjacent to the Great Highway, the run-up is estimated to reach elevations of -3.6 to -1.6 feet for the once-in-50-year-event, -0.6 to 1.4 feet for the once-in-100-year event, and 6.4 to 11.4 feet for the once-in-500-year event. The elevation of the Great Highway is +22 feet. If a tsunami should occur during a period of extreme high tide (8 feet or more above mean lower low water), the above run-ups could be increased by three to five feet. This could be considered the once-in-1,000-year event.

e. Groundwater Levels. Groundwater beneath the Sunset District flows westward to the ocean. The existence of an impermeable structure, such as the proposed transport, will impede the flow, causing the water table on the east side of the proposed transport to rise. The potential effects of such a rise include flooding damage to basements, underground utilities, and pavements; increased risk of liquefaction; and, increased risk of building settlement.

In response to the applicant's request for an analysis of the groundwater processes in the Ocean Beach area, the applicant's consultants concluded after study that because of the proposed transport, groundwater levels east of the structure would rise one to two feet above existing levels (Harding Lawson Associates, February 9, 1979). The consultants noted the rise would be less if the transport structure were located farther to the west. Although the consultants feel the rise would have "no significant effect" on the foundation support of existing structures east of the lower Great Highway, they recommend drainage facilities be provided from Irving Street south. The consultants mentioned in their report a system already designed; this system calls for vertical, 12-inch-diameter drains at approximately 20 ft. intervals on both sides of the proposed structure, all connected to a drain blanket under the structure's entire width. The consultants recommended monitoring groundwater levels for rises. If monitoring shows the levels are found to be rising, the consultants recommend, additional drainage facilities should be added.

The applicant states that the transport has been designed with a gravel base and lateral drains "that are sufficient to avert even this small potential rise in the water table." The conditions require an independent monitoring program and remedial actions to protect existing structures as required by Section 30253(a) of the Act.

f. Geologic and Seismic Issues Related to Southwest Ocean Outfall Project (SWOOP). The proposed outfall would discharge treated effluent into the ocean at locations about 2½ and 4½ miles offshore. The proposed outfall would cross the San Andreas fault zone about 2 miles offshore, where it is about 400 feet wide. The applicant's consultants concluded that a major earthquake on the San Andreas Fault (design magnitude 8+) during the life of the proposed outfall could cause severe structural damage. Seismic considerations at the proposed outfall include ground motion, ground failure, lateral pressures, and liquefaction. Oceanographic considerations include wave-induced liquefaction and stresses associated with breaking waves and ocean currents. Ground motion, ground failure, and associated lateral pressures can rupture structures. Liquefaction could result in flotation, settling, and other stresses.

The consultants concluded the most probable cause of severe damage would be ground surface rupture in the fault zone. The consultants state:

The major portion of this rupture would probably be confined to a single, relatively narrow, zone along the pre-existing fault trace; relatively minor movement along secondary or branch faults also would be a possibility. The published data on the 1906 San Francisco earthquake suggest that the maximum horizontal and vertical displacement might be 16 feet and 4 feet, respectively, along a zone 5 to 6 feet wide.

Permanent distortions after seismic shock on either side of the rupture zone might be in the range of 4 to 6 feet (Woodward Clyde, Dec. 1977, p. 11).

The potential for liquefaction varies along the proposed alignment of the outfall. Onshore, the subsurface soils below groundwater level generally consist of dense to very dense sands which "should not be susceptible to liquefaction during the magnitude 8+ design earthquake (Woodward Clyde, Dec. 1177, p. 16)." The consultants concluded: (1) localized onshore lenses and pockets of sand are susceptible to liquefaction during the design earthquake, and (2) differential onshore settlements beneath the Headworks structure, or along the outfall conduit, are estimated to be small, on the order of ¼ inch in 100 feet.

With respect to liquefaction offshore, the City's consultants concluded that liquefaction is very unlikely to occur below depths ranging 4 to 8 feet below the sea floor east of the San Andreas fault. West of the fault, the consultants concluded, liquefaction could be initiated to depths from 8 to 25 feet below the sea floor. The consultants concluded that potential for landsliding, large lateral movements and differential settlements is small.

To minimize the consequences of liquefaction, the consultants recommend offshore depths of imbedment of at least 10 to 20 feet, although they believe other design criteria (e.g., scour, wave loading, hydraulic profile) will require depths greater than those recommended. The consultants studied additional methods to minimize liquefaction hazards and chose two schemes as the most certain solutions. These are: weighing down the conduit with concrete or other weighting material, and driving friction piles for anchor piles to resist uplift forces generated by both liquefaction and wave action.

The applicant states:

The seismic impacts are being mitigated by designing the outfall with special pipe joint sections to allow for lateral movement, burying most of the outfall to minimize lateral movement, and by providing rock alongside the diffuser section to minimize lateral movement.

The consultants determined that wave-induced liquefaction is not as critical as seismically-induced liquefaction and therefore recommended that design criteria to minimize liquefaction hazard be based on seismic data. However, other oceanographic processes may have adverse impacts on the proposed outfall. Currents could create lateral pressures, and, since the proposed outfall runs through the surf zone, the effect of breaking waves on the structures must be considered also. The applicant does not discuss oceanographic hazards nor methods to minimize such hazards in the application for the outfall project.

The proposed emergency discharge structure associated with the outfall would be on the beach near Fort Funston (Exhibit 15) and would, therefore, be subject to wave action. The applicant proposes to protect this structure with rock rip-rap in an area with extensive existing rubble.

As a condition for all specific projects covered by this public works plan approval, each of these proposals will be analyzed in geologic and engineering reports to assure public safety and structural integrity in seismic event of 8.3 on the San Andreas fault. Each of these projects' impact on offshore process and the effect of ocean forces on the structures also shall be assessed. Only with such assurances can this Commission find the projects consistent with the mandates of Section 30253 (1) and (2) of the Act.

3. Alternative Locations for Westside Storage and Transport. Because of these dynamic geologic processes and potential hazards, alternative locations for the projects were analyzed very carefully. The City's evaluation of siting the Westside Storage and Transport inland at Sunset Boulevard documented that it would be more disruptive of residential areas and add over \$200 million to program cost. In accepting the upper Great Highway location, the Commission must find that the proposal is analagous to a coastal dependent industrial facility and make the findings required by Section 30260 that:

- (1) alternative locations are infeasible or more environmental damaging;
- (2) to do otherwise would adversely affect the public welfare;
and
- (3) adverse environmental effects are mitigated to the maximum extent feasible.

The Commission rarely and reluctantly makes this finding. Only with the most prudent location of the transport within the upper Great Highway corridor and the maximum feasible mitigation measures can this project be found consistent with the mandates of the Coastal Act.

4. Recreational and Access Impacts. If the Restoration Plan for the Great Highway is constructed as presently designed and is maintained over time, and the transport not exposed, recreational opportunities and access to the shoreline would be improved. However, some uncertainties remain.

The proposed four-lane road would be significantly narrower than the existing 125-ft.-wide Great Highway. The proposed highway would be 52 ft. wide with four, 11-ft.-wide lanes and two, 4-ft.-wide bike lanes. There is some support in the community, buoyed by statements from the National Park Service, for a two-lane recreational road. They contend that a reduced number of lanes would eliminate commuter traffic and make the corridor more of a recreational parkway. However, according to the project EIR, Sunday traffic actually exceeds weekday traffic. The design of the roadway is intended to discourage commuter traffic and current speeding problems, while providing adequate highway capacity for more leisurely recreational driving. The narrower roadway would reduce the size of the proposed underpasses to the beach, thus making them more inviting to the public. Also, eliminating pavement from the corridor would provide additional recreational land.

The proposed restoration would reduce the number of parking spaces in the corridor. The parking area in front of Golden Gate Park currently provides 800 parking spaces. This would be reduced to 500, the paving would be removed and a landscaped connection between the Park and the beach provided. Thirty-five spaces are proposed west of the redesigned highway at Judah Street, and 200 are proposed at an existing lot at Sloat Blvd. This reallocation of parking reflects Section 30212.5 of the Coastal Act which provides:

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts social and otherwise, of overcrowding or overuse by the public of any single area.

The only effect of the ocean outfall project on public access appears to be that the emergency overflow structure may block lateral public access on the beach. This has been conditioned, as required by Section 30211 of the Act, to require steps, platform, and railing be constructed over the structure to provide access consistent with the Coastal Act.

The City and the National Park Service are in the process of negotiating maintenance and boundary adjustment agreements. The Commission has been informed that the National Park Service will accept jurisdiction of all dune and beach area west of the new alignment of the Great Highway and take responsibility for routine maintenance and operation of this area. The City will contour, plant, install necessary irrigation system and guarantee the success of plantings while it retains jurisdiction over the highway and recreational areas to the east. Only with such institutional responsibilities clearly established can this Commission find the projects consistent with the recreation and public access policies of the Coastal Act (Sections 30212, 30221, and 30240(b) of the Act).

5. Construction Impacts. The construction of the Westside Transport, Pump Station, and restoration of the Great Highway is projected to take 28 months and the construction

phase of the ocean outfall 48 months. The prolonged disruption of the immediate shoreline would have adverse effects on recreational resources and restrict access. However, the project is conditioned to require completion of the restoration plan as part of each segment of transport construction in order to maximize public access and minimize adverse scenic impacts consistent with Coastal Act policies (Sections 30211, 30212, 30221, and 30240(b) of the Act).

Construction will restrict traffic along the Great Highway as well as impede vertical access to the beach. Portions of the beach will be closed to the public as sand is stockpiled. Sand blowing may increase during construction. The City intends to phase construction to keep at least one traffic lane open in each direction to minimize these impacts. Sand stabilization measures will be required of contractors as will compliance with the City's noise, vibration and dust control specifications. Contractors may have the option of narrow sheetpile construction or wider open trench construction. The City has characterized the issue of worker parking and coastal access as follows:

During construction of the Westside Transport, about 400 construction workers would be employed. Workers' cars would require about 275 parking spaces. These spaces could be provided north or south of the construction areas on the Upper Great Highway within the construction activity zones. Construction workers might park on the Lower Great Highway. The number of workers parking on the Lower Great Highway would depend on the Upper Great Highway to the construction sites.

The ocean outfall construction will also require trenching across the Great Highway. The construction of the outfall will crush marine life in the construction corridor and cause increased turbidity. The City proposed to allow the contractor several options for underwater construction techniques. Whichever measure is selected, the construction will require the dredging and disposal of approximately 2,700,000 cubic yards of material. Bottom samples meet EPA disposal standards and are predominantly sand. This will provide an opportunity to implement Dr. Galvin's proposal that dredged materials be introduced offshore into the Ocean Beach littoral system to provide additional natural shore protection. Section 30233(b) of the Coastal Act provides:

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.

The project is conditioned to require spoils disposal into the littoral system of Ocean Beach as required by this section of the Act. This action in conjunction with the offshore monitoring program can evaluate the effectiveness of offshore sand nourishment. Only with such a commitment can the City and the Commission pursue the possibility of annual nourishment via the Corps of Engineers' San Francisco Bar dredging program.

6. Scenic Impacts of Projects. The Coastal Act (Section 30251) requires that the scenic resources of the coast be protected and enhanced. The Westside Transport will be underground, except if exposed by wave action. Best estimates of shoreline processes predict that in an easterly alignment, this will occur infrequently and temporarily.

The pump station would be partially below and partially above ground. The visible portion of the station would be 220 ft. long, 65 ft. wide, and 20 ft. high. A structure of this bulk in this location could be visually overwhelming, but the proposed earth berm will reduce significantly the station's visual impact. Viewed from the beachfront parking lot opposite the end of Sloat Blvd., the station will be partially enclosed by the berm and backed by a screen of trees planted atop the berm. From the Zoo, the station will be completely hidden by the berm and trees.

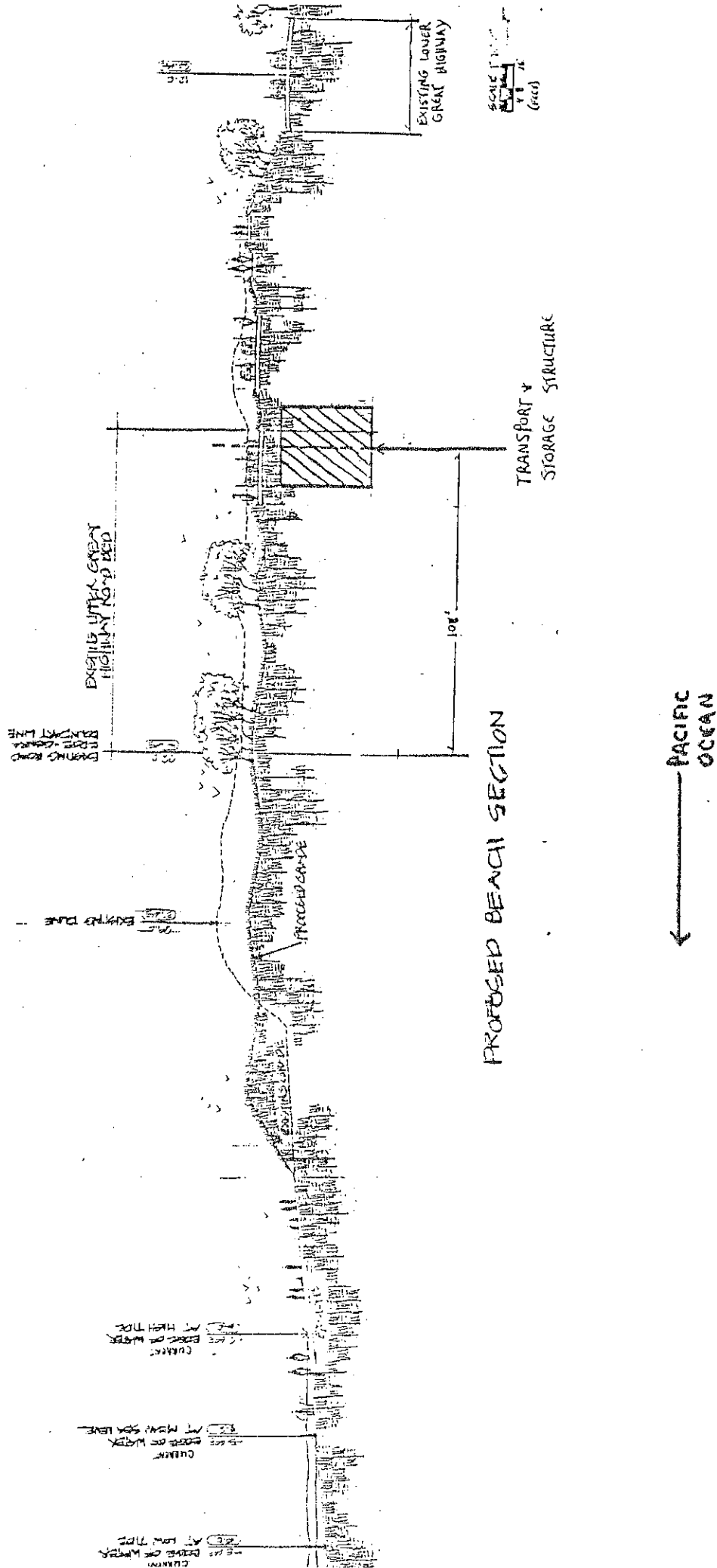
A public viewing area on the roof of the station will be provided. This deck will allow unobstructed views of the coastline. Access to the viewing area from the Zoo will provide a sense of connection between the ocean and the Zoo which now turns its back on the ocean. At the same time, the berm and trees will provide wind protection for the Zoo.

The recreational restoration of the Great Highway would not only improve views of the ocean and coastline, it would improve the visual appearance of the dunes and the highway itself. The existing barren stretch of asphalt would be replaced by a narrower roadway matching the reconstructed terrain. The dunes would be heavily landscaped to control wind erosion and would, therefore, present a somewhat more green and park-line appearance than the existing open hills of sand.

The ocean outfall will be below the land and water surface. Only the emergency overflow structure will visually intrude on the beach.

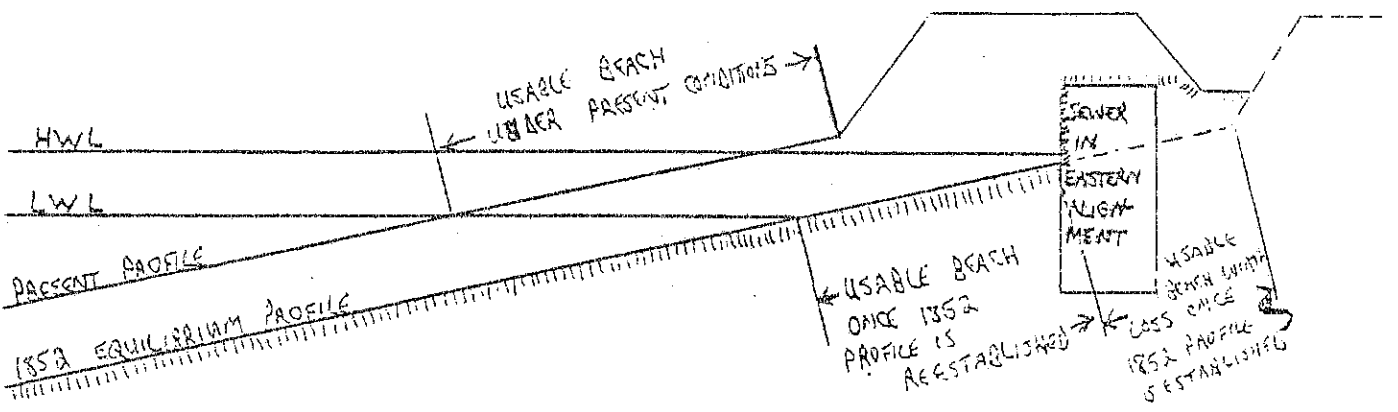
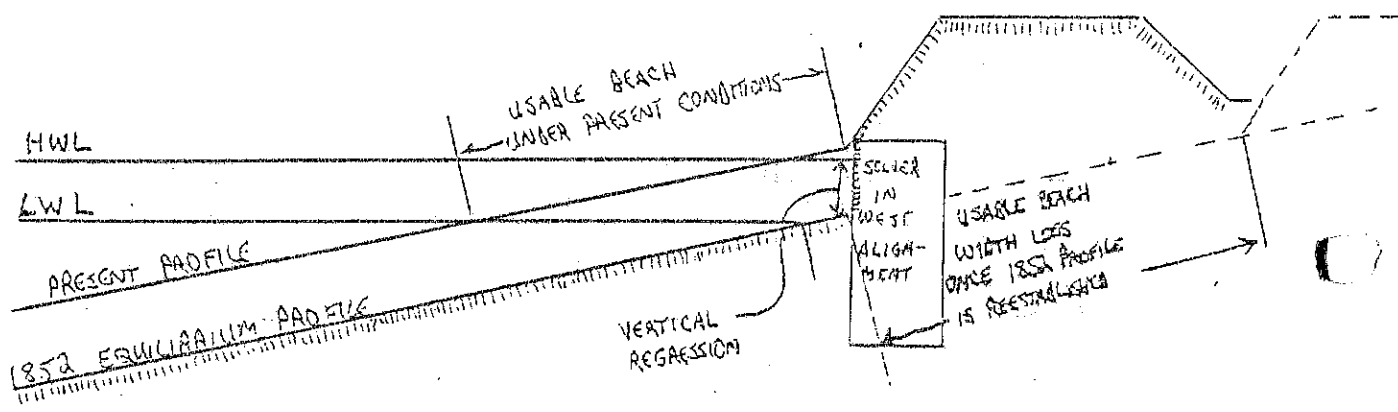
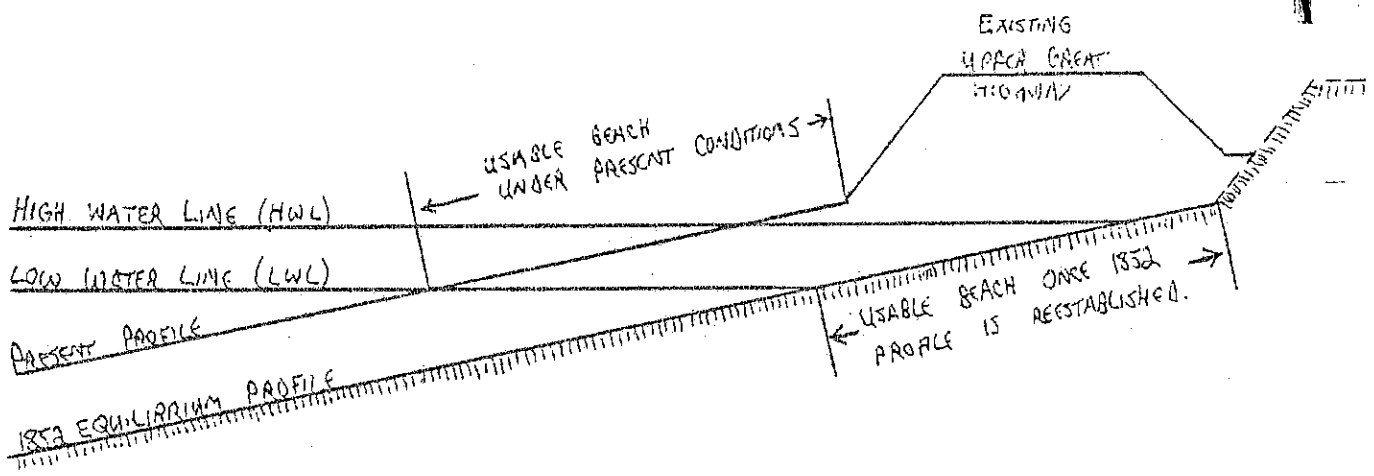
NOTE:

The exhibits attached are in addition to those included in the Application Summary. In the spirit of economy, those exhibits are not duplicated here. They were included in the previous document. Additional copies of all exhibits are available from the State Commission office. Your cooperation is appreciated.



PROPOSED BEACH SECTION

← PACIFIC OCEAN



(NOT TO SCALE)



DEPARTMENT OF THE ARMY
 SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
 211 MAIN STREET
 SAN FRANCISCO, CALIFORNIA 94105

SPNED-PN

RECEIVED

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Mr. Albert J. Perini CALIFORNIA
 Director of Special Projects COASTAL COMMISSION
 San Francisco Wastewater Program
 276 City Hall
 San Francisco, CA 94102

Dear Mr. Perini:

This is in response to your letter of 30 April 1979 regarding nearshore release of sand dredged from the San Francisco Bay.

In early 1971 with the deepening of the Main Ship Channel to -55 feet MLLW, extensive meetings were held with experts across the country to formulate a disposal operation which would continue sand movement downcoast. Both nearshore disposal and beach disposal were alternatives considered. The recommendation, which was implemented in 1971 and continues, is to release the sand on top of the Bar sufficiently south of the Main Ship Channel to reduce the amount returning when reversal in transport occurs. The top of the Bar is an active zone of littoral transport. The release feeds the beach and nearshore area of Ocean Beach as well as minimizes the transit time of the dredge Biddle.

Sediment analysis were made of both the new construction dredging (-50 feet to -55 feet) and maintenance dredging. The sediments during the construction were significantly courser than during maintenance dredging. Courser sand is desirable for the beach. The new construction, however, has been completed. The sands now dredged are again maintenance sediments. Maintenance sediments generally have a median grain diameter from 0.14 mm to 0.13 mm.

Analysis of the sand for beach replenishment yielded an initial fill factor of about nine(9). This implies that only a small percentage would contribute to the beach and the major portion would move in nearshore transport. Over the long term we do not feel that releasing the sand at Dr. Galvin's location would increase the amount of sand in littoral transport. We also feel that the placement of sand would

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Mr. Albert J. Perini

not alter the bathymetry to change the waves acting on the beach. The placement of sand would be overwhelmed by tidal currents and wave action. The area of erosion is outside (to the south of) the flank of the Bar and not inside the flank, shoreward of the proposed disposal site.

The proposed disposal site is subject to heavy seas and would be extremely unsafe for the hopper dredge for much of the dredging season. The site would require an additional haul distance of about seven(7) nautical miles. The added cost would be about \$400,000 per year. The additional time required for the haul would be about eighteen(18) days. With the present west coast hopper dredge workload, it is doubtful that time would be available.

If you have any further questions, contact Mr. John Sustar, (556-5370), of my staff.

Sincerely yours,

JOHN M. ADSIT
Colonel, CE
District Engineer

Copy furnished:

Golden Gate National Recreation Area
Bldg. 201, Fort Mason
San Francisco, CA 94123

California Coastal Commission
631 Howard Street
San Francisco, CA 94105

EWB

Prototype coastal data collection program as required by Condition 12.

12. The City shall be responsible for a program of collecting data on coastal processes and formaking the information available to interested parties. The program tasks and operating details shall be approved by the Executive Director. The National Park Service is encouraged to participate in this program to the maximum extent feasible. At a minimum, the program shall include the following tasks:

a. Daily measurement of deepwater wave heights and periods at a point seaward of the San Francisco Bar, beginning prior to the construction of the West Side Transport and continuing for at least five years or until construction of the project is completed;

b. Measurement of wave height, period, and direction at a point landward of the Bar. These measurements should be taken for the same period of time that the deep-water waves are being measured. The feasibility of collecting this data shall be based in part on the willingness of either the California Wave Network Program or the Federal Wave Network to cooperate with the installation and maintenance of the equipment;

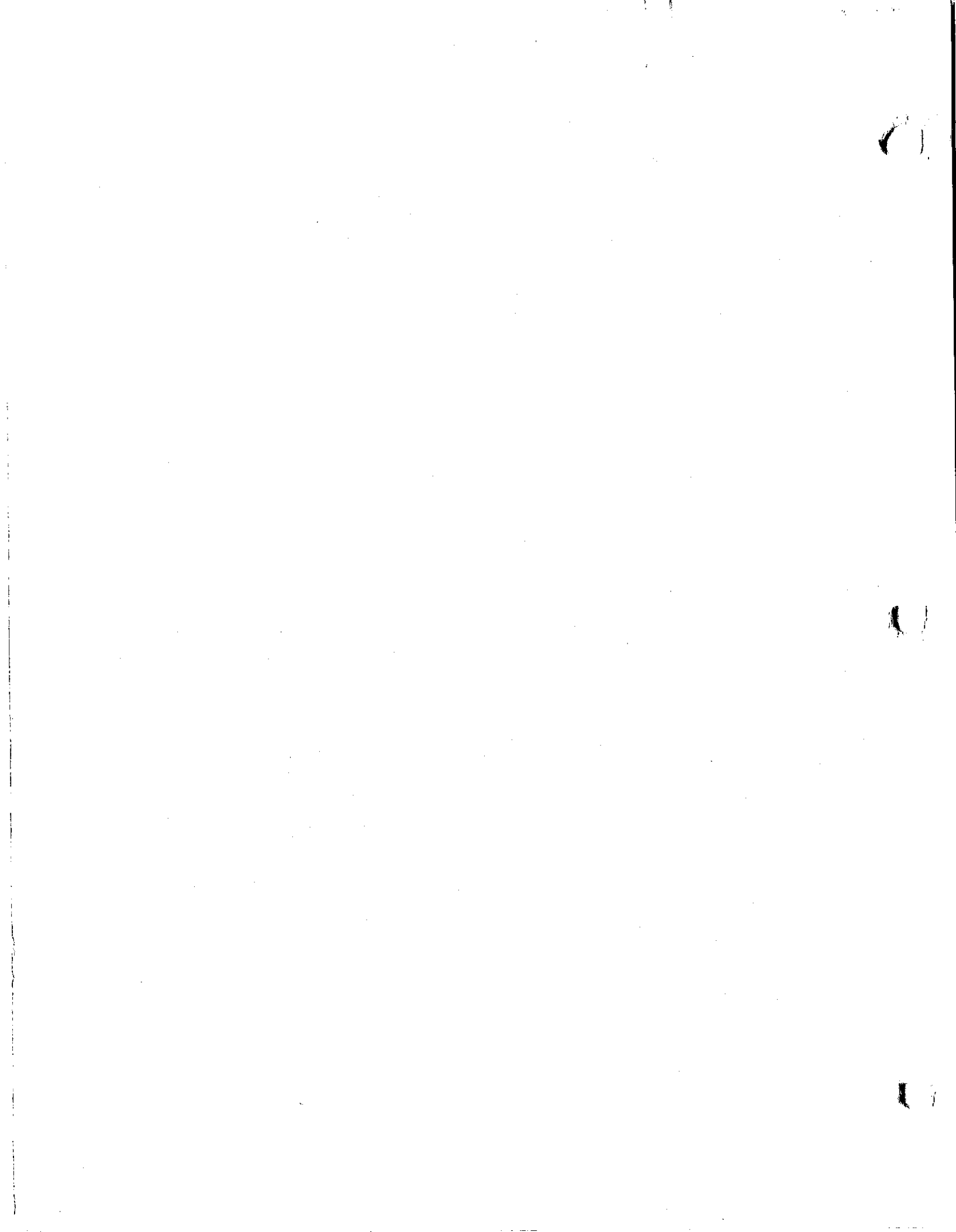
c. Quarterly measurement of beach profiles at four locations extending from behind the dunes to a depth of two ft. below mean lower low water. Wherever possible, the profile transects shall follow those already established by the Corps of Engineers. Quarterly measurements shall be continued for five years after the completion of all filling of the beach with the excess materials excavated from all project components. After that time, profiles shall be taken twice yearly during the months of April and October;

d. Samples of beach sand shall be taken and analyzed for grain size distribution at the same time profiles are measured. Along each profile one sample shall be taken at the mean lower low water line and one sample at the mean higher high water line. Sample size shall be large enough to allow retention of a portion.

e. Aerial photographs shall be taken of the entire surf zone and highway along Ocean Beach concurrently with profile measurement. Flights should be scheduled during storm as well as calm conditions and include 60-percent overlap.

f. Offshore bathimetry should be measured to the 30-ft. depth parallel to the beach during the months of April and October for five years after the completion of filling and then yearly after that, alternating every other year between April and October;

g. Observations of the littoral environment in a manner consistent with the Corps of Engineers LEP program. Observation points should be located on the beach approximately opposite the following four locations: The windmill at Golden Gate Park, Kirkham Street, Vicente Street, and Fort Funston.



CALIFORNIA COASTAL COMMISSION

631 Howard Street, San Francisco 94105 — (415) 543-8555

TO: ALL COMMISSIONERS

FROM: MICHAEL L. FISCHER, EXECUTIVE DIRECTOR, STATE COMMISSION

SUBJECT: MINUTES OF STATE COMMISSION MEETING OF MAY 1-2, 1979

1. Call to Order. The meeting of the California Coastal Commission was called to order on Tuesday, May 1, 1979, at 1:35 p.m. at the Burlingame Hyatt House, 1333 Bayshore Boulevard, Burlingame, California, by Chairman Dorill Wright.

2. Roll Call. Present: Chairman Wright, Vice Chairman Ewan, Commissioners Allen, Benioff, Doerfling, Golden, Grote, King, Leavy, Mackie, and Wilson. Absent: none. Commissioner Ramos arrived at 4:50 p.m., and Commissioners Rosener and Schwartz arrived at 5:05 p.m.

3. Emergency Regulations. Public Hearing and possible Commission action on draft Emergency Regulations.

a. Public Works. Regulations to provide for review of plans for public works pursuant to Public Resources Code Section 30605 and 30606.

William Boyd, State staff counsel, summarized the draft Proposed Emergency Regulations concerning public works plans. Staff recommends that the Commission open the public hearing and action be taken at a subsequent meeting.

Norbert Dall, representing the Sierra Club, said he believed that staff should have provided better notice of public hearing and discussion of the regulations themselves could have been more complete. Therefore, he asked that the vote on these regulations be continued to another meeting. Further, there is no criteria enumerated in the regulations as to what constitutes sufficiency. One possible aspect of "sufficiency" might be that a draft EIS be required for any one of the components.

Dennis Antenore, representing the Sunset Coalition, said they concur basically with the draft regulations, but opposed the adoption of regulations on an emergency basis. They believe that adoption of the regulations at this stage constitutes a denial of due process to both applicants and opponents.

Jesse Tepper, public citizen, said he does not oppose the regulations in general, but was opposed to expediting them for tonight's hearing. Also, by condensing the amount of information and the time limits to facilitate the approval of the sewer project would lessen public input to a great extent.

MOTION: After further Commission discussion, Commissioner Leavy moved the Commission continue the vote to the June 5th meeting, seconded by Commissioner Benioff.

AMENDING MOTION: Commissioner Grote moved the Commission amend the motion by continuing the vote until the May 15th meeting, seconded by Vice Chairman Ewan, and the hand vote was 7 in favor and 1 opposed.

4. Summary Appeals Calendar. Commission consideration of Appeals from permit decisions of Regional Commissions.

a. Appeal No. 114-79 (Wiesen, Sonoma Co.). Appeal of Ben & Rose Mary Wiesen from decision of North Coast Regional Commission granting permit with conditions from single-family home at Unit 24, Lot 157, The Sea Ranch, Sonoma County.

Chairman Wright asked to hear from the appellant, and there was no response. There being no comments from Commissioners, Chairman Wright ruled that this appeal remain on the summary calendar.

b. Appeal No. 115-79 (Woods, Sonoma Co.). Appeal of Anthony Woods from decision of North Coast Regional Commission granting permit with conditions for single-family home at Unit 21, Lot 147, The Sea Ranch, Sonoma County.

Anthony Woods, the appellant, said the Commission's decision could affect the physical and mental health of some of the residents of Sea Ranch. Secondly, the Commission could demonstrate some flexibility and send some sort of message to the Legislators. There being no comments from Commissioners, Chairman Wright ruled that this appeal remain on the summary calendar.

c. Appeal No. 116-79 (Hafezi, Orange Co.). Appeal of Fred Hafezi from decision of South Coast Regional Commission granting permit with conditions for 3-level, 4-unit apartment at 33815 Violet Lantern Street, Dana Point, Orange County.

Sydney Halem, representing the appellant, said they oppose the height condition not to exceed 35' from the intersection. The South Coast Regional Commission measured the 35' from the center of the crown of the road, but the crown of the road is 33' above the sidewalk level. There being no comments from Commissioners, Chairman Wright ruled that this appeal remain on the summary calendar.

d. Appeal No. 125-79 (Padilla, Monterey Co.). Appeal of Gregencio Padilla from decision of Central Coast Regional Commission denying permit to divide 5-acres into 2 parcels of 2.5 acres each at 418 Maher Road, in the Aromas area of north Monterey County.

Gregencio Padilla, the appellant, said the Regional Commission calculated the criteria for land divisions in this area by including farmlands. There being no comments from Commissioners, Chairman Wright ruled that this appeal remain on the summary calendar.

MOTION: Commissioner Benioff moved the Commission find no substantial issue on the summary calendar, seconded by Commissioner Leavy, and the hand vote was 8 in favor and 0 opposed.

5. New Appeals. Public Hearings on Appeals from Regional Commission Decisions.

a. Appeal No. 97-79 (Monterey Sand, Marina & Sand City). Appeal of Sierra Club from decision of Central Coast Regional Commission granting permit with conditions to Monterey Sand Co. to continue sand extraction in Marina and Sand Cities, Monterey County.

Mark Prinz-Delaplane, State staff analyst, said the Regional Commission approved the project with conditions after receiving considerable expert testimony on the subject of shoreline erosion and the contribution of sand mining to this erosion. The Regional Commission concluded that the project contributes to erosion but there is not enough data to determine how serious sand mining's contribution is. Therefore, the Regional Commission required the applicant to contribute information and money to help with a study on this subject. Under the conditions, there will be a review in 5 years to set a new annual extraction figure which would last for another 5 years, at which time the applicant must reapply for a permit. Appellant is requesting more flexibility in the timing rather than waiting 5 years for the first review. Staff

believes the Regional Commission adequately considered these issues, and, accordingly recommends no substantial issue. In addition, staff further recommends that the Commission adopt a resolution that the project is consistent with the California Coastal Zone Management Program.

Carl Larson, representing the Sierra Club, said this is an irretrievable commitment of a scarce resource beyond the IGP for 10 years and thereby severely prejudices any realistic option for protection. Further, the data presented to the Regional Commission states that there is erosion along the beaches.

Thomas H. Jamison, representing the applicant, said this operation has been ongoing for over 30 years by Monterey Sand Company and at those sites by others for over 70 years. The Regional Commission found this is a coastal dependent use which gives it special priority under the Act. In addition, there are no substitute products for Monterey Bay sand which is a special industrial sand.

Mr. Jacobs said the consistency regulations indicate that the notice given for permit proceedings is not sufficient under the consistency regulations. Therefore, he suggested that the Commission defer action on the consistency resolution until a subsequent meeting.

After further Commission discussion, the hand vote was 8 in favor of finding no substantial issue, and 1 opposed.

b. Appeal No. 100-79 (Hermann, Marin Co.) Appeal of Jack Hermann from decision of North Central Coast Regional Commission denying permit for 2 homes, barn, greenhouse, water well, septic system and miscellaneous improvements on 32 acres at 11201 Sir Francis Drake Blvd., Point Reyes Station, Marin County.

Phil Kern, State staff analyst, said the Regional Commission denied the permit finding that it would prejudice planning options in the area. However, the Regional Commission further found that the decision did not prejudice the merits of the project so that it could be considered should acquisition not take place at an early date and should that type of development be considered to be consistent with the planned uses for the park. However, no such determination has been made by the National Park Services. Staff believes the Regional Commission acted consistently with past actions, and, accordingly, recommends no substantial issue.

Jack Hermann, the appellant/applicant, said denial of this permit is in conflict with repeated statements in support of agriculture in both the Coastal Act and National Parks and Recreation Act because of its unique combination of highly fertile soil, ample water, unshaded all-day sunshine and the local market. They are confident that diversified small-scale farming in the Ilwaco Valley is economically viable, and the Commission should support this type of agriculture wherever possible.

Winifred Hermann, also representing the appellant/applicant, said lands suitable for agricultural uses should not be converted to non-agricultural uses. It would appear that the proposed use of this excellent agricultural land for recreational use would be in conflict with the mandates of the Coastal Act. Therefore, she asked the Commission to support this project.

Susanah Jacobs, representing Environmental Action Committee of West Marin and Point Reyes Planning Group, said they feel the Regional Commission acted properly because there is an unresolved controversy in this area regarding the highest and best use of this land. Further, the Regional Commission acted properly in not interfering with the development of the IGP which presumably would resolve these kinds of

issues. Also, since the Federal Government is in process of possibly purchasing this property it is not a hardship on this particular applicant to wait six months and return to the Commission without prejudice.

Richard Jordan, representing People for a Golden Gate National Recreation Area, said they support the Regional Commission's decision and asked the State Commission to adopt their findings. At the Regional level, they indicated that they felt it was proper to deny the application without prejudice to reapplying.

After further Commission discussion, the hand vote was 7 in favor of finding no substantial issue and 1 opposed. Chairman Wright ruled that the time limit of 6 months and filing fee be waived.

c. Appeal No. 111-79 (GALTRAMS, Humboldt Co.) Appeal of James & Cynthia Arras from decision of North Coast Regional Commission granting permit with conditions to California Department of Transportation to dump 420,000 cu. yds. of spoil at the corner of Highway 101 and McDonald Creek Road, adjacent to Dry Lagoon State Park, Humboldt County.

Tom Mikkelsen, State staff analyst, said the Regional Commission approved the project with conditions which tend to limit the kind of fill material deposited and require that winter fill be graded and planted in spring. Appellant contends that the approval to place fill on this particular site does not protect scenic resources and, further, that the fill could affect the resources of the nearby Lagoon if left uncontrolled. In addition, the State Commission granted a single-family residence on an adjacent parcel with a substantial scenic easement, and the action of the Regional Commission to allow this dump site appears to be inconsistent with that action. He said staff recommends that the appeal does raise a substantial issue.

There being no comments from Commissioners, Chairman Wright opened the public hearing and asked to hear from the applicant.

Joe Thorne, representing the California Department of Transportation, said appellant and staff contend that this project degrades the environment characterized as open space. After the construction contract was completed, during last winter there were some slide problems which threatened to close Highway 101. Therefore, acting under the permission of the local agency they dumped all the necessary material to clear the road on this site. In addition, a section of roadway nearby is slipping and eventually may slide into the Lagoon, so their proposal is to move into the hillside which will create about 8,000 cubic yards more which they can control by spreading and reseeding when it is sufficiently dried out this spring. He said they believe the scenic easement was imposed on appellant's adjacent parcel so that he would not cut down the trees on the hillside.

Cynthia Arras, one of the appellants, said the Regional Commission described this project as "dirt piled on dirt". Since the Regional Commission's approval with conditions on March 14th, 8 to 12 cubic yards of gravel have been dumped along with boulders and stumps. After all this dumping, the beauty of the area will be gone even though Galtrams contends they will reseed the area. Therefore, they believe this is a significant change in the land form. Surrounding land use consists of Dry Lagoon State Park, a large public campground, 10 families residing on McDonald Creek Road and pasture, so this is not an undeveloped area. Further, they are concerned with how this project can be regulated efficiently. Moreover, when they applied for a permit for a small residence on a 5-acre parcel adjacent to the Galtrams property, the development was approved with a condition

Chairman Wright asked to hear from the opponents of the project, and there was no response.

After further Commission discussion, the hand vote was 9 in favor of finding no substantial issue, and 0 opposed.

f. Appeal No. 126-79 (Sewer Authority Mid-Coastside (SAM), San Mateo Co.). Appeal of Nicholas Damer & Granada Sanitary District from decision of Central Coast Regional Commission granting permit with conditions to SAM for intertie sewer pipeline from Montara to north central Half Moon Bay, Montara, El Granada, Half Moon Bay, San Mateo County.

g. Appeal No. 127-79 (Sewer Authority Mid-Coastside (SAM), Half Moon Bay). Appeal of Nicholas Damer & Granada Sanitary District from decision of Central Coast Regional Commission granting permit with conditions to SAM for wastewater outfall from existing Half Moon Bay treatment plant, City of Half Moon Bay, San Mateo County.

Steve Howe, State staff analyst, said the Regional Commission in 1977 granted SAM a permit to construct a wastewater treatment facility with conditions to limit the sewer service area. SAM appealed that decision and the State Commission found no substantial issue was raised by that appeal. However, rather than accept that permit, the applicant has proposed a new 2-phase project. In an attempt to comply with Regional Water Quality Control Board mandates and to avoid prosecution by the member districts, the applicant appeared before the Regional Commission to construct the first phase of the project. Following detailed analysis by the Regional staff, the Regional Commission granted the permit with conditions. One of the appellants, Granada Sanitary District, objects to the condition placing priority on reducing effluent discharge in the Fitzgerald Marine Reserve as they contend that this condition would force construction of the Granada to Montara pipeline segment before any capacity and cost effectiveness studies could be completed. Staff believes the appellants have misinterpreted this condition and that nothing in the Regional Commission's condition would result in such a situation. Staff believes that the most appropriate and expedient way to address these concerns is through the Regional Commission. Accordingly, staff recommends no substantial issue.

William Esselstein, representing Granada Sanitary District, said SAM and its constituents propose to commence construction June 1st, 1979, on new and approved regional sewage facilities. However, unless the controversy succumbed by this appeal is immediately resolved bids cannot be opened due to an existing Order by the Regional Water Quality Control Board. They contend that the condition which requires construction of a segment of the intertie pipeline between Granada and the new regional outfall at Half Moon Bay is illegal before construction of the segment of the pipeline between Montara and Granada. Therefore, to require Granada to construct what may be an improperly sized an exorbitantly expensive pipeline 25' underground without the benefit of either a cost effectiveness study or the draft land use plan of the LCP not only defies logic and common sense but is contrary to well-established Coastal Act policies requiring Coastal development decisions to be based on sound planning considerations. He urged the Commission to remove condition 4 of the intertie pipeline permit and condition 5 of the outfall permit so that construction can proceed in accordance with the time schedule established by the Regional Board in its MPNS permit and by the State Board in its grant conditions.

Nicholas Damer, one of the appellants, said the reason bids are not being opened today is because of the conditions imposed on this project. The agencies responsible for inclusion of these conditions no longer want those conditions in those permits. Therefore, he asked the Commission to remove these conditions immediately.

that a scenic easement for over half of their property be recorded. She asked the Commission to continue to support their opinion of the scenic values of the area and that the Regional Commission's approval with conditions be reversed.

After further Commission discussion, Chairman Wright ruled that the public hearing remain open until a future meeting at which time the vote would take place.

d. Appeal No. 112-79 (George, Newport Beach). Appeal of Ernest & Mary George from decision of South Coast Regional Commission granting permit with conditions for garage, decks, swimming pool and second-story addition to 1-story single-family home on coastal bluff at 169 Shorecliff Drive in Corona del Mar, Newport Beach, Orange County.

Martha Lemmihen, State staff analyst, said the Regional Commission approved this project with conditions following both Statewide and Orange County Guidelines in their definition of the top of the bluff. Accordingly, staff recommends no substantial issue.

George Koteles, representing the opponents, said the substantial issue is inconsistent because of the ruling on where the top of the bluff is. In December, a permit was granted by the Regional Commission to the property on the east where the determination of the edge of the bluff was as their geologist's report indicates. However, staff misinterpreted their geologist's angle of constraint.

Ernest George, one of the appellants/applicants, said the property owners on the south side graded their property with fill on an even slope down to the bluff, and later placed a wood retaining wall on their property. He said they hoped to continue this retaining wall in order to support the pool and decking, while at the present time the old retaining walls are deteriorating. Therefore, they believe the project is consistent with the existing neighbors' properties.

The hand vote was 9 in favor of finding no substantial issue and 0 opposed.

e. Appeal No. 117-79 (Madson, Monterey Co.). Appeal of Douglas Madson from decision of Central Coast Regional Commission denying permit to improve existing goathouse in Laifler Canyon, Big Sur, Monterey County.

Mark Prinz-Delaplaine, State staff analyst, said the Regional Commission denied the permit for the 2nd story addition and essentially told the applicant that the building should either be relocated out of the viewshed from Highway 1 or that the addition be located on another of the visually less intrusive buildings on applicant's property. Staff believes the Regional Commission's decision is consistent with the Act, and, accordingly, recommends no substantial issue.

Bill Woodson, representing the appellant/applicant, said the Regional Commission decision was made on speculation of certain factual allegations that were the only opposition to the application. Basically, those allegations were that the applicant's goathouse and a number of other structures situated on his property were in violation of the Act as they stood. For example, they were constructed without a permit after the enactment of the Coastal Act. Because the proposed goathouse is an attractive building, some of the Regional Commissioners asked if this goathouse would be turned into a residence. Therefore, the application was not considered on its merits alone but on speculation of what might happen in the future. In addition, there is no feasible alternative site although the Regional Commission suggested that it be located elsewhere.

Fred Durker, representing the Regional Water Quality Control Board, said all entities in the Half Moon Bay area are discharging sewage in violation of the law. These entities are under Regional Board Cense and Desist Orders which are being violated because corrective measures were not taken according to the time schedules. Two major wastewater facilities are urgently needed with sufficient capacity to serve these 3 entities. The second priority is a sewer from Monterey pumping plant to the Half Moon Bay plant with a connecting lines and necessary pumping facilities required to transport the wastewater from the communities of Monterey, Granada and Half Moon Bay to a new ocean outfall. Commencement of construction of the new ocean outfall is particularly critical since inadequately treated sewage from the Half Moon Bay community is presently discharging into a heavily used recreational beach. If construction does not commence soon, it cannot be started until the summer of 1980 because of the weather. He asked the Commission to either remove this condition or take some other final action with respect to the permits in question to prevent further delay and commencement of this project.

Commissioner Leavy said he did not believe the condition in question would delay the project. The timeline is very short and this project has been a major compromise by a great number of parties. The conditions which are the subject of the discussion were imposed specifically by the Regional Commission to bind all 3 sanitary districts to their agreement, including the Granada Sanitary District. There were attempts to detract from that at the Regional level, but they were defeated by an almost unanimous vote. The condition requires in effect an intertidal line to cover the entire district and the Regional Commission felt this was the quickest way to avoid continual dumping of raw sewage into the areas of special biological significance, namely, the Fitzgerald Marine Reserve. SAN yielded its demands and the environmentalists who opposed the project yielded their demands and even the Regional Commission yielded its position because the discharge project will allow a larger capacity than the Commission wanted. Bids are scheduled to be opened and construction is to commence in the near future. He urged finding no substantial issue.

Appeal No. 126-79. The hand vote was 8 in favor of finding no substantial issue, and 0 opposed.

Appeal No. 127-79. The hand vote was 8 in favor of finding no substantial issue, and 0 opposed.

h. Appeal No. 132-79 (DeGeorge, Monterey Co.). Appeal of Douglas DeGeorge from decision of Central Coast Regional Commission denying permit for single-family home, west of Highway 1 at Rocky Point, Big Sur, Monterey County.

Bob Sheppard, State staff analyst, said the Regional Commission denied this application because of its impact on visual resources in this scenic viewshed of the Big Sur coast and the prejudicial effect on approval would have on the preparation of the LRP. Applicant is appealing the decision contending that the Commission has been inconsistent in granting permits for other developments in this area and other similar areas on the Big Sur coast while denying his proposed project. The Regional Commission staff indicates that no coastal permits, in fact, have been issued in this area under the 1976 Coastal Act, but at least 15 permits were issued under Proposition 20. Staff believes the Regional Commission acted consistently and, accordingly, recommends no substantial issue.

Douglas DeGeorge, the appellant/applicant, said the Regional Commission denied the permit based on site specific factors, such as the lack of a geological report, but Regional staff informed him a geological report was not necessary. Further, parcelation vests done were submitted to the County Health Department

who took the sea otter fish and game refuge into consideration. So far as archaeological tests, he would be most willing to submit to these tests, but, again, he was not asked for these tests. Although staff contends no permits were granted after Proposition 20, he cited the Sorenson permit at Kessler Point was granted. Further, the Erickson permit was granted under Proposition 20 and the Regional Commission approved a revised permit in August 1977.

Carl Larson, representing the Sierra Club, said they support the Regional Commission's denial at this time because it is consistent with past decisions along the coast to allow LRP planning.

After further Commission discussion, the hand vote was 6 in favor of finding no substantial issue, and 2 opposed. Therefore, Chairman Wright opened the public hearing on the merits of the project, and asked to hear from the applicant.

Douglas DeGeorge, the applicant, said it is inaccurate that the Sorenson house would be unseen and that the geological area was such that it was not a residential area because there were 15 permits granted under Proposition 20, and 17 existing houses prior to that time. Further, across the street from his home is a 10,000 sq-ft. home which was built prior to Proposition 20 and to the south of the proposed site is a commercial restaurant. Currently, there are five houses being built in Otter Cove. He then showed some slides of the subject area.

Carl Larson, representing the Sierra Club, said one of the neighboring houses that was built blocks the view of the cove because of the lack of enforcement under Proposition 20. With respect to the Morris home, it was approved under Proposition 20 also and it was represented at that time to be hidden by a number of pine trees. He said the Regional Commission has been consistent along this Big Sur coast and asked the Commission to deny this proposed project.

Commissioner Leavy asked the staff to research a history of other permit activity in the immediate area and the question of consistency. Finally, he questioned whether or not the Commission could grant a permit without a more detailed blufftop geological report in accordance with the criteria set down by the Commission and whether the report prepared for the neighboring project is adequate.

Vice Chairman Ewen asked staff to obtain an updated Big Sur segment of the LRP.

Chairman Wright ruled that the public hearing remain open until a future meeting at which time the vote would take place.

1. Appeal No. 134-79 (Sewald, Monterey) Appeal of John Sewald from decision of Central Coast Regional Commission denying permit for 2-story, single-family home at 2 Beach Road, Del Norte Beach area, City of Monterey, Monterey County.

Phil Kern, State staff analyst, said staff had received a waiver and request from the applicant and that this appeal be continued to a later date.

MOTION: Commissioner Ramos moved the Commission continue this appeal to a future meeting, seconded by Commissioner DeFling, and the hand vote was 11 in favor, 0 opposed and 1 abstention.

J. Appeal No. 136-79 (Coast Associates, Mendocino Co.). Appeal of Ron Guenther & Sierra Club et al. from decision of North Coast Regional Commission granting permit with conditions to Coast Associates for 54-unit condominium project at Highway 1 & Little Lake Road, 1/2 mile northeast of Mendocino, Mendocino County.

Phil Kern, State staff analyst, said the Regional Commission granted the permit with extensive conditions consistent with the Coastal Act and supported by the evidence. In staff's view, the major consideration in this appeal is how best to concentrate development in a manner protective of coastal resources. Consequently, the Regional Commission considered areas for some expansion around developed areas which are appropriate for new development, and this project lies within an expansion area outside of the Town of Mendocino. Staff believes that while this is a different type of development for the area of Mendocino, it does not conflict with the character of the town that makes it an important visitor destination. The development is located east of town, largely covered by the existing trees, and in an area can be considered distinct from the old town itself. Accordingly, staff recommends no substantial issue.

Ron Guenther, resident of Fort Bragg, said his concerns are with the Local Coastal Program, the ongoing General Plan Amendments and also the hardship exemption process under the Court's ruling. Also, the funding proposal for the Mendocino LCP is before the Commission tomorrow morning, and there is every possibility the community will decide to retain its character and special community status and strictly limit the expansion area for this type of development. He said the State Commission should consider the area-wide effect of this kind of precedent-setting high-density luxury project on housing opportunities for low- and moderate-income people within the area which the Regional Commission failed to do. In addition, there could be agricultural potential here that should be explored under the LCP which, again, the Regional Commission failed to do, citing only that these soils are not prime. One of his special concerns is the de facto urban rural boundary at the northeast corner of Little Lake Road and Highway 1, which may set a precedent for further development along Highway 1 to the Jug Handle Preserve.

Sylvia Coddington, representing Citizens for Community Needs, said the Town of Mendocino is the only historic site on the entire coast. Therefore, development of these lands that were formerly agricultural were grandfathered in 3 days before the Attorney General's moratorium which is now in effect. Fort Bragg is nearby and needs condominiums, so there is no need in Mendocino for elegant housing for visitors.

Norbert Ball, representing the Sierra Club, said there are presently some 200 residential structures in the Town of Mendocino and this project would increase that number by 25%. The two major problems with this project are water supply and the commitment made some years back that there would be no major hookups for major projects until a Land Use Plan had been completed for Mendocino. Therefore, the Commission should address those problems with the County before approval of this project.

Bud Kamb, representing the applicant, said he agreed with the staff recommendation of no substantial issue. This project has been in the development stage for two years, and the Sewer Board approved this project in concept unanimously. In addition, the Planning Commission and the Board of Supervisors approved this project unanimously. As part of this project, they will place a 100,000-gallon water storage tank on one of the high points of the Town of Mendocino for the volunteer Fire Department of the Town of Mendocino at no charge. In addition, they are providing low- and moderate-income rental units and seasonal vacation units.

Commissioner Bandloff said that one of the reasons the Regional Commission determined there were developed areas to the south of Fort Bragg and east of Mendocino was to give guidance to the ongoing planning process. Just east of this project is a fairly substantial piece of land which came to the Regional Commission for a land division and, at that time, the Regional Commission determined there should not be a land division there but rather a full-scale subdivision. She said the Regional Commission considered this project in greater detail than any other project before it on her 6 years with the Commission. Therefore, she supported no substantial issue.

After further Commission discussion, the hand vote was 8 in favor of finding no substantial issue, and 4 opposed.

6. Recess. The Commission recessed for dinner at 5:40 p.m. and reconvened at 7:35 p.m. Chairman Koenigshofer, Vice Chairman Egger, Commissioners Duncan, Johnck, Kiefer, MacAbay, Rivaldo, and Stanfield of the North Central Coast Regional Commission; and Commissioners Hughes, Levy, McCarthy, and Wyman of the Central Coast Regional Commission attended the evening session.

7. San Francisco Sewer Application. Joint Public Hearing with North Central Coast Regional Commission and Central Coast Regional Commission on Public Works Plan for all portions of San Francisco Wastewater Management Program in the coastal zone and specific project review of Westside Transport and Storage Facility, Pump Station, Recreational Restoration of Great Highway Corridor and Southwest Ocean Outfall.

Donald Newirth, State staff analyst, briefly summarized the Review of Public Works Plan and Specific Projects proposed by San Francisco Wastewater Management Program. Part I addresses the San Francisco Wastewater Management Program as the public works plan, and Part II summarizes the Westside Transport and Storage facility, pump station, recreational restoration of Great Highway Corridor and the Southwest ocean outfall as specific projects under the plan. Staff showed some slides of the subject area, and recommended that the public hearing be opened today and be left open until June 5, 1979, at which time the vote on the certification of the program would take place.

Dianne Feinstein, Mayor of the City and County of San Francisco, said San Francisco has been mandated by State and Federal authorities to substantially reduce the present pollution level of the surrounding waters. The City proposes a portion of this wastewater project within the coastal zone which will control the sewage discharges that pollute the waters and beaches of the City. This will be a single permit sanctioning all the construction phases of the wastewater program's proposed Westside facilities. Because of enormous opposition to this project on City streets, the Board of Supervisors sent the Department of Public Works to find a new alternative and the Great Highway location was raised. After many public hearings were held, the Board approved that location for submission. Since that time, the City staff has attempted to address all of the concerns of the public, including the search for additional land for the Center for the Handicapped on which they can expand. Further, there is a great deal of sensitivity from people in the southeast area of the City who have sewage facilities located in their area and ask that the rest of the City do its share as well. In fact, the plan before the Commission today shows that all areas of San Francisco will, in fact, be doing their share to treat the City's wastes. In summary, all of the concerns raised were answered in September and it is clear that the proposed Westside sewer line can be built safely and with a strong regard for aesthetics and community concerns in the coastal zone. At this time, the Commission is holding the key to a timely completion of the entire wastewater program and without the Westside permits the City and

County of San Francisco faces a 2-year delay because they will have been forced out of the coastal zone in the development of this program. This delay would create an extraordinary expense for the citizens of San Francisco due to the rate of inflation and would require extensive redesign of the project. The City would be violating State and Federal water quality compliance schedules which could result in large daily fines. Also, during her 10 years as Supervisor the Regional Water Quality Control Board imposed building bans on two occasions. Another building ban through the halt of sewer connections would have serious consequences to the economic well-being of San Francisco. She asked the Commission not to judge the project as a private profit-making development, but as a major public works project, the largest in the history of the City and County of San Francisco, whose prime purpose is to clean up the ocean and beaches of San Francisco. She urged the Commission for an affirmative vote.

Albert Perrini, Director of Special Projects for the City and County of San Francisco, said their request is for conceptual approval for the entire project and permission to proceed with construction of four of the eight Westside facility elements. He then described the history of San Francisco's wastewater program and in 1973, the Board of Supervisors approved the wastewater plan in concept and a year later a joint EIR/AFIS was certified. At present, whenever rainfall exceeds a rate of 1/50-inch per hour the sewage system overflows which happens on the west side approximately 14 times a year. The Regional Water Quality Control Board mandate of March 1976 permitted only one overflow per year and required an enormously costly system, but in January 1979 the Regional Water Quality Control Board reconsidered this permit and reduced the strictness of it. The State Water Resources Control Board concurred and the new permit allows eight overflows or approximately 20 hours per year, which is a 90% improvement over the existing situation. In summary, this program is designed to clean up Bay and ocean waters as adjacently as possible by strictly controlling what and where to discharge. This is a carefully designed system to serve the entire city and the Westside facilities before the Commission tonight are a well-integrated part of this system. In addition, this project will restore the most disturbed area on the west side in a way which will actually enhance the coast, provide increased public access and address the erosion of beach erosion. He then discussed the size, cost and location of the Westside facilities and erosion of the beach, as well as the effect of the transport on the processes of the beach. In addition, he discussed short and long-term maintenance operation of the facilities, and, finally, the mitigation that the City and County of San Francisco is undertaking to ensure that the wastewater projects are good neighbors to the residence in the western portion of the City.

Louise Skoll, Manager of Government Affairs for the Wastewater Program, said the highway redesign plan was to address the recreational and aesthetic aspects of Ocean Beach and to ensure that public access was increased and, also, to preserve as much of the natural beach environment as possible. Their goal was to reinforce the environmental systems already operating and see that an urban environment had extra access to a lovely resource. In 1977, the Board of Supervisors asked for a highway plan that would, in fact, create a better recreational area on Ocean Beach that would have 4 lanes and a lower profile to enhance the aesthetics and scenic views and also be landscaped. In September of last year, that plan was brought before the North Central Coast Regional Commission and based on inquiries from Commission staff and the public, the Wastewater Program embarked upon a process to ensure that there was maximum public involvement of the highway plan. The Coastal Conservancy hosted a series of three meetings held in Golden Gate Park, and in between these meetings, a jury panel of three experts analyzed the suggestions of the public and had a landscape architect make drawings to reflect what had gone on the previous week. From that, they learned that the public did want to have the dunes in

front of the road between the road and the ocean and that they did want them landscaped and more recreational trails. In addition, there would be bike paths, jogging trails, equestrian and pedestrian trails with 7 access points to the beach. Also, the treatment plant is 2/3 underground and the surface of that treatment plant is able to be used by the zoo. The pump station also has been sited to enhance the aesthetics although it is partially visible above ground from the beach. In addition, there would be an observation deck on the surface which will be accessible from both the beach and zoo side of the building.

Robert Bacchi, representing the Citizens Advisory Committee, said this project has been reviewed at great length and they specifically support the items that have been well-developed, i.e., Westside transport, redesign of the Great Highway, the Southwest ocean outfall and the pump station. He urged the Commission to allow the project to go forward with the Westside transport in a westerly location with the current lane profile retained to help control blowing of sand and to give a better edge to the bluff. In addition, they would like to see the emergency overflow structure from the southwest outfall designed in some fashion so there is no restriction of lateral access. He then submitted further written testimony.

George Dolin, representing the Recreation Center for the Handicapped, read a resolution passed by a substantial majority of the Directors present at a regular meeting of the Recreation Center for the Handicapped in April 1979. In summary, it said that they would not oppose the proposed construction of the Southwest water pollution control plant predicated upon the assumption that acceptable mitigation can be negotiated.

Mike McGill, Associate Director of San Francisco Planning and Urban Research Association (SPUR), said they vigorously support the location of the transport beneath the Great Highway and the construction of a curvilinear Great Highway and expanded Ocean Beach. In addition, the City and County of San Francisco have an agreement with the Golden Gate National Recreation Area (GGNRA) that they have the right to go into GGNRA territory to take necessary actions to prevent erosion from washing away the Great Highway. The City has done in the past by dumping construction debris onto Ocean Beach. If the Sunset Boulevard route is chosen instead of Great Highway, the disruption in the Richmond district will be severe. At present, the staff believes they can build the Richmond transport line to connect with the Westside transport through publicly-owned property outside of residential areas. Finally, SPUR is concerned about further cost increases that will occur if the Commission denies the Great Highway route.

After further Commission discussion, Chairman Wright asked to hear from the opponents of the project.

Amy Meyer, representing People for GGNRA, said they support the cleanup of wastewater. Their concern is whether or not the Westside transport is coastally dependent, and, if not, the transport location should be shown to be the least environmentally damaging alternative, but the real reconsideration of other sites has been politically undesirable unless and until this one is turned down. Moreover, a maximum amount of plantable dirt is needed to hold the area for combination of various forms of recreation, including in addition to automobile traffic, walking, riding horses or bikes, or just beachcombing, and, therefore, two auto lanes would be sufficient. With the kind of erosion that is prevalent at Ocean Beach, there must also be a long-term planting program because of San Francisco's storms and droughts. Also, the dumping of debris in the area is an ugly answer to a problem which impedes both beach access and egress. In conclusion, the National Park Service agreed to take on Ocean Beach and the dunes west of the upper Great Highway in perpetuity and it is above all the long-term nature of this project that should be considered.

George Gates, retired geologist/resident of San Francisco, said the Commission is being called upon to approve placing a transport in a geologically sensitive area because the area is unstable alongside Ocean Beach. Dr. Galvin is to be highly commended for bringing together a large number of facts and focusing that on the processes along Ocean Beach, as well as developing criteria to stabilize this area. However, Dr. Galvin has qualified it by stating that the quantitative estimates have wide margins of uncertainty and that these estimates are useful in indicating relative importance of each element in a total budget at Ocean Beach. Therefore, Dr. Galvin's proposal to have the Corps of Engineers dump the dredgings from the sea lane near Ocean Beach is a very good one, but this is a recommendation only and there is no commitment on the part of the Corps of Engineers to actually carry this out. Even if the Corps of Engineers does decide to do this, there is no assurance that it will be done throughout the 100-year life of the project.

Shari Mann, representing Sunset Ocean Beach Association, said the specific applications for the transport, pump station and redesign before the Commission this evening are "cherry pie" projects. She asked the Commission not to take chances on nature and Ocean Beach is one "cherry tree" which cannot be cut down on the slim chance that the regrowth will be better than the original. The question is not whether this project can go in this location, but whether or not it should go in this location.

Arden Danekas, representing the Richmond Planning Association, said there are still many unanswered questions on this project. So, if this project is approved, it is incumbent upon the Commission to approve dumping forever.

Charles Carwen, representing Sunset Coalition, said they recently took a 2nd look at the findings of fact which supported the original decision of the North Central Coastal Commission to deny wastewater's first permit application. It seems clear to them that the 300-page application now before the Commission is not in any different from the original and is clearly subject to all of the same environmental and other objections upon which the Regional Commission rejected the original permit.

Elaime Grimm, representing the Sunset Coalition, said the City still has not adequately addressed the question of maximized public access and the use of beach areas and tidelands. She then submitted an article from the San Diego Union regarding erosion at Imperial Beach which is an ongoing problem and depending on the Corps of Engineers to solve San Francisco's problem by use of their dredge for an unlimited length and an unknown cost cannot be considered as a solution. Furthermore, the City has not demonstrated how it will maintain the redesign of the Great Highway and the beach area.

Frances Larkin, resident of San Francisco, said she is President of Tide Beds Community Association (TECA) established in 1970 which is the oldest continuing organization in San Francisco that concentrates on ocean and beach matters. She then submitted her written testimony.

Larry Erickson, resident of San Francisco, said he has long been involved in this project, both as a staff person in community organizations in the Sunset District and as a third generation resident of San Francisco who cares very much what happens to the beach. The reason for the sewer proposal on Great Highway is that 600 homeowners on 42nd Avenue attended a public meeting in the spring of 1976 asking that it be denied. Therefore, the 2 alternatives left were Sunset Boulevard and Upper Great Highway. Because Lower Great Highway has a higher percentage of renters and low-income people it was the point of least resistance. However, the City did not recognize the erosion rate, the groundwater problem, liquefaction, ground shaking, nor the history of bad maintenance.

Jesse Tepper, resident of San Francisco, said the City has constantly claimed that cost is one of the major factors and yet for the last 2 years they have not been able to obtain specific cost figures from them. He asked the Commission to request those specific figures from the City.

Dennis Antenore, representing the Sunset Coalition, said the City has not yet obtained EPA approval for the 8 overflows so the entire design before the Commission is predicated on something which may or may not be approved. Also, the City has claimed it has rejected the Sunset Boulevard route because of its cost and disruption of the neighborhood. Sunset Boulevard is over 100 yards wide and is a triple street in effect and the disruption to the neighborhood there is insignificant compared to one of the narrower streets. He then submitted his written testimony.

Norbert Dall, representing the Sierra Club, said there are severe contradictions and uncertainties in the overall wastewater management plan that need to be specifically addressed and resolved in a manner that cleans up the wastewater discharges into the marine environment, but equally importantly, enhances and protects coastal access and recreational opportunities along one of San Francisco's most important beaches.

Harold Sellman, representing SOEC Resident Coastal Zone, said their concerns are lack of safety factor margins, seismic and structure in an insecure geologic location thereby making the project inconsistent.

James J. Walsh, representing Sunset Parkside Education Action Committee, said Dr. Galvin's report has been done objectively and his recommendations are sound and logical. He said they believe the plans provided by the City enhance the access to the ocean beach, so he asked the Commission to vote affirmatively on the City's application.

Jane Nurre, representing the League of Women Voters of San Francisco, said they commend the efforts of San Francisco's Wastewater management to address the issues raised at the Regional Commission. One of their concerns is whether specific responsibility for future management and its financing has been formally assigned to an appropriate governmental body. Also, will the final design of the Upper Great Highway and the transport incorporate Dr. Galvin's design recommendations concerning maximizing the highway elevation and providing a solid barrier against wave action. Further, whether or not there is a contingency plan for protection of the transport and the pump station in the event that sand replenishment is not successful.

Louis Longinotti, representing S. P. Recreation Center for the Handicapped, said they oppose the wastewater project, but wished to reserve the right to speak further at the June 5th meeting.

John Gilmore, resident of San Francisco, said he is opposed to the wastewater plant being located anywhere near the Recreation Center for the Handicapped. Two of their main objections are pollution and inaccessibility.

Carla Curtis, resident of San Francisco, an instructor of adapted aquatic courses at the Recreation Center for the Handicapped, said she and others are very concerned about where the waste is to be dumped. She asked that the project be located near Fort Funston as the handicapped people have nowhere to go during the 5-year construction period.

Ernest Lotti, representing Louise Lombard Center for the Retarded, submitted a letter from Senator Cranston stating his concerns about placing the wastewater project near the Recreation Center. In addition, the Joint Council of Teamsters will be adopting a resolution condemning the placement of this wastewater project near the Recreation Center.

Charlie Walker, resident of Bayview Hunters Point, said all of the waste cannot be expected to be dumped at Hunters Point, and asked everyone in the City to share in the wastewater project.

Lynn Thompson, representing National Park Service, said their belief in this project is strengthened by the tangible benefits it will offer visitors to the Golden Gate National Recreation area in the form of cleaner water and cleaner beaches. For this reason, his staff has devoted the past two years to working with the City in an effort to reach the best possible solution in areas where the project directly affects the park.

Arthur Zief, representing San Francisco Recreation Center for the Handicapped, said the same arguments were presented at the Regional Commission and there was an unanimous vote for denial. Placing this project near the Handicapped Center will be 5 years of dust, fumes and noise pollution. He then asked the Commission to visit this area before making a decision on the placement of this proposed wastewater project.

Keith Eckman, representing the San Francisco Recreation and Park Commission and Warehouse Union #6, said he voted for the Great Highway redesign plan in 1977 as part of the Westside transportation project. However, some people living along the Great Highway would like to make Ocean Beach and the Great Highway corridor their private reserve. Although he is sympathetic to their concerns, he did not think it is in any way acceptable to limit the vast resources which Ocean Beach represents to only one group of people who live there. He asked the Commission to vote in favor of the proposed wastewater project.

Don Zeitler, representing Planning Association for the Richmond, said they are opposed to the sewer along the beach and to a 4-lane highway at the beach. They favor a more inland and less energy consuming route for the sewer with a 2-lane recreational road to provide access to the coastal zone.

Florence Rogers, resident of the Recreation Center for the Handicapped, said she opposed the wastewater project being placed near the Center because of the noise and dust pollution, especially for the younger children.

Donna O'Neill, representing the Recreation Center, said this wastewater project would be very detrimental to the residents of the Recreation Center. She submitted a list of persons opposed to the project.

Sylvia Anthony Newman, resident of San Francisco, said she also opposed the wastewater project.

John Baritis, resident of San Francisco, said there was an EIR prepared for this project some time ago which is now being amended. Therefore, this EIR should be available to the Commission before any action is taken.

Larry Walker, representing State Water Resources Control Board, said their interest in this project is basically 2-fold. First of all, they are extremely interested in seeing the City comply with State and Federal water quality standards

in accordance with existing compliance schedules. Secondly, because they administer a State and Federal construction grant program, they are interested in reviewing very closely the proposed project to determine eligibility for construction grant.

Inclille Peterson, representing the Recreation Center for the Handicapped, asked the Commission to deny this proposed wastewater project.

Alfred Smith, resident of San Francisco, said he has written to all politicians with regard to the placement of this project near the Recreation Center for the Handicapped. They are not opposed to the project, but only against the location of the plant.

William Bradley, resident of San Francisco, said he opposed the location of wastewater project near the Recreation Center.

Fred Diarker, representing the Regional Water Quality Control Board, said they are very anxious to see the wastewater disposal problems of the City and County of San Francisco resolved as soon as possible because of the time limit set by Federal and State law for July 1983.

Stan Smith, Secretary-Treasurer of the San Francisco Building and Construction Trades Council, said he challenged the testimony of Mr. Lotti who stated the Joint Council of Teamsters were adopting a resolution opposing the project. The AFL-CIO and the building trades are, in fact, supporting the project, and would submit written testimony to this effect.

Joe Castrovinski, representing the San Francisco Chamber of Commerce, said they support the application and asked to speak at the next meeting.

Harold Madison, representing the Citizens Advisory Committee, said that a 105-acre recreation park is proposed for the Hunters Point area, and all of the City should cooperate in the construction of the proposed plant. He asked to speak at the June 5th meeting also.

Lee Chu, resident of San Francisco, said he supported the redesign plan and appreciated the Wastewater Management's efforts to involve the community in the design.

Danny Miranda, Director of the Apprenticeship Opportunities Foundation, said no one has discussed the struggle of the minority communities in San Francisco who have fought to secure affirmative action requirements in order to secure employment. This wastewater project will allow a large number of jobs within the building and construction trades, as well as other areas. Therefore, they totally support the proposed project.

After further Commission discussion, Chairman Wright ruled that the public hearing remain open until June 5-6 meeting at which time the vote would take place.

8. Recess. The Commission adjourned for the evening at 12:00 midnight and reconvened Wednesday, May 2, 1979, at 8:35 a.m.

9. Roll Call. Present: Chairman Wright, Vice Chairman Ewan, Commissioners Allen, Berloff, Doerfling, Farr, Golden, Grove, King, Leavy, Ramos, Rosemer, Schwartz, and Wilson. Absent: none. Commissioner Mackle arrived at 9:45 a.m.

10. Executive Director's Report.

- a. Appointment. Mr. Fischer said Robert Lagle was appointed Chief Planner to succeed Jack Schoop who is now working in Dallas, Texas.
- b. Contracts. Mr. Fischer presented the Status Report on Coastal Commission contracts dated April 24, 1979.

NOTICE: Commissioner Benioff moved the Commission approve the above-mentioned contracts, seconded by Vice Chairman Ewen, and the hand vote was 8 in favor, 0 opposed, and 1 abstention.

"Reports" will be continued at the end of the agenda.

11. Local Coastal Programs.

a. Mendocino County. Public Hearing and possible Commission action on allocation of funds for consultant contract to prepare a Local Coastal Program for Mendocino County (total budgeted at \$165,000, with expenditures not to exceed 20% of that prior to Commission approval of the work program), and authorization of grant agreement to provide staff assistance to Mendocino County (not to exceed \$30,000).

Pat Stebbins, LCP Coordinator, presented the staff report, a copy of which is attached to the official copy of these minutes on file in the Commission's office. She said staff recommends approval.

NOTICE: There being no speakers at the public hearing, Commissioner Benioff moved the Commission approve the funding for Mendocino County Local Coastal Program for a consultant contract, seconded by Commissioner Doerfling, and the hand vote was 10 in favor and 0 opposed.

12. LCP Grant Augmentation. Public Hearing and possible Commission action on modification of work program and augmentation of existing LCP grant to the City of Huntington Beach (augmentation of approx. \$10,660).

Madge Strong, Deputy Chief Planner, said staff recommends that the Commission approve a grant augmentation for \$10,660 which was inadvertently not included in the City's original grant request.

NOTICE: There being no speakers, Commissioner Allen moved the Commission approve the grant augmentation of \$10,660 for Huntington Beach, seconded by Commissioner Doerfling, and the hand vote was 10 in favor and 0 opposed.

13. Categorical Exclusions. Continued Public Hearing and Voting on Categorical Exclusions from the permit requirements of the Coastal Act.

a. Categorical Exclusion E-79-1. Agriculturally-related development in portions of the coastal zone in Del Norte and Humboldt Counties and the Cities of Arcata, Ferndale, and Point Arena.

John Van Coops, State staff analyst, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the Commission's office. He said staff recommends approval with the following conditions.

1. Historical Structures

This exclusion shall not apply to any structure defined as "a qualified historical building or structure" by Health and Safety Code Section 18975, which states:

For the purposes of this part, a qualified historical building or structure is any structure, collection of structures, and their associated sites deemed of importance to the history, architecture, or culture of any area by an appropriate local or state governmental jurisdiction. This shall include structures on existing or future national, state, or local historical registers or official inventories, such as the National Register of Historical Places, State Historical Landmarks, State Points of Historical Interest, and city or county registers or inventories of historical or architecturally significant sites, places, historic districts, or landmarks.

2. Implementation

The Counties of Del Norte and Humboldt and the cities of Arcata, Ferndale, and Point Arena shall, at an appropriate stage in the local approval process for development subject to this exclusion, distribute to the applicant for such local approval an instruction sheet and form provided by the Executive Director of the Commission. After obtaining final local governmental approval but prior to commencing construction under this exclusion, such applicant shall send the completed form containing a brief description of the excluded development to the North Coast Regional Commission.

3. This exclusion shall apply only to the permit requirements of the Coastal Act of 1976, pursuant to Public Resources Code Section 30610 (d) and 30610.5(b), and shall not be construed to exempt any person from the permit requirements of any other federal, state or local government or agency.

b. Categorical Exclusion E-79-2. Lot line adjustments in portions of the coastal zone in Del Norte, Humboldt, and Mendocino Counties and cities within those counties.

Pat Stebbins, LCP Coordinator, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the Commission's office. She said staff recommends approval with the following conditions:

- In order (1) to assure that the adoption of the exclusion will cause no significant change in the density, height, or nature of uses in excluded area,
- (2) to protect coastal resources, and (3) to implement the exclusion, this order is subject to the following conditions:

- 1. This exclusion shall not apply to line adjustments in which more than five acres are transferred from one parcel to another parcel.
- 2. Applicable Zoning - Development pursuant to this exclusion shall conform, unless otherwise limited by this order, to the zoning in effect on January 1, 1979, in the affected local government.

3. Implementation - The counties of Del Norte, Humboldt, and Mendocino, and the cities of Crescent City, Trinidad, Arcata, Eureka, Fortuna, Ferndale, Fort Bragg, and Point Arena shall, at an appropriate stage in the local approval process for development subject to this exclusion, distribute to the applicant for such local approval, an instruction sheet and form provided by the Executive Director of the Commission. After obtaining final local governmental approval but prior to filing a final map, such applicant shall send the completed form containing a brief description of the excluded project to the North Coast Regional Commission.

4. This exclusion shall apply only to the permit requirements of the Coastal Act of 1976, pursuant to Public Resources Code Section 30610(d) and 30610.5(b), and shall not be construed to exempt any person from the permit requirements of any other federal, state or local government or agency.

Chairman Wright opened the public hearing, and there was no response.

Categorical Exclusion E-79-1.

NOTION: Commissioner Allen moved the Commission approve the above-mentioned categorical exclusion, seconded by Commissioner Benioff, and the roll call vote on the exclusion, with a yes vote to approve with the conditions and for the reasons in the staff recommendation, and a no vote to deny, was as follows: Yes: Commissioners Allen, Benioff, Doerfling, Ewen, Leary, Ramos, Rosener, Schwartz, and Chairman Wright. No: none. The exclusion was thus approved with conditions by a vote of 9 in favor and 0 opposed.

Categorical Exclusion E-79-2.

NOTION: Commissioner Doerfling moved the Commission approve the above-mentioned categorical exclusion, seconded by Commissioner Benioff, and the roll call vote on the exclusion, with a yes vote to approve with the conditions and for the reasons in the staff recommendation, and a no vote to approve, was as follows: Yes: Commissioners Allen, Benioff, Doerfling, Ewen, Leary, Ramos, Rosener, Schwartz, and Chairman Wright. No: none. The exclusion was thus approved with conditions by a vote of 9 in favor and 0 opposed.

14. Final Regulations. Public hearing and possible adoption of new regulations and previously adopted emergency regulations.

a. Permit Applications by Lessees. Regulations to amend Section 13053.5 of the Commission's Regulations to require owners of property to join lessees as co-applicants for proposed development projects. These regulations were adopted as emergency measures on February 21, 1979.

b. Applications for Permits. Add new Sections 13053.4 and 13053.6 to provide revised and updated permit application procedures.

c. Hearings. Amend Sections 13062 and 13071(c) to delete the 21 day requirement, consistent with the recent amendments to the Coastal Act.

d. Appeal Form. Amend Sections 13188 and 13120 to revise the requirements for telephone numbers on the appeal form.

e. Additions to Existing Residences. Amend Section 13230(b)(5) to delete the requirement for a coastal development permit for spas and fountains.

f. Minor adjustments to the Coastal Zone Boundary. Adopt new Subchapter 8 to Chapter 6 to provide a procedure to adopt minor adjustments to the coastal zone boundary after Regional and State Commission hearings.

Nancy Wainwright, State staff analyst, presented the amended Final Regulations, a copy of which is attached to the official copy of these minutes on file in the Commission's office. She said staff recommends approval.

Chairman Wright asked to hear from the public, and there was no response.

NOTION: Vice Chairman Ewen moved the Commission adopt the above-mentioned regulations, seconded by Commissioner Doerfling, and the roll call vote on the regulations was as follows: Yes: Commissioners Allen, Doerfling, Ewen, Parr, Leary, Ramos, Rosener, Schwartz, Wilson, and Chairman Wright. No: none. The regulations were thus adopted by a vote of 10 in favor and none opposed.

15. Access Guidelines. Public Hearing on Statewide Interpretive Guidelines on Public Access. Commission action will be scheduled for a subsequent meeting. Janet Nulk, State staff analyst, summarized the proposed Statewide Interpretive Guidelines on public access. The draft guidelines include a discussion of when projects are subject to the access provisions of the Coastal Act, what types of access and what amount of access must be provided to find a project consistent with the Act, and what mechanism should be used to effectuate the dedication of required accessways. She said staff recommends that the public hearing be held and that adoption of the final guidelines be scheduled for a subsequent meeting in southern California.

Vice Chairman Ewen opened the public hearing and asked to hear from the audience.

Jack Stevens, representing the Pacific Legal Foundation, said the Guidelines were prepared in isolation from other relevant portions of the State and Federal Constitutions and that private property cannot be expropriated without just compensation. Therefore, he asked the Commission's present policy of providing access guidelines, but to also reject the Commission's present policy of providing access and expropriating private property without just compensation. He said they prefer to see action taken to protect prescriptive rights only when a Court has decided that they exist.

There being no further speakers, Vice Chairman Ewen ruled that the public hearing remain open until a future meeting.

16. Yotting on Appeals. Continued Public Hearing and Yotting on Appeals.

a. Appeal No. 439-78 (Norman, Monterey Co.) Appeal of Emille Norman from decision of Central Coast Regional Commission granting permit with conditions to remove mobile home and construct caretaker residence \pm 3/4 mile west of Highway 1, Pfeiffer Ridge, Big Sur, Monterey County.

Tom Mikkelson, State staff analyst, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the Commission's office. He said staff recommends approval with the following conditions:

1. Revised Plans. Prior to the issuance of permit the applicant shall submit for the review and approval of the Executive Director of the Commission, detailed building and site plans. No additions to the proposed residence not contained in the approved plans shall be constructed without the written consent of the Executive Director of the Commission. All construction shall be in strict conformance with the approved plans. These plans shall be comprised of and provide the following:

a. Architectural drawings of the proposed two-story residence and appurtenant structures (if any) showing elevations, floor plans, and building materials. No portion of the residence or exterior lighting shall be visible from Highway 1 or from any other public viewing area. Water conservation devices shall be incorporated in all plumbing fixtures including low water use toilets and flow restrictors or aerators on all interior faucets. Solar collection panels shall be constructed of non-glare materials.

b. Site plans showing the location of the proposed caretaker's residence as well as all necessary site improvements including grading, placement of utilities, removal of vegetation, and proposed landscaping. The applicant shall not remove any trees not shown for removal on the approved plan without the prior written approval of the Executive Director of the Commission. All exposed cuts and other graded areas shall be promptly revegetated.

2. Occupancy of Mobile Home. Within ten days after occupancy of the residence authorized by this permit, applicant shall submit a signed statement by a county-registered sanitarian evidencing that the septic connection from the mobile home has been abandoned. Upon occupancy of the new home, the mobile home shall no longer be used for residential purposes. A separate permit shall be required if the mobile home is to be removed to another lot in the coastal zone, outside of an established mobile home park.

3. Prescriptive Rights. The applicant shall, by accepting the terms and conditions of this permit, agree that issuance of the permit and completion of the authorized development shall not prejudice any subsequent assertion of public rights, that may be determined to exist on the subject property.

4. Local Permit. The applicant shall comply with the conditions of Monterey County Special Permit PC-3193 (Exhibit 2). If compliance with these conditions requires revisions or additions to the plans as approved by the Commission or the Executive Director, the applicant shall submit such revisions to the Executive Director for his review and approval prior to commencement of construction.

Chairman Wright asked to hear from the opponents, and there was no response.

Lawrence Horen, representing the applicant, said at the time the mobile home was constructed a septic tank system was designed to accommodate a full-scale residence and applicant proposes to use that septic tank system subject to the County's approval that it is entirely adequate for this purpose. The County imposed a condition in order that there be no intensification of use of the property by having the mobile home disconnected from the septic tank system prior to the occupancy of the newly constructed residence. Moreover, they agree with the staff recommendation and conditions.

Commissioners Leavy and Rosener said they had familiarized themselves with the record and were prepared to vote.

MOTION: Commissioner Doerfling moved the Commission vote on the application per the staff recommendation, seconded by Commissioner Leavy, and the roll call vote on the application, with a yes vote to approve with the conditions and for the reasons in the staff recommendation, and a no vote to deny, was as follows: Yes: Commissioners Allen, Penloff, Doerfling, Ewen, Farr, Grote, Leavy, Ramos, Rosener, Schwartz, Wilson, and Chairman Wright. No: none. The application was thus approved with conditions by a vote of 12 in favor and 0 opposed.

b. Appeal No. 29-79 (Auguste, Pt. Arena). Appeal of Sierra Club Coastal Task Force and Ron Guehrther from decision of North Coast Regional Commission granting permit with conditions to Robert & Donna Auguste for single-family home, 28200 S. Highway 1, Pt. Arena, Mendocino County.

Martha Lemmihan, State staff analyst, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the Commission's office. She said staff recommends approval with the following conditions:

1. Prior to the issuance of permit the applicant's shall submit, for the review and approval of the Executive Director of the Commission, plans and/or specifications for the following:

a. Utilities. Service connections shall be underground from power source to the structure;

b. Water Conservation. Faucets and shower heads shall be fitted with water saving devices that restrict flow to a maximum of three gallons per minute;

c. Blufftop Setback. The house shall be set back a minimum of 65 ft. from the edge of the bluff, as indicated on the site development plan by the applicant;

d. Septic Disposal System. A private septic disposal system shall be used, the design and placement of which have been reviewed and approved by the executive officer of the California Regional Water Quality Control Board, North Coast Region, and determined to be in compliance with the Regional Water Quality Control Board Basin Plan; and

e. Highway Access. An encroachment permit shall be obtained from the State Department of Transportation (Caltrans) to allow highway access from the driveway.

2. Foundation Plans. Prior to the issuance of permit, the applicants shall submit the following for the review and approval of the Executive Director of the Commission:

a. A siting plan showing the precise location of the foundations and the grading necessary for their construction; and

b. A foundation plan for the proposed development prepared by a registered civil engineer with expertise in foundation design, or by a certified engineering geologist, showing that soil conditions will not be adversely affected by the proposed structure.

3. Lateral Access Easements. Prior to the issuance of a permit, the applicants shall record an irrevocable offer to dedicate to a public agency or private association approved by the Executive Director of the Commission:

a. Lateral beach access from the toe of the bluff to the mean high tide line; and

b. a twenty-five (25) ft. blufftop accessway measured inland from the "current" bluff edge, that shall in no case be any closer than ten (10) ft. from the residential structure. This easement shall be for the normal passive recreational

use of the public and does not allow the construction or placement of structures or fencing without the permission of the landowner and the Commission. Such easement shall be free of prior liens except tax liens and all which the Executive Director determines may affect the interest being conveyed. The offer shall be made in a manner and form approved in writing by the Executive Director. The offer shall be irrevocable for a period of 25 years, running from the date of recordation and shall run with the land in favor of the people of the State of California, binding successors and assigns of the applicant or landowner.

4. Waiver of Public Liability. Prior to the issuance of a permit, the applicants shall submit to the Executive Director a deed restriction for recording free of prior liens except for tax liens, agreeing for themselves and any successors in interest to waive any claims against the Commission or any other public agency for damage or injury to the property or the development resulting from drainage from the proposed structure and septic system, erosion, or wave action; and to relinquish any rights to public disaster funds or loans for repair, replacement or rehabilitation of the property or the development made available because of the above. The form and content of the deed restriction shall be subject to the review and approval of the Executive Director of the Commission.

5. Shoreline Protective Devices. Prior to the issuance of a permit, the applicants shall record a deed restriction, the form and content of which are to be approved in writing by the Executive Director of the Commission, stipulating that the landowner (deed holder) shall not construct any shoreline protective devices to protect the subject single-family residence in the event that the structure, at some future point in time, is subject to damage from erosion or flooding. In such an event, the landowner (deed holder) shall remove the structure from the parcel, reduce the size of the structure, or take some other such measure to protect the structure rather than the construction of a shoreline protection device. This document shall be recorded prior to all liens and encumbrances other than the tax liens and shall run with the land, binding successors and assigns of the applicants or landowner.

6. Blufftop Safety Fence. The applicants shall have the option to construct a low fence along the blufftop, not to impede movement but as a safety measure to warn pedestrians of the sheer bluff face. Plans for such a fence must be submitted and approved by the Executive Director of the Commission prior to commencement of construction of a fence.

Ms. Lemnhan said staff received a telegram from the Sierra Club stating that they would not oppose the staff recommendation because of the conditions requiring access, blufftop setbacks, and prohibiting shoreline protective devices.

Ralph Matheson, representing the applicant, said they agree with the staff recommendation and would comply with the imposed conditions.

Commissioner Leavy said he had familiarized himself with the record and was prepared to vote.

NOTICE: Commissioner Ramos moved the Commission vote on the application per the staff recommendation, seconded by Commissioner Benioff, and the roll call vote on the application, with a yes vote to approve with the conditions and for the reasons in the staff recommendation, and a no vote to deny, was as follows: Yes: Commissioners Allen, Benioff, Boerling, Ewen, Grote, Leavy, Ramos, Rosener, Schwartz, and Chairman Wright. No: none. The application was thus approved with conditions by a vote of 10 in favor and 0 opposed.

c. Appeal No. 62-79 (Schneider, Del Norte Co.). Appeal of Sierra Club from decision of North Coast Regional Commission granting permit with conditions to Stewart Schneider to divide two 12-acre parcels into thirteen 1-acre parcels, three 2-acre parcels, and one 4-acre parcel, east of Highway 101, approximately 3 miles north of Crescent City, Del Norte County.

Tom Mikkelson, State staff analyst, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the Commission's office. He said staff recommends denial.

Chairman Wright asked to hear from the opponents, and Mr. Mikkelson said staff received a letter from the Sierra Club which strongly urged denial of this project because it did not meet the subdivision criteria of Coastal Act regulations.

Dave Schneider, representing the applicant, said there is no concrete evidence of any opposition to this project. This project is 5 miles from the ocean and 3 miles from Lake Earl and adjacent to the Mendocino subdivision which is already built out. When they split the residential portion from the agricultural portion, the Regional Commission agreed that the area was residential and already developed. Therefore, it does meet all the criteria of the Coastal Act. In addition, the Department of Fish and Game have worked with them throughout this project and do not oppose this project.

Commissioner Benioff said she believed this proposed land division is a good one. However, it is a matter of six months before the IGP in Del Norte County will address the necessary sizes of lots to protect the habitat and other environmental concerns. Therefore, she supports the staff recommendation in order that the IGP can take precedence.

Commissioners Leavy and Rosener said they had familiarized themselves with the record, and were prepared to vote.

NOTICE: After further Commission discussion, Commissioner Benioff moved the Commission vote on the application, seconded by Commissioner Leavy and the roll call vote on the application, with a yes vote to approve, and a no vote to deny for the reasons in the staff recommendation, was as follows: Yes: Commissioners Benioff and Ramos. No: Commissioners Allen, Benioff, Ewen, Grote, Leavy, Rosener, Schwartz, Willson, and Chairman Wright. The application was thus denied by a vote of 2 in favor and 9 opposed.

d. Appeal No. 71-79 (CALIFRANS, San Mateo Co.). Appeal of California Department of Transportation from decision of Central Coast Regional Commission granting permit with conditions to extend existing seawall to protect Highway 1 at El Granada Beach, south of Pillar Point Harbor, San Mateo County.

Linda Probert, State staff analyst, presented the staff recommendation for approval of the application with the following conditions:

1. Access. Prior to issuance of permit, the applicant shall submit for review and approval by the Executive Director of the Commission, final site and engineering plans for the revetment. These plans shall include: (a) a lateral pedestrian access-way across the top of the revetment from the existing parking area at Pillar Point Harbor, south to the end of the revetment; and (b) a ramp on the southern portion of the revetment to provide access to the beach.

The applicant shall submit for the review and approval of the Executive Director of the Commission an offer to dedicate easements over the above described accessways for public pedestrian use to a public agency acceptable to the Executive Director.

The offer to dedicate shall be in a form and content approved by the Executive Director and shall be recorded at the County Recorder's office. The offer to dedicate the easements shall provide that the Department of Transportation or its successor in interest shall maintain the accessways for public pedestrian use and shall assume liability responsibility for the operation of the accessways.

2. Sand Replenishment. The applicant shall submit a plan for the review and approval of the Executive Director of the Commission showing the placement of 1600 cubic yards of sand along the southernmost portion of the revetment within 90 days of project completion. If project completion should occur between November 15 and March 15, placement of sand may be deferred until April 15 at the latest. The sand shall be clean, durable sand, of a grain size compatible with the natural sand on the beach.

3. Downshore Erosion. The applicant shall submit a written report prepared by a registered geologist for the review and approval of the Executive Director of the Commission describing the effect, if any, that construction of the revetment will have on downshore beaches and structures. The report shall address the threat of erosion generally along the southern beaches, and specifically on the Granada Sanitary District sewer transfer station and unprotected areas of Highway 1. In addition, the applicant shall enter into a written agreement with the Commission, the form and content of which shall be approved by the Executive Director of the Commission. In the agreement the applicant shall agree to take protective measures for the Granada Sanitary District sewer transfer station and other structures or beaches affected by the revetment if, after construction of the revetment, the Executive Director determines there is any evidence that the revetment caused damage to the structures or beaches, beyond the level of erosion already caused by existing natural and artificial conditions.

4. Participation in a Regional Solution. The applicant shall agree to participate in future discussions regarding the continuing problem of shoreline erosion and regarding the planning and implementation of a regional solution for the area south of Pillar Point Harbor to the San Mateo Midcoast Beaches (i.e., a spur extension to the harbor breakerwater, beach nourishment, etc.), as such discussions are held as a part of the Local Coastal Program.

5. Wave Gauge Network. The applicant shall establish a program and submit such program to the Executive Director of the Commission for review and approval to monitor wave height, direction and duration using suitable recording devices, in shallow water in the area south of Pillar Point Harbor for a period of five years after completion of the revetment. In lieu of recording this wave data directly, the applicant shall with the written approval of the Executive Director of the Commission, contribute \$5,000 per year for 5 years to the California Department of Boating and Waterways-Corps of Engineers existing California wave network program; the money shall be used to install appropriate gauges south of Pillar Point Harbor.

Regarding condition no. 1, Ms. Probert said Caltrans has agreed to secure a dedication of easements from the underlying property owners rather than making an offer to dedicate itself.

Chairman Wright asked to hear from the opponents of the project, and there was no response.

Quentin Fletcher, representing Caltrans, said they agree with the staff recommendation with conditions. Further they agree to enter into the necessary agreements as requested by the Commission. The rate of erosion since the breakerwater has been built has been averaging about 6' to 10' per year.

Commissioner Leavy said he was concerned that this was a long-term solution on a piecemeal basis. The main issue is whether or not the beaches are going to be protected over the highways or vice versa, and this project will permanently eliminate a very-much needed beach in this area. The long-term solution heard at the Regional level was to build a spur onto the Pillar Point Harbor breakerwater and extend along the coast to prevent the erosion. In summary, if Caltrans wants to protect the highway by dumping rock on the beach then the amount of sand recommended by the Regional Commission should be required to maintain that beach. Therefore, he could not support the staff recommendation.

Commissioner Mackie said a number of concerns expressed at the Regional level were addressed, and the placement of the wall does raise problems of highway spray. However, Caltrans' agreement to replenish the southerly third as well as their agreement to repair any erosion that appears to come from this activity further down the beach goes far to try to protect this as a resource for people in this area. In conclusion, the conditions imposed reflect a fair analysis of the wave actions and the geologic conditions in this area and also protect the coastal resources, as well as meeting the needs of Caltrans to guard public access up and down the coast.

After further Commission discussion, Mr. Fletcher said Caltrans would agree to cooperate with the Commission in the preparation of its LCP and any studies for the long-term solution of this problem.

MOVION: Commissioner Doerfling moved the Commission vote on the application per staff recommendation with conditions, seconded by Commissioner Benioff.

AMENDING MOVION: Commissioner Leavy moved the Commission continue this matter to a later date for further discussions between the State staff and Caltrans, seconded by Commissioner Grote, and the hand vote was 9 in favor, 1 opposed, and 1 abstention.

e. Appeal No. 81-79 (Prim Investments, Monterey). Appeal of Prim Investments, Inc., from decision of Central Coast Regional Commission granting permit with conditions for 55-unit condominium on Shepherdus Knoll, off Scenic Drive, City of Monterey, Monterey County.

Tom Hikkelsen, State staff analyst, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the Commission's office. Staff showed some slides of the subject area, and recommended approval with the following conditions:

1. Housing Dedication.

- a. Offer of Dedication.

Alternative I. Prior to issuance of a permit, the applicants shall record an offer to dedicate to the Housing Authority of Monterey County or the Coastal Conservancy 8 units of the proposed 55 condominium units. The offer shall include suitable access easements into Del Monte Forest and to the development along the proposed streets. The offer of dedication shall run with the land, binding successors and assigns, shall be recorded free of all prior liens and encumbrances except for tax liens, and shall be insured by title insurance acceptable to the Executive Director. Prior to recording, the applicant shall submit the documents conveying the offer of dedication to the Executive Director for his review and approval. The approved offer shall be recorded and evidence therefore submitted to the Executive Director. Any division of land necessary to accomplish this action is also hereby approved by this Commission.

— OR —

Alternative II. Prior to issuance of a permit, the applicants shall record an offer to dedicate to the Housing Authority of Monterey County or the Coastal Conservancy a parcel of vacant land zoned to allow a minimum of 16 residential units, located in the City of Monterey. This site shall be approved by the Executive Director of the State Commission in consultation with the Housing Authority. The offer of dedication shall run with the land, binding successors and assigns, shall be insured by title insurance acceptable to the Executive Director. Prior to recordation, the applicant shall submit the documents conveying the offer of dedication to the Executive Director for his review and approval. The approved offer shall be recorded and evidence thereof submitted to the Executive Director. Any division of land necessary to accomplish this action is also hereby approved by this Commission.

— OR —

Alternative III. Prior to the issuance of a permit, the applicants shall record an agreement of financial participation, between the applicant and the City of Monterey, to effect the purchase of the parcel of land recommended by the City of Monterey in Exhibit 3. The agreement shall provide that the financial participation of the applicants shall be an amount equal to the land cost for 16 units. This agreement shall only be acceptable upon the submission to the Executive Director of an irrevocable letter of credit in an amount equal to the land costs for 16 units. The determination of the land costs shall be made by the Executive Director of the Commission in consultation with the City of Monterey and the Monterey County Housing Authority. The form and content of the agreement of financial participation shall be subject to the written agreement of the Executive Director of the Commission prior to recordation. The recorded agreement shall also contain an offer to dedicate any interest the applicants may obtain in the acquired parcel to the Monterey County Housing Authority or the Coastal Conservancy. The offer of dedication shall run with the land, binding successors and assigns, shall be insured by title insurance acceptable to the Executive Director for tax liens, and shall be recorded by title insurance acceptable to the Executive Director. Prior to recordation, the applicant shall submit the documents conveying the offer of dedication to the Executive Director for his review and approval. The approved offer shall be recorded and evidence thereof submitted to the Executive Director. Any division of land necessary to accomplish this action is also hereby approved by this Commission.

h. Acceptance by Grantee. The offer of dedication shall provide that as a condition of conveyance of fee title, the grantee agency or organization shall agree to accept the restrictions on the subsequent use of the land to be granted as limited to housing for persons of low and moderate income. Prior to the acceptance of the grant of fee title, the grantee shall submit to the Executive Director for his review and approval the documents containing the terms and conditions of the acceptance of the subject units, parcel, or interest in parcel.

2. Regional Commission Conditions. The terms and conditions of the Regional Commission are hereby incorporated into this permit, except as those conditions are superseded by the findings and conditions of this permit or by subsequent Regional or State Commission action on the permit application for the construction of the subject condominiums. Conformance with the conditions shown in Exhibit 4 shall be subject to the review and approval of the Executive Director of the Regional Commission.

Brian Finnegan, representing the applicant, said they agree with the staff recommendation for approval of the entire 55 units. However, they are concerned with the housing dedication condition. The applicant is willing to make a very substan-

tial dedication to a low-cost housing condition, but Section 30213 requires this sort of condition where it is feasible, and Section 30108 of the Act defines "feasible" as capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, environmental and social factors. He then submitted a letter from the Housing Authority and the Planning Director of the City of Monterey in support of the project. Alternatives 2 and 3 require a dedication of 30% of the units in the project and this project is different from those cited by staff as there is no existing housing at this site nor is it a government-subsidized project. Furthermore, there are no incentives proposed for the developer here in return for these conditions which was allowed in the Harvey project where he was allowed to build 5 more units on his site. Therefore, they believe that 15% or 8 units in the context of this project would be the appropriate dedication for low-cost housing. He asked the Commission to adopt alternatives II and III as contained in Mr. Prim's Declaration.

Carl Larson, representing the opponents, said their concerns were geology and the seismic hazards. In addition, this project would set a precedent leading to the probable opening of the next two adjacent parcels. Another concern is the water allocation and the staff recommends that the Commission exceed the Guidelines in view of the total, low water consumption that seems appropriate for this type of development.

Mr. Mikkelsen said the alternatives presented by the applicant basically hinge on his offer of \$40,000 for low- and moderate-income housing which is tantamount to an in-lieu fee. Therefore, staff believes this would set an unreasonable precedent in this area and opposes both alternatives as presented.

William Boyd, State staff analyst, said the 1st condition is inaccurately worded and should be rephrased to say that this would be an offer to enter into a contract with the Housing Authority for a rental program of 8 units in terms of the standard condition the Commission has used in other types of developments. Another alternative could be a sale program with resale conditions at less than market value.

After further Commission discussion, Mr. Finnegan said they would like to have the Housing Authority's recommendation incorporated into the staff recommendation as a 4th alternative.

Commissioner Leavy said he had familiarized himself with the record, and was prepared to vote.

NOTE: Commissioner Leavy moved the Commission vote on the application per staff recommendation, seconded by Commissioner Bernoff, and the roll call vote on the application, with a yes vote to approve with the conditions and for the reasons in the staff recommendation as amended above by Mr. Boyd, and a no vote to deny, was as follows: Yes: Commissioners Allen, Bernoff, Doerfling, Ewen, Grote, Leavy, Ramos, Rosemer, Schwartz, Wilson, and Chairman Wright. No: none. The application was thus approved with conditions by a vote of 11 in favor and 0 opposed.

17. Findings. Voting on Findings regarding previously considered actions.

a. Permit No. A-61-76. Also Water Management Agency (WMA), Land and ocean outfall from waste treatment plant at Aliso Creek, South Laguna, Orange County. Amendment request to amend conditions concerning capacity.

John Bremner, State staff analyst, presented the proposed Findings, a copy of which is attached to the official copy of these minutes on file in the Commission's office. He said staff recommends approval.

Chairman Wright asked to hear from the opponents and applicants of the project, and there was no response.

MOTION: Commissioner Allen moved the Commission approve the proposed Findings, seconded by Commissioner Doerfling, and the hand vote was 7 in favor and 1 abstention.

b. Appeal No. 376-78 (Harvey Development), 49-unit condominium, San Pedro, Los Angeles, Los Angeles County.

William Boyd, State staff analyst, presented the proposed Findings, a copy of which is attached to the official copy of these minutes on file in the Commission's office. He said staff recommends approval.

Chairman Wright asked to hear from the opponents and applicants of the project, and there was no response.

MOTION: Commissioner Schwartz moved the Commission approve the proposed Findings, seconded by Commissioner Benioff, and the hand vote was 7 in favor and 2 abstentions.

c. Appeal No. 490-78 (Pan Western Petroleum Co.). Request to drill 2 additional oil wells and install necessary production equipment in existing drillsite in Long Beach, Los Angeles County.

Phil Kern, State staff analyst, presented the proposed Findings, a copy of which is attached to the official copy of these minutes on file in the Commission's office. He said staff recommends approval.

Chairman Wright asked to hear from the opponents and applicants of the project, and there was no response.

MOTION: Commissioner Doerfling moved the Commission approve the proposed Findings, seconded by Commissioner Grote, and the hand vote was 8 in favor and 2 abstentions.

d. Appeal No. 67-79 (Telekrew). Request to demolish 9-unit apartment and construct 11-story office and commercial building in Santa Monica, Los Angeles County.

Phil Kern, State staff analyst, presented the proposed Findings, a copy of which is attached to the official copy of these minutes on file in the Commission's office. Staff recommended approval.

Chairman Wright asked to hear from the opponents and applicants of the project, and there was no response.

MOTION: Commissioner Benioff moved the Commission approve the proposed Findings, seconded by Commissioner Doerfling, and the hand vote was 7 in favor and 3 abstentions.

18. CEIP Grants. Public Hearing on, and possible award of, grants requested under the Coastal Energy Impact Program.

a. Sonoma and Marin Counties (Jointly), requested grant of \$70,000, for participation in Lease Sale #53 planning.

Devon Bates, State staff analyst, said the staff recommends that the Commission approve the CEIP joint grant for local participation in OCS Lease Sale #53 planning over the next two years but that funding initially be limited to that necessary for the first year of the planning work in the amount of \$70,000.

Chairman Wright opened the public hearing and asked to hear from the audience.

MOTION: There being no speakers, Commissioner Benioff moved the Commission approve the CEIP grant of \$70,000 for Sonoma and Marin Counties jointly, seconded by Commissioner Allen, and the hand vote was 11 in favor and 0 opposed.

19. Executive Director's Report. (Continued)

Legislation. AB 117 (Levine) Staff recommended support with amendments; AB 316 (Cline) Staff recommended a neutral position with comments; AB 643 (Calvo) Staff recommended support; AB 1157, AB 1158, AB 1159, AB 1160 and AB 1286 (Frazee) Staff recommended opposition; AB 1188 (Bergeson) Staff recommended opposition; AB 1253 (Naylor) Staff recommended opposition unless amended; AB 1316 (Kapiloff) Staff recommended a neutral position at this time; AB 1443 (Hallet) Staff recommended opposition; AB 1468 (Imbrecht) and AB 1559 (Rogers) Staff recommended opposition.

MOTION: Commissioner Leavy moved the Commission support staff's positions as outlined above, seconded by Commissioner Benioff, and unanimously approved, with Commissioner Doerfling opposing AB 1157 (Frazee).

20. Commissioner's Reports.

(a) Central Coast Regional Commission. Commissioner Leavy said his Regional Commission has set up an Asilomar Follow-up Committee which has met several times. They are discussing the possibility of workshops in the Counties to bring in locally-elected representatives in the LCP process. Finally, they are working on a program of public information techniques in coordination with Ms. Corsaut of the State staff.

(b) North Coast Regional Commission. Commissioner Benioff said they have discussed the same items Commissioner Leavy outlined above, and they are also trying to involve Regional Commissioners in workshops with local government to help accelerate the work on the Local Coastal Programs.

(c) North Central Coast Commission. Commissioner Grote said the San Francisco Planning Commission finally approved an LCP issue identification and work program and the Board of Supervisors will review and submit it to his Regional Commission.

(d) South Central Coast Regional Commission. Chairman Wright said they also discussed Asilomar and will bring recommendations to the Commission very shortly. He said they hope the City of Port Hueme LCP will be before the State Commission in August.

(e) South Coast Regional Commission. Commissioner Doerfling said the permit process has slowed down in his Region. In the spirit of Astilomar, his Regional Commission will be using at least one mechanism to have more interaction with local government which will be to hear the intermediate milestones as they come in.

(f) San Diego Coast Regional Commission. Commissioner Allen said her Regional Commission has decided that those who attended Astilomar will constitute a sub-committee for her Region.

(g) Other Commissioners. Commissioner King said the Department of Parks and Recreation has appointed Russell Cahill as its new Director.

21. Adjournment. There being no old or new business, the meeting adjourned at 1:45 p.m.

Respectfully submitted,

MICHAEL L. FISCHER
Executive Director

CALIFORNIA COASTAL COMMISSION

631 Howard Street, San Francisco 94105 — (415) 543-8555

TO: ALL COMMISSIONERS

FROM: MICHAEL L. FISCHER, EXECUTIVE DIRECTOR, STATE COMMISSION

SUBJECT: MINUTES OF COMMISSION MEETING OF JUNE 5, 1979

1. Call to Order. The meeting of the California Coastal Commission was called to order at 9:05 a.m., Tuesday, June 5, 1979, at the Airport Marina Hotel, 1300 Old Bayshore Blvd., Burlingame, California, by Chairman Dorill Wright.
2. Roll Call. Present: Chairman Wright, Vice Chairman Eben, Commissioners Boerfling, Golden, Leavy, King, Ramos, Renner, Rush, and Schwartz. Absent: Commissioner Rosener. Commissioner Grote arrived at 10:40 a.m.; Commissioner Mackle at 11:45 p.m.; Commissioner Wilson at 3:40 p.m.; and Commissioner Sweetwood at 7:35 p.m.
3. Minor Boundary Adjustment BA-1-79 (Sea Ranch, Sonoma Co.). Public Hearing and possible Voting on adjustment to coastal zone boundary affecting 25 parcels near Timber Ridge Road, Sea Ranch, Sonoma County.

Joe Nicholson, State Staff Analyst, presented the staff report, a copy of which is attached to the official copy of these minutes on file in the State Commission's office. Staff emphasized the importance of this precedent setting action as it was the first boundary adjustment to come before the Commission, with the exception of the minor adjustments made as a part of the 124,000 scale maps adopted by this Commission in March of 1977. Therefore, staff recommended that the Commission find substantial issue. Further, staff recommended adjusting the boundary as shown on Exhibit 3 of the staff report, as being the most practical alignment for consistency with the regulations and Section 2103(h). He said this was only a minor change from the Regional Commission recommendation, and they did concur with the Regional Commission's denial of the original request at Sea Ranch for the exclusion of several parcels.

There being no questions from Commissioners on substantial issue, Chairman Wright opened the public hearing and asked to hear from the audience. There being no response, Chairman Wright returned the matter to the Commission for discussion and deliberation.

ACTION: Vice Chairman Eben moved the Commission approve the request for adjustment, seconded by Commissioner Boerfling, and the roll call vote for the adjustment, with a yes vote to approve the request, and a no vote to deny, was as follows: Yes: Boerfling, Eben, Leavy, Ramos, Renner, Rush, Schwartz, and Chairman Wright. No: none. The request for the adjustments was approved by a vote of 8 in favor and none opposed.

4. Conservancy Project. Public Hearing on Application by the State Coastal Conservancy.

a. Coastal Conservancy Project #4, Stearn's Wharf, Santa Barbara. Coastal Restoration Project Plan for restoration of Stearn's Wharf for public recreational, visitor-serving commercial and coastal dependent industrial uses in Santa Barbara, Santa Barbara County.

Roy Gorman, State staff analyst, said the present proposal is a request for a conceptual approval to restore the wharf to the same type and intensity of use that existed prior to the fire in 1973. The present applicant is the Coastal Conservancy working together with the City of Santa Barbara in order to address the Commission's concerns announced in its earlier decisions for denial. The South Central Regional Commission held a public hearing on June 1 in San Luis Obispo, forwarding their recommendation for the approval of this plan, subject to conditions as follows: Provision of a development plan with detailed descriptions; projecting impacts on Highway 101, and the needs for parking and analysis of the effects of groundshaking and liquefaction on the pier structure and recommendations as to mitigations for reduction of impacts to life and property; and detailed evidence, through maps, photos or other practices indicating as precisely as possible the level of development on the wharf in 1973 with the square footage of all the prior uses, number of restaurant seats, hours of operation and anticipated parking demands. He pointed out, however, that they had limited the traffic management plan to simply the downtown area within the vicinity of the oceanfront and Stearn's Wharf rather than the entire waterfront area. Also, the recommendation included design envelopes indicating the areas where the structures should be placed, leaving open spaces in order to give the City of Santa Barbara more flexibility in the designing of the project. However, the major question remaining would be the appropriate use of the wharf itself for different types of uses which may be proposed. The project would be financed by a combination of Conservancy grants and C.E.I.F. loans, and the City of Santa Barbara's oil settlement fund which would be the major financing for the project. Therefore, the project would be entirely funded by public funds with no private money as had been previously presented to the Commission. Staff recommended the Commission open the public hearing at this meeting, but defer any action to the meeting of June 19-21, at which time staff would present a staff recommendation.

Chairman Wright then opened the hearing for public testimony from the audience.

Joe Petillo, Executive Officer of the State Coastal Conservancy, discussed the project with the Commission and noted that the representatives of the City Council of the City of Santa Barbara were not able to attend today as they had an important Council meeting and he would therefore be making their presentation. He offered to present slides of the project but indicated that a number of the Commissioners had viewed the project more than once. The proposed parking would be the same as had been there prior to the fire in 1973, and distributed aerial photographs of the wharf in 1969. The specific design would be made available to the Commission when the City of Santa Barbara officially requests its development permit as required under the Coastal Act.

Chairman Wright asked that the slides be held over until the next hearing at which time the vote would take place.

Commissioner Schwartz commended the staff and Conservancy on the development of the proposal demonstrating ability to work with local governments to develop oceanfront facilities. She asked that the concerns of the entire waterfront be addressed

with information regarding Santa Barbara's land use plan.

There being no further speakers, Chairman Wright continued the hearing to the next meeting, June 19, in Los Angeles.

5. C E L P Grants. Public hearing on, and possible Award of, Grants requested under the Coastal Energy Impact Program.

a. Los Angeles County Museum of Natural History and Department of Regional Planning, requested \$1,200 amendment to existing CEIP Grant #79-9 of \$14,100 for an ecological survey and use conflict study in the Ballona Creek Wetland.

Jim Birch, CEP Coordinator, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the State Commission's office. He said this information would dovetail into the City of Los Angeles' work program, which will be presented to the Commission on June 21, and that this was the first time there had been an expression of inter-agency cooperation between the City and County of Los Angeles, and staff would expect this same kind of cooperation between these two planning agencies for Marina del Rey and Venice.

Staff recommended the Commission award the \$1200 grant amendment to the Los Angeles County Natural History Museum for an augmentation to the already approved ecological survey and use-conflict study in the Ballona Creek Wetland, to include the Ballona Lagoon-Grand Canal, and the north of Washington Street's canals as part of the Local Coastal Programs for Los Angeles County and City. This augmentation would bring the total project to \$21,300.

Chairman Wright opened the public hearing and asked to hear from the audience. There being no response, he closed the hearing and requested action from the Commission.

NOTICE: Commissioner Bush moved the Commission approve the staff recommendation, seconded by Commissioner Leavy, and the hand vote was 7 in favor, and 0 opposed.

6. Voting on Appeals. Continued Public Hearing and Voting on Appeals.

a. Appeal No. 111-79 (CALTRANS, Humboldt Co.). Appeal of James & Cynthia Arras from decision of North Coast Regional Commission granting permit with conditions to California Department of Transportation to dump 120,000 cu.yds. of spoil at Highway 101 & McDonald Creek Road, adjacent to Dry Lagoon State Park, Humboldt County.

Tom Mikkelsen, State staff analyst, informed the Commission that Mr. Del Brown, Caltrans engineer, had contacted staff this morning requesting a withdrawal of the permit at this time, and that they would be re-applying for a different site at the Regional Commission level. He said he had informed the appellant of the request.

b. Appeal No. 141-79 (MRE, Monterey Co.). Appeal of Sierra Club, Audubon Society & Friends of the Sea Offer from decision of Central Coast Regional Commission granting permit with conditions to Pacific Gas and Electric Company for marine oil terminal and related pipelines in the Moss Landing area of Monterey County.

Mike Badarovich, Parks Coordinator, presented the staff recommendation with amended conditions, a copy of which is attached to the official copy of these minutes on file in the Commission's office. Staff recommends approval with the following conditions:

A. Special Conditions for Review and Approval by the Executive Director of the Central Coast Regional Commission.

Prior to commencement of construction, the applicant shall submit the following plans and/or documents for review and approval as indicated below. No construction shall commence until written approval is received from the Executive Director of the Central Coast Regional Commission.

1. A construction schedule for the authorized development.
2. Plans for removal of the existing 7-point mooring system including the date related to, and the methods proposed for disposition of all mooring facilities; the plans for removal or use of the existing valve box for the existing 18-inch pipelines and the methods required to fill and seal the existing 18-inch pipelines. The existing 24-inch pipeline section within Moss Landing Harbor shall also be filled and sealed and replaced by the 16-inch cutter stock reentrainment pipeline. Reactivation of the 18-inch or 24-inch pipeline shall require a new permit authorization from the Central Coast Regional Commission or successor.
3. Applicant shall submit a detailed outline of procedures, after consultation with the California Department of Parks and Recreation, Moss Landing Harbor District, and the Monterey County Public Works Department describing a program which minimizes the disruption of public access to the shoreline and maximizes the public safety during construction activity. This program shall include but not be limited to the designation of storage areas for construction materials and equipment, a public notification system identifying construction time schedules and locations, and location of temporary public beach parking.
4. In addition to the procedures described in condition 3 the applicant shall submit plans designating an alignment for a pedestrian pathway along the sand spit to the jetty and beach area. These plans shall include installation of appropriate signing and shall provide for continuous pedestrian access to be maintained during the construction phase of the pipeline installation.
5. Applicant shall submit a dune restoration plan showing restoration and revegetation of the construction zone with native dune vegetation to the maximum extent feasible. The restoration plans shall be developed in consultation with the California Department of Parks and Recreation. Aspects of the plan shall include but not be limited to: 1) designation of precise restoration boundaries; 2) list of native plant species which will be utilized; 3) topographic map showing final dune features and indication of source of dune material; 4) maintenance and management objectives and methods; and 5) upon completion of construction and prior to the operation of the approved facility, the permittee shall begin the dune restoration and stabilization plan.
6. Applicant shall submit a plan of mitigation, prepared by a qualified professional archaeologist and using accepted scientific techniques, prior to any disturbance of the surface area of the site known as CA#MM-229. Such plans shall also be submitted for review by the State Historic Preservation Officer. The plan shall provide for reasonable mitigation of archaeological impacts resulting from the development of the site, and shall be fully implemented. A report verifying compliance with this condition shall be submitted upon completion of excavation, for review and approval by the Executive Director.

7. Applicant shall submit seismic profiles for the pipeline alignment and samples of outcrop materials, if any, within the alignment for California Division of Mines and Geology and the United States Geologic Survey analysis and recommendation.

8. Applicant shall submit plans for the disposal or storage of dredged spoils acceptable to the Environmental Protection Agency and approved by the U.S. Army Corps of Engineers.

9. Applicant shall submit all construction drawings and specifications for the approved 7-point mooring terminal for review and approval. The drawings and specifications shall indicate a capability to accommodate vessels no greater than 90,000 DWT. Such drawings and specifications shall include, but not be limited to state-of-the-art marine terminal safety equipment.

B. Special Conditions for Review and Approval of the Central Coast Regional Commission.

1. Within 60 days of approval of this permit, the applicant shall submit an Oil Spill Contingency Plan and a Terminal Operations Manual.

The Oil Spill Contingency Plan shall include in addition to U.S. Coast Guard requirements, the following provisions:

- a. descriptions of the crude oil and products handled.
- b. oil spill prevention measures.
- c. oil spill detection measures for spills originating in the pipelines or aboard the tanker.
- d. immediate response actions including effective and rapid deployment of booms to protect Elkhorn Slough.
- e. spill assessment methods.
- f. spill containment and clean-up actions.
- g. listing of special biological, meteorological, oceanographic, or other factors affecting spill control or response in other sensitive areas of Monterey Bay and methods to contain and control spills in view of these special factors.
- h. listing of available government oil spill response resources, third party contractors, equipment lists and response times.

i. descriptions and locations of containment booms, oil skimmers, recovery barges, tugs, sorbents and other oil spill response materials available either at Moss Landing or within a reasonable distance of Moss Landing with a listing of performance standards and capabilities in varying wind, wave, current or other environmental factors.

j. descriptions of training programs and in-house response drills including type of emergency communication used to notify response team personnel of a spill.

The Terminal Operations Manual shall conform to U.S. Coast Guard requirements contained in 33 CFR 154 and shall contain the following additional provisions:

- a. provision for qualified tanker mooring master including the type of license held and whether such license is active
- b. provision for emergency response capability to assist a disabled or otherwise distressed tanker including assessments of U.S. Coast Guard support, tug assistance, frequency of vessel traffic offshore with capability to assist large tankers
- c. conditions under which a tanker would not be permitted to moor at the facility (e.g., wind, wave, fog, etc.)

The Central Coast Regional Commission shall review the Oil Spill Contingency Plan and Terminal Operations Manual. The Regional Commission shall conduct public workshops on the requested documents and consider suggestions to change or supplement the Plan or Manual. The Regional Commission shall schedule a public hearing and shall act to approve the Oil Spill Contingency Plan and the Terminal Operations Manual with any changes or additions considered necessary to preserve and protect the environment and provide for safe operation of the terminal. All operations at the project site shall comply with the provisions of the approved Plan and Manual. The Plan or Manual may be amended by Pacific Gas and Electric Company only after consultation with and approval of the Executive Director, Pacific Gas and Electric Company shall not place the new mooring in operation until the Regional Commission has approved the Oil Spill Plan and Terminal Operations Manual.

2. Within 18 months of approval of this permit, the applicant shall submit for Commission review and approval at a public hearing a report on the status of compliance with all conditions established in approval of this application. Lack of compliance with any portion of any condition shall be considered as grounds for revocation of the permit approved by this Commission.

3. The applicant shall submit the Analysis and Recommendation Section of the Final Revised Section 316 a & b Field Study for P.O.D.E.'s Moss Landing Facility due December 1979. The 316 a & b study is a federal mandated investigation of P.O.D.E.'s thermal discharge as a point-source to comply with Public Law 92-500, the Federal Clean Water Act.

4. P.O.D.E. shall fund the planning, development, and implementation of a marine mammal and bird rescue training and implementation operation in cooperation with the U.S. Fish and Wildlife Service and the Department of Fish and Game according to accepted training and rescue techniques. The program may be developed by contractual arrangement with an organization capable of providing bird and mammal rescue training and implementation.

5. All vessels berthing at the approved terminal larger than 50,000 DWT shall have the following systems designed to improve safety and prevent pollution:

- a) Segregated ballast tanks (SBT), clean ballast tanks (CBT), or Crude Oil Washing System (COW).
- b) Inert gas system (IGS), or a closed vent system with masthead venting.

furnia finds the site to be located in an apparent high seismic hazard area and further acknowledges that the State of California assumes no liability for the loss of life or property which may result from the placement or installation of improvements and structures at the proposed facility.

Rod Holmgren, representing the Sierras Club and the Audobon Society, said that he had already sent written comments on the proposed project and distributed copies from a Coast Guard publication indicating the difficulties the Coast Guard has controlling and inspecting foreign flag tankers. He said he supported staff's recommendation and asked that additional conditions be added as follows: 1) Provision for a sea-going tug boat to meet any tanker over 50,000 tons for escorting services to the new moorings; 2) A requirement that no connection or unloading shall be done at night; 3) Provision for an alarm system loud enough to reach every employee at the Moss Landing station; 4) The elimination of Condition No. 5 (D) of special conditions in the staff's summary and recommendations; 5) Provision to make sure the mooring master is wide awake and alert throughout the whole procedure and, if large tankers take 25 hours or more to unload, that a second mooring master be brought in for relief; 6) Provision of an adequately stockpiled, bird-cleaning facility at Moss Landing with the Audobon Society monitoring rescue drills; and 7) Designation of lanes for in-coming and out-going vessels in Monterey Bay.

Captain Charles Donac, representing the Friends of the Sea Otter, said the statistical information supplied by the applicant is clearly biased in favor of the large oil tankers. He spoke of the greatly increasing dangers involving larger tankers over recent years, their lack of maneuverability, and poor quality of construction. He said that foreign flag ship owners refused to accept the safety conditions as required on the newly constructed American vessels, and their officers lacked necessary training and motivation. Therefore, the disasters would continue. Any decision by the Commission should be made in favor of the sea otters, the rare birds and marine life that have made Monterey Bay what it is today.

Peter J. Baumgartner, representing Pacific Gas and Electric, discussed the history of the aging facility at Moss Landing, noting that there was a need to handle the newer, safer ships in the deeper waters located away from the harbor entrance and the Elkhorn slough. The new design features would include new and modern control and pumping facilities to improve both the efficiencies and safety of operations. In addition, the risk of an oil spill would be reduced at the existing facility through the development of new Operations Manual and Oil Spill Plans, including equipment and procedures. He said the major issue was whether PG&E would continue to use the aging and inefficient existing facility to supply the Moss Landing power plant, or whether they would be permitted to build a modern facility capable of bringing in the necessary fuel supplies more safely and with less risk and environmental impact.

Commissioner Schwartz asked Mr. Baumgartner about a tug meeting incoming larger tankers to act as an escort, and Mr. Baumgartner said all of the suggestions of the opponents would be worthy of discussion at the workshops proposed by the applicant to be held either by the State or Regional Commissions.

c) Two remote steering gear control systems and two or more steering gear power units.

d) Dual radar system.

All vessels berthing at the approved terminal smaller than 50,000 DWT shall have the above system as soon as practicable but not later than required by federal law.

6. Should the United States Coast Guard discontinue its safety and operating inspections, the applicant shall contract an independent consultant in marine terminal safety to inspect all oil transfer operations and procedures for all foreign flag vessels. Marine terminal safety inspections shall also be required for all U.S. Registry vessels not previously berthed at Moss Landing.

7. The oil terminal facility shall be used only to deliver and store fuel for the Moss Landing Power Plant. Resale or retransfer of oil to other users or other P.G.&E. facilities is expressly prohibited except upon order of the California Public Utilities Commission or other regulatory agency. P.G.&E. shall maintain continuous traffic monitoring. Only one tanker for loading or unloading at Moss Landing is to be located within Monterey Bay, defined as the waters east of a line drawn from Pt. Pinos to Point Santa Cruz, at any one time.

8. P.G.&E. shall provide monthly reports of amounts of fuel burned (including sulfur content) to the Monterey Bay Area Air Pollution Control District. P.G.&E. shall provide annual reports to the Commission on Moss Landing and system-wide fuel supply situations (including gas supplies, low sulfur oil supplies and anticipated short term needs). The annual reports shall also include, but not be limited to information on tanker arrivals, nature and quantity of fuel, tanker size, ownership, and any occurrence of water or land based oil spills, conformance with air quality standards, and conformance with Condition 7 in this section.

9. Applicant shall obtain and make available upon request from the Commission the tanker casualty record, if available, for vessels berthing at the approved mooring facility.

10. Pacific Gas and Electric Company (PG&E) shall respond to Oil Spill Response Drills initiated by the California Department of Fish and Game (DFG) in cooperation with the California Coastal Commission (CCC) and after consultation with the U.S. Coast Guard, other appropriate governmental agencies, and/or private organizations. These drills shall be called by DFG no less than annually, and without pre-notification to PG&E. DFG, in cooperation with the CCC and after consultation with the U.S. Coast Guard and other interested parties, shall develop the spill test assumptions and conditions, observe PG&E's response actions, and assess PG&E's ability to successfully contain and recover a simulated oil spill and otherwise implement the provisions of its Oil Spill Contingency Plan, as demonstrated by its actions during these Oil Spill Response Drills. PG&E shall correct any deficiencies noted by the DFG after DFG consultation with the CCC and the U.S. Coast Guard and within a period of time specified by the DFG and shall submit evidence to the DFG and the CCC when corrective actions have been completed.

11. In accepting this permit, applicant acknowledges that the State of Cali-

Bob Shephard, State Staff analyst, said the Regional Commission found that the approval of a house on this site would establish a precedent committing the remainder of the dune area to development, and that it would prejudice the LCP preparation by the City of Monterey for this area. Staff said the dune area was worthy of protection for public recreational use, but at the same time, did not think the Coastal Act would allow a project to be denied solely based on the possibility of acquisition. State staff would be willing to work with the Regional Commission staff to determine the kinds of uses appropriate for the site if the Commission did, indeed, take the matter on substantial issue. Staff recommended that the appeal raise a substantial issue. He concluded his presentation with slides of the subject area.

There being no comments from Commissioners, Chairman Wright opened the public hearing and asked to hear from the applicant.

John Sewald, the applicant, said that there were circumstances that would make his application consistent with the Coastal Act. He said the site was not on an included sand dune, but on an existing street with public utilities and services available. He discussed a letter from the State Parks Department, Chief of Planning Division, indicating they had had repeated requests to review the subject area, and found that construction of a single-family home on this site would not inhibit use or enjoyment of the beach. He cited a similar permit granted for a home on Aullomar beach, where the Commission found such a home not out of character with the landscape. Further, when the issue of state acquisition was brought up it was found that a single-family home among others built on the sand was not inconsistent with the Coastal Act. The issue of prejudicing the LCP was discussed by the Regional Commission with no one questioning their legal right or ability to make judgments concerning zoning, and concluded with a request for support of his project.

June Usher, representing the Del Monte Beach Improvement Association, said the congested parking and traffic occur on many days of the year, and presented pictures to demonstrate their opposition to the project. She took issue with the description of the area as being "developed" lots, as many children had grown up playing in this area. The applicant is asking the Commission to set a precedent in this case by identifying any lot along a roadway to be a developed area. She said the proposed project would extremely prejudice the ability of the City of Monterey and the public to plan the Local Coastal Program process because this first structure in the undeveloped part of Del Monte Beach would be an irreversible commitment. There could be no doubt that the voters of Proposition 20 intended to preserve and prevent such disasters along the coastline. She asked the Commission to carefully investigate all of the issues before voting.

Carl Larson, representing Del Monte Beach Improvement Association, said the residents of the area did not want any more development in the open space of the area, but were not opposed to any infilling in the developed area. He said that acquisition was a feasible alternative, and the Monterey City Council had offered a Resolution to urge the State of California to acquire the area. In addition, the Monterey Regional Parks District stated in a letter of Feb. 9, 1979, that this beach area should be considered for purchase by the State Department of Parks and Recreation. The area has been evaluated by State Parks and Recreation but they have refused to include it in their other coastal acquisitions. He concluded by requesting a long-term continuance of the hearing so the potential of the property could be considered.

Commissioner Leavy discussed condition No. 5, and staff replied that most of the requirements would not be in effect on existing vessels until 1983. The recent drill that was deemed a failure had been reported by the applicant who expected to improve their procedure to make sure that those containment booms would be deliverable to the mooring site, and expressed the serious concerns staff has over the failure of the drill.

Mr. Fischer pointed out that such a failure only increased the staff's efforts in recommending the approval of this permit, so that the system can be upgraded and serious work can begin on a tough and effective Port Management Plan and Oil Spill Contingency Plan.

Commissioner Boerfling discussed his concerns about the requirements for ship construction and equipment and schedules as they apply to foreign flags, and Mr. Baumgartner said that applicant would not agree to a condition forbidding the use of foreign flagships under all circumstances, as American flagships are not always available to bring in oil from Indonesia.

Commissioner Egan expressed her desire to tighten up all the monitor regulations being placed in the Contingency Plans and Operations Manuals.

Commissioners Leavy, Reimer and Rush said they had familiarized themselves with the record, and were prepared to vote.

MOTION: After further Commission discussion, Commissioner Schwartz moved the Commission vote on the application per staff recommendation with conditions, seconded by Vics Chairman Egan.

ROLL CALL VOTE ON MAIN MOTION: The roll call vote on the application, with a yes vote to approve with the conditions and for the reasons in the staff recommendations, and a no vote to deny, was as follows: Yes: Commissioners Boerfling, Egan, Grobe, Leavy, Ramos, Reimer, Rush, Schwartz, and Chairman Wright. No: none. The application was thus approved with conditions by a vote of 9 in favor and 0 opposed.

7. New Appeals. Public Hearings on Appeals from Regional Commission Decisions.

a. Appeal No. 179-79 (Higgins, Santa Cruz Co.). Appeal of Patricia A. Thomas from decision of Central Coast Regional Commission denying permit to demolish garage and 3 living units and to subdivide 1/2 acres into 2 lots at 630 Bay View Drive, Rio Del Mar, Santa Cruz County.

State staff analyst Phil Kern informed the Commission that the appellant had telephoned the Coastal Commission's office late yesterday saying that she was ill and unable to be present and staff recommended the matter be placed on the next northern California meeting agenda.

MOTION: Commissioner Rush moved the Commission continue the matter, seconded by Commissioner Boerfling and the hand vote was 9 in favor and 0 opposed.

b. Appeal No. 144-79 (Sewald, Monterey). Appeal of John Sewald from decision of Central Coast Regional Commission denying permit for 2-story, single-family home at 2 Beach Road, Del Monte Beach area, City of Monterey, Monterey County.

James Boyden, owner of an adjacent lot, said the description and pictures viewed by the Commission did not accurately depict the whole area and then described how their two lots would fit in. He said it would be more appropriate to consider them as a part of the developed area because construction on the lots would be in full. He said acquisition of the property by the State would be a horrendous expense of taxpayers money, because it was too expensive to convert the land.

Commissioner Leavy said that he was in support of substantial issue only so that the findings of the Regional Commission can be expanded. Although the City approved the project, they had not yet gone through the ICP process. The applicants and other nearby residents could be most helpful in getting the City going on their ICP so that such issues could be resolved at the proper level. He said the Regional Commission voted 9 to 5 to deny it based on essentially the same issues as were raised today.

Commissioner Doerfling said that the Attorney General should examine the issue of prescriptive rights on the subject property.

Following Commission discussion Chairman Wright ruled that the matter remain open until a future meeting, at which time the vote would take place.

c. Appeal No. 144-79 (Davidson, Mendocino Co.). Appeal of Mr. & Mrs. Jack Davidson from decision of North Coast Regional Commission granting permit with conditions for detached 768 sq. ft. garage and storage shed on 2.5 acres at 45467 Indian Shoals Road, about 2.5 miles north of Mendocino, County of Mendocino.

Martha Lenuhan, State staff analyst, said that the Regional Commission's analyst had informed the applicant that if they built a similar structure attached to the existing house, no coastal development permit would be required. However, applicant preferred the project as applied for, including the easement condition, which is the reason for the appeal. She discussed six appeals that had already been heard by this Commission from this area and recommended the Commission find no substantial issue since the Regional Commission fully considered the merits of the application and acted consistently with previous State Commission actions.

Chairman Wright opened the public hearing and asked to hear from the applicants/appellants, and there was no response.

The hand vote was 7 in favor of finding no substantial issue and 0 opposed.

8. Recess. The Commission recessed for lunch at 12:05 p.m. and reconvened at 1:10 p.m.

9. New Appeals (Continued).

a. Appeal No. 147-79 (ARCO, Santa Barbara Co.). Appeal of South Central Coast Watch from decision of South Central Coast Regional Commission granting permit with conditions to Atlantic Richfield Company to convert single-family home to management training center at 1160 Channel Drive, Montecito, Santa Barbara County.

Linda Pivola, State staff analyst, said the appellant contends that the proposed conversion of this estate house from a Jesuit retreat to a seminar center would be an inconsistent use in a dominantly residential neighborhood. The appellant further contend that the proposed project would seriously impact traffic on Channel Drive,

while the applicant states that most of the participants for seminars would arrive by airplane and use the limousine service to get to the hotel and seminar center. The Regional Commission imposed a lateral access easement running from the main high tide line to the toe of the bluff, and also imposed a condition requiring the applicant to allow the public to park in the proposed 25-car parking lot during the months of July and August. However, applicant opposed this condition contending that the proposed conversion to a seminar center would not increase traffic congestion and, therefore, the Regional Commission deleted the parking condition. Staff recommends that no substantial issues of statewide significance are raised by this appeal, and that the project would not significantly impact traffic problems as addressed in the draft Local Coastal Program.

Jeff North, representing South Central Coastwatch, said the description of the project was very misleading, and that Arco's purpose is to change this huge magnificent estate into a convention center for all of its management personnel and other oil industry executives. He said that Arco does not need such spacious accommodations for just 18 to 40 people, and the project should be viewed as an extension of the Billmore Hotel. He then discussed the adverse impacts of traffic along Channel Island Drive, Mill Road, and Rattlesly Lane. In addition, the convention center would not be a coastal dependent use and the Commission should hold a public hearing.

Jeff Pendergraft, representing the applicant, said that all the information presented before this Commission today had already been addressed at the Regional Commission level. He said there would only be 40 persons at the seminar facility at any one time, and that the wording was not ambiguous. In his opinion, the traffic problem was really a parking problem and this project would have its own parking lot for off-street parking. There would be no interference with public access, and, in fact, the lateral easement condition would increase public access. He pointed out that the property had previously been used for the same educational purposes by Jesuits since 1966, so, basically, it was only a continuation of that use.

Commissioner Leavy discussed the draft use plan and the description of the project with staff, and Mr. Pivola stated that it was indeed a residential neighborhood.

Vice Chairman Ewen discussed the conditional use permit situation with staff and said that the LCP should be completed in the very near future. Therefore, the Commission should examine the cumulative effects of this project more carefully.

Commissioner Schwartz discussed the upcoming public hearings for the LCP, and Wendy Locksley, LCP Coordinator, said the draft access component was presently being released for public inspection very shortly.

After further Commission discussion, the hand vote was 4 in favor of finding no substantial issue, and 4 opposed. Therefore, Chairman Wright opened the public hearing on the merits of the project and asked to hear from the applicant.

Jeff Pendergraft, representing the applicant, said he would submit further written testimony. He reiterated that the applicant would only be continuing the current use of the facility which would be consistent with the residential character of the neighborhood. He briefly described the history of the project and their intention for upgrading the landscaping and interior of the facility. He said the

Architectural Committee of the Montecito Protective Association endorsed the project and the applicant's efforts. Recreational and visitor serving opportunities would be increased by this proposed use rather than returning it to a single-family residential use.

Jeff North, representing South Central Coast Motel, said it was a fallacious assumption that the people attending the convention center would not be a burden on the traffic resources in the area. Further, the Chairperson of the Regional Commission stated that the project was premature because LCP hearings would be commencing this summer for the area in question. He said the Commission could properly deny the application based on the new information received at this hearing and the impact this project would have on such a small community.

Elizabeth Weingand, one of the opponents, said her major concern was for the Local Coastal Program and that the project would set a precedent for further non-coastal development uses. In addition, further seasonal and weekend traffic would severely limit access to the beaches. Also, Channel Drive should be protected as a scenic resource of public importance.

Commissioner Schwartz asked staff for figures regarding the allocation of water for the subject property and the anticipated water use. She further requested an alternate plan if the participants in the seminars could not stay at the Hillmore and other proposed uses for the converted residence.

Commissioner Leavy asked staff to investigate whether or not the proposed use would be sufficiently visitor serving to justify approval prior to the certification of the LCP. He asked staff to further investigate the use of the parking lot during those periods of time when the applicant would not be using the facility.

Chairman Wright said the proposed project should be limited to passive use which would not significantly impact its historical use until the parking and traffic concerns are addressed in the area. In addition, the potential additional water use should be addressed with a limitation on intensity of use based on the resources available.

Chairman Wright ruled that the public hearing remain open until a future meeting at which time the vote would be taken.

b. Appeal No. 156-79 (City of San Diego, Carmel Valley Rd.). Appeal of Dept. of Fish & Game, Mary Kelley and Torrey Pines Protective Association from decision of San Diego Coastal Regional Commission granting permit with conditions to City of San Diego to realign and widen Carmel Valley Road between Intersstate 5 and Fort-Flune Road, San Diego, San Diego County.

Janet Falk, State staff analyst, said the proposed project would require filling into the adjacent San Penapisulas lagoon. Under the conditions imposed by the Regional Commission the project would require straightening of the curved area, as well as .2 of an acre of fill into the wetland. Also, Ms. Falk said that the City of San Diego has requested the State Commission to invalidate the Department of Fish and Game's appeal because it had failed to submit the notice of appeal required under the regulations. The Department of Fish and Game sent a letter with their concerns to the City of San Diego, but the appeal form had not been used in submitting the information to the City of San Diego. Staff provided the necessary notice to the applicant and, therefore, the Executive Director believes the appeal is valid and that a substantial issue is raised by this appeal.

There being no comments from the Commissioners, Chairman Wright opened the public hearing and asked to hear from the applicants.

John Reese, Deputy City Attorney for the City of San Diego, discussed the existing habitat in the area and the nearby archeological site. Also, the peak-hour use was not residential and the traffic count of four years ago was one-half of today's. He said the LCP indicates that the City should restrict access on this roadway to visitors. He cited a letter from Executive Director Fischer which indicated that the Los Penapisulas lagoon had the lowest priority of the three lagoons in the area. He said the real problem was the regulation of speed which caused most of the accidents in the area, and it was unfortunate that most of the drivers do not pay enough attention to the signs. In his opinion, roads should be designed by people who know the risks and how to do the job.

Both Myerson, representing Mary Kelly, asked the Commission to carefully consider the cumulative effects of widening Carmel Valley Road, and recommended it remain a 2-lane road with an easement of 52 feet. She asked that the realignment of the curve be of lesser radius than that proposed by the City of San Diego.

Jeanette O'Toole, representing Torrey Pines Protective Association, said they had appealed the Regional Commission's decision because it was inconsistent, although they did agree that Carmel Valley Road should remain a 2-lane road. Also, the Regional Commission missed an opportunity for a compromise agreement to redesign and straighten the curve to help solve the safety problem. She showed slides of the area demonstrating the cumulative impact of allowing a 4-lane road or easement which could set a precedent for the remainder of the road. She asked that a precise map and specific plan be approved before any construction is commenced to realign the curve. It was not the width of the road that caused the safety problems but the sharpness of the curve and inadequate road markings. Although the City contends that a 4-lane road is safer, Carmel Valley Road has had fewer accidents than most major 2-lane roads in San Diego and an overall lower rate of accidents than most 4-lane roads.

Terry Mansfield, representing California Department of Fish and Game, said that the Department concurred with the staff recommendation of statewide significance of the project. He said they submitted a letter to both the Regional and State Commission staffs opposing the decision because the project was not dependent on wetlands and there were less damaging alternatives available. Any fill towards the wetland would definitely impact sensitive coastal resources which is contrary to Sections 30233(c) and 30240 of the Coastal Act. In addition, they have a problem with the restoration as offered because they do not believe that to be appropriate compensation, but extended the opportunity to work with staff and the City regarding this matter.

After further Commission discussion, Chairman Wright ruled that the public hearing remain open until a future meeting at which time the vote would take place.

c. Appeal No. 157-79 (Lancaster County Water District, Carlsbad). Appeal of Hancock La Costa Residents' Association from decision of San Diego Coastal Regional Commission granting permit to Lancaster County Water District for pipeline for treated effluent from existing Eschscholtz outfall facility south along railroad right of way to existing pipeline, Carlsbad, San Diego County.

Stove Howe, State staff analyst, said that unconditional approval of this project could result in development inconsistent with agricultural, erosion and new development policies of the Coastal Act. Also, the growth inducement potential would be inconsistent with past Commission action. Accordingly, staff recommended that this appeal does raise a substantial issue.

There being no comments from Commissioners, Chairman Wright opened the public hearing and asked to hear from the applicant.

Dick Hanson, manager of the Lencada County Water District, said that the sewage treatment plant itself was not within the coastal zone, but only a portion of the underground pipeline. The proposed project would provide reusable water for the golf course irrigation, and possibly the irrigation of parks and agricultural lands. Also, the plant would be upgraded to provide odor-control which is a great concern of the Regional Water Quality Control Board and the Lencada County Water District's Board of Directors. Another aspect of the project would be to gain additional sewage treatment capacity. Due to sewage capacity constraints, a sewer moratorium was instigated in 1977 brought about by new requirements established by regulatory agencies and the District's planning. The Regional Water Quality Control Board and the San Diego Regional Commission voted unanimously in favor of the permit and requested this Commission to do likewise.

Terry Teeple, representing the San Diego Construction Industry Federation, discussed a letter from Mr. Walling dated June 1, 1979, saying that the District's application included a program of waste water for reclamation, subject to rigorous studies and enforcement standards, and would be extremely desirable in this semi-arid climate. He said they support the efforts of the Water District and other agencies attempting to implement waste-water reclamation programs.

Jim Kern, representing American National Homeing Corporation, said they support the District's plan for reactivation of their existing wastewater facility. The pipeline proposed within the coastal zone would be an integral part of the overall reclamation program being proposed by the District, and urged the Commission to approve the proposal.

Lola Humphrey, President of the Rancho La Costa Residents Association, said they had collected over 1,000 residents' signatures in opposition to the reactivation of the sewage plant, because they do not believe that sewage plants belong in residential areas. All public services are currently severely impacted and could not accommodate the increase in population which would accompany a project such as the one being proposed. Despite numerous complaints about the obnoxious odors, the Water District continues to do nothing. She asked the Commission to deny the permit on the grounds that they had not adequately addressed the problems of possible damage to Baliquitos Lagoon and their past history of spillage, odor and breakdowns.

Commissioner Ruch said the Sanitation District was the oldest operating plant in the State with reclamation of water going on for many years. The requirements placed on them by the Regional Water Quality Control Board are stringent and the reclaimed water would not contaminate the lagoons in the area.

Commissioner Boardling said it would be a waste of money for a project to solve current environmental problems with no growth. Also, most of the current needs were outside of the coastal zone and not within the Coastal Commission's jurisdiction.

After further Commission discussion, Chairman Wright ruled that the public hearing remain open until a future meeting at which time the vote would take place.

d. Appeal No. 140-79 (Missane, San Luis Obispo Co.). Appeal of Andy & Dorothy Murdoch, Thomas & Elizabeth Gladwell, and Mr. & Mrs. Lester Arnold from decision of South Central Coast Regional Commission granting permit with conditions to Daniel Kisuane for single-family home at 336 Hastings, Cambria, San Luis Obispo County.

Mark Pring-belaupaine, State staff analyst, said staff recommends remand back to the Regional Commission because of inadequate notice. There was no comment from the Commission on substantial issue.

MOTION: Commissioner Ruch moved the Commission remand this appeal back to the Regional Commission, seconded by Commissioner Boardling, and the hand vote was 8 in favor and 0 opposed.

10. Extension of Permit. Public Hearing and possible Voting on Request for Extension of Permit.

a. Permit No. A-138-77, Allen E. Cune, single-family home, garage, rock driveway and septic system at Headlands Drive, Little River Headlands Subdivision, Mendocino County.

Linda Pirola, State staff analyst, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the State Commission's office. Staff recommended extension of the permit be granted to the applicant.

Chairman Wright opened the public hearing and asked to hear from the audience, but there was no response.

MOTION: Commissioner Reuner moved the Commission vote on the matter of the extension as recommended by staff, seconded by Vice Chairman Ewen and the hand vote was 8 in favor and 0 opposed.

11. Findings. Voting on Findings regarding previously considered appeals.

a. Appeal No. 131-79, Lawrence Oppenheimer, demolition of 2 structures and construction of Unit condominium at 3907-3915 Gresham Street, Pacific Beach, San Diego, San Diego County.

Phil Kern, State staff analyst, presented the findings, a copy of which is attached to the official copy of these minutes on file in the Commission's office. He said staff recommends approval.

Chairman Wright asked to hear from the audience, and there was no response.

Commissioners Leavy and Reuner said they had familiarized themselves with the record and were prepared to vote.

MOTION: Commissioner Schwartz moved the Commission vote on the findings per staff recommendation, seconded by Commissioner Renner and the hand vote was 4 in favor and 0 opposed.

12. Housing Guidelines. Public hearing on Statewide Interpretive Guidelines on Housing, condominium and stock cooperative conversions. Commission action will be scheduled for a subsequent meeting.

John Bremer, State staff analyst, summarized the proposed guidelines. Changes were made in order to give more notice to potential applicants of conversions and to give more guidance to staff in the handling of applications. The only changes thus far are for conversions with future guidelines and policy statements on new construction with demolition and replacement to come in the near future.

Following the staff presentation, Chairman Wright opened the public hearing and asked to hear from the audience.

The Ilung, apartment owner in Malibu, said the staff recommendation is neither practical nor enforceable. There are many places not suitable for low- and moderate-income people due to long distances from transportation and working facilities. Therefore, the guidelines should consider a proposal on its own merits rather than incorporate all the proposals along the coast with no provision for exceptions. Also, he discussed the infeasibility of setting aside some units for low- and moderate-income people in an expansive area as the owner cannot afford to call a unit at 1/3 of the prevailing prices. In his opinion, the County or local agencies should be responsible for these matters and the Coastal Commission should devote their time and energy to protecting the coast instead.

Sam Young, representing the Condominium Development Association, said the United States has the largest percentage of home ownership in the world because of benefits such as tax deductions and cost appreciation. Their studies have found that 93% of the buyers of condominiums are people who rented immediately prior to the time of conversion. Therefore, there is no displacement of tenants, but only a shift in the supply and demand available for rental units. He then discussed the benefits derived by the community from condominium conversion versus rental units. He said he would submit further written testimony.

Bill Geyer, representing the California Council for Environmental and Economic Balance and the California Housing Council, said the Commission had more alternatives than staff report indicated. When the Commission took jurisdiction over stock cooperatives, he had suggested at that time that more extensive discussion and notice should have been provided to the public. In addition, staff should address the preponderant effects these guidelines could have on the LCP process. He said he would submit further written testimony.

Commissioner Schwartz said she was concerned about the limited time given to the Commission to consider and vote on these very important guidelines.

Vice Chairman Even asked staff to investigate Mr. Ilung's suggestion for flexibility in the guidelines with respect to low- and moderate-income people living in remote areas away from transportation and work facilities.

Commissioner Doerfling said he was concerned about the intensity of use when the conversions were made which becomes a public access problem.

Commissioner Mackie said he would like to see a more detailed discussion of the benefits, as well as the problems involved and whether low- and moderate-income people can purchase condominiums. Also, he asked for figures on the amount of displaced

ment to be expected within the coastal zone as a result of conversions.

There being no further speakers, Chairman Wright ruled that the public hearing remain open until a future meeting at which time the vote would take place.

13. Emergency Regulations. Public Hearing and possible Commission action on draft Emergency Regulations.

a. Public Works. Regulations to provide for review of plans for public works plans pursuant to Public Resources Code Section 30605 and 30606. (Note: These regulations apply to the sewer project on the evening agenda.)

Nancy Mainwright, State staff analyst, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the State Commission's offices. She said staff recommends approval with the proposed changes.

Vice Chairman Even said the public hearing was closed at the last meeting for oral testimony, and returned the matter to the Commission for discussion.

Commissioners Schwartz, Bush, Doerfling and Renner said they had familiarized themselves with the record and were prepared to vote.

MOTION: Commissioner Doerfling moved the Commission vote on the draft Emergency Regulations for public works plans, seconded by Vice Chairman Even, and the roll call vote on the regulations, with a yes vote to approve, and a no vote to not approve, was as follows: Yes: Commissioners Doerfling, Even, Grote, Leavy, Renner, Bush, Schwartz, and Chairman Wright. No: none. The regulations were thus approved by a vote of 8 in favor and 0 opposed.

13. LCP Grant Augmentation. Public hearing and possible Commission action on modification of work program and augmentation of existing LCP grant to the City of Ferndale (augmentation of approx. \$2,000).

Director Fischer said staff recommends that the Commission approve an augmentation of approximately \$2,000 for the City of Ferndale.

MOTION: Commissioner Renner moved the Commission approve the grant of \$2,000 to the City of Ferndale, seconded by Commissioner Doerfling, and the hand vote was 8 in favor and 0 opposed.

14. LCP Management.

The staff briefed the Commission on the status of the Local Coastal Programs, after which Commission discussion followed.

15. Approval of Minutes of November 14-15, 1978.

MOTION: Commissioner Doerfling moved the Commission approve the minutes of November 14-15, 1978, seconded by Vice Chairman Even, and unanimously approved with Commissioners Bush, Grote and Leavy abstaining.

16. Chairman's Report. Vice Chairman Even reported on the last Chairman's meeting where matters of pending legislation were discussed, as well as future actions to be taken. It was decided that a small State task force be formed,

which might include some Regional staff, in an attempt to keep in contact with the Legislature throughout the year and to respond to any questions they may have.

Chairman Wright welcomed Commissioner John Rush to the State Commission. Also he welcomed Al Lernas Remner, Sweetwood and Leavy who had been provided all the necessary information to qualify them to vote on matters before the Commission today.

17. Executive Director's Report.

(a) Contracts. Executive Director Fischer said staff recommends approval of a contract renewal for ECTC and personnel matters relating to the Coastal Conservancy.

NOTE: Commissioner Doerfling moved the Commission approve the contract renewal, seconded by Commissioner Schwartz, and the hand vote was 9 in favor and 0 opposed.

(b) Executive Director Fischer said staff recommends approval of an interim contract for hearing reporter services during the month of June.

NOTE: Commissioner Doerfling moved the Commission approve the interim contract, seconded by Commissioner Rush, and the hand vote was 9 in favor and 0 opposed.

(c) Executive Director Fischer said staff recommends approval of an extension of a contract for hearing reporter services for South Coast Regional Commission.

NOTE: Commissioner Doerfling moved the Commission approve the above extension of contract, seconded by Commissioner Rush, and the hand vote was 9 in favor and 0 opposed.

18. Deputy Attorney General's Report. Richard Jacobs, Deputy Attorney General, reported on Ruynon v. California Coastal Commission involving a fairly substantial development on Cannery Row. The Regional Commission approved the project subject to conditions limiting the size of the project. The State Commission on appeal found no substantial issue. The case went to Court and the trial court returned the matter to the Regional Commission on several grounds. The Regional Commission disagreed with the decision of the Trial Court and voted unanimously to take the appeal, but under the Commission's regulations the State Commission must concur with the Regional Commission's decision for appeal. After further Commission discussion and concurrence, Chairman Wright ruled that the Attorney General's office not file an appeal unless it is returned to the State Commission by recommendation of the Regional Commission. Mr. Jacobs then discussed other pending litigation.

19. Commissioners' Reports.

(a) South Coast Regional Commission. Commissioner Doerfling discussed the State Commission's lack of processing of categorical exclusions for Orange County and Laguna Beach which had been approved some time ago. Executive Director Fischer said a written update on categorical exclusions would be distributed at the next meeting.

(b) Central Coast Regional Commission. Commissioner Leavy said the action of the Asilomar Workshop Committees was approved and would be forwarded to the Com-

mission in the near future. The Central Region adopted an agricultural exclusion recently which is somewhat lighter than those adopted in other regions which, hopefully, will ease the Commission some time.

(c) North Central Coast Regional Commission. Commissioner Groto said that Bradford Lundberg, former Chairman of the State Commission, had resigned from the Regional Commission which now leaves 3 vacancies on his Commission.

(d) North Coast Regional Commission. Commissioner Remner said that Dwight May, former member of the State Commission and the State Board of Forestry, died very suddenly last weekend. He was a very fine and respected member of the community in Humboldt County and would be sorely missed by all who knew him.

20. Public Statements.

Dill Oeyer, representing California Council for Environmental and Economic Balance, said he appreciated the Commission's efforts relative to getting the LCP programs in action. He said he had been in touch with local government representatives in Sacramento who will co-sponsor with the Commission a workshop on LCP completion dealing with the two difficult issues of specificity and transition to local control. He then discussed various legislative programs.

21. Receipts. The Commission recessed for dinner at 5:15 p.m. and reconvened at 7:35 p.m.

22. San Francisco Sewer Application. Continued Joint Public Hearing with North Central Coast Regional Commission and Central Coast Regional Commission and possible Voting on Public Works Plan for all portions of San Francisco Westwater Management Program in the coastal zone and specific project review of Westside Transport and Storage Facility, Pump Station, Recreational Restoration of Great Highway Corridor and Southwest Ocean Outfall.

Chairman Wright opened the second public meeting on this matter and asked to hear from the audience.

George Teinter, representing the Citizen's Advisory Committee, said they continue to support the City in their proposal.

Sue Bierman, representing the City of San Francisco Planning Commission, discussed her experience over the years with freeways and the desperate need for a 4-lane road. The public and Commissioner who had given their support to this project would like a curvilinear road as a deterrent to drag races.

Rai Okamoto, Director of Planning for San Francisco City and County, confirmed former testimony that the proposed design of the road in its curvilinear road was City policy, adopted by the Board of Supervisors, City Planning Commission and the Recreation and Park Commission.

Bill Wilson, resident of the Sunset Parkside District, said it was vital that the waste water program proceed as soon as possible as it would reduce the raw sewage outflow from 114 outflows to 8 outflows per year thus improving the ocean and bay water quality considerably. Also, by using the upper Great Highway location the residents of the City and State have an opportunity to improve a scenic and recreation resource.

Yona Nakashima, member of the City Planning Commission, reaffirmed their position in support of the project as being in the best interests of the citizens of San Francisco.

Joe Castrovini, representing the Chamber of Commerce for the City of San Francisco, spoke in favor of the project, and urged the Commission to approve it without the costly conditions.

Joe Balaneri, representing the Parkside District Improvement Club, spoke in favor of the City's proposal and said that it was obvious the City's project would have the least amount of impact on the environment, safety and the lives of the citizens in the area.

Frances McManis, public citizen, said they would be one of the closest neighbors to the pump station and treatment plant. She thanked the staff for keeping the public informed about the project, approval of which would be in the best interests of the people of San Francisco.

Bill Sliseman, representing Parkside Association, said the beautification of the upper Great Highway would enhance the business climate for the merchants in the area and urged the Commission to vote in favor of the application.

Harold Madison, public citizen, asked the Commission to have other areas of the City share in the implementation of the waste water treatment program as the Bayview-Hunter's Point area had already taken their fair share. He said the cross-town tunnel was very important and should be done now since the federal government was picking up most of the share.

Bill Eisen, representing the Park Presidio Neighborhood Association, said there were alternatives less costly than the realignment of the upper Great Highway, and discussed a paper by the San Francisco Waste Water Program regarding alternatives.

Charles Walker, Chairman of the Coordinating Council of the Waste Water Committee, said the Bayview Hunter's Point community was opposed to the waste water being confined to their area and asked the Commission to consider having every area share in the construction.

Gerald Johnson, President of the Black Business Association, said they have been very active in obtaining contracts for their members for the construction of this project over the past 2 1/2 years, and hoped the project would move ahead as planned by the City.

Darry Miranda, representing Stan Smith of the San Francisco Building and Trade Council, said both the Apprenticeship Opportunity Foundation and the San Francisco Building and Trade Council are in support of the project.

Mary Meyer, representing the Point Reyes Bird Observatory, said she was familiar with the subject area because of research done by the Point Reyes Bird Observatory. Since the Standary Oil tanker collided under the Golden Gate Bridge the area has never been the same.

Any Meyer, representing People for a Golden Gate Natural Recreation Area, said the alternative to the westside transport was the Richmond District to Sunset Blvd. The Coastal Commission was mandated to protect the coast and urged them to vote for the ocean outfall this evening, but to deny the westside transport structure as it would contribute to the beach erosion.

Lucille Peterson, President of the Parents Auxiliary of the Recreation Center for the Handicapped, said they opposed the waste water project being located across the road from the Recreation Center, and asked the Commission to deny the permit.

Jane Murre, representing the minority position of the Citizens Advisory Committee on Waste Water Management, said they could not support the westside transport in its proposed location, and urged the Commission to deny the permit.

Evelyn Wilson, representing the Sunset Park Education and Action Committee, said they were in support of the curvilinear road on the upper Great Highway and urged the Commission's approval.

Arden Davakas, member of the Planning Association for the Richmond District, discussed the alternate route of Sunset Blvd., and urged its use for the project. He discussed the economics of the project after completion and the importance of keeping the cost factors low.

Lon Hanke, representing the Associated General Contractors in San Francisco, said the project had been under consideration for 10 years and urged the Commission to finally approve it.

Roy Soule, Chairman of the Recreation Center for the Handicapped in San Francisco, reaffirmed their resolution to the Commission introduced at a previous hearing in favor of the project on the assumption that mitigation was negotiable and acceptable to the Center for the Handicapped.

Louis Longinotti, representing the San Francisco Recreation Center for the Handicapped, said they were opposed to the proposed project's location only 400' from their facility and strongly recommended that the entire permit be denied by the Commission.

Harold Sellman, public citizen, said he wished to thank the Regional members for their common sense in voting against the project, and that any interference with the beach would alter the free-flowing sand's performance.

There being no further speakers, Chairman Wright asked staff for their recommendation, after which the public would be allowed to comment.

Don Mawirth, State staff analyst, presented the staff recommendation, a copy of which is attached to the official copy of these minutes on file in the Commission's office. He said staff recommends approval of the Public Works Plan with the following amended conditions:

(A). Construction Mitigation Conditions. All specific projects proposed as part of this public works plan shall include evidence satisfactory to the Executive Director for that the following mitigation measures are to be implemented:

1. Shuttle Bus. Institution of a shuttle bus system during construction of the Westwater Transport. This system shall provide bus services along the upper Great Highway from Fulton Street to a parking lot at Fort Funston (south of Sloat Blvd.) between the hours of 7:00 a.m. and 7:00 p.m. Headways shall be no greater than ten minutes on weekends, and holidays and at construction workers shift changes. At all other times headways shall be no greater than 30 minutes. The City shall provide a report on riderhip of the shuttle to the Commission six months after commencement of construction. If service is inadequately used, the Executive Director may authorize termination of service.

2. Pedestrian Crossings. Provision of at least 7 pedestrian accessways across the upper Great Highway between Fallon Street and Fort Funston. These may be temporary and shift in location as construction schedule dictates.

3. Through Traffic Lanes. Provision of at least one lane of traffic in each direction for public transit and private autos on the upper Great Highway during construction.

4. Workers' Parking. Provision of at least 300 parking spaces for construction workers on the treatment plant site and 275 spaces within the construction zone on the upper Great Highway during the Westside Transport construction phase. These spaces may be provided by each contractor in their respective job sites, with location changing as the work progresses. An alternate which provides remote worker parking with a shuttle bus system may be substituted to meet these requirements.

5. Street Excavation Scheduling. Coordination of street excavations, and construction of utilities and other facilities to prevent multiple disruption of sites to the maximum degree feasible.

6. Visual Screening. Retention of existing berms and minimizing removal of mature trees. Screening of pump station and treatment plant sites by constructing and planting permanent berms as material is excavated. If replacement trees larger than five-gallon size are not grant-eligible, all trees shall be purchased at the commencement of construction so they will achieve some additional growth by project completion.

7. Truck Routing. Prohibition of construction trucks from using Park Road, Zoo Road, or Skyline Blvd. fronting the Recreation Center for the Handicapped, except for construction of Crosstown Tunnel.

8. Noise Barrier. Installation of a 15-ft.-high noise barrier at the north-east border of the treatment plant site, extending along the site boundary from opposite the Recreation Center for the Handicapped building, north and west to the present treatment influent line. The noise barrier should be of nonporous material with a surface weight of at least 4 lbs./sq. ft. (e.g., 1/2-inch plywood, etc.) and should be devoid of gaps or cracks. A combination berm and barrier would also be suitable, provided the specific height above grade and specifications are attained. An alternative proposal which accomplishes this purpose may be submitted to the Executive Director for his review and approval prior to construction at the Treatment Plant site.

9. Construction Noise Enforcement. Requirement of a performance bond from the contractor to assure that construction activity does not exceed City noise standards and monitoring of the contractor to assure strict adherence to noise standards.

10. Dust Control. Wetting down soil and sand to be excavated or distributed at least twice each day and more frequently on windy days. All haul truckloads shall be covered with a tarpaulin. All temporary stockpiles of sand shall be fenced and covered by plastic or fabric.

11. Recreation Center Air Filtration. Prior to initiation of any construction in the vicinity of the Recreation Center for the Handicapped, the City shall complete a thorough study of the air filtration needs of the Center done by a licensed

mechanical engineer. Based on this report, the City shall install and maintain additional air filters and/or fans in the Center's ventilation systems. The City shall regularly monitor the performance of the system and change filters as required to maintain internal air quality.

12. Day Camp Site. Provision of an alternative temporary day camp site for the Recreation Center for the Handicapped, if requested to do so by the Center's Board of Directors. This provision shall include an offer to defray all reasonable relocation and additional transportation expenses. It is understood that this provision would be effective only if relocation was due to construction impacts.

13. Groundwater Monitoring. Throughout the construction of all specific projects groundwater levels and ground surface elevations shall be measured at least monthly by a person acceptable to the Executive Director of the Commission. Records of measurements shall be submitted to the Commission and made available to the public. The independent engineer shall determine the area to be monitored during construction and afterward. If the engineer determines that groundwater or ground surface elevations are changing such that there is a risk of damage to surrounding structures, the City shall expeditiously implement measures to eliminate the risk.

14. Placement of Suitable Excavated Material on Beach. Excavated material from any onshore construction site that is not needed for backfill, berm construction, or other on-site work, shall be placed on the beach landward of the surf zone. If it meets National Park Service standards for beach nourishment materials. Materials excavated offshore during outfall construction shall be deposited so as to provide the maximum benefit to the Ocean Beach littoral system. The site of deposition shall be determined by an independent coastal engineer selected by the City and approved by the Executive Director. This sand shall be deposited consistent with a plan approval in advance by the National Park Service.

(B). Siting Conditions for Public Works Plan.

1. No Sand Removal from Beach. As of the effective date of this Commission action, sand removal from the beach shall be prohibited. Any sand that accumulates on streets or any other surface other than the beach or dunes, shall be collected and placed on the beach, landward of the surf zone as directed by the National Park Service.

2. Recreation Center Expansion Site. Specific project plans for the treatment plant and Crosstown tunnel shall locate those facilities as far as possible from the Recreation Center for the Handicapped and shall provide for an expansion area for the Recreation Center for the Handicapped. This expansion area shall be approximately three acres in size and in a location that is of the same general nature and scale of the Center's 20-year expansion program (dated April, 1979).

3. Lake Merced Transport Alignment. The only alignment of the Lake Merced Transport approved as part of this plan is that along Skyline Blvd. and the Great Highway Extension (alignment C).

4. Routing of Treatment Plant Traffic. The Treatment Plant shall be designed so that all operational traffic (i.e., chemical deliveries, employee access) shall be via Skyline Blvd.

5. Treatment Plant Screening. All above-ground treatment plant areas shall be screened with Landforms, trees, and shrubs to minimize visual impacts.

6. Control of Odors and Noise from Plant Operations. Provide air filtration, vibration and sound reducing techniques in the treatment facility to mitigate odor and noise problems to the maximum extent feasible. Project plans shall include the best available odor scrubbing agents for use during periods of plant operational "upsets".

7. Geotechnical Evaluation. For each component of the plan, geologic and engineering reports, approved by the Executive Director, shall be provided containing the following:

a. A geotechnical report which describes in detail the site conditions and the anticipated seismic response, including the characteristics of shaking and the potential for liquefaction and ground failure, and a description of how these factors may affect the project component or the safety of persons near the component;

b. A structural engineering report which describes the adopted design criteria, the structural system and how it is expected to resist forces caused by earthquake-inducing shaking and ground failure;

c. A statement signed by an independent registered engineer stating that:

1.) He/she has made a complete review of the design details, calculations and construction drawings; and

11.) In his/her opinion the component is designed to withstand a Richter magnitude 6.3 earthquake on the San Andreas fault (epicenter at point closest to the project site) and to protect the safety of persons exposed to the component, that the structural design takes into account the geotechnical hazards described in the geotechnical report and that architectural details and mechanical elements of the component are designed so that they are not a risk to human lives.

Further, staff recommended approval of the Specific Projects, subject to the following amended conditions:

Prior to commencement of each phase of development, final working drawings, construction contract specifications, and other required documents shall be submitted to the Executive Director of the Commission for his review and approval in writing to assure the following:

1. Mitigation of Adverse Construction Impacts. Inclusion of the applicable construction mitigation measures specified in the public works plan approval.

2. Cul-De-Sac Construction. Construction of the cul-de-sac on the Lower Great Highway as proposed in the restoration plan or temporary closing of the intersection shall be accomplished prior to the excavation of the Upper Great Highway. A traffic management plan shall be submitted for approval by the Executive Director to demonstrate how traffic will be routed in the coastal zone to ensure equitable distribution of traffic in the Sunset District during construction of the Westside facilities.

3. Phasing of Restoration. Each phase of the construction of the Westside Transport shall include restoration of the highway and creation of the dune field for that portion of the shoreline.

4. Boardwalk. The elimination of the plazas on the beach and the provision of alternative public accessways through construction of wooden boardwalks connecting the underpasses to the sandy beach and recreational trails.

5. Dune Planting. The contractor shall provide an irrigation system and guarantee the success of dune planting for a period of five years. Design of the irrigation system, final contours, planting and fertilization schedules, and plant selection shall be approved by the National Park Service.

6. Groundwater Monitoring. Construction of the Transport and Storage Structure shall include a drain system to allow for the flow of groundwater from the east under it to the west. A permanent groundwater monitoring system providing quarterly measurements shall be included as part of the project. If the water table rises more than two ft. above existing levels at any point, additional drainage facilities shall be installed to lower the level to pre-project conditions. The existing groundwater level shall be defined as the groundwater level prior to any construction, as determined by a registered engineer's analysis of borings drilled coincident with the east-wall alignment of the transport and storage structure.

7. Access Over Overflows. The design of the emergency overflow structures shall incorporate steps on the north and south sides and a railing on top or other measures to provide lateral access along the beach. The existing overflow structures shall be modified to provide decking, railing, and steps on the north and south to allow lateral access landward of the surf zone.

8. Relocation of Westside Transport and Restored Great Highway. Consistent with the City's proposed alignment, transport shall be located with the midpoint of the structure 108 ft. east of the west curb of the existing upper Great Highway. No part of the reconstructed highway shall be west of the transport's west wall. Similarly, the restored recreational corridor shall be shifted to the east in the same manner as the restored Great Highway provided that all features of the restored recreational corridor shall be consistent with plans on file in the application except for the location in relation to the shorelines. The highway itself shall be up to four lanes with two bike lanes and the curvilinear configuration modified to fit within these constraints.

9. Future Shoreline Protection Measures. All existing rubbles shall be removed from the beach between Lincoln Way and the shoreline in front of the proposed pump station. Future placement of rip-rap or rubble is prohibited. The City shall place at least one row of monuments, markers, or other distinguishable features 50 ft. west of the highway-transport alignment at a depth of 20 ft. above mean sea level. The markers shall be of permanent construction and located every 50 ft. When these features are exposed, the City shall replenish the lost sand, replace and contour the dunes 50 ft. seaward of the roadway/transport's west wall. Implementation and enforcement of this condition shall be evidenced by a binding Clean Water Grant condition which requires the City's Wastewater Revenue Program to provide an annual fund adequate to provide at least 100,000 cu. yds. of sand.

10. Annual Beach Nourishment. The City shall use its best efforts to implement the Corps of Engineers S.F. Bar Dredge spoil dumping within the littoral system of Ocean Beach. The Commission staff is authorized to assist in this effort in any way possible.

11. Analysis of Oceanographic Forces. For the Transport and Storage structure, the emergency overflow structure, and the ocean outfalls, there shall be reports, acceptable to the Executive Director, containing the following:

a. A report which describes in detail the site conditions, maximum credible oceanographic conditions, waves, currents, etc., and a description of how these conditions may affect the project component or persons exposed to the component;

job in a safe and reasonable fashion.

Larry Erickson, one of the opponents, spoke to the Commission regarding his concerns for the project since inception, and strongly urged the Commission to vote no on the request.

Following conclusion of the testimony of opponents on the staff report, Chairman Wright then requested the applicant for their presentation and comments concerning the staff report.

Roger Boes, Chief Administrative Officer in San Francisco, commented briefly on the staff report and said they were very appreciative of the Coastal Commission's efforts in trying to make the project more constructive and productive. He said he agreed with most of the people who were not happy with the project. However, the problem stems from the age of the City and its location on the bay and ocean. He described the history of the project and how the City came to develop it, as well as the economics involved. Generally speaking, he said the City must try to do its work in an esthetic way and as conservatively and intelligently as possible. He discussed some of the alternatives and what their consequences would be, and closed by saying that they were in front of the Commission in a spirit of willingness to complete the project to the best of their abilities, and requested the Commission's consideration and indulgence.

Supervisor Louise Henne, appearing on behalf of Mayor Dianne Feinstein and Supervisor Bob Gonzales, said the conditions imposed would make it extremely difficult to defend their position and move the project forward. She described the conditions as overly broad, unreasonable and too costly, and said they would like the permit without the conditions. She then read a letter from Mayor Feinstein urging the continued construction of San Francisco's water pollution abatement facility and the extraordinary consequences that would come from delays. Their opposition to the conditions is as follows:

- 1) Free shuttle-bus service;
- 2) Disposal of ocean outfall and excavated material;
- 3) Recreation Center expansion site, specifying particular acreage;
- 4) Cul-de-sac of the Great Highway;
- 5) Relignment of the upper Great Highway;
- 6) Removal of all existing rubble; and
- 7) Off-shore monitoring.

The Mayor's letter concluded by saying that resolution of these conditions tonight would allow San Francisco to proceed with its critical water pollution control program for the benefit of all residents. She believed it was a good plan that would leave the coastal zone more beautiful and with far more public access and recreational opportunities than presently afforded the public.

Albert Ferini, Director of Special Projects, briefly described the waste water program for the Commissioners, and discussed the problems they had with some of the conditions. He offered a compromise solution for the placement of the road which would be that the west edge of the road always stay east of the west edge of the box, and the trigger point to be 50' away from the box for the replenishment of the sand by the City. He further suggested that the trigger point be moved out to the G.G.H.A. boundary line, and that the road be permitted to swing 70 feet west of the west edge of the box.

Louise Stoll, Manager of Government Affairs for the Waste Water Program, introduced Dr. Cyril Galvin (Coastal Engineer) who discussed the beach erosion question from the City's position in the construction of the project.

Tom Malloy, Executive Assistant General Manager for the Recreation and Park Commission, discussed the maintenance of the upper Great Highway, noting that he

b. A structural engineering report which describes the adopted design criteria and how the structural system is expected to resist the forces of wave and tidal action;

c. A statement signed by an independent registered engineer, acceptable to the Executive Director, stating:

1) that he/she has made a complete and independent review of the design, details, calculations, and construction drawings; and

11) that in his/her opinion the structure is designed to withstand the maximum credible oceanographic conditions described in the oceanographic report and that, as designed, the plan component will not adversely affect natural coastal processes.

12. Monitoring of Offshore Processes. The City shall be responsible for a program of collecting data on coastal processes and for making the information available to interested parties. The program tasks and operating details are described more fully in Exhibit 20 and shall be approved by the Executive Director. At a minimum the program shall include measurement of deep-water and nearshore wave conditions for a period of five years, quarterly measurement of beach profiles at four locations during construction and for five years after the dunes are graded to their final contour, analysis of beach sand sizes, aerial photography, offshore hydrography, and daily visual observations of the littoral environment. A less extensive program shall be continued indefinitely. The National Park Service shall be encouraged to participate in this program to the maximum extent feasible.

13. Standard Enforcement Condition. All final working drawings shall be accompanied by a Landscape Architect and Engineer's Certificate that said drawings are in substantial conformance with preliminary plans submitted to the Commission and the attached conditions.

Chairman Wright then opened the public hearing and asked to bear from the opponents.

Judy McCabe, representing the Sunset Coalition, spoke to the Commission about how the project would not meet the requirements of the Coastal Act and its policies, and urged the Commission to deny the project which would enable the City to choose an alternate location for this project.

Jesse Tepper, one of the opponents, discussed the proposed structure at the beach and the amount of sand needed for replenishment. He asked the Commission to deny the project for the westside transport.

Dennis Antenore, representing the Sunset Coalition, discussed the serious erosion problem of the beach in the subject area, and staff's solution for the erosion problem. Approval of this project would also include a constant stream of trucks along Ocean Beach dumping sand, with no recreation corridor. Therefore, the Commission had no choice but to deny this project.

Steve Zisman, representing the Bay Chapter of the Sierra Club, spoke against the application, noting that the westside transport would not fit with the rest of the project, and urged the Commission to deny the permit.

Don Ziegler, President of the Planning Association for the Richmond, spoke in opposition to sever construction along the beach primarily because of the lack of protective measures for the westside transport and the evident loss of the beach to wave action. The City of San Francisco must take the responsibility of doing the

was particularly impressed with the realization of achieving the curvilinear parkway long proposed in the City's policy and the zoo master plan. He said they would be glad to meet with representatives of the Recreational Center for the Handicapped to discuss their concerns.

Amy Meyer, representing the Recreation and Park Commission of San Francisco, said they would put forth a good faith effort to work with the Recreational Center for the Handicapped in order to make the best possible use of the land for their needs and to conform with the zoo master plan and existing policies.

Michael McGill, representing "SPUR", spoke in support of the Great Highway improvement program and the implementation of this plan. He also discussed the disadvantages of the conditions placed on the permit.

Chairman Wright cited a letter from the Department of Public Health of San Francisco addressing concerns of noise and air pollution, respiratory and nervous disorders, stating these were more of a nuisance factor rather than a health hazard.

Raymond Walsh, Assistant Chief of the Division of Water Quality of the State Water Resources Control Board, spoke to concerns of water quality, grant funding and the project's eligibility for this funding.

Roger James, Assistant Executive Officer of the Regional Water Quality Control Board, distributed a prepared statement and read it to the Commission covering their position and their support for the project.

Lynn Thompson, General Superintendent of the Golden Gate National Recreational Area, spoke in support of the development and implementation of the project.

John Molinari, President of the San Francisco Board of Supervisors, said this matter was extremely important to the City who had worked long hours and asked the Commission to hear the recommendation of the caucus of the two Regional Commissions before adjourning.

After further Commission discussion and amendments to conditions, Chairman Wright closed the public hearing. Commissioners Sweetwood, Bush, Renner and Leavy said they had familiarized themselves with the record and were prepared to vote.

MOTION: Commissioner Schwartz moved that the Commission vote on the Public Works Plan with staff's amended conditions, seconded by Commissioner Wilson, and the roll call vote on the plan, with a yes vote to approve with the conditions and for the reasons in the staff recommendation as amended, and a no vote not to approve, was as follows: Yes: Commissioners Doerfling, Even, Leavy, Ramos, Renner, Rush, Schwartz, Sweetwood, Wilson, and Chairman Wright. No: Commissioner Grote. The public works plan was thus approved with conditions by a vote of 10 in favor and 1 opposed.

MOTION: Commissioner Ramos moved that the Commission vote on the applications with amended conditions, seconded by Commissioner Wilson, and the roll call vote on the applications, with a yes vote to approve with the conditions and for the reasons in the staff recommendation as amended, and a no vote to deny, was as follows: Yes: Commissioners Doerfling, Even, Grote, Leavy, Ramos, Renner, Rush, Schwartz, Sweetwood, Wilson, and Chairman Wright. No: none. The applications were thus approved with conditions by a vote of 11 in favor and 0 opposed.

22. Adjournment. There being no old or new business, the meeting adjourned Wednesday, June 6, 1979, at 1:00 a.m.

Respectfully submitted,

MICHAEL I. FISCHER
Executive Director

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

AMENDMENT TO PUBLIC WORKS PLAN APPROVAL

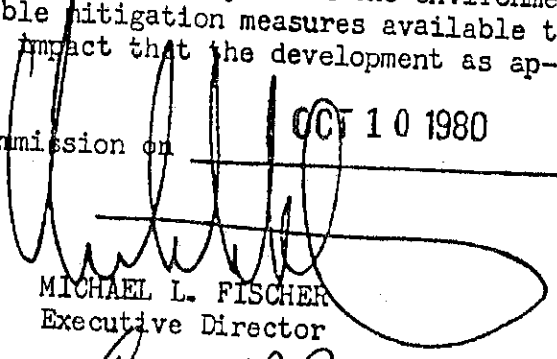
On September 30, 1980, by a vote of 9 to 0, the California Coastal Commission granted to San Francisco Wastewater Management Program an amendment to Public Works Plan #1, subject to the conditions set forth below, for changes to the development or conditions imposed on the existing permit issued on June 6, 1979. Changes approved by this amendment consist of see Attachment A

more specifically described in the application file in the Commission offices.

The development is within the coastal zone in San Francisco and San Mateo Counties at various locations throughout the coastal zone

After public hearing held on September 30, 1980, the Commission found that, as conditioned, the proposed amendment is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; if between the sea and the public road nearest the sea, is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act of 1976; either (1) will not have any significant adverse impact on the environment, or (2) there are no feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse impact that the development as approved may have on the environment.

Issued on behalf of the California Coastal Commission on OCT 10 1980

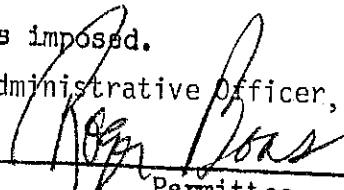

MICHAEL L. FISCHER
Executive Director

By 

The undersigned permittee acknowledges receipt of the California Coastal Commission, this amendment to Public Works Plan No. 1, dated September 30, 1980 and fully understands its contents, including all conditions imposed.

January 20, 1981

Date


Chief Administrative Officer, City & County of San Francisco

Permittee

This amendment to Public Works Plan No. 1, is subject to the following conditions:

A. Standard Conditions.

1. Assignment of Permit. This permit may not be assigned to another person except as provided in the California Administrative Code, Title 14, Section 13170.

2. Notice of Receipt and Acknowledgement. Construction authorized by this amendment shall not commence until a copy of this amendment, signed by the applicant or authorized agent, acknowledging receipt of the amendment and acceptance of its contents, is returned to the Commission.

3. Expiration. If construction has not commenced, the permit will expire two (2) years from the date on which the Commission voted on the application. Application for extension of the permit must be made prior to the expiration date of the original permit. This amendment does not constitute an extension to the original permit.

4. Construction. All construction must occur in accord with the proposal as set forth in the application for permit, subject to any special conditions imposed on the permit except as modified by this amendment. Any further deviations from the approved plans must be reviewed by the Commission pursuant to California Administrative Code, Title 14, Sections 13164-13168.

5. Interpretation. Interpretation or revisions of the terms or conditions of the permit or this amendment must be reviewed by the State Coastal Commission or its Executive Director. All questions regarding the permit or this amendment should be addressed to the State Commission office in San Francisco unless a condition expressly authorizes review by the Regional Commission or its staff.

B. Special Conditions.

1. Realigned Great Highway. The 50 foot trigger line for the sand replenishment program required by Specific Projects Resolution special condition #9 shall be measured from the west edge of the redesigned Great Highway at any point where the western edge of the highway is seaward of the transport structure. The seaward extension of the redesigned Great Highway at the new underpasses shall be a maximum of 20 feet west of the transport's west wall. The redesigned Great Highway between Wawono Street and the Great Highway extension shall not extend farther seaward than the existing Great Highway alignment.

2. Public Transit Along Great Highway. The Clean Water Program shall provide the transit stop improvements required by Muni. At a minimum, these include operator restroom facilities, and a lighted terminal shelter. Improvements required by Muni must be operating at the time the modified service commences. Transit service must commence no later than March 1, 1980. The method for determining the effectiveness of the modified service shall be funded by the Clean Water Program and approved by Muni to involve actual ridership counts on all coaches on the augmented service area.

3. Revised Plans. All final plans and working drawings resulting from this amendment must be approved by the Executive Director of the Commission prior to commencement of construction.

Amendment to Public Works Plan No. 1

4. Original Conditions. All conditions or portions thereof not changed explicitly by the amendment shall be complied with in the manner outlined in the Resolution on the public works plan and specific project approvals.

5. Rubble. Only the rubble located seaward of the 50 foot trigger line for the sand replenishment program shall be removed as part of the recreational restoration of the Great Highway.

Attachment A - Amendment to Public Works Plan No. 1

Requested changes are as follows:

- a. Amend the specific projects resolution to allow for a realignment of the restored Great Highway such that portions of the highway are seaward of the transport structure;
- b. Amend the public works plan to substitute a modified Muni transit service in the project area for the shuttle bus system required by Condition #1 on the Public Works Plan;
- c. Substitute an underpass for the originally proposed land bridge that will link Golden Gate Park with the beach as amendment of project description; and
- d. Allow the existing rubble at Ocean Beach to remain.

Jh

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

TO: STATE COMMISSIONERS, INTERESTED PUBLIC

FROM: MICHAEL L. FISCHER, EXECUTIVE DIRECTOR

SUBJECT: REQUEST FOR AMENDMENT TO CITY OF SAN FRANCISCO PUBLIC WORKS PLAN
AND SPECIFIC PROJECT APPROVALS

Procedures

In the case of public works plans and project approvals granted by the Commission under the Coastal Act of 1976, the Commission regulations (Section 13365 for public works plans, Section 13166 for projects) allow applicants to request approval by the Commission of amendments to the public works plan or project or to the plan or project conditions. The Coastal Commission may approve an amendment if it finds that the revised development is consistent with the Coastal Act. The staff recommends that the Commission hold a public hearing on the request, and after closing the public hearing, vote on it.

1. Development Description/Proposed Amendment. On June 6, 1979 the Commission granted the City of San Francisco Clean Water Program a conditional approval for 4 specific projects and a public works plan for other elements of the City's comprehensive effort to improve its antiquated sewage treatment system (the resolution on the specific projects and public works plan approval is set forth in Exhibit 1). The 4 specific projects for which approval was granted are: (1) the Westside transport and storage structure, (2) the Westside pump station, (3) the Southwest ocean outfall, and (4) the restored Great Highway.

Over the last 16 months the Clean Water Program has been developing the final plans and specifications necessary to implement the construction phase of the specific projects. The Clean Water Program now seeks an amendment to change 4 elements of the Commission's approval of the Westside Transport and the Redesigned Great Highway; the requested changes are as follows:

- a. Amend the specific projects resolution to allow for a realignment of the restored Great Highway such that portions of the highway are seaward of the transport structure;
- b. Amend the public works plan to substitute a modified Mini transit service in the project area for the shuttle bus system required by Condition #1 on the Public Works Plan;
- c. Substitute an underpass for the originally proposed land bridge that will link Golden Gate park with the beach as amendment of project description; and
- d. Allow the existing rubble at Ocean Beach to remain.

2. Background. The Commission's review of the specific projects and public works plan (Exhibit 1) focused primarily on 3 issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the treatment projects into conformity with the Coastal Act, the Commission found it necessary to impose conditions

9/30-10/1/80

on the project to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during construction or after project completion, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a 5 year construction period.

The proposed amendment directly affects four of the conditions imposed on the project and plan approvals. First, special condition #8 on the Specific Project Resolution requires, in part, that "no part of the reconstructed highway shall be west of the transport's west wall." The Clean Water Program requests that this condition be changed to allow for greater curves in the restored Great Highway and to facilitate the highway's connection with the Great Highway extension south of Sloat Blvd.

Second, Condition #1 on the Public works plan requires the implementation of a shuttle bus system to run along the Great Highway from Sloat Blvd. to Fulton St. throughout the duration of the project construction. The Clean Water Program proposes to comply with this condition through a modification of existing Muni transit service in the area.

Third, Condition #3 on the Specific Projects resolution requires certification that the final drawings for the projects be in substantial conformance to the preliminary drawings submitted to the Commission for review. A land bridge was first proposed to link Golden Gate Park to the beach, but the current project design calls for an underpass; an amendment is necessary to allow this change.

Fourth, Special Condition #9 on the Specific Projects resolution requires the removal of the existing rubble located at Ocean Beach. The Clean Water Program requests that this requirement be changed so that the rubble can remain as protection against shoreline retreat, in the event that severe storms rapidly erode the beach faster than sand replenishment can occur.

STAFF RECOMMENDATION:

Staff recommends that the Commission adopt the following resolution:

I. Approval With Conditions. The Commission hereby grants, subject to the conditions below, the proposed amendment to the Specific Project and Public Works Plan described above, on the grounds that the development, as amended and conditioned, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and that there are no feasible alternatives, or feasible mitigation measures, as provided in the California Environmental Quality Act, available that would lessen any significant adverse impact that the development as finally proposed would have on the environment.

II. Conditions. The amendment is subject to the following conditions:

1. Realigned Great Highway. The 50 foot trigger line for the sand replenishment program required by Specific Projects Resolution special condition #9 shall be measured from the west edge of the redesigned Great Highway at any point where the western edge of the highway is seaward of the transport structure. The seaward extension of the redesigned Great Highway at the new underpasses shall be a maximum of 20 feet west of the

transport's west wall. The redesigned Great Highway between Wawona Street and the Great Highway extension shall not extend farther seaward than the existing Great Highway alignment.

2. Public Transit Along Great Highway. The Clean Water Program shall provide the transit stop improvements required by Muni. At a minimum, these include operator rest-room facilities, and a lighted terminal shelter. Improvements required by Muni must be operating at the time the modified service commences. Transit service must commence no later than March 1, 1980. The method for determining the effectiveness of the modified service shall be funded by the Clean Water Program and approved by Muni to involve actual ridership counts of all coaches on the augmented service area.

3. Revised Plans. All final plans and working drawings resulting from this amendment must be approved by the Executive Director of the Commission prior to commencement of construction.

4. Original Conditions. All conditions or portions thereof not changed explicitly by the amendment shall be complied with in the manner outlined in the Resolution on the public works plan and specific project approvals.

5. Rubble. Only the rubble located seaward of the 50 foot trigger line for the sand replenishment program shall be removed as part of the recreational restoration of the Great Highway.

III. Findings and Declarations.

1. Amendment Description. The subject amendment will result in a total of 4 changes to the Public Works Plan and Specific Projects approvals granted to the Clean Water Program by the Commission in June of 1979.

a. Realigned Great Highway. The concept of a curvilinear Great Highway has been advocated and supported by various community groups and the Board of Supervisors over the last 10 years. Under the proposed amendment, the redesigned Great Highway will curve seaward of the Westside transport of each pedestrian underpass; the maximum seaward extension of the road will be 20 feet west of the transport. The road will be elevated at these points and the roads structural support will be constructed integrally with the transport structure [Exhibit 2]. The roadway also will extend seaward of the transport near Sloat Blvd. in order to facilitate the road's connection with the Great Highway extension south of Sloat Blvd. and because the transport structure curves inland at this point to align with the Westside Pump Station. However, the redesigned Great Highway will extend no farther seaward than the existing Great Highway. The specific portions of the redesigned Great Highway that will be seaward of the transport are as follows (from north to south):

- 1) Approximately 460 feet between Irving and Kirkham Streets;
- 2) Approximately 460 feet between Kirkham and Moraga Streets;
- 3) Approximately 420 feet between Moraga and Ortega Streets;
- 4) Approximately 860 feet between Pacheco and Rivera Streets;
- 5) Approximately 365 feet between Santiago and Ulloa Streets; and
- 6) Approximately 800 feet from Sloat Blvd. north.

b. Transit Service System. The modification of the existing Muni service is designed to better serve transit riders along the Great Highway Corridor during construction of the westside transport. The modified service will replace the shuttle bus system required by special condition #1 on the public works plan. The amended bus service will be provided by using two existing Muni bus lines, the Number 18 Sloat and the Number 10 Monterey. The 18 Sloat parallels the existing Great Highway as it runs along 46th Avenue between Sloat and Fulton Street. Bus stops on 46th Avenue are within walking distance to the Great Highway (i.e. no more than 800 feet east of the highway). Under this amendment, the 18 Sloat will stop at the parking lot at the intersection of Sloat Blvd. and the Great Highway and then continue along its regular route along 46th Avenue. The 10 Monterey line is a new major east-west route that will connect the Hunter's Point area of the city, via the Bernal Heights and Twin Peaks areas, with the San Francisco Zoo, located near the Great Highway on Sloat Blvd. The modified service provided by this amendment will result in all runs of the 10 Monterey line terminating at the Sloat/Great Highway parking lot.

The additional costs for the modification of the Muni service will be financed by the Clean Water Program for at least 6 months, which is the same as the initial time period for the shuttle bus program originally required by public works plan condition #1. After 6 months the modified service will be evaluated to determine whether it should be financed by the Clean Water Program for the duration of the Westside transport construction.

The Clean Water Program also will finance the reconstruction of the Sloat/Great Highway intersection, the repaving of the parking lot, and the installation of a lighted transit shelter and a bus operator restroom. These structural improvements are required to accommodate the Muni buses and to meet Muni standards for facilities at line terminals.

c. Underpass at Golden Gate Park. An underpass running under the Great Highway will link Golden Gate Park near the Beach Chalet Building with Ocean Beach. This underpass will replace the bridge over the highway that was proposed originally. The intent of the underpass is to provide access to the beach from the east side of the highway without adversely affecting views to the ocean from the park and the Beach Chalet.

d. Rubble. Under the amendment as conditioned, the Clean Water Program will be required to remove only the rubble in the project area that lies seaward of the sand replenishment trigger line. The rubble removal will take place as part of the Great Highway redesign so that upon project completion there will be no exposed rubble along the Ocean Beach shoreline.

2. Coastal Processes. In reviewing the Westside Transport and Highway Redesign projects, the Commission found that the Ocean Beach area is an eroding shoreline. Section 30253 of the Coastal Act states:

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 Commission's findings on the specific projects resolution state (page 27):

In summary, the shoreline condition at Ocean Beach can be described as follows: Given that construction will take place between the existing shoreline and the natural historical shoreline approximately at the lower Great Highway, the farther east the hard line protection is, the longer a recreational beach will exist, and the useable beach will be wider. This situation is explained visually by Mr. Ecker's graphic representation of the various Ocean Beach profiles (Exhibit 18) and was emphasized by the erosion conference panel when they stated:

If the objective is to protect the existing beach width and the recreational benefits it provides for the greatest possible period of time, the transport line should be constructed in the most eastward location possible.

In response to these findings, the Commission imposed conditions designed to minimize the potential need for protective structures on the beach and to protect and enhance the existing sandy beach environment and associated recreational benefits. Condition #8 on the Specific Projects Resolution requires the transport structure to be located as far east of the shoreline as is feasible, with the restored great highway located east of the transport. Specific Projects Condition #9 requires the implementation of a sand replenishment program at any time any part of the shoreline recedes to within 50 feet of the transport, prohibits the placement of rip-rap as erosion protection, and requires the removal of the existing rubble that is exposed at Ocean Beach. The intent of these conditions is to provide the widest possible sandy beach and dune system, to eliminate the placement of erosion protection structures on the recreational shoreline, and to improve the appearance and user safety of the shoreline (through the removal of existing exposed rubble).

Condition #3 reduces the curvilinear character of the redesigned roadway by reducing the east-west distance the road can turn. Because this conflicts with the desires of the Board of Supervisors and numerous community groups, the Clean Water Program has requested the amendment allowing the roadway to extend west of the transport structure for limited distances to provide adequate distance for curves. The design of the roadway west of the transport, as proposed and conditioned, addresses the Commission's concerns with respect to avoiding the need for physical structures to protect the roadway. The roadway curving west of the transport will be supported by columns rising from the transport structure at each of the pedestrian underpasses (Exhibit 2). Therefore, the amended, redesigned roadway west of the transport at the underpasses will not be based on dune fill, as is the case with the existing Great Highway, and will not be subject to undermining caused by erosion. At the point where the transport structure turns inland to align with the pump station, the Great Highway will be significantly seaward of the transport in order for the roadway to connect with the existing Great Highway Extension along a relatively straight alignment. Although the redesigned roadway will be supported on existing fill, it will not extend beyond the current Great Highway alignment. In order to maintain at least a 50 foot buffer of beach between physical improvements and the ocean, condition #1 on the amendment requires the sand replenishment program trigger line to be measured 50 feet seaward from the most seaward structure (i.e., either the road edge that curves west of the transport, or the west edge of the transport). The Commission emphasizes that the City must recognize that as any structure is moved closer to wave action, the potential for implementing the sand replenishment program increases. However, the Commission finds that the 50 foot "buffer zone" between the ocean and the seaward most structure is necessary to assure the use and maintenance of a shoreline area consistent with the policies of Chapter 3 of the Coastal Act.

* Except for a small portion of the approaches to the underpasses

Under the proposed amendment, the Clean Water program will not be required to remove any rubble from the project area that is located landward of the sand replenishment line. With the exception of short periods of times where severe storms may expose rubble, any rubble located landward of the trigger line always will be covered by sand (either naturally or through the replenishment program) and, therefore will not conflict with the Commission's intent to assure a sandy recreational shoreline.

As conditioned, the Commission finds the amendment consistent with Section 30253 of the Coastal Act.

3. Public Access. Sections 30210-12 of the Coastal Act provide for the protection and enhancement of public access opportunities in the Coastal Zone. With respect to the subject development, the Commission found, in part, that during the 6 year construction phase access throughout the City's coastal zone will be impaired by excavation, grading, reduced road capacity, construction vehicle traffic, traffic diversions, and other factors related to project construction. One of the conditions imposed on the public works plan by the Commission required the commencement of a shuttle bus transit system to serve the Great Highway during construction of the Westside Transport. The intent of this condition was to mitigate the project's adverse impact on access by linking existing transit terminals that end at the Great Highway, encourage transit use by workers, and provide access along the Great Highway corridor for beach users.

The City, through the Municipal Railway and the Clean Water Program, contends that providing a temporary shuttle bus along the Great Highway could have adverse impacts on existing public transit that serves the general area. Some disadvantages cited include: 1) the shuttle would duplicate service provided by Muni's 18 Sloat Line and could draw riders away from the established service, thereby affecting fare revenues, 2) temporary shuttle service does not encourage the development of a transit ridership habit, and 3) the shuttle would not connect significant destinations on its own.

Subsequent to discussions with Muni, the Clean Water Program has proposed an alternative designed to provide more beneficial and long term service than the required shuttle bus. The alternative in this amendment takes advantage of existing public transit service. The specific changes that will go into effect as a result of this amendment are set forth in Exhibit 3.

Commission staff agrees that the proposed alternative has the potential for greater long term benefits than the shuttle bus alternative. By modifying existing transit service along the Great Highway corridor rather than using a shuttle between Sloat and Fulton, transit service will link eastern portions of the City with the Palace of the Legion of Honor, the Cliff House, Golden Gate Park, and the zoo; thus, the amendment provides improved access to a variety of recreational opportunities at San Francisco's western edge.

Under this amendment, the headways for transit within the Great Highway corridor will be less than the maximums specified in the shuttle bus condition. As proposed and conditioned, the condition requires the Clean Water Program to provide the improvements to the Sloat/Great Highway intersection and the facilities necessary to convert the parking lot at the intersection into a line terminal. The Clean Water Program also will finance Muni's additional operation costs for a period of six months starting from the first day of operation. At that time the modified service will be evaluated by the Executive Director to determine whether the Cleanwater Program should finance the operation of the modified service for the duration of the Westside transport construction.

Although the original condition requires start-up of the bus service concurrent with the first excavation on the Great Highway (i.e. the W-3 contract between Lincoln and Fulton Streets, due to begin in late 1980), the Clean Water Program has requested that the service start at a later date in order to coordinate construction of transit improvements with the transport construction along that part of the Great Highway (i.e., concurrent with the W-1 contract, from Lincoln Way to Sloat, due to start in January, 1981). The Commission finds that the benefits provided from the amended transit service outweigh the disadvantages resulting from the time delay. However, to assure that the service is provided in a timely fashion following initial disruption of the Great Highway corridor, amendment condition #2 requires a time certain transit service start-up of ~~January~~ March 1, 1981.

The Commission finds that the transit service provided by this amendment will enhance public access in the Coastal Zone of San Francisco. Thus, the Commission finds that the amendment is consistent with the public access policies of the Coastal Act.

4. Coastal Views. Section 30251 of the Coastal Act provides for the protection of scenic and visual qualities of coastal areas. The Great Highway redesign plan findings presented before the Commission included a land bridge to connect Golden Gate Park with the beach. The bridge would obstruct views to the north from the Beach Chalet building, which is designated in the City's LCP as a visitor serving facility. The Clean Water Program has requested an amendment to substitute an underpass for the land bridge in order to preserve public views from the Beach Chalet. The under pass will provide access to the same points as the originally proposed land bridge and, therefore, is not in conflict with the Commission's original findings on coastal access. In addition, the use of an underpass in this location will enhance a visitor serving use by preserving coastal views. Therefore, the underpass is a preferable alternative to a land bridge.

Thus, the Commission finds the amendment consistent with Section 30251 of the Coastal Act.



Jan

SAN FRANCISCO CLEAN WATER PROGRAM

City and County of San Francisco, 150 Hayes Street, San Francisco, California 94102, Telephone (415) 558-2137

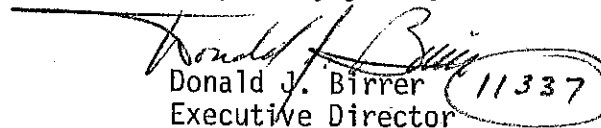
January 20, 1981

Mr. Michael Fischer
Executive Director
California Coastal Commission
631 Howard Street
San Francisco, CA 94105

Dear Mr. Fischer:

Attached is a countersigned copy of the September 30, 1980 Amendment to Public Works Plan #1. We can find no record in our files indicating that we had received this amendment prior to January 20, 1981, the date on which we received your January 16, 1981 letter transmitting this amendment.

Very truly yours,


Donald J. Birrer
Executive Director

11337

Attachment: As Noted

ALIFORNIA COASTAL COMMISSION

631 Howard Street, San Francisco 94105 — (415) 543-8555

TO: STATE COMMISSIONERS, INTERESTED PUBLIC
FROM: MICHAEL L. FISCHER, EXECUTIVE DIRECTOR
SUBJECT: REQUEST FOR AMENDMENT TO CITY OF SAN FRANCISCO PUBLIC WORKS PLAN AND SPECIFIC PROJECT APPROVALS

Procedures

In the case of public works plans and project approvals granted by the Commission under the Coastal Act of 1976, the Commission regulations (Section 13365 for public works plans, Section 13166 for projects) allow applicants to request approval by the Commission of amendments to the public works plan or project or to the plan or project conditions. The Coastal Commission may approve an amendment if it finds that the revised development is consistent with the Coastal Act. The staff recommends that the Commission hold a public hearing on the request, and after closing the public hearing, vote on it.

1. Development Description/Proposed Amendment. On June 6, 1979 the Commission granted the City of San Francisco Clean Water Program a conditional approval for 4 specific projects and a public works plan for other elements of the City's comprehensive effort to improve its antiquated sewage treatment system (the resolution on the specific projects and public works plan approval is set forth in Exhibit 1). The 4 specific projects for which approval was granted are: (1) the Westside transport and storage structure, (2) the Westside pump station, (3) the Southwest ocean outfall, and (4) the restored Great Highway.

Over the last 16 months the Clean Water Program has been developing the final plans and specifications necessary to implement the construction phase of the specific projects. The Clean Water Program now seeks an amendment to change 4 elements of the Commission's approval of the Westside Transport and the Redesigned Great Highway; the requested changes are as follows:

- a. Amend the specific projects resolution to allow for a realignment of the restored Great Highway such that portions of the highway are seaward of the transport structure;
- b. Amend the public works plan to substitute a modified Muni transit service in the project area for the shuttle bus system required by Condition #1 on the Public Works Plan;
- c. Substitute an underpass for the originally proposed land bridge that will link Golden Gate park with the beach as amendment of project description; and
- d. Allow the existing rubble at Ocean Beach to remain.

2. Background. The Commission's review of the specific projects and public works plan (Exhibit 1) focused primarily on 3 issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the treatment projects into conformity with the Coastal Act, the Commission found it necessary to impose conditions

9/30-10/1/80

on the project to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during construction or after project completion, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a 5 year construction period.

The proposed amendment directly affects four of the conditions imposed on the project and plan approvals. First, special condition #3 on the Specific Project Resolution requires, in part, that "no part of the reconstructed highway shall be west of the transport's west wall." The Clean Water Program requests that this condition be changed to allow for greater curves in the restored Great Highway and to facilitate the highway's connection with the Great Highway extension south of Sloat Blvd.

Second, Condition #1 on the Public works plan requires the implementation of a shuttle bus system to run along the Great Highway from Sloat Blvd. to Fulton St. throughout the duration of the project construction. The Clean Water Program proposes to comply with this condition through a modification of existing Muni transit service in the area.

Third, Condition #3 on the Specific Projects resolution requires certification that the final drawings for the projects be in substantial conformance to the preliminary drawings submitted to the Commission for review. A land bridge was first proposed to link Golden Gate Park to the beach, but the current project design calls for an underpass; an amendment is necessary to allow this change.

Fourth, Special Condition #9 on the Specific Projects resolution requires the removal of the existing rubble located at Ocean Beach. The Clean Water Program requests that this requirement be changed so that the rubble can remain as protection against shoreline retreat, in the event that severe storms rapidly erode the beach faster than sand replenishment can occur.

STAFF RECOMMENDATION:

Staff recommends that the Commission adopt the following resolution:

I. Approval With Conditions. The Commission hereby grants, subject to the conditions below, the proposed amendment to the Specific Project and Public Works Plan described above, on the grounds that the development, as amended and conditioned, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and that there are no feasible alternatives, or feasible mitigation measures, as provided in the California Environmental Quality Act, available that would lessen any significant adverse impact that the development as finally proposed would have on the environment.

II. Conditions. The amendment is subject to the following conditions:

1. Realigned Great Highway. The 50 foot trigger line for the sand replenishment program required by Specific Projects Resolution special condition #9 shall be measured from the west edge of the redesigned Great Highway at any point where the western edge of the highway is seaward of the transport structure. The seaward extension of the redesigned Great Highway at the new underpasses shall be a maximum of 20 feet west of the

transport's west wall. The redesigned Great Highway between Wawona Street and the Great Highway extension shall not extend farther seaward than the existing Great Highway alignment.

2. Public Transit Along Great Highway. The Clean Water Program shall provide the transit stop improvements required by Muni. At a minimum, these include operator rest-room facilities, and a lighted terminal shelter. Improvements required by Muni must be operating at the time the modified service commences. Transit service must commence no later than March 1, 1980. The method for determining the effectiveness of the modified service shall be funded by the Clean Water Program and approved by Muni to involve actual ridership counts of all coaches on the augmented service area.

3. Revised Plans. All final plans and working drawings resulting from this amendment must be approved by the Executive Director of the Commission prior to commencement of construction.

4. Original Conditions. All conditions or portions thereof not changed explicitly by the amendment shall be complied with in the manner outlined in the Resolution on the public works plan and specific project approvals.

5. Rubble. Only the rubble located seaward of the 50 foot trigger line for the sand replenishment program shall be removed as part of the recreational restoration of the Great Highway.

III. Findings and Declarations.

1. Amendment Description. The subject amendment will result in a total of 4 changes to the Public Works Plan and Specific Projects approvals granted to the Clean Water Program by the Commission in June of 1979.

a. Realigned Great Highway. The concept of a curvilinear Great Highway has been advocated and supported by various community groups and the Board of Supervisors over the last 10 years. Under the proposed amendment, the redesigned Great Highway will curve seaward of the Westside transport of each pedestrian underpass; the maximum seaward extension of the road will be 20 feet west of the transport. The road will be elevated at these points and the roads structural support will be constructed integrally with the transport structure [Exhibit 2]. The roadway also will extend seaward of the transport near Sloat Blvd. in order to facilitate the road's connection with the Great Highway extension south of Sloat Blvd. and because the transport structure curves inland at this point to align with the Westside Pump Station. However, the redesigned Great Highway will extend no farther seaward than the existing Great Highway. The specific portions of the redesigned Great Highway that will be seaward of the transport are as follows (from north to south):

- 1) Approximately 460 feet between Irving and Kirkham Streets;
- 2) Approximately 460 feet between Kirkham and Moraga Streets;
- 3) Approximately 420 feet between Moraga and Ortega Streets;
- 4) Approximately 860 feet between Pacheco and Rivera Streets;
- 5) Approximately 365 feet between Santiago and Ulloa Streets; and
- 6) Approximately 800 feet from Sloat Blvd. north.

b. Transit Service System. The modification of the existing Muni service is designed to better serve transit riders along the Great Highway Corridor during construction of the westside transport. The modified service will replace the shuttle bus system required by special condition #1 on the public works plan. The amended bus service will be provided by using two existing Muni bus lines, the Number 18 Sloat and the Number 10 Monterey. The 18 Sloat parallels the existing Great Highway as it runs along 46th Avenue between Sloat and Fulton Street. Bus stops on 46th Avenue are within walking distance to the Great Highway (i.e. no more than 800 feet east of the highway). Under this amendment, the 18 Sloat will stop at the parking lot at the intersection of Sloat Blvd. and the Great Highway and then continue along its regular route along 46th Avenue. The 10 Monterey line is a new major east-west route that will connect the Hunter's Point area of the city, via the Bernal Heights and Twin Peaks areas, with the San Francisco Zoo, located near the Great Highway on Sloat Blvd. The modified service provided by this amendment will result in all runs of the 10 Monterey line terminating at the Sloat/Great Highway parking lot.

The additional costs for the modification of the Muni service will be financed by the Clean Water Program for at least 6 months, which is the same as the initial time period for the shuttle bus program originally required by public works plan condition #1. After 6 months the modified service will be evaluated to determine whether it should be financed by the Clean Water Program for the duration of the Westside transport construction.

The Clean Water Program also will finance the reconstruction of the Sloat/Great Highway intersection, the repaving of the parking lot, and the installation of a lighted transit shelter and a bus operator restroom. These structural improvements are required to accommodate the Muni buses and to meet Muni standards for facilities at line terminals.

c. Underpass at Golden Gate Park. An underpass running under the Great Highway will link Golden Gate Park near the Beach Chalet Building with Ocean Beach. This underpass will replace the bridge over the highway that was proposed originally. The intent of the underpass is to provide access to the beach from the east side of the highway without adversely affecting views to the ocean from the park and the Beach Chalet.

d. Rubble. Under the amendment as conditioned, the Clean Water Program will be required to remove only the rubble in the project area that lies seaward of the sand replenishment trigger line. The rubble removal will take place as part of the Great Highway redesign so that upon project completion there will be no exposed rubble along the Ocean Beach shoreline.

2. Coastal Processes. In reviewing the Westside Transport and Highway Redesign projects, the Commission found that the Ocean Beach area is an eroding shoreline. Section 30253 of the Coastal Act states:

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 Commission's findings on the specific projects resolution state (page 27):

In summary, the shoreline condition at Ocean Beach can be described as follows: Given that construction will take place between the existing shoreline and the natural historical shoreline approximately at the lower Great Highway, the farther east the hard line protection is, the longer a recreational beach will exist, and the useable beach will be wider. This situation is explained visually by Mr. Ecker's graphic representation of the various Ocean Beach profiles (Exhibit 18) and was emphasized by the erosion conference panel when they stated:

If the objective is to protect the existing beach width and the recreational benefits it provides for the greatest possible period of time, the transport line should be constructed in the most eastward location possible.

In response to these findings, the Commission imposed conditions designed to minimize the potential need for protective structures on the beach and to protect and enhance the existing sandy beach environment and associated recreational benefits. Condition #3 on the Specific Projects Resolution requires the transport structure to be located as far east of the shoreline as is feasible, with the restored great highway located east of the transport. Specific Projects Condition #9 requires the implementation of a sand replenishment program at any time any part of the shoreline recedes to within 50 feet of the transport, prohibits the placement of rip-rap as erosion protection, and requires the removal of the existing rubble that is exposed at Ocean Beach. The intent of these conditions is to provide the widest possible sandy beach and dune system, to eliminate the placement of erosion protection structures on the recreational shoreline, and to improve the appearance and user safety of the shoreline (through the removal of existing exposed rubble).

Condition #8 reduces the curvilinear character of the redesigned roadway by reducing the east-west distance the road can turn. Because this conflicts with the desires of the Board of Supervisors and numerous community groups, the Clean Water Program has requested the amendment allowing the roadway to extend west of the transport structure for limited distances to provide adequate distance for curves. The design of the roadway west of the transport, as proposed and conditioned, addresses the Commission's concerns with respect to avoiding the need for physical structures to protect the roadway. The roadway curving west of the transport will be supported by columns rising from the transport structure at each of the pedestrian underpasses (Exhibit 2). Therefore, the amended, redesigned roadway west of the transport at the underpasses will not be based on dune fill, as is the case with the existing Great Highway, and will not be subject to undermining caused by erosion. At the point where the transport structure turns inland to align with the pump station, the Great Highway will be significantly seaward of the transport in order for the roadway to connect with the existing Great Highway Extension along a relatively straight alignment. Although the redesigned roadway will be supported on existing fill, it will not extend beyond the current Great Highway alignment. In order to maintain at least a 50 foot buffer of beach between physical improvements and the ocean, condition #1 on the amendment requires the sand replenishment program trigger line to be measured 50 feet seaward from the most seaward structure (i.e., either the road edge that curves west of the transport, or the west edge of the transport). The Commission emphasizes that the City must recognize that as any structure is moved closer to wave action, the potential for implementing the sand replenishment program increases. However, the Commission finds that the 50 foot "buffer zone" between the ocean and the seaward most structure is necessary to assure the use and maintenance of a shoreline area consistent with the policies of Chapter 3 of the Coastal Act.

Under the proposed amendment, the Clean Water program will not be required to remove any rubble from the project area that is located landward of the sand replenishment line. With the exception of short periods of times where severe storms may expose rubble, any rubble located landward of the trigger line always will be covered by sand (either naturally or through the replenishment program) and, therefore will not conflict with the Commission's intent to assure a sandy recreational shoreline.

As conditioned, the Commission finds the amendment consistent with Section 30253 of the Coastal Act.

3. Public Access. Sections 30210-12 of the Coastal Act provide for the protection and enhancement of public access opportunities in the Coastal Zone. With respect to the subject development, the Commission found, in part, that during the 6 year construction phase access throughout the City's coastal zone will be impaired by excavation, grading, reduced road capacity, construction vehicle traffic, traffic diversions, and other factors related to project construction. One of the conditions imposed on the public works plan by the Commission required the commencement of a shuttle bus transit system to serve the Great Highway during construction of the Westside Transport. The intent of this condition was to mitigate the project's adverse impact on access by linking existing transit terminals that end at the Great Highway, encourage transit use by workers, and provide access along the Great Highway corridor for beach users.

The City, through the Municipal Railway and the Clean Water Program, contends that providing a temporary shuttle bus along the Great Highway could have adverse impacts on existing public transit that serves the general area. Some disadvantages cited include: 1) the shuttle would duplicate service provided by Muni's 18 Sloat line and could draw riders away from the established service, thereby affecting fare revenues, 2) temporary shuttle service does not encourage the development of a transit ridership habit, and 3) the shuttle would not connect significant destinations on its own.

Subsequent to discussions with Muni, the Clean Water Program has proposed an alternative designed to provide more beneficial and long term service than the required shuttle bus. The alternative in this amendment takes advantage of existing public transit service. The specific changes that will go into effect as a result of this amendment are set forth in Exhibit 3.

Commission staff agrees that the proposed alternative has the potential for greater long term benefits than the shuttle bus alternative. By modifying existing transit service along the Great Highway corridor rather than using a shuttle between Sloat and Fulton, transit service will link eastern portions of the City with the Palace of the Legion of Honor, the Cliff House, Golden Gate Park, and the zoo; thus, the amendment provides improved access to a variety of recreational opportunities at San Francisco's western edge.

Under this amendment, the headways for transit within the Great Highway corridor will be less than the maximums specified in the shuttle bus condition. As proposed and conditioned, the condition requires the Clean Water Program to provide the improvements to the Sloat/Great Highway intersection and the facilities necessary to convert the parking lot at the intersection into a line terminal. The Clean Water Program also will finance Muni's additional operation costs for a period of six months starting from the first day of operation. At that time the modified service will be evaluated by the Executive Director to determine whether the Cleanwater Program should finance the operation of the modified service for the duration of the Westside transport construction.

Although the original condition requires start-up of the bus service concurrent with the first excavation on the Great Highway (i.e. the W-3 contract between Lincoln and Filton Streets, due to begin in late 1980), the Clean Water Program has requested that the service start at a later date in order to coordinate construction of transit improvements with the transport construction along that part of the Great Highway (i.e., concurrent with the W-1 contract, from Lincoln Way to Sloat, due to start in January, 1981). The Commission finds that the benefits provided from the amended transit service outweigh the disadvantages resulting from the time delay. However, to assure that the service is provided in a timely fashion following initial disruption of the Great Highway corridor, amendment condition #2 requires a time certain transit service start-up of January 1, 1981.

The Commission finds that the transit service provided by this amendment will enhance public access in the Coastal Zone of San Francisco. Thus, the Commission finds that the amendment is consistent with the public access policies of the Coastal Act.

4. Coastal Views. Section 30251 of the Coastal Act provides for the protection of scenic and visual qualities of coastal areas. The Great Highway redesign plan findings presented before the Commission included a land bridge to connect Golden Gate Park with the beach. The bridge would obstruct views to the north from the Beach Chalet building, which is designated in the City's LCP as a visitor serving facility. The Clean Water Program has requested an amendment to substitute an underpass for the land bridge in order to preserve public views from the Beach Chalet. The under pass will provide access to the same points as the originally proposed land bridge and, therefore, is not in conflict with the Commission's original findings on coastal access. In addition, the use of an underpass in this location will enhance a visitor serving use by preserving coastal views. Therefore, the underpass is a preferable alternative to a land bridge.

Thus, the Commission finds the amendment consistent with Section 30251 of the Coastal Act.

NORTH CENTRAL COAST
REGIONAL COMMISSION

CALIFORNIA COASTAL COMMISSION

Howard Street, San Francisco 94105 --- (415) 543-8555

AMENDMENT TO PUBLIC WORKS PLAN APPROVAL

JUN 16 1981

RECEIVED
On January 7, 1981

_____ , by a vote of 8 to 2 , the California Coastal Commission granted to San Francisco Wastewater Management Program an amendment to Public Works Plan #1, subject to the conditions set forth below, for changes to the development or conditions imposed on the existing permit issued on June 6, 1979. Changes approved by this amendment consist of modification of conditions concerning sand replenishment program

more specifically described in the application file in the Commission offices.

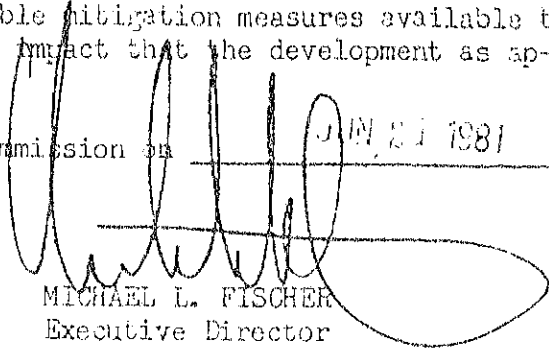
The development is within the coastal zone in San Francisco County at

Great Highway at Ocean Beach, San Francisco

After public hearing held on January 7, 1981 , the Commission found that, as conditioned, the proposed amendment is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; if between the sea and the public road nearest the sea, is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act of 1976; either (1) will not have any significant adverse impact on the environment, or (2) there are no feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse impact that the development as approved may have on the environment.

Issued on behalf of the California Coastal Commission on

JUN 21 1981



MICHAEL L. FISCHER
Executive Director

By James McGeath

Supersedes Amendment dated May 24, 1981

The undersigned permittee acknowledges receipt of the California Coastal Commission, this amendment to Public Works Plan No. 1 , dated _____ , and fully understands its contents, including all conditions imposed.

Permittee

This amendment to Public Works Plan No. 1, is subject to the following conditions:

A. Standard Conditions.

1. Assignment of Permit. This permit may not be assigned to another person except as provided in the California Administrative Code, Title 14, Section 13170.
2. Notice of Receipt and Acknowledgement. Construction authorized by this amendment shall not commence until a copy of this amendment, signed by the applicant or authorized agent, acknowledging receipt of the amendment and acceptance of its contents, is returned to the Commission.
3. Expiration. If construction has not commenced, the permit will expire two (2) years from the date on which the Commission voted on the application. Application for extension of the permit must be made prior to the expiration date of the original permit. This amendment does not constitute an extension to the original permit.
4. Construction. All construction must occur in accord with the proposal as set forth in the application for permit, subject to any special conditions imposed on the permit except as modified by this amendment. Any further deviations from the approved plans must be reviewed by the Commission pursuant to California Administrative Code, Title 14, Sections 13164-13168.
5. Interpretation. Interpretation or revisions of the terms or conditions of the permit or this amendment must be reviewed by the State Coastal Commission or its Executive Director. All questions regarding the permit or this amendment should be addressed to the State Commission office in San Francisco unless a condition expressly authorizes review by the Regional Commission or its staff.

B. Special Conditions.

- a. Condition 9. Condition 9 of the specific plan approval shall be amended to read:

Future Shoreline Protection Measures

1. All visible rubble located seaward of the 50 foot markers referred to below shall be removed from the beach as part of the recreational resolution of the Great Highway;
2. Future placement of rip-rap or rubble is prohibited;
3. Prior to the commencement of any construction of the Westside Storage and Transport Structure between Lincoln Way and Sloat Blvd., the City shall submit for the review and approval of the Executive Director a beach nourishment plan. This plan shall be revised to incorporate additional information and resubmitted to the Commission and the Golden Gate National Recreation Area (GGNRA) every 5 years on January 1 commencing in 1985 for approval or possible revision. The purpose of this plan is to describe in detail how the Beach will be managed to protect the line described by the row of monuments required below, to protect the natural appearing qualities and recreational amenities of Ocean Beach and to minimize the amount of sand blown onto the highway and into residential areas. This plan, as approved by the Commission and the GGNRA will serve as the basis for activities financed by the escrow fund described below;

4. The City shall place at least one row of monuments, markers, or other distinguishable features 50 feet west of the highway-transport alignment at a depth of 20 feet above mean sea level. The markers shall be of permanent construction and located every 50 feet. When these features are exposed, the City shall replenish the lost sand, replace and contour the dunes and reestablish appropriate vegetation in accordance with Specific Project Condition 5 to a point at least 50 feet seaward of the roadway/transport's west wall.

5. To carry out the Beach Nourishment Plan the City shall deposit \$5.4 million dollars into an escrow or trust agreement or execute a bond assuring payment within 120 days of this approval in a form approved on behalf of the Commission by the Executive Director prior to commencement of any construction of the Westside Storage and Transport Structure (contracts W-1). It is intended that this escrow fund shall be used solely for beach nourishment/restoration efforts and not used to carry out other conditions of the Specific Project approval.

6. The City shall use its best efforts to obtain additional funding to carryout the Beach Nourishment Plan from the state and federal government in order to insure the perpetual protection of Ocean Beach and its recreational qualities.

b. Remaining Conditions. All conditions of the Specific Project approval not modified in this amendment shall remain in full force and effect.

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 398-8555
NORTH CENTRAL COAST
REGIONAL COMMISSION

AMENDMENT TO PUBLIC WORKS PLAN APPROVAL

MAY 22 1981

On January 7, 1981, by a vote of 8 to 6, the California

RECEIVED

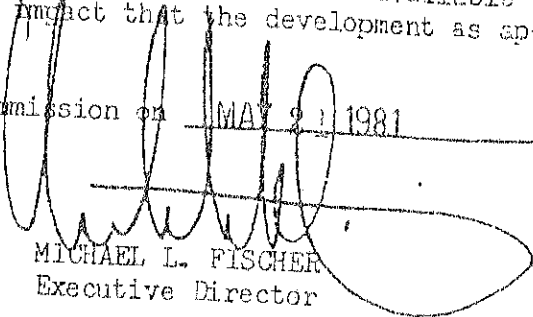
Coastal Commission granted to San Francisco Wastewater Management Program an amendment to Public Works Plan #1, subject to the conditions set forth below, for changes to the development or conditions imposed on the existing permit issued on June 6, 1979. Changes approved by this amendment consist of modification of conditions concerning sand replenishment program

more specifically described in the application file in the Commission offices.

The development is within the coastal zone in San Francisco County at Great Highway at Ocean Beach, San Francisco

After public hearing held on January 7, 1981, the Commission found that as conditioned, the proposed amendment is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; if between the sea and the public road nearest the sea, is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act of 1976; either (1) will not have any significant adverse impact on the environment, or (2) there are no feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse impact that the development as approved may have on the environment.

Issued on behalf of the California Coastal Commission on MAY 21 1981


MICHAEL L. FISCHER
Executive Director

By John S. ...

The undersigned permittee acknowledges receipt of the California Coastal Commission, this amendment to Public Works Plan No. 1, dated MAY 21 1981, and fully understands its contents, including all conditions imposed.

Permittee

4. The City shall place at least one row of monuments, markers, or other distinguishable features 50 feet west of the highway-transport alignment at a depth of 20 feet above mean sea level. The markers shall be of permanent construction and located every 50 feet. When these features are exposed, the City shall replenish the lost sand, replace and contour the dunes and reestablish appropriate vegetation in accordance with Specific Project Condition 5 to a point at least 50 feet seaward of the roadway/transport's west wall.

5. To carry out the Beach Nourishment Plan the City shall deposit \$5.4 million dollars into an escrow or trust agreement in a form approved on behalf of the Commission by the Executive Director prior to the commencement of any construction of the Westside Storage and Transport Structure (contracts W-1 and W-3). It is intended that this escrow fund shall be used solely for beach nourishment/restoration efforts and not used to carry out other conditions of the Specific Project approval.

6. The City shall use its best efforts to obtain additional funding carryout the Beach Nourishment Plan from the state and federal government in order to insure the perpertual protection of Ocean Beach and its recreational qualities.

b. Remaining Conditions. All conditions of the Specific Project approval not modified in this amendment shall remain in full force and effect.

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

December 31, 1980

TO: STATE COMMISSIONERS, INTERESTED PARTIES
FROM: MICHAEL L. FISHER, EXECUTIVE DIRECTOR
SUBJECT: REQUEST FOR AMENDMENT TO CITY OF SAN FRANCISCO WASTEWATER
PROJECT APPROVALS

Procedures

In the case of public works plans and project approvals granted by the Commission under the Coastal Act of 1976, the Commission regulations (Section 13365 for public works plans and Section 13166 for projects) allow the applicants to request approval by the Commission of amendments to the public works plan or project or to the project or plan conditions. The Coastal Commission may approve an amendment if it finds that the revised development is consistent with the Coastal Act. The staff recommends that the Commission hold a public hearing on the request, and after closing the public hearing vote on it.

1. Development Description. On June 6, 1979, the Commission granted the City of San Francisco Clean Water Program a conditional approval for 4 specific projects and a public works plan for other elements of the City's comprehensive effort to improve its antiquated sewage treatment system (the resolution on the specific projects and public works plan approval is set forth in Exhibit 1). The 4 specific projects for which approval was granted are: (1) the Westside transport and storage structure, (2) the Westside pump station, (3) the Southwest ocean outfall, and (4) the restored Great Highway.

The Commission's review of the specific projects and public works plan (Exhibit 1) focused primarily on 3 issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the treatment projects into conformity with the Coastal Act, the Commission found it necessary to impose conditions on the project to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during construction or after project completion, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a 5-year construction period.

Over the past 19 months, the Clean Water Program has been developing the final plans and specifications necessary to implement the construction phase of the specific projects. In addition, the City had an Ocean Beach Replenishment Program prepared (Oct. 1980) to assess the needs for sand replenishment consistent with expressed Commission concern. The clean water program is now seeking an amendment to modify the conditions requiring establishment of a specific beach replenishment program to conform to the conclusions of the October 1980 report.

2. Amendment Request. On December 16, 1980, the San Francisco Clean Water Program requested the Commission amend condition 9 of the Specific Projects Resolution adopted on June 6, 1979 and amended on September 30, 1980 permitting the construction of the Westside Transport and Storage Structure along Ocean Beach, San Francisco. Condition No. 9 currently provides that:

9. Future Shoreline Protection Measures. All Existing rubble shall be removed from the beach between Lincoln Way and the shoreline in front of the proposed pump station. Future placement of rip-rap or rubble is prohibited. The City shall place at least one row of monuments, markers, or other distinguishable features 50-feet west of the highway-transport alignment at a depth of 20-feet above the mean sea level. The markers shall be of permanent construction and located every 50-feet. When these features are exposed, the City shall replenish the lost sand, replace and contour the dunes 50-feet seaward of the roadway/transport's west wall. Implementation and enforcement of this condition shall be evidenced by a binding Clean Water Grant condition which requires the City's Wastewater Revenue Program to provide an annual fund adequate to provide at least 100,000 cubic yards of sand.

The beach nourishment section of Condition No. 9 was originally suggested by the City staff during negotiations over the effect of constructing the Transport Structure on an eroding beach at a point seaward of the historical mean high tide line. The City staff stated that they preferred to guarantee that the Transport would remain covered by sand rather than construct an energy dissipating seawall as suggested by the Commission staff. A report prepared by the City by Dr. Cyril Galvin suggested the Transport Structure have a sloping seaward face with roughness elements to dissipate wave energy when attacked by waves. The City estimated that this would delay the construction of the segment of the Transport from Lincoln Way to Sloat Blvd. as well as cost an additional \$22,000,000; when the permit was considered this alternative was estimated to cost \$12 to \$13 million dollars. The second alternative considered by the City was to extend the O'Shaughnessy Seawall south to Sloat Blvd. along an alignment adjacent to the Transport Structure and/or the Great Highway. The City estimated that this alternative would cost \$41,000,000.

Subsequent to the approval of the subject project, the City contracted with Richard Ecker to review the situation at Ocean Beach and to prepare a specific sand replenishment program addressing the concerns expressed in the Commission's approval. According to the amendment request, the Ecker report indicates that (1) the erosion rate at Ocean Beach is substantially less than 100,000 cu. yds. per year and (2) a program requiring annual sand placement is not the most effective method of protecting the Ocean Beach shoreline. This report was submitted to the State Water Resources Control Board ("SWRCB") for review. According to the City, the SWRCB has indicated that the \$5.4 million dollars is the absolute maximum amount which is considered grant eligible for sand replenishment pursuant to SWRCB and Environmental Protection Agency grant regulations. Based on this information, the City requests that the Commission amend Condition No. 9 to read as follows:

9. Future Shoreline Protection Measures. All visible rubble located seaward of the 50-foot markers referred to below shall be removed from the beach as part of the recreational restoration of the Great Highway. Future placement of rip-rap or rubble is prohibited. The City shall place at least one row of monuments, markers, or other distinguishable features

50 feet west of the highway-transport alignment at a depth of 20 feet above mean sea level. The markers shall be of permanent construction and located every 50 feet. When these features are exposed, the City shall replenish the lost sand, replace and contour the dunes 50 feet seaward of the roadway/transport's west wall. To implement this program, the City shall deposit \$5.4 million dollars into an escrow or trust account pursuant to an escrow or trust agreement in form satisfactory to the Commission's staff. The sand replenishment program required by this condition shall be substantially in accord with the "Ocean Beach Sand Replenishment Program" report dated

October 1980 by Richard Ecker of Towill, Inc. unless otherwise approved by the City and the Commission's staff. The City shall, after commencement of construction on the Westside Transport, endeavor to obtain additional funding for sand replenishment from the state and federal governments in order to insure the perpetual protection of the Ocean Beach shoreline.

3. Amendment History and Analysis. Although there was disagreement at the time Condition 9 was adopted regarding the rate of erosion at Ocean Beach, the staff believed 100,000 cubic yards would be an adequate amount placed annually to protect the beach and Transport Structure. The amount, 100,000 cubic yards, was derived from a report by Dr. Cyril Galvin dated March 30, 1979 (pg. 27). Dr. Galvin stated that each foot of beach regression represented a loss of 2.52 cubic yards for each foot of beach. Assuming a rate of bluff retreat of 4 feet per year, the quantity would be about 10 cubic yards/lineal foot (4×2.52). Since the affected length of Ocean Beach is about 10,000 feet, this resulted in 100,000 cubic yards per year ($10 \text{ cy/ft.} \times 10,000 \text{ ft.}$).

While reviewing the progress of the City in fulfilling the conditions of approval, in February 1980, the staff agreed with the City that the nourishment responsibility should be limited to 100 years and the financial resources necessary should be committed at the beginning of the project in a manner analogous to a capital improvement. The staff also agreed with the City's computation that a \$10 million fund provided assurance that up to 100,000 cubic yards of sand could be deposited annually on the beach once the trigger line was reached. The calculation assumed a dune field extending 200-feet west of the trigger line, an average rate of erosion of 2.4 feet per year, nourishment costs would increase at 10 percent per year interest on the fund compounded at 10 percent per year, and the cost to place sand on the beach equal to \$5.50 per yard. This computation showed that a \$10 million fund would finance nourishment of the beach until 100 years after the Transport was constructed. Nourishment

plans were only conceptual in February 1980, but they included alternatives such as stock piling several hundred thousand cubic yards of sand near the beach and possible construction of a permanent hydraulic pipeline from the offshore sand bar three or four miles to shore.

The City contracted with R.M. Towill for Richard Ecker, a coastal engineer, to consult on coastal processes (Mr. Ecker was formerly employed by Buttell Northwest and appeared on behalf of the Golden Gate National Recreation Area during the Commission's initial consideration of this report). Mr. Ecker prepared a report "Ocean Beach Sand Replenishment Program, October 1980" (The Ecker Report). Mr. Ecker explained that erosion would not be uniform along Ocean Beach and predicted that the 50 foot trigger line (the fifty foot wide sand buffer required by Condition 9) would be exposed in limited areas in twenty-four years. He recommends that during the following 15 years, it would be economical to nourish the beach in limited amounts at the critical points where the 50 foot trigger line was exposed. The progressive exposure of the trigger line will require a greater amounts of sand each year until the fortith year when about one million yards of sand should be placed. About 35 years later (75 years after Transport construction) another million yards would be needed to provide enough sand to cover the trigger line at all points for 25 years, or a total of 100 years.

The Ecker Report builds on the work of previous researches and is the most thorough available. It maintains that the beach profile will continue to flatten and that the quantity of sand annually eroded from the beach will decrease from approximately 100,000 cubic yards the first year after the Great Highway is reconstructed, to approximately 32,000 cubic yards per year when the trigger line is reached. Mr. Ecker maintains then that 32,000 cubic yards per year would be needed rather than the 100,000 cubic yards in Condition 9. Furthermore, Mr. Ecker regards 32,000 cubic yards per year as a conservative estimate as he expects the annual rate to decrease even farther as the beach erodes to the trigger line.

Unfortunately, the cost of the Ecker Report 100-year nourishment program was estimated to cost about \$10,000,000 in todays dollars. This cost included \$783,000 for bi-yearly replenishments from the 24th to 40th years and \$9,210,000 total for placing large quantities on the 40th and 75th year.

On December 15, 1980, Mr. Roger Boas, Chief Administrative Officer of the City and County of San Francisco, informed the staff that the State Water Resources Control Board had determined that the full nourishment program recommended in the Ecker Report was not grant fundable since they view the Waste-water project as having a 50 year life rather than 100 years used by the City to comply with Condition 9. In a letter dated November 14, 1980 to Donald J. Birrer, Raymond Walsh of the State Water Resources Control Board staff stated that:

"Grant eligibility will be based on a 50 year project life, as specified by federal and state regulations. With a 50 year life, the proposed bi-yearly sand placements and one of the two proposed large-scale sand placements will be grant eligible. The eligible cost of the program is 5,400,000."

Eligible costs are funded by 87½ federal and state funds and 12½ city funds (\$675,000).

Mr. Boas informed the staff that the City could not provide a larger fund.

In the application for amendment the City explains that \$5.4 million will grow dramatically before the trigger line is expected to be exposed. An example given in the application shows that the amount would increase to approximately \$51 million in seventeen years if invested in Federal Home Loan Bank Board obligations at the current rate of 13.5 percent.

The dramatic growth of capital, however, must be viewed against the possibility of an equally dramatic increase in the cost of sand nourishment. The usual method for estimating construction costs relies on the Engineering News Record Construction Cost Index. The current index value of 4268 (San Francisco, October, 1980), compares to the 1913 base year value of 100. In other words, a given construction project today would cost 42 times the same project 67 years ago. For a rough comparison, a beach nourishment project at Redondo Beach in 1967 placed 1,000,000 cubic yards on the beach at a cost of \$1,070,000. This project would cost about \$3,465,000 today.

In a letter dated October 30, 1980, from Arthur T. Cooke, Jr., Senior Vice President of the Bank Investment and Securities Division of the Bank of America, analyzed the question - is there an investment which would keep even with the rate of inflation as it is assumed that the rate of inflation is the rate at which the cost of the project's expenses will increase? The GNP Implicit Price Deflator (on inflation index) was compared with three month U.S. Treasury Bills since 1947 and 1970. During the shorter period, however, the return of 6.28 percent compounded annually was less than the 6.821 percent compounded annually increase of the GNP Deflator. Mr. Cooke concluded that: "In summary, one cannot state unequivocally that the U.S. Treasury three month bill rate over the next 10 or 100 years will or will not keep even with the rate of inflation. We do believe, however, that there is a high degree of probability that over longer time periods bills and equivalent money market instruments would yield returns that approximate inflation rates."

The staff has no reason to argue with Mr. Cooke's conclusion regarding the approximate equivalence between the rate of inflation and the rate of return on capital, but must point out that the cost of construction during the same period has increased at a rate greater than inflation. Relying on the Engineering News Record Construction Cost Index as an indicator of the increase in construction costs, the cost of construction from 1947 to 1980 has increased ten times compared to the 3-1/3 times increase in the GNP Deflator. Although the Construction Cost Index may not exactly reflect cost changes in time for beach nourishment projects, this comparison is a valid indication that economic forecasts regarding the sufficiency of the \$5.4 million dollar Escrow Fund are mere educated guesses.

The assumption that the interest rate and the rate of increase in the cost of beach nourishment conveniently allows future costs to be compared on a present worth basis. Although the City has not submitted a detailed proposal on how the \$5.4 million would be used, the staff has reviewed the City's correspondence to the State Water Resources Control Board arguing for \$10 million to fund the nourishment program for 100 years. According to the Ecker report there will be sufficient sand on Ocean Beach that the trigger line should remain covered until the 24th year (about 2005). Beginning in the year 2005 approximately 87,000 cubic yards of sand would be placed at critical erosion areas. This sand probably would be trucked to Ocean Beach at an estimated cost of \$9 per cubic yard. This phase of the nourishment program called the "passive phase", is estimated to cost \$783,000 in today's dollars. In the year 2020, about 40 years from now, the "active" phase would begin when a dredge would be brought in to place about 920,000 cubic yards of sand from an offshore source. Dredging this amount could probably use all the money remaining in the nourishment fund. Please see Table I for a summary of how 920,000 cubic yard was calculated.

Table I.

Active Phase Dredging Costs

Adapted from George J. Murphy, Project Manager, PBQ and D, Inc. letter of March 7, 1980 to Mr. A. B. Kenck, San Francisco Wastewater Program.

Trust Fund Total	\$ 5,400,000
Passive Phase Nourishment	<783,000>
Amount Available for Active Phase	\$ 4,617,000
Mobilization/Demobilization	\$<2,284,000>
Contingency (10%)	<462,000>
Available for Operations	\$ 1,871,000

Number of Days the dredge can operate equals the amount available divided by the cost operate per day:

$$\frac{\$1,871,000}{\$40,800/\text{day}} = 46 \text{ days}$$

Maximum production rate is 20,000 cubic yards/day

Total quantity of sand to be placed on the beach:

$$46 \text{ days} \times 20,000 \text{ cubic yards/day} = 920,000 \text{ cubic yards}$$

The Ecker report estimates that it would cost \$4.72/cubic yard to place 1,000,000 cubic yards on Ocean Beach. Therefore if \$4,617,000 is available, this would yield 978,200 cubic yards as compared to 920,000 calculated by the staff. These numbers are in close agreement.

According to the Ecker Report, if this approximately 1,000,000 cubic yards is placed along the 7000' reach of Ocean Beach between Sloat Boulevard and Lawton Street, the extended protective beach will be an average of 200 feet wide. It is not possible to estimate how long it would be until the trigger line would be exposed in critical erosion areas without additional information. A rough guess, however, would be that the trigger line in the Santiago Street area would be exposed 15 to 25 years after the "active phase" is carried out (e.g. 55 to 65 years from now). The sand remaining between the trigger line and the Transport Structure would remain another five to ten years assuming erosion continues at the same rate each year. In other words, the Transport Structure would be exposed in 60 to 75 years if this analysis is accurate. Since erosion along Ocean Beach is irregular, the Transport Structure will still be covered at other locations.

The basis for the City's proposed nourishment program is the Ecker Report. Although this report provides the best information available at this time, it must be understood that it is based on an incomplete understanding of coastal processes at Ocean Beach, and certain assumptions. Some of these points will be described to provide a "feel" of the uncertainty inherent in nourishment plans at this time. Condition 12 of the Specific Projects Resolution for the Westside Storage and Transport Structure required monitoring of offshore processes so that better data will be available upon which to conduct beach nourishment efforts. Mr. Ecker anticipates that initially large rates of erosion (e.g. 24 percent of the new fill during the first year) will decrease to a rate of 32,000 cubic yards per year as the trigger line is exposed. Relying on historical profiles and shoreline locations the report maintains that the rate of sand loss has steadily decreased from the initial filling as the over steepened beach approaches a profile closer to a dynamic equilibrium from 1976 to 1980 he computed the sand loss to be 32,000 cubic yards per year. Mr. Ecker comments that this value ultimately should be on the high side since the trigger line generally lies about 78 feet east of the seaward edge of the Great Highway. On the other hand, forecasting rates of erosion 25 to 40 years from now based on four years of observations is a tenuous exercise because of variations in weather patterns, wave climate, and accuracy of data. For example, while data from 1976-1980 indicates an annual average loss of sand of 32,000 cubic yards, data from 1972 to 1976 indicates an average annual loss of 43,000 cubic yards. Sand losses below the Mean Lower Water line are not well known. Ecker assumed there is little sand loss at this depth in calculating that 1.17 cubic yards of sand are lost per foot of bluff retreat for each foot of beach length. Galvin, in an earlier report, used a value of 2.53 cubic yards/foot. Although the Ecker assumption is logical for an over steepened beach like Ocean Beach which is eroding to a more gradual profile, the variation between investigators is indicative of possible variations in these projections.

The active phase of the sand nourishment program recommended in the Ecker Report is based on the assumption that sufficient quantities of coarse sand can be successfully mined from the inside flank of the San Francisco Bay mouth bar. However, the extent (depth and area) has not been extensively explored, wave climate as it affects operational capabilities of a floating dredge is not well known, and the cost estimates by the City for mobilization and demobilization and operations are tentative.

The calculations included in the Ecker Report do not reflect the alignment of the 50-foot trigger line as revised to provide curves in the Great Highway at six locations. One of the realigned portions, between Pacheco and Rivera Streets, is in the area expected to be most critical. The effect of extending the trigger line twenty feet seaward will be to shorten the time period before the monuments are exposed and the passive nourishment program must begin by six to eight years.

The Ecker report proposes a beach management program that allows the beach to erode to a point approaching the trigger line before the beach is nourished at critical locations. This would result in the dune configuration (width, length, and number of ridges), and vegetation resulting from the Great Highway redesign to be eroded. After nourishment the sand blowing problem will once again become a maintenance problem for the Great Highway and oceanfront residents since the remaining dune field will be incapable of restraining the blowing sand.

The Ecker Report also fails to mention a recommendation by Dr. Galvin that methods be explored to test the theory that disposal of dredged sand on the offshore bar near Ocean Beach will provide increased quantities of sand to offset losses. Although the Corps of Engineers has rejected the use of deep draft hopper dredges, other alternatives have not been explored. Moreover, the Ecker Report does not take into account materials excavated for the construction of the Southwest Ocean Outfall which are to be deposited so as to provide the maximum benefit to the Ocean Beach littoral system. The disposal site is to be determined by an independent coastal engineer and deposited consistent with a plan approved in advance by the National Park Service (Public Works Plan Condition 14). These two sources of sand are regarded as important measures to further forestall exposure of the Transport Structure.

Continued next page

Revisions to Condition 9 as proposed by the City does not specifically provide for "how" the escrow fund would be used. Although the City has stated its intent to follow the program recommended in the previously described Ecker Report, it does not provide for modifications to respond to concerns discussed above nor does it assure changes to respond to information obtained through the monitoring program required by the Commission on Condition 12 of the specific project approval. The staff believes that in order to find the proposed changes consistent with the intent of original Condition 9, to reduce erosion impacts and prevent the need for a shoreline protective device, that the concerns expressed above must be answered. The staff is, therefore, recommending that the Commission approve the project amendment subject to condition requiring the preparation of a beach nourishment plan to be used in allocating the escrow funds to assure implementation of the most efficient and cost effective program to mitigate the impacts of the project on beach erosion.

STAFF RECOMMENDATION:

Staff recommends that the Commission adopt the following resolution:

I. Approval With Condition. The Commission hereby grants, subject to the conditions below, the proposed amendment to the Specific Project described above, on the grounds that the development, as amended and conditioned, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and that here are no feasible alternatives, or feasible mitigation measures, as provided in the California Environmental Quality Act, available that would lessen any significant adverse impact that the development as finally proposed would have on the environment.

II. Conditions. The amendment is subject to the following conditions:

a. Condition 9. Condition 9 of the specific plan approval shall be amended to read:

Future Shoreline Protection Measures

1. All visible rubble located seaward of the 50 foot markers referred to below shall be removed from the beach as part of the recreational resolution of the Great Highway;

2. Future placement of rip-rap or rubble is prohibited;

3. Prior to the commencement of any construction of the Westside Storage and Transport Structure between Lincoln Way and Sloat Blvd., the City shall submit for the review and approval of the Executive Director a beach nourishment plan. This plan shall be revised to incorporate additional information and resubmitted to the Commission on the Golden Gate National Recreation Area (GGNRA) every 5 years on January 1 commencing in 1985 for approval or possible revision. The purpose of this plan is to describe in detail how the Beach will be managed to protect the line describe by the row of monuments required below, to protect the natural appearing qualities and recreational amenities of Ocean Beach and to minimize the amount of sand blown onto the highway and into residential areas. This Plan, as approved by the Commission and the GGNRA will serve as the basis for activities financed by the escrow fund described below;

4. The City shall place at least one row of monuments, markers, or other distinguishable features 50 feet west of the highway-transport alignment at a depth

of 20 feet above mean sea level. The markers shall be of permanent construction and located every 50 feet. When these features are exposed, the City shall replenish the lost sand, replace and contour the dunes and reestablish appropriate vegetation in accordance with Specific Project Condition 5 to a point at least 50 feet seaward of the roadway/transport's west wall.

5. To carry out the Beach Nourishment Plan the City shall deposit \$5.4 million dollars into an escrow or trust agreement in a form approved on behalf of the Commission by the Executive Director prior to the commencement of any construction of the Westside Storage and Transport Structure (contracts W-1 and W-3). It is intended that this escrow fund shall be used solely for beach nourishment/restoration efforts and not used to carry out other conditions of the Specific Project approval.

6. The City shall use its best efforts to obtain additional funding to carry out the Beach Nourishment Plan from the state and federal government in order to insure the perpetual protection of Ocean Beach and its recreational qualities.

b. Remaining Conditions. All conditions of the Specific Project approval not modified in this amendment shall remain in full force and effect.

III. Findings and Declarations.

The Commission finds and declares as follows:

1. Amendment Description. The City proposes to amend condition 9 of the Specific Project approval for the San Francisco Wastewater Project pursuant to the applicant's proposal, rather than requiring the City to demonstrate a capacity for placement of 100,000 cubic yards of sand on the beach annually to assure the replenishment of sand along Ocean Beach, a set monetary figure would be deposited in an escrow account to be used for a sand replenishment program; no amount of minimum replacement is excluded. According to the applicant, 100,000 cu. yards has been determined to be excessive, as discussed above. The applicant also states that the monetary commitment would assure adequate protection for 50-75 years. As approved, the applicant would be allowed to establish such an escrow account but would be required to prepare, and at 5 year intervals update, a replenishment plan for the Commission's approval to assure that replenishment work performed is the most effective and cost efficient to meet the concerns over beach erosion discussed below and in the original action by the Commission on this project.

2. Coastal Processes. In reviewing the Westside Transport and Highway Redesign projects, the Commission found that the Ocean Beach area is an eroding shoreline. Section 30253 of the Coastal Act states:

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 in-

stability, 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 Commission's findings on the specific projects resolution state (page 27):

In summary, the shoreline condition at Ocean Beach can be described as follows:

"Given that construction will take place between the existing shoreline and the natural historical shoreline approximately at the lower Great Highway, the farther east the hard line protection is, the longer a recreational beach will exist, and the useable beach will be wider." This situation is explained visually by Mr. Ecker's graphic representation of the various Ocean Beach profiles (Exhibit 18) and was emphasized by the erosion conference panel when they stated:

If the objective is to protect the existing beach width and the recreational benefits it provides for the greatest possible period of time, the transport line should be constructed in the most eastward location possible.

In response to these findings, the Commission imposed conditions designed to minimize the potential need for protective structures on the beach and to protect and enhance the existing sandy beach environment and associated recreational benefits. Condition #8 on the Specific Projects Resolution requires the transport structure to be located as far east of the shoreline as is feasible, with the restored great highway located east of the transport. Specific Projects Condition #9, the subject of this amendment, requires the implementation of a specific sand replenishment program at any time any part of the shoreline recedes to within 50 feet of the transport, prohibits the placement of rip-rap as erosion protection, and requires the removal of the existing rubble that is exposed at Ocean Beach. The intent of these conditions is to provide the widest possible sandy beach and dune system, to eliminate the placement of erosion protection structures on the recreational shoreline, and to improve the appearance and user safety of the shoreline (though the removal of existing exposed rubble).

As discussed in the analysis section, the proposed amendment would modify the specifics of the sand replenishment program. The City proposed to tie the program to grant funds available to perform the replenishment work rather than to assurance of availability of a minimum amount of sand to be placed on the beach. Recent information (The Ecker Report) has been submitted to demonstrate that the original language requiring a demonstrated ability to place up to 100,000 cu. yds. of sand on the beach may have been excessive and that the proposed escrow account for beach nourishment in conjunction with other mitigation conditions included in the original decision would provide a strong likelihood of maintaining the necessary sand cover at Ocean Beach. As discussed in the analysis, only with a well maintained replenishment plan, can the concerns

over erosion be adequately mitigated by the subject Escrow fund. Therefore, the Commission finds that only with a condition requiring such a program to assure effective sand replenishment and with the continued commitment to place dredge-spoils and suitable materials excavated during the construction of the Southwest Ocean Outfall in the Ocean Beach Littoral system to further nourish the beach thereby extending the time the monuments are covered, can the Commission find the project, as amended, consistent with the provisions of Section 30253 of the Coastal Act.

3. Previous Discussion and Findings. The Commission hereby incorporates the analysis provided previously in this report as a portion of its findings in approving this amendment. All findings of the original project approval, not specifically altered in this decision shall remain in effect.

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

AMENDMENT TO PUBLIC WORKS PLAN APPROVAL

On April 1, 1981, by a vote of 7 to 0, the California Coastal Commission granted to San Francisco Wastewater Management Program an amendment to Public Works Plan #1, subject to the conditions set forth below, for changes to the development or conditions imposed on the existing permit issued on June 6, 1979. Changes approved by this amendment consist of modifying outfall design from 3 pipes to a single 12-ft. pipe

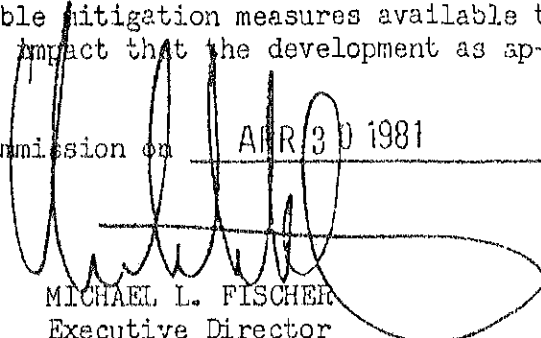
more specifically described in the application file in the Commission offices.

The development is within the coastal zone in San Francisco & County at San Mateo Sloat Boulevard near Ft. Funston

After public hearing held on April 1, 1981, the Commission found that, as conditioned, the proposed amendment is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; if between the sea and the public road nearest the sea, is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act of 1976; either (1) will not have any significant adverse impact on the environment, or (2) there are no feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse impact that the development as approved may have on the environment.

Issued on behalf of the California Coastal Commission on APR 30 1981
San Francisco
Clean Water Program

MAY 04 '81


MICHAEL L. FISCHER
Executive Director

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SW00P-D-01067
FILE# SW00P-D-01271

By Maed Poljan

The undersigned permittee acknowledges receipt of the California Coastal Commission, this amendment to Public Works Plan No. 1, dated APR 30 1981, and fully understands its contents, including all conditions imposed.

MAY 6 1981

Date


Roger Boas Permittee
Chief Administrative Officer, CCSF

This amendment to Public Works Plan No. 1, is subject to the following conditions:

A. Standard Conditions.

1. Assignment of Permit. This permit may not be assigned to another person except as provided in the California Administrative Code, Title 14, Section 13170.

2. Notice of Receipt and Acknowledgement. Construction authorized by this amendment shall not commence until a copy of this amendment, signed by the applicant or authorized agent, acknowledging receipt of the amendment and acceptance of its contents, is returned to the Commission.

3. Expiration. If construction has not commenced, the permit will expire two (2) years from the date on which the Commission voted on the application. Application for extension of the permit must be made prior to the expiration date of the original permit. This amendment does not constitute an extension to the original permit.

4. Construction. All construction must occur in accord with the proposal as set forth in the application for permit, subject to any special conditions imposed on the permit except as modified by this amendment. Any further deviations from the approved plans must be reviewed by the Commission pursuant to California Administrative Code, Title 14, Sections 13164-13168.

5. Interpretation. Interpretation or revisions of the terms or conditions of the permit or this amendment must be reviewed by the State Coastal Commission or its Executive Director. All questions regarding the permit or this amendment should be addressed to the State Commission office in San Francisco unless a condition expressly authorizes review by the Regional Commission or its staff.

B. Special Conditions.

None.

CALIFORNIA COASTAL COMMISSION

631 Howard Street, San Francisco 94105 — (415) 543-8555

TO: STATE COMMISSIONERS, INTERESTED PARTIES

FROM: MICHAEL L. FISCHER, EXECUTIVE DIRECTOR

SUBJECT: REQUEST FOR AMENDMENT TO THE SOUTHWEST OCEAN OUTFALL, A SPECIFIC PROJECT APPROVED AS PART OF THE SAN FRANCISCO WASTEWATER MANAGEMENT PROGRAM

Procedures

In the case of public works plans and project approvals granted by the Commission under the Coastal Act of 1976, the Commission regulations (Section 13365 for public works plans, Section 13166 for projects) allow applicants to request approval by the Commission of amendments to the public works plan or project or to the plan or project conditions. The Coastal Commission may approve an amendment if it finds that the revised development is consistent with the Coastal Act. The staff recommends that the Commission hold a public hearing on the request, and after closing the public hearing, vote on it.

1. Development Description/Background. On June 6, 1979 the Commission granted the City of San Francisco Clean Water Program a conditional approval for 4 specific projects and a public works plan for other elements of the City's comprehensive effort to improve its antiquated sewage treatment system (the resolution on the specific projects and public works plan approval is set forth in Exhibit 1). The 4 specific projects for which approval was granted are: (1) the Westside transport and storage structure, (2) the Westside pump station, (3) the Southwest ocean outfall, and (4) the restored Great Highway. The Commission's review of the specific projects and public works plan (Exhibit 1) focused primarily on 3 issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the treatment projects into conformity with the Coastal Act, the Commission found it necessary to impose conditions on the project to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during construction or after project completion, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a 5 year construction period.

2. Proposed Amendment. The applicant requests an amendment to the offshore portion of the Southwest Ocean Outfall specific project, to allow a redesign of the offshore outfall pipe from a three-barrel, 670 mgd outfall, to a single barrel system, 12 ft. in inside diameter, approximately 23,000 ft. long, with a capacity of 450 mgd at high tide. The project is further described in the City Planning Dept.'s environmental review (Exhibit 3). The applicant states that the redesign was necessitated by fiscal constraints, but states that "This modification provides enhanced environmental benefits as well as considerable savings in both construction and operation costs." (Exhibit 2).

3/31-4/1/81

STAFF RECOMMENDATION:

Staff recommends that the Commission adopt the following resolution:

I. Approval. The Commission hereby grants the proposed amendment to the Specific Project and Public Works Plan described above, on the grounds that the development, as amended, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and that there are no feasible alternatives, or feasible mitigation measures, as provided in the California Environmental Quality Act, available that would lessen any significant adverse impact that the development as finally proposed would have on the environment.

II. Findings and Declarations.

The Commission finds and declares as follows:

1. Coastal Processes and Public Access. In approving the Southwest Ocean Outfall one of the Commission's major concerns was whether it could withstand potential geologic and seismic hazards. The Commission found:

As a condition for all specific projects covered by this public works plan approval, each of these proposals will be analyzed in geologic and engineering reports to assure public safety and structural integrity in seismic event of 8.3 on the San Andreas fault. Each of these projects' impact on offshore process and the effect of ocean forces on the structures also shall be assessed. Only with such assurances can this Commission find the projects consistent with the mandates of Section 30253(1) and (2) of the Act.

Other findings adopted by the Commission specifically regarding the ocean outfall are as follows:

The only effect of the ocean outfall project on public access appears to be that the emergency overflow structure may block lateral public access on the beach. This has been conditioned, as required by Section 30211 of the Act, to require steps, platform, and railing be constructed over the structure to provide access consistent with the Coastal Act.

The ocean outfall construction will also require trenching across the Great Highway. The construction of the outfall will crush marine life in the construction corridor and cause increased turbidity. The City proposed to allow the contractor several options for underwater construction techniques. Whichever measure is selected, the construction will require the dredging and disposal of approximately 2,700,000 cubic yards of material. This will provide an opportunity to implement Dr. Galvin's proposal that dredged materials be introduced offshore into the Ocean Beach littoral system to provide additional natural shore protection.

The project is conditioned to require spoils disposal into the littoral system of Ocean Beach as required by...Section 30233(b) of the Act. This action in conjunction with the offshore monitoring program can evaluate the effectiveness of offshore sand nourishment. Only with such a commitment can the City and the Commission pursue the possibility of annual nourishment via the Corps of Engineers' San Francisco Bar dredging program.

The Commission finds that the proposed redesign of the outfall from a three barrel outfall to a one barrel outfall will not increase any adverse impacts of the project on coastal resources or public access, and the Commission therefore finds the proposed amendment consistent with its previous resolution approving with conditions the Public Works Plan and Specific Projects proposed by the San Francisco Wastewater Management Program, and with Chapter 3 of the Coastal Act.

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

APPROVED July 15, 1982

TO: COMMISSIONERS, INTERESTED PUBLIC

FROM: MICHAEL L. FISCHER, EXECUTIVE DIRECTOR

SUBJECT: REQUEST FOR AMENDMENTS TO CITY OF SAN FRANCISCO CLEAN WATER PROGRAM
PUBLIC WORKS PLAN AND SPECIFIC PROJECT APPROVALS (PW 2-82-25-A)

Background

The Public Works Plan for San Francisco's Clean Water Program projects at Ocean Beach was approved by the Coastal Commission on June 6, 1979. The Public Works Plan covered the entire range of wastewater collection, storage, treatment and disposal facilities in the coastal zone. At the same time that the Public Works Plan was approved, three Specific Projects were approved under the Plan. The three Specific Projects are the Westside Transport and Pump Station, the Restoration of the Great Highway, and the Ocean Outfall.

The Commission's review of the Public Works Plan and Specific Projects focused primarily on three issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the projects into conformity with the Coastal Act, the Commission imposed conditions on the Public Works Plan and Specific Projects to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during and after construction, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a lengthy construction period. Since 1979, three amendments to the Public Works Plan and Specific Project approvals have been approved by the Commission. These amendments affect primarily the alignment of the restored Great Highway, future shoreline protection measures, and the size of the Ocean Outfall.

Procedures.

Sections 13365 through 13371 of the Commission Regulations provide for the review of amendments to Public Works Plans. Under the Regulations, the Executive Director shall determine whether or not a proposed amendment is minor in nature. If the Executive Director determines that the proposed amendment is not minor or if the proposed amendment affects conditions required in the Public Works Plan for the purpose of protecting a coastal resource or coastal access, then the amendment request shall be set for a regular public hearing before the Commission. To approve an amendment to the

Public Works Plan, the Commission must find that the amendment is in conformity with the provisions of the Coastal Act of 1976, including specific factual findings that the development is in conformity with Chapter 3 of the Coastal Act and that there are no feasible alternatives, or feasible mitigation measures, as provided in the California Environmental Quality Act, available which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

The Executive Director has determined that the amendments proposed by the City of San Francisco are not minor in nature. (One of the amendments involves a condition previously imposed on the Public Works Plan.) Therefore, the amendment requests have been set for a public hearing with a recommendation for action by the Commission.

Proposed Amendment

The applicant requests a three-part amendment to the Public Works Plan and Specific Project approvals:

1. Deletion of the cut-off wall between Kirkham Street and Lincoln Way. The cut-off wall was originally planned to protect the Westside Transport from being undermined in the event of severe beach recession.
2. Change in design of the Pump Station. The Pump Station would be reduced in size from the original design, thus allowing the old Fleish-hacker Bathhouse to remain in place rather than be demolished. The rooftop observation deck on the Pump Station would be deleted.
3. Deletion of spoils from Ocean Outfall construction for use in beach nourishment. The amendment would reflect the construction methods chosen by the contractor who is now constructing the Ocean Outfall and the additional information recently gathered by the City's consultant in shoreline processes.

STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution:

I. Approval with Conditions. The Commission hereby approves, subject to conditions below, the proposed amendments to the Public Works Plan and Specific Project approvals described above, on the grounds that the proposed development, as amended and conditioned, is in conformity with the provisions of the California Coastal Act of 1976 including the provisions of Chapter 3 of the Coastal Act and that there are no feasible alternatives, or feasible mitigation measures, available as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

II. Conditions

The amendment is subject to the following conditions:

- a. Condition #14 of the Public Works Plan shall be amended to read:

14. Placement of Suitable Excavated Material on Beach.

Excavated material from any onshore construction site that is not needed for backfill, berm construction or other on-site work, shall be placed on the beach landward of the surf zone, if it meets National Park Service standards for beach nourishment materials.

- b. Remaining Conditions. All conditions of the Public Works Plan and Specific Project Approvals not modified in this amendment shall remain in full force and effect.

III. Findings and Declarations.

The Commission hereby finds and declares as follows:

A. Cut-Off Wall.

1. Amendment Description. San Francisco's sewer system collects both sanitary sewage and storm run-off. During rainy periods, the existing system cannot hold the volume of run-off that is produced, resulting in frequent overflows of untreated sewage into waters surrounding the city. The Westside Transport is a huge collection and storage facility which will prevent most overflows on the west side of the city by collecting both sanitary sewage and storm run-off during all but the heaviest rains and storing it temporarily until treatment capacity becomes available at the proposed Southwest Treatment plant.

The Transport, which is now under construction, is located beneath the eastern (northbound) lanes of the Great Highway. The Transport is 30 feet wide at the north end and up to 60 feet wide at certain locations. The bottom elevation of the Transport slopes southward, dropping about two feet per thousand feet of length, in order to allow gravity flow of sewage to the Pump Station.

In the event of severe beach recession, the Westside Transport could potentially be exposed to wave action. From north of Lawton Street south to Sloat Boulevard, the bottom elevation of the Transport is below the level of mean lower low water, thus preventing waves from potentially undercutting the Transport, even if it were exposed to wave action. However, from Lawton Street north to the end of the existing seawall near Lincoln Way, the bottom of the Transport is above the level of mean lower low water. A cut-off wall was originally planned for this area to prevent undercutting of the Transport. The cut-off wall would extend vertically beneath the Transport below the level of mean lower low water.

When construction of the Transport began in 1981, the contractor installed approximately 448 feet of cut-off wall near Lincoln Way. The amendment requested by the City would delete a portion of the originally planned cut-off wall between this already constructed portion and Kirkham Street.

2. Shoreline Processes. The findings supporting the Specific Project Approval for the Westside Transport adopted by the Commission on June 6, 1979 (and hereby incorporated by reference, as amended) explain that the Westside Transport is located on an eroding shoreline. The Transport is being constructed within the corridor of the existing Upper Great Highway which is located mostly seaward of the natural high-water shoreline in historic times. The Great Highway was constructed on artificial fill that extended as much as 200 feet seaward of the natural shoreline. Testimony of coastal engineers has indicated that because of the artificial fill, the existing beach profile is oversteepened and out of equilibrium. In an effort to balance the profile, the ocean will gradually erode the oversteepened profile until the seaward and landward portions of the beach profile are in balance. At that time, the shoreline would be roughly equivalent to the 1852 shoreline, which is approximately in the vicinity of the Lower Great Highway. Shoreline recession to the equilibrium shoreline location would cause the Transport to be partially or completely exposed to wave action. The applicant has stated that the Transport would withstand the maximum credible wave attack, even if fully exposed. Although the Transport would withstand the force of the waves, it would not withstand undercutting by wave action. The cut-off wall was originally proposed to prevent undercutting, thus assuring the structural integrity of the Transport.

Richard Ecker, a consultant in shoreline processes hired by the City, has estimated the time required for shoreline recession to expose the north end of the Transport to possible undercutting (Cut-Off Wall evaluation, January 21, 1982). Mr. Ecker's estimate is that undercutting could occur in 40 years between Lawton Street and Kirkham Street and in 100 years north of Kirkham. Based on this estimate and the design project life of 50 years for the Transport itself, Ecker recommends protection of the base of the Transport with a cut-off wall between Lawton and Kirkham Streets (See Exhibit 3). Ecker states that north of Kirkham, the potential for undercutting is very slight. Ecker states that even if average annual erosion rates doubled, the Transport would not be subject to undercutting within the next 50 years in this stretch of shoreline.

In line with Mr. Ecker's recommendation, the City proposes to construct the portion of the cut-off wall between Lawton Street and Kirkham Street, but to delete the remainder of the originally planned cut-off wall between Kirkham Street and the portion of the cut-off wall which has already been constructed near Lincoln Way (a distance of approximately 1,770 feet).

Exposure of the Transport to wave attack would mean at least a temporary loss of the recreational beach, a situation which other conditions of the Public Works Plan and Specific Project approvals are designed to avoid. The possibility of exposure of the Transport is therefore considered only as a worst-case situation in order to assure the structural stability of the Transport itself. Based on Mr. Ecker's conservative estimate of when the exposure of the Transport between Kirkham Street and Lincoln Way could potentially occur, the cut-off wall in this area is not required to assure the structural stability

of the Westside Transport. The Commission finds that deletion of the portion of the planned cut-off wall between Kirkham Street and the already installed cut-off wall at Lincoln Way is consistent with Section 30253 of the Coastal Act.

B. Pump Station

1. Amendment Description. The Pump Station is to be constructed largely underground. As originally planned, the above-ground portion of the Station was to be approximately 230 feet long, 65 feet wide and 20 feet high (See Exhibit 4). The originally proposed size and location of the Pump Station required demolition of the old Fleishhacker Bathhouse which once served the mammoth Fleishhacker Swimming Pool. (The Pool has since been destroyed.) To take advantage of the height of the Pump Station and its proximity to the ocean and the zoo, a public observation deck was planned for the roof of the Pump Station.

The proposed amendment would reduce the size of the Pump Station so that the above-ground portion measures only 75 feet in length (See Exhibit 5). One result of the smaller size is that the Fleishhacker Bathhouse no longer would need to be demolished. The amendment would also delete the observation deck on the roof of the Bathhouse.

2. Recreational Access and Scenic Impacts. As originally proposed, the roof-top observation deck on the Pump Station would have provided a modest public recreational opportunity. The deck would have provided a view of the coast from an elevated site, although the attractiveness of the site is somewhat limited by the severe weather conditions often encountered there. Deletion of the rooftop observation deck eliminates this recreational opportunity, but retention of the Bathhouse at the same time provides a potentially more usable and significant opportunity for the coastal visitor. The Bathhouse has large windows facing the sea, from which a more sheltered and comfortable view may be enjoyed.

The Bathhouse is owned by the Recreation and Park Department of the City of San Francisco. It is now used temporarily for offices of the Clean Water Program. Once construction in the area is completed, the building will be vacated. If necessary rehabilitation were carried out, the building could then be available for a variety of public uses, including use as a restaurant or meeting rooms.

The reduction in size of the Pump Station will significantly reduce its impact on coastal visual resources. The potentially overwhelming bulk of the originally proposed building is reduced by approximately two-thirds. The visual impact of the Station is reduced somewhat further by the landscaped earth berm which will partially enclose the Pump Station. As redesigned, the Pump Station is more compatible with the scale of surrounding buildings and therefore more protective of coastal visual resources. Furthermore, retention of the Bathhouse, which is a building of recognized historic and esthetic importance, will provide an additional visual benefit to the area. The Bathhouse will provide a visual reminder of the former Fleishhacker Pool, a once popular use of this coastal location. The Commission finds that, as redesigned, the Pump Station is consistent with Coastal Act policies regarding protection of visual quality and recreational opportunities.

C. Outfall Spoils

1. Amendment Description. As originally planned, the construction of the Ocean Outfall was expected to produce a significant quantity of spoils which could be used for shore protection. The findings of approval of the Public Works Plan state that approximately 2.7 million cubic yards of material would be dredged during the construction. Although not all of this material was expected to be available for shore protection due to backfill requirements and handling losses, the contribution to shore protection was expected nevertheless to be significant.

Dr. Cyril Galvin, an independent coastal engineer working as a consultant for the City, proposed use of offshore spoils for indirect shore protection through introduction of the spoils into the littoral system in such a way as to nourish the beach. At the time of approval of the Public Works Plan, Dr. Galvin's proposal was a general one and did not include specific recommendations as to where spoils should be placed or conclusions as to the expected benefit to Ocean Beach. Such recommendations and conclusions were left to further study, as recognized by the following condition which was attached to the approval of the Public Works Plan:

14. Placement of Suitable Excavated Material on Beach. Excavated material from any onshore construction site that is not needed for backfill, berm construction, or other on-site work, shall be placed on the beach landward of the surf zone, if it meets National Park Service standards for beach nourishment materials. Materials excavated offshore during outfall construction shall be deposited so as to provide the maximum offshore benefit to the Ocean Beach littoral system. The site of deposition shall be determined by an independent coastal engineer selected by the City and approved by the Executive Director. This sand shall be deposited consistent with a plan approved in advance by the National Park Service.

The City's requested amendment would delete the second part of this condition, regarding materials excavated offshore. (The first part of the condition, applying to onshore construction work, would be unchanged.)

After the Public Works Plan was approved in 1979, the City hired Dr. Galvin to expand upon his general proposal for beach nourishment by estimating the actual volume of spoils to become available from offshore construction and recommending an appropriate offshore disposal site. Dr. Galvin's report, dated February 1, 1981, discussed spoils from two distinct offshore construction zones. The surf zone, extending approximately 4,400 feet offshore, was termed Region 1. The 20,000 feet beyond the surf zone was termed Regions 2-5. Dr. Galvin's report estimated that 220,000 cubic yards of material could be produced from Region 1 for direct placement on the beach. The report recognized that in Regions 2-5, the potential amount of material that could be produced for placement in the littoral system would vary widely depending on the construction methods chosen.

Dr. Ecker estimated that under optimum conditions and use of his recommended construction methods, including minimizing the amount of dredged material used for backfill, a total of 810,000 cubic yards from Regions 2-5 could be made available for beach nourishment.

The City advised the Commission in early 1981 that the most practical construction methods for Regions 2-5 would result in no excess spoils being produced for use at an offshore disposal site. On June 30, 1981, a contract was awarded for construction of the Ocean Outfall. The contractor chose to use a clamshell dredge operating from an anchored barge. The contractor agreed that, using this method, significant losses of dredged material would be experienced due to handling and backfill requirements. The contractor stated therefore that no excess material would be available for placement in the offshore littoral system.

The City then deleted the initial specification in the contract requiring placement of excess material from Regions 2-5 into the littoral system and substituted a requirement that all suitable spoils from Region 1, the surf zone, be placed directly on the beach, subject to the approval of the National Park Service. This proposal was based on the idea that direct placement of suitable material on the beach would have much greater value to the beach than placement of spoils offshore in the littoral system.

The City hired Richard Ecker to review the quantity of spoils to be produced in Region 1 and to prepare a plan for placement of suitable spoils on the beach. Mr. Ecker produced a report entitled "Availability and Placement of SWOO Region 1 Spoils on Ocean Beach," dated February 16, 1982, along with an addendum dated March 8, 1982. These reports reflect the use of a trestle, which is the construction method selected by the contractor for Region 1. As finally designed by the contractor, the trestle will be only 1,800 feet long instead of the 4,400 feet originally envisioned. Because of the shortened Region 1, the total volume of excavated material is estimated by Ecker to be only 147,000 cubic yards, rather than the larger amount originally estimated. Ecker's report states that the portion of the total 147,000 cubic yards that is suitable for placement on the beach is 46,000 cubic yards. Because the sand in the Region 1 zone is relatively fine-grained and would be unstable when placed on the beach, the effective fill volume is estimated to be only 7,000 cubic yards. Ecker concludes that, based on the above considerations he does not believe that placing the SWOO trench material from the 1,800-foot reach of trench onto Ocean Beach would be an effective beach nourishment program.

2. Sand Replenishment. Section 30233 (b) of the Coastal Act provides:

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.

This policy encourages two different means of beach replenishment: placement of material into longshore current systems so as to indirectly nourish the beach

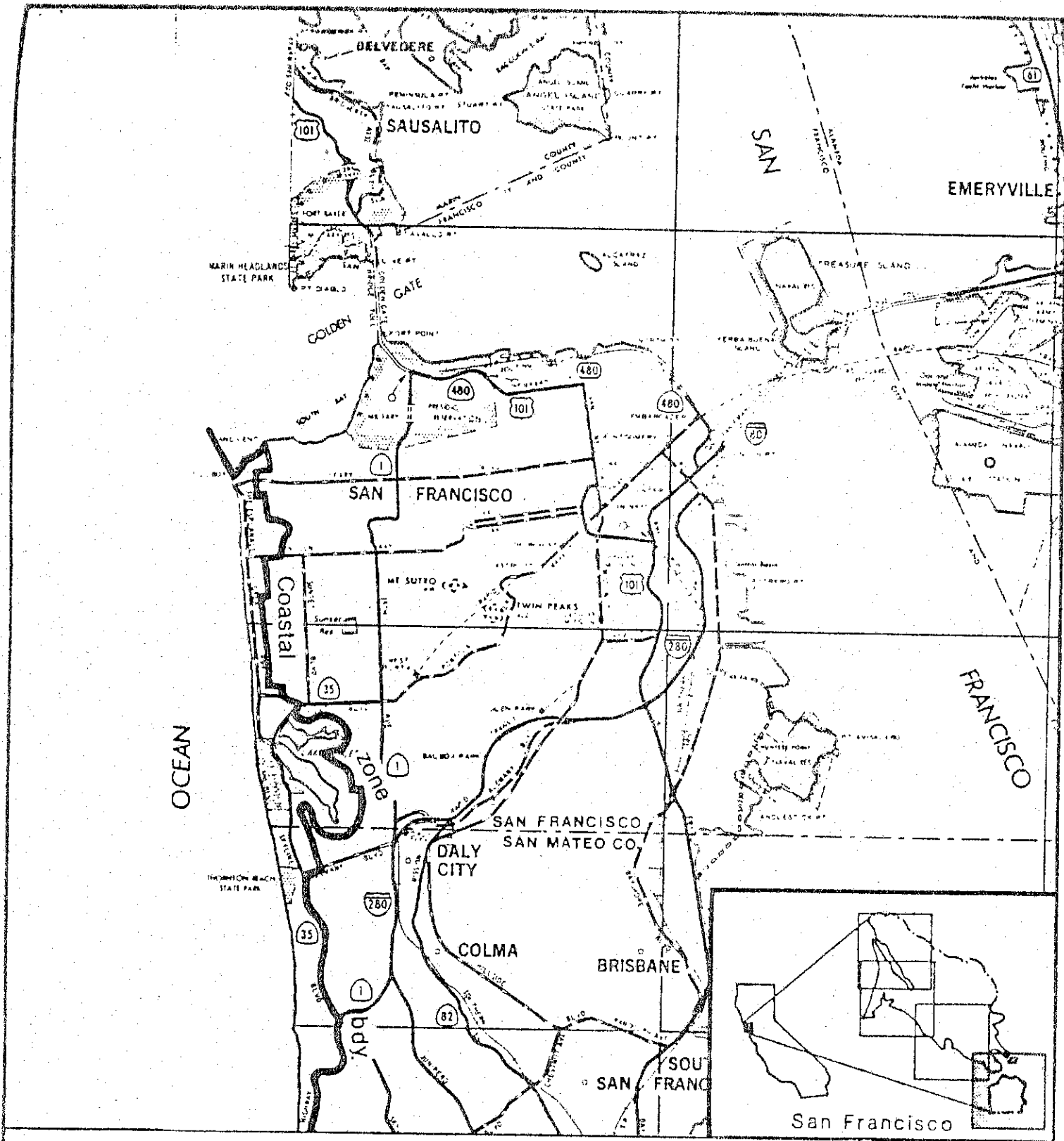
and placement of suitable sand directly on the beach. Both methods of beach nourishment have been considered in connection with the construction of the Ocean Outfall. The Commission's findings of approval as originally adopted state that sand would be placed into the longshore current system. As explained above, the construction method finally selected by the contractor does not produce material for placement into the longshore current system. The City has proposed to implement the other means of beach nourishment, but, as described above, the City's consultant has concluded that the effective volume of suitable material is too small to warrant its placement on the beach.


The policy of Section 30233 (b) regarding placement of dredge spoils into the longshore current system or on the beach is directive rather than mandatory. The Commission finds, based on the discussion above, that the intent of Section 30233 (b) cannot feasibly be carried out in connection with the construction of the Ocean Outfall. In so finding, the Commission recognizes that as the planning and construction of the Ocean Outfall have proceeded, additional information has become available which was not available to the Commission at the time the findings of approval were originally adopted.

The Commission emphasizes that no change is requested by the City or granted by the Commission in regard to the basic commitment of the City to ensure the future existence of Ocean Beach as a recreational resource. Although the Commission finds that construction of the Outfall will not contribute significantly to the nourishment of Ocean Beach, other steps are underway to ensure that the beach will be protected. Although not strictly related to the construction of the Ocean Outfall, the following discussion is provided in order to address the underlying and continuing commitment of the City to protect Ocean Beach in the event of future beach recession.

Condition #9 of the Specific Projects Approval requires the City to maintain the beach as a recreational resource. As amended, Condition #9 requires the establishment of an escrow account containing the sum of \$5.4 million to be used in the future to replenish sand on the beach. This condition has been superseded in part by state legislation adopted in 1981 (SB 626) which terminates the escrow account but reaffirms the commitment of the City of San Francisco to ensure the future protection of the beach. The law provides that the City shall prepare a beach nourishment plan designed to counter the effect of future erosion at Ocean Beach. The plan shall ensure the integrity of the beach area as a recreational resource and shall contain or provide for appropriate funding of beach restoration measures if, or when, such measures become necessary. The beach nourishment plan shall be submitted to the Coastal Commission for a determination that it is adequate to ensure the integrity of the beach area as a recreational resource. Until that determination has been made, the Westside Transport shall not be approved for operation.

The City has taken initial steps toward preparation of the required Beach Nourishment Plan. A number of background reports and preliminary nourishment plans have been prepared. The City has also recently convened a new Ocean Beach Management Advisory Board, including representatives of the public and of city, state and federal agencies with responsibility over Ocean Beach. The Board is expected to assist in the preparation of a beach nourishment plan which will include provisions for appropriate funding and institutional arrangements which will assure that, if and when they become necessary, beach protection efforts will in fact be accomplished.



 California Coastal Commission

LOCATION MAP



County of San Francisco

EXHIBIT NO. 1

APPLICATION NO.

PWA 2-82-25

S.F. Clean Water Program

 California Coastal Commission

→

WESTSIDE TRANSPORT
PROTECT AREA

Lincoln Way

Kirkham

Ward

PACIFIC OCEAN


GOLDEN GATE

PARK

CITY OF
SAN FRANCISCO



EXHIBIT NO. 2
APPLICATION NO.
 PWA 2-82-25
S.F. Clean Water
Program

 California Coastal Commission

Slcat
3112,
Ocean Outfall

↓ Pump Station

STA. 109+17.49

448'
CUT-OFF WALL
COMPLETED

STA. 107+68.5
END OF W-1
LINCOLN WAY

W-3
W-1

STA. 101+08
C&E IRVING

Westside
← Transport

STA. 93+18
C&E JUDAH

GGNRA #

1770' ±
CUT-OFF WALL NOT NECESSARY

STA. 86+40
C&E KIRKHAM
STA. 85+00

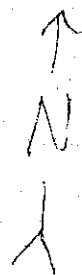
140'*

CUT-OFF WALL
TO BE CONSTRUCTED

STA. 79+60
C&E LAWTON

GENERAL LIMITS OF CUT-OFF WALL

CUT-OFF
WALL PLAN




Ocean
←

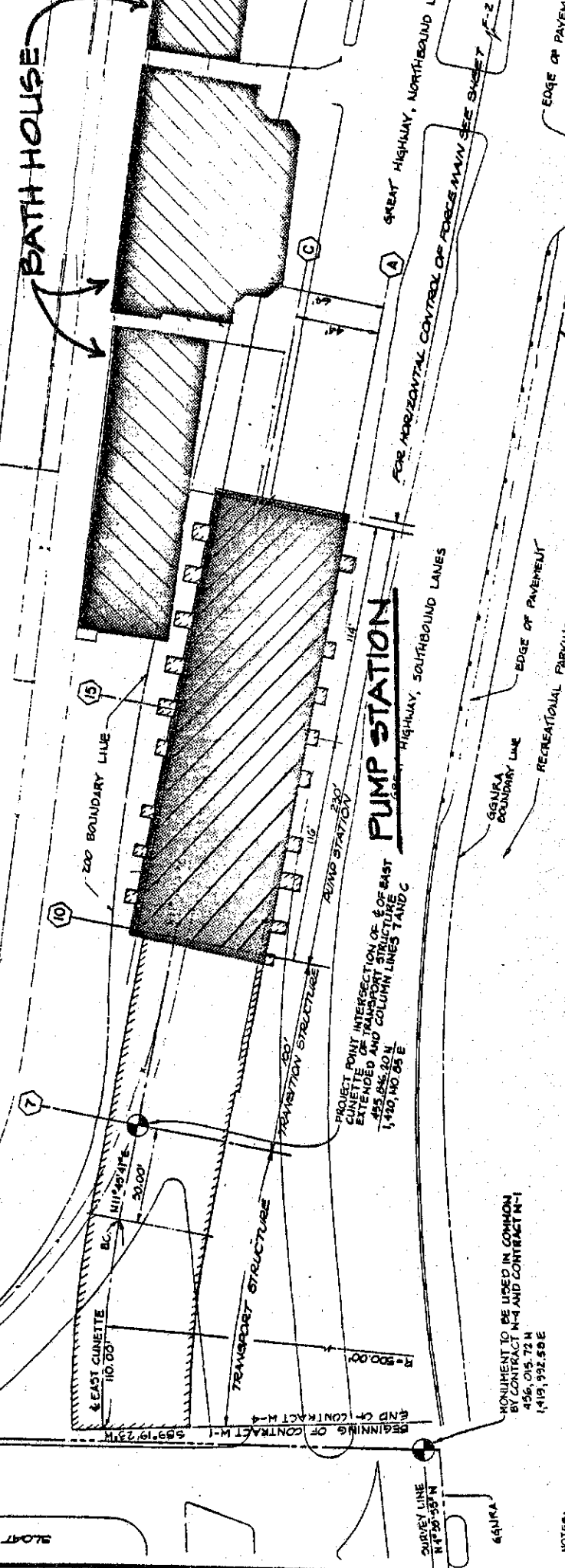
* PER COASTAL ENGR. REPORT OF 1/21/82

SCALE: 1" = 300'

PLAN

EXHIBIT NO. 3
APPLICATION NO. FWA 2-82-25
S.F. Clean Water Program
 California Coastal Commission

PUMP STATION, TRANSMISSION
 1.5" x 1.5" x 1.5" x 1.5"
 1.5" x 1.5" x 1.5" x 1.5"
 1.5" x 1.5" x 1.5" x 1.5"
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 1.5" x 1.5" x 1.5" x 1.5"



PREVIOUS PLAN

- THE CITY SURVEYOR WILL PROVIDE AN OFFSET LINE FOR LOCATION OF THE CENTERLINE OF THE MAIN CANAL. LOCATION POINTS WILL BE PROVIDED AT INTERVALS NOT EXCEEDING 50 FEET.
- LOCATION POINT COORDINATES ARE IN CALIFORNIA COORDINATE SYSTEM AS NOTED ON SHEET 11-054.
- PROJECT COORDINATE SYSTEM IS BASED ON COLUMN LINE (A) AS REFERENCE POINT. THE INTERSECTION OF COLUMN LINES (A) & (B) HAVING THE COORDINATES 1000.00 N, 1000.00 E ARE LOCATED BY PROJECT COORDINATES INCLUDE: (A) BEAM MAIN ALIGNMENT. REFER TO DRG F-2 (B) BEAM TOE LOCATION. REFER TO DRG G-20

NOTES:
 LOCATION OF THE PUMP STATION COLUMN LINE GRID FROM CITY SURVEY DATA IS FURNISHED FOR REFERENCE ONLY. THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR LOCATION OF THE PUMP STATION COLUMN LINE GRID FROM CITY SURVEY DATA. LOCATION OF FLOOR TOE IS THE COLUMN LINE GRID OR OFFSETS FROM SAME. THE SECTION LINE OFFSETS FROM SAME WILL BE MUTUALLY AGREED BETWEEN CONTRACTOR AND CITY SURVEYOR. EACH MARK SET FOR CONTROL FOR THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING THE HORIZONTAL AND VERTICAL ALIGNMENT. REFERENCE MONUMENTS THROUGHOUT THE LENGTH OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL NEEDS.

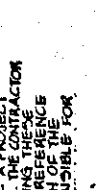


EXHIBIT NO. 4
APPLICATION NO. PWA 2-82-25
S.F. Clean Water Program

OLD PUMP STATION PLAN

← 27

PROJECT NO. 11-054	CITY AND COUNTY DEPARTMENT
SHEET NO. 11-054	WEST SIDE DRIVE

GRAPHIC SCALE
 0 30

MONUMENT TO BE USED IN COMMON BY CONTRACT N-4 AND CONTRACT N-1
 456, 015.72 N
 1419, 992.89 E

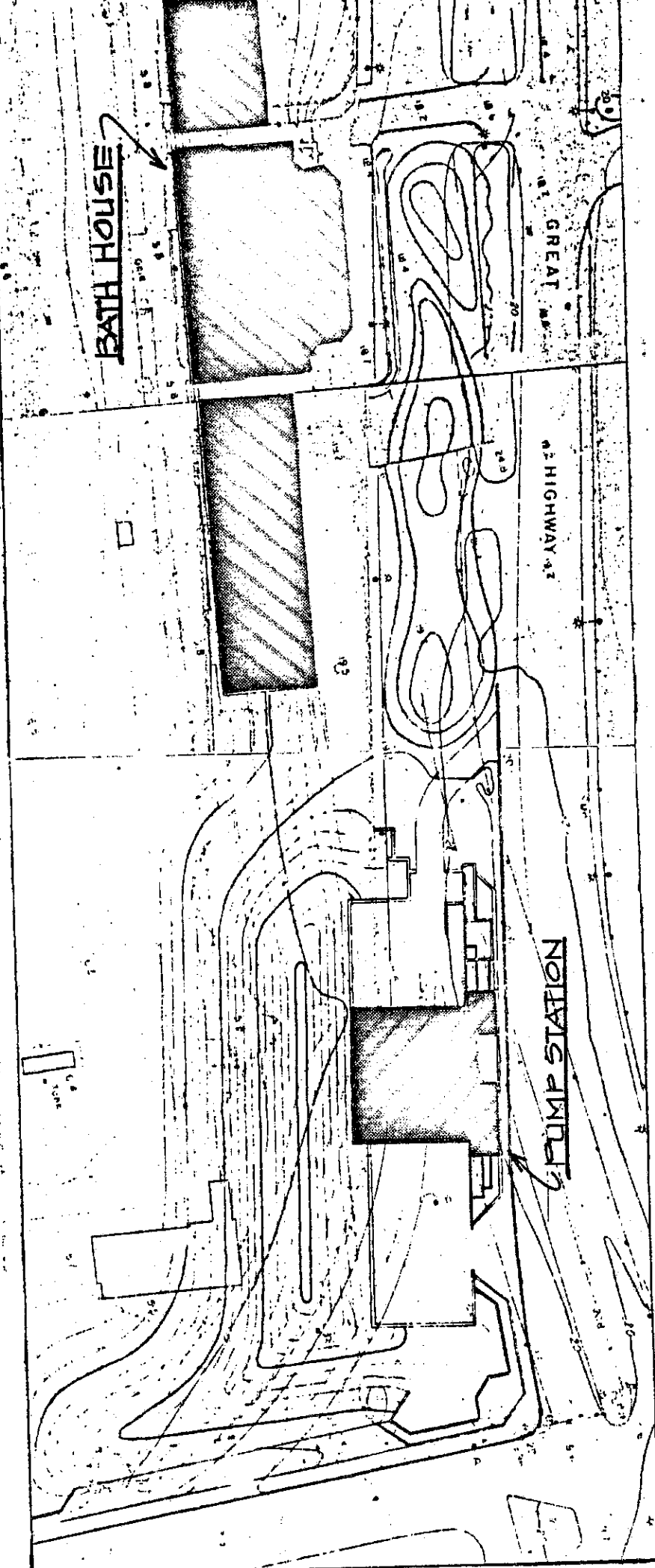
PROJECT POINT INTERSECTION OF S OF EAST
 425, 015.72 N
 1419, 992.89 E

BATH HOUSE

PUMP STATION


SLOOT BOULEVARD

SURVEY LINE
 1419-537 N
 6419A



NEW PLAN

NEW DUMP
STATION
PLAN

EXHIBIT NO. 5
APPLICATION NO. PWA - 2-82-25
S.F. Clean Water Program
 California Coastal Commission



California Coastal Commission
631 Howard Street, 4th floor
San Francisco, California 94105
(415) 543-8555

July 15, 1982

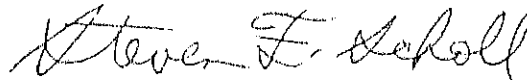
Donald J. Birrer, Executive Director
San Francisco Clean Water Program
P.O. Box 360
San Francisco, California 94101

Dear Mr. Birrer:

On July 15, 1982 the Coastal Commission approved the amendments requested by San Francisco to the Public Works Plan and Specific Project Approvals for the Clean Water Program projects at Ocean Beach. These amendments affect the Westside Transport Cut-Off Wall, the Pump Station design, and the disposition of spoils from construction of the Ocean Outfall. The findings of approval adopted by the Commission are enclosed.

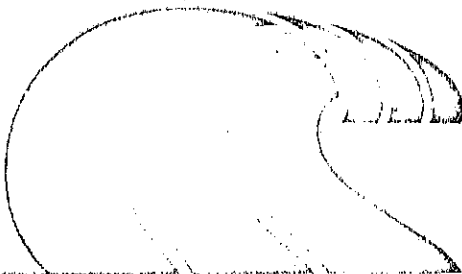
Thank you for your cooperation on this matter.

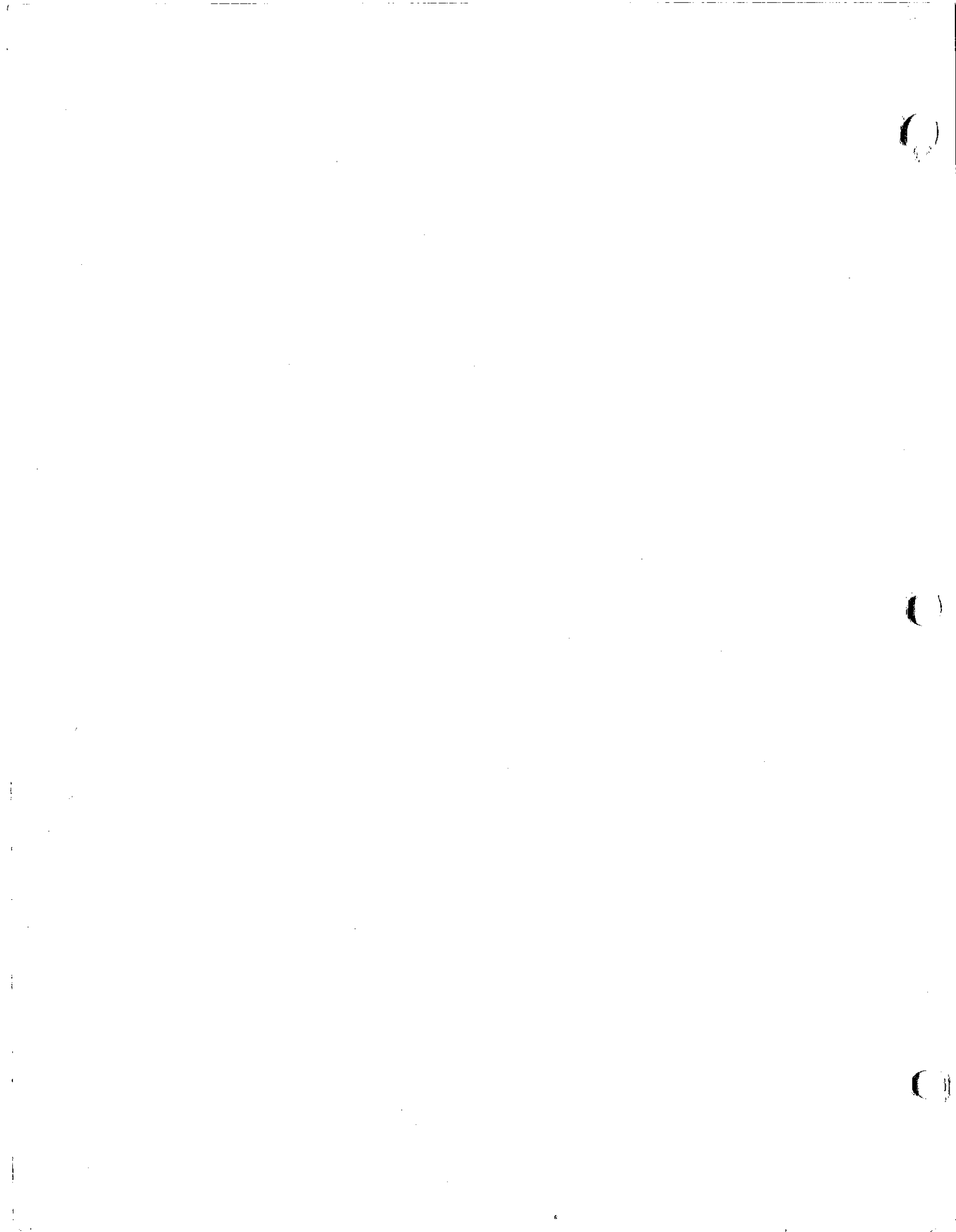
Truly yours,



Steven F. Scholl
North Central District Manager

cc: Sara Pickus





Not Adopted -
Hearing Continued

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

May 27, 1983

TO: COMMISSIONERS, INTERESTED PUBLIC

FROM: MICHAEL L. FISCHER, EXECUTIVE DIRECTOR

SUBJECT: REQUEST FOR AMENDMENTS TO CITY OF SAN FRANCISCO CLEAN WATER PROGRAM
PUBLIC WORKS PLAN AND SPECIFIC PROJECT APPROVALS (PW2-83-14-A)

Background

The Public Works Plan for San Francisco's Clean Water Program projects at Ocean Beach was approved by the Coastal Commission on June 6, 1979. The Public Works Plan covered the entire range of wastewater collection, storage, treatment and disposal facilities in the coastal zone. At the same time that the Public Works Plan was approved, three Specific Projects were approved under the Plan. The three Specific Projects are the Westside Transport and Pump Station, the Restoration of the Great Highway, and the Ocean Outfall.

The Commission's review of the Public Works Plan and Specific Projects focused primarily on three issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the projects into conformity with the Coastal Act, the Commission imposed conditions on the Public Works Plan and Specific Projects to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during and after construction, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a lengthy construction period. Since 1979, four amendments to the Public Works Plan and Specific Project approvals have been approved by the Commission. These amendments affect primarily the alignment of the restored Great Highway, future shoreline protection measures, the size and construction methods of the Ocean Outfall, and the design of the Pump Station.

Procedures

Sections 13365 through 13371 of the Commission Regulations provide for the review of amendments to Public Works Plans. Under the Regulations, the Executive Director shall determine whether or not a proposed amendment is minor in nature. If the Executive Director determines that the proposed amendment is not minor or if the proposed amendment affects conditions required in the Public Works Plan for the purpose of protecting a coastal resource or coastal access, then the amendment request shall be set for a regular hearing before the Commission. To approve an amendment to the Public Works Plan, the Commission must find that the amendment is in conformity with the provisions of the Coastal Act of 1976, including specific factual findings that the development is in conformity with Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

The Executive Director has determined that the proposed amendments, some of which affect conditions previously imposed, are not minor in nature. Therefore, the amendment requests have been set for a public hearing with a recommendation for action by the Commission.

Summary of Proposed Amendments

The applicant requests the following amendments to the Public Works Plan and Specific Project approvals:

1. Substitution of two at-grade pedestrian crossings of the Great Highway near Quintara Street for one pedestrian underpass.
2. Deletion of boardwalks connecting the pedestrian underpasses with the beach, requiring deletion of Specific Project Condition #4.
3. Change from a 5-year dune landscaping guarantee to a 3-5 year variable guarantee period, requiring amendment of Specific Project Condition #5.

Although not specifically requested as amendments by the City, the following changes require action by the Commission:

4. Deletion of the stairway over the Lincoln Way emergency outfall, requiring amendment of Specific Project Condition #7.
5. Postponement of reconstruction of the Great Highway between Fulton Street and Lincoln Way, requiring amendment of Specific Project Condition #3.
6. Postponement of re-creation of the dune field west of the new Great Highway between Noriega Street and Sloat Boulevard, requiring amendment of Specific Project Condition #3.
7. Potential additional changes in the alignment of the new Great Highway now being considered by the City, but not adopted at this time.

STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution:

I. APPROVAL WITH CONDITIONS

The Commission hereby approves, subject to the conditions below, the proposed amendments to the Public Works Plan and Specific Project approvals described herein, on the grounds that the proposed development, as amended and conditioned, is in conformity with the provisions of the California Coastal Act of 1976 including the provisions of Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

II. CONDITIONS

Specific Project Conditions

A. Amended Conditions

3. Phasing of Restoration. Each phase of the construction of the Westside Transport shall include restoration of the highway and creation of the dune field for that portion of the shoreline, with the following two exceptions:
 - a) Prior to reconstruction of the Great Highway between Fulton Street and Lincoln Way, the City shall report to the Commission (but in no case later than one year from the date of Commission action on Amendment #PW 2-83-14-A) on progress in securing federal, state, or local funding for reconstruction of the highway, together with a timetable for reconstruction of the roadway.
 - b) Prior to creation of the dune field for the portion of the shoreline between Noriega Street and Sloat Boulevard, the City shall prepare a Beach Nourishment Plan, as required by Section 5, Chapter 1007, 1981 California Laws, which shall be designed to counter the effect of future erosion and which shall ensure the integrity of Ocean Beach as a recreational resource. The Plan shall contain or provide for appropriate funding of beach restoration measures. The City and County of San Francisco shall contribute six hundred twenty-five thousand dollars (\$625,000) to the implementation of this plan. The Plan shall be submitted to the California Coastal Commission prior to the operation of the Westside Transport for a determination by a majority vote of the membership of the Commission that it is adequate to ensure the integrity of the beach area as a recreational resource.
4. Boardwalks. (Deleted)
5. Dune Planting. The City shall provide an irrigation system and shall guarantee the success of dune planting for a period of 5 years, or a lesser period if so provided in a Maintenance Agreement which is jointly signed by the City and the National Park Service. Design of the irrigation system, final contours, planting and fertilization schedules, and plant selection shall be approved by the National Park Service.
7. Access Over Overflows. The design of the emergency overflow structure shall incorporate steps on the north and south sides and a railing on top or other measures to provide lateral access along the beach. The existing overflow structure near the end of Vicente Street shall be modified to provide decking, railing, and steps on the north and south to allow lateral access landward of the surf zone.
9. Future Shoreline Protection Measures. All existing rubble located west of the trigger line described below shall be removed from the beach between Lincoln Way and the shoreline in front of the proposed pump station. Future placement of rubble is prohibited. The City shall place at least one row of monuments, markers, or other distinguishable features (known as the trigger line) 50

feet west of the Westside Transport at a depth of 20 feet above mean sea level. At any point where the western edge of the highway is seaward of the Westside Transport, the trigger line shall be 50 feet west of the highway, except that in no case shall the trigger line be more than 80 feet west of the Transport. When the trigger line is exposed, the City shall replenish the lost sand and replace and recontour the dunes, unless an alternative means of shoreline protection has been approved by the Commission.

14. Erosion Protection Test. (Added condition). Prior to the commencement of construction of the redesigned Great Highway, the City shall install, with the approval of the National Park Service and State Lands Commission, "artificial seaweed" such as the type used at Long Beach, California and Cape Hatteras, North Carolina as a test of a non-structural means of assisting sand accretion on the beach. Said installation shall be a minimum of one-half mile long and shall be placed offshore in the vicinity of Quintara Street where observed beach erosion has been most severe, or, with agreement of the Executive Director, at such other location on Ocean Beach between Lincoln Way and Sloat Boulevard and in such fashion as is recommended by an independent coastal engineer selected by the City and approved by the Executive Director. The installation shall be modified periodically as conditions warrant in the opinion of the coastal engineer. As required by Condition #12 of the Specific Projects Approval, the City shall monitor beach profiles in the vicinity of the installation and shall report the results at least quarterly to the National Park Service and the Executive Director. Removal of the installation shall not be accomplished without the approval of the Coastal Commission.
15. Existing Great Highway. (Added condition). The asphalt pavement of the existing southbound lanes of the old Great Highway shall be removed upon completion of construction of the new Great Highway. Following removal of the existing highway, adequate measures, subject to the review and approval of the Executive Director, shall be taken to stabilize sand in the area between Noriega Street and Sloat Boulevard where new dunes will not be created as a part of this project. At least two sand ladders, of a design acceptable to the National Park Service, shall be installed and maintained to provide access to the beach between Noriega and Taraval Streets. The sand ladders shall remain in place until such time as an alternative means of providing access to the beach has been approved by the Executive Director.
16. Final Plans. (Added condition). Prior to the commencement of construction of the new Great Highway, the City shall submit for the review and approval of the Executive Director plans for the highway, the recreational trails, the pedestrian accessway, and all other features described in these findings. The plans may include minor variations from the plans submitted to the Commission (dated January, 1983 with four addenda) as long as the general elements described in these findings are included. Specifically, (a) the new highway may extend up to 40 feet west of the Westside Transport sewer box between Lincoln Way and Noriega Street and between Taraval Street and Sloat

Boulevard, but the location of the highway at the underpasses at Judah, Lawton, Noriega and Taraval Streets as shown on the Plans and Specifications dated January, 1983 shall remain unchanged; (b) between Noriega and Taraval Streets, the highway shall not extend west of the west wall of the Westside Transport except where necessary to connect with the pedestrian underpass structures at Noriega and Taraval; (c) adjustments in median width and curve radii may be made; (d) one or both recreational trails maybe relocated to the east side of the new highway, so long as two trails, one hard-surfaced and one semi-hard-surfaced, are provided; (e) four pedestrian undercrossings shall be provided at Judah, Lawton, Noriega and Taraval Streets, and two at-grade pedestrian crossings shall be provided in the vicinity of Quintara Street (f) a vista parking lot for approximately 35 cars shall be provided west of the new Great Highway opposite the end of Irving Street.

B. Unchanged Conditions

All remaining conditions of the Public Works Plan and Specific Project Approvals not specifically amended herein remain in full force and effect.

III. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. Proposed Redesign of the Great Highway.

The plans for the new Great Highway which have been submitted to the Commission show the following basic elements (including proposed amendments #1 through 6):

1. Curvilinear four-lane highway. The new Great Highway extends from Lincoln Way to Stoa Boulevard. North and southbound lanes are separated by a 17-foot wide median. Total width of the highway, including median and shoulders, is approximately 70-75 feet. The highway extends generally no further west than the west edge of the Westside Transport sewer box, consistent with the Commission's previous Specific Project Approval. Where the road curves furthest west, the east edge of the new roadway lies approximately 70 feet from the west curb of the Lower Great Highway (or 125 feet from the nearest houses). Where the road curves furthest east, the edge of the road lies 25-30 feet from the west curb of the Lower Great Highway (or 80-85 feet from the nearest houses). A three-foot high concrete "Jersey" barrier is located on the east side of the new roadway where it curves closest to the Lower Great Highway.

In addition to curving slightly from east to west, the road rises and falls slightly, with high points over the pedestrian undercrossings and low points in between. In addition, the northbound (easterly) lanes are elevated slightly above the southbound lanes in order to provide a better view for motorists.

2. Pedestrian Accessways. Four pedestrian undercrossings are located at Taraval, Noriega, Lawton and Judah Streets. (The plans show the Lawton Street undercrossing as a deletable bid item.) These undercrossings provide pedestrian access from the Lower Great Highway to the beach. Boardwalks which were originally proposed to connect the undercrossings with the beach have been deleted. A fifth pedestrian undercrossing which was originally proposed at

Quintara Street has been deleted on the recommendation of the City's coastal engineer. The City proposes substitution of two at-grade highway crossings near Quintara (perhaps at Pacheco and Rivera Streets), although plans submitted at this time do not show the crossings.

3. Recreational Trails. Two trails, each approximately 8 feet wide, extend along the west side of the new highway from Lincoln Way south to Noriega Street. One trail is hard-surfaced for bicycles and hikers, and the other is decomposed granite or similar surface for runners and equestrians. The trails connect the pedestrian undercrossings at Judah, Lawton and Noriega Streets.

South of Noriega, the new trails are not included in the plans. The City proposes to leave in place the existing southbound lanes of the old Great Highway (which would no longer be used for vehicles once the new highway is constructed). The City proposes that the old highway lanes would serve as a temporary recreational trail connection between Noriega Street and Sloat Boulevard.

4. Dune Recontouring and Landscaping. North of Noriega Street, the plans include recontouring and landscaping of the dunes and installation of irrigation facilities. South of Noriega, the landscaping would be installed only as far west as the southbound lanes of the old Great Highway, and no dune recontouring or landscaping would be done west of the old highway.

5. Miscellaneous Improvements. A vista parking lot for approximately 35 cars is located west of the new roadway opposite the end of Irving Street. A new restroom building would replace the existing building on the Lower Great Highway at Judah Street. Existing restroom buildings at Wawona and Taraval Streets would be retained. Miscellaneous improvements such as bicycle racks, horse hitching posts, and picnic tables east of the new roadway are included in the plans.

B. Coastal Act Policies and Objectives.

In approving the conceptual redesign plan for the Great Highway in 1979, the Commission had two main goals under the Coastal Act: to improve public access, recreational opportunities, and the visual quality of the beach area and to ensure that the project, although located on an eroding shoreline, would not compromise the existence of a sandy recreational shoreline during and after construction of the Westside Transport sewer box.

1. Improving recreational opportunities. The Great Highway redesign concept adopted by the San Francisco Board of Supervisors in 1977 called for removing the existing broad, flat, straight expanse of asphalt which encourages speeding and replacing it with a narrower, curving road designed to slow down traffic and improve views of the shoreline. Landscaping of the dunes with beach grass and other plants would improve the area's appearance and help to reduce blowing sand which has frequently forced closure of the existing Great Highway and created a nuisance for nearby residents. Access to the beach would be provided through crossings which would be grade-separated for safety and limited in number to reduce foot traffic through the landscaped dunes.

Ocean Beach is located in a major urban area, and it serves not only residents of the immediate neighborhood and the City as a whole, but also visitors from

all over the world who come to the Golden Gate National Recreation Area, of which Ocean Beach is a part. Ocean Beach is among the most popular units of the Recreation Area, and it serves some two million visitors each year. The Commission found in originally approving the Great Highway Redesign concept that the improvement of the area would partially offset the adverse impacts on beach access of a lengthy construction period and the adverse impact of constructing the sewer box on what is recognized to be an eroding shoreline. The need to improve the Ocean Beach area for use and enjoyment of residents and visitors alike remains a goal of the highest priority.

2. Protecting the Sandy Beach. The Commission also found in 1979 that the project site is an eroding shoreline. Extensive testimony was presented to the Commission by residents of the neighborhood and shoreline experts which supported the conclusion that the Westside Transport sewer and proposed reconstructed Great Highway would be located generally seaward of natural high-water shorelines in recent historic times. The reason is that the existing Great Highway was constructed approximately 50 years ago on artificial fill that extended as much as 200 feet seaward of the natural shoreline. The Commission found that because of the artificial fill, the existing beach profile is oversteepened and out of equilibrium. The 1978 Shoreline Erosion Conference sponsored by the Army Corps of Engineers agreed with other shoreline experts that without protective measures, further erosion will occur at Ocean Beach until the shoreline is approximately at the position of 1852, or about at the Lower Great Highway. Since the Westside Transport sewer is constructed west of the historic shoreline, it is likely that the sewer will be exposed some time during its lifetime, unless protective measures are taken.

In originally approving the Great Highway conceptual design, the Commission sought to preserve the new roadway from shoreline erosion by restricting the highway to an alignment generally above or east of the sewer box. At the request of the City, the Commission approved an amendment to the Public Works Plan in 1980 to allow the new highway to extend slightly west of the sewer (up to 20 feet) where the roadway would be adequately supported by the sewer. This amendment was made in order to preserve the curvilinearity of the highway which is an element of the City's Master Plan and Local Coastal Program.

The Commission's approval of the sewer construction on the beach was predicated on establishment of a sand replenishment program and a trigger line. Condition #9, as amended by the Commission in 1980, required placement of permanent markers in the sand 50 feet west of the sewer box or the highway, whichever is further west, to act as a trigger line for sand replenishment efforts. Whenever the markers are exposed by erosion, the condition requires the City to replenish the lost sand. Visible rubble west of the trigger line must be removed, and future placement of rubble as a protective measure is prohibited.

As amended, Condition #9 originally required establishment of an escrow fund to pay for sand replenishment. Since the condition was adopted, expected federal funds have not materialized, and the Legislature abolished the escrow fund consisting solely of City funds which had been set up.

The Legislature at the same time required that the City prepare a Beach Nourishment Plan with the purpose of ensuring the integrity of the beach area as a recreational resource (Section 5, Chapter 1007, 1981 Laws). The plan is to provide for adequate funding, and shall be submitted to the Coastal Commission

for a determination that it is adequate prior to operation of the Westside Transport (now expected to occur by mid-1985).

Since the Commission approved the Public Works Plan in 1979, the evidence of a continuing erosion problem is, if anything, stronger than before. The storms of last winter (particularly in January, 1983) caused enormous losses of sand from Ocean Beach. Between Noriega Street and Sloat Boulevard, almost the entire volume of sand (some 236,000 cubic yards) from sewer construction which had been stockpiled for future recontouring into new dunes was lost to wave action. Additional sand was lost from the beach and the original bluffs. The City's shoreline consultant, Dr. Richard Ecker, states that the sand stockpile south of Rivera Street acted as a buffer, preventing wave action from undermining the Upper Great Highway along the entire reach of shoreline between Sloat Boulevard and Noriega Street. The sand would have provided even more protection, had it been properly contoured and less steep. Even with the presence of the stockpiled sand, emergency measures were necessary to protect the road from being undermined. Rubble was dumped over the bluff at several locations which provided additional protection to the road, although Dr. Ecker concluded that the rubble is not a permanent solution to wave-induced erosion.

Section 30253 of the Coastal Act states:

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 Commission finds that erosion at Ocean Beach presents a continuing hazard to a new highway and other improvements as well as to the beach itself (the findings of the Commission on the Public Works Plan and Specific Project Approvals adopted on June 13, 1979 are hereby incorporated by reference.) The trigger line concept to establish the point at which beach nourishment efforts must be taken is hereby reaffirmed.

The Commission also finds that the City must make rapid progress toward resolution of the beach erosion problem. The Beach Nourishment Plan discussed above must be submitted to the Coastal Commission for a determination that it is adequate to ensure the integrity of the beach area as a recreational resource prior to operation of the Westside Transport, which is now estimated to be only two years away. Although the erosion threat has been the subject of Commission findings in 1979, 1980, 1981, and 1982 and the subject of numerous other reports and studies, progress on preparing a Beach Nourishment Plan has been slow.

The City has formed an Ocean Beach Management Advisory Board which has discussed the outline of a beach protection plan. The City is considering a request to the Army Corps of Engineers for a study of erosion at Ocean Beach and recommendation of possible solutions (although a previous Corps study has been

done). These steps are useful, but quicker action needs to be taken by the City in order to address the problem.

At a high-energy shoreline on the East Coast, a test of a new non-structural means of assisting beach accretion has been made. An installation of "synthetic seaweed" was made in 1981 at Cape Hatteras, North Carolina under the direction of the National Park Service which administers the Cape Hatteras National Seashore. The installation has shown signs of assisting in the formation of an offshore bar, nearshore sand deposition, and onshore accumulation, although systematic monitoring of the beach has not been accomplished. Another installation of synthetic seaweed has been made on an eroding shoreline at Long Beach, California, but the installation is too recent to permit valid conclusions about its effect.

San Francisco's Ocean Beach offers a high-energy environment which would provide valuable information on the potential use of a synthetic seaweed. Unlike a seawall or riprap, the seaweed is not a permanent structure, and it can be placed as a test without a permanent commitment of beach resources. The material is placed offshore in shallow water where it is not visible and does not interfere with recreation or boating, and it can easily be removed, if necessary. To demonstrate its commitment to resolving the beach erosion threat at Ocean Beach, the City is required as a condition of this amendment to place a test installation of synthetic seaweed with the consultation of the City's independent coastal engineer and the National Park Service.

C. Analysis of the Amendments

An analysis of the amendments to the Great Highway plan which have been submitted to the Commission at this time is presented below. At this writing, the City is considering additional changes to the project. No formal action on these additional changes has been taken by the City, although preliminary hearings have been held. To assist in the City's consideration of possible additional changes, the findings below address not only the amendments which have been formally requested, but also the general issues raised by other alternative designs for the highway which have been discussed recently.

1. Substitution of Two Surface Crossings for Quintara Undercrossings

For safety reasons and to protect the landscaped dune field from foot traffic, pedestrian crossings of the new Great Highway are restricted to a limited number of specific locations. The City proposed originally to construct five pedestrian undercrossings in the middle reach of the new Great Highway between Lincoln Way and Sloat Boulevard. These five crossings were proposed at the ends of Judah, Lawton, Noriega, Quintara, and Taraval Streets. Each crossing would be no more than three blocks (or 2040 feet) from the next access point.

Section 30210 of the Coastal Act requires that maximum access shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30212 requires that public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects

except where (1) it is inconsistent with public safety...or the protection of fragile coastal resources.

Based on the risk of beach erosion which has been observed to be most severe near Quintara Street, the City's coastal engineer has recommended the elimination of the Quintara Street undercrossing. The engineer recommends maintaining a large and uninterrupted sand berm at the point of greatest erosion threat, making infeasible the undercrossing which requires a cut in the berm.

To ensure adequate pedestrian access to the beach, the City has proposed to add two at-grade crossings to replace the undercrossing. At-grade crossings would not require creation of a break in the berm, since they would be located on top of the roadway instead of under it. As long as appropriate pedestrian safety features are incorporated in the at-grade crossings, they are an acceptable substitute for grade-separated crossings.

The Commission finds that construction of two at-grade crossings in the area of greatest erosion near Quintara Street and four pedestrian underpasses at Judah, Lawton, Noriega, and Taraval Streets is consistent with the public recreation and public access policies of Chapter 3 of the Coastal Act.

2. Deletion of Boardwalks. The boardwalks were designed to extend laterally from the western ends of the pedestrian underpasses out to the beach. The boardwalks were intended to encourage pedestrians to remain on the path, rather than straying through the landscaped dunes which are easily disturbed by foot traffic.

The City contends that the boardwalks would be quickly covered with sand and that vandalism would be a continuing problem. National Park Service officials, who patrol the area, agree that maintenance of the boardwalks would be difficult. Deletion of the boardwalks would not physically restrict access to the beach, but would simply mean that the beachgoer would have to walk on sand instead of a hard surface. In view of the limited advantages of the boardwalks and potential maintenance problems, the Commission finds that their deletion is consistent with the public access policies of the Coastal Act.

3. Dune-Planting Guarantee. The Commission originally required that the contractor who constructs the new Great Highway be responsible for the success of the dune plantings for a period of five years. The City now requests that it be responsible for the dune plantings for a minimum of three years and a maximum of five years, under an agreement with the National Park Service.

Section 30240 subsection (b) requires that development in areas adjacent to parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30243 provides that the long-term productivity of soils shall be protected.

Section 30251 states that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to minimize the alteration of natural

land forms, and, where feasible, to restore and enhance visual quality in visually degraded areas.

The success of the dune plantings is crucial to the reduction of blowing sand and the achievement of a stable dune system. The National Park Service has agreed to assume maintenance of the dunes at some time in the future when construction is complete. Before the Park Service takes over maintenance, the City has an obligation to use the best efforts possible to create a thriving plant community in the dunes.

If a thriving plant community can be established in less than five years, and the Park Service is willing to assume maintenance of the area, then nothing would be gained by a continuing city responsibility in the area. Therefore, if an agreement can be reached between the City and the Park Service allowing for fewer than five years of city maintenance, under specified conditions, it would be consistent with the Commission's intent to give the plants a good start. The condition is hereby amended to allow use of a flexible maintenance agreement. If an agreement cannot be reached, then the city remains responsible for the plantings for a five-year period.

4. Deletion of Stairs at Lincoln Way Outfall. Two existing concrete outfall structures extend onto the beach at the end of Lincoln Way and Vicente Street. If the tide is high enough to prevent pedestrians from passing around the seaward end of the structures, they must climb over the structure. If sand is removed from the beach by erosion, the relative height of the structure above the beach is increased, which could make the structures a dangerous obstacle to lateral passage along the shoreline.

The City has agreed to install stairs over the outfall structure at Vicente Street, where significant erosion was observed last winter. The City proposes to delete the stairs at Lincoln Way on the grounds that access over the structure is always easily available.

Access over the structure at Lincoln Way has been available by walking to its eastern end where the sloping beach rises to cover the structure. Loss of sand from the beach during the winter of 1983 did not make access difficult. Therefore, the Commission finds that the deletion of the Lincoln Way outfall stairs does not present a hazard to lateral access along the beach, and the condition is modified accordingly.

5. Postponement of Reconstruction of the Great Highway between Fulton Street and Lincoln Way. Plans have not been submitted to the Commission for the reconstruction of the Great Highway adjacent to Golden Gate Park. The City states that work in this area has been postponed, due to reduced federal and state funding. A separate contract will be issued for this work when funding is obtained.

The Commission required in Specific Project Condition #3 that each phase of the construction of the Westside Transport shall include restoration of the highway for that portion of the shoreline. Construction of the Westside Transport between Fulton and Lincoln was completed a year ago, but no plans have been prepared for the highway's restoration. An amendment to the condition is therefore required.

Rapid restoration of the Great Highway at the end of Golden Gate Park is not as critical as it is south of the park. When construction of the sewer at the end of the park was completed, the roadway was repaved and it now looks just as it did before construction. The road is protected from erosion by the existing seawall, and blowing sand is not a major problem. Although the road is unattractive and does not invite pedestrian use, it at least provides coastal visitors with a place to park and view the coast. Failure to rapidly reconstruct the area does not inhibit visitor use of the area or present a hazard to public improvements. Therefore the Commission finds that a delay in reconstruction of the roadway between Fulton and Lincoln is acceptable, but that the City must continue to seek funding so that the area can eventually be improved. A report to the Executive Director on progress in securing funding is required within one year.

6. Postponement of Dune Creation between Noriega Street and Sloat Boulevard.

The proposed dune recontouring west of the new highway between Noriega and Sloat has been deleted because of the tremendous erosion that occurred in this area last winter. Nearly all of the sand from sewer construction which had been stockpiled for creation of new dunes was lost to the ocean waves. Furthermore, the observed erosion makes the expenditure of public funds in the area unwise, without a long-term approach to beach erosion. As described above, the City is required to prepare a Beach Nourishment Plan and to install as a test measure a non-structural means of assisting sand accretion. Until the results of one or both of those efforts is known, no further permanent improvements should be placed west of the new highway or sewer box.

Between Noriega and Sloat, the City proposes to leave the existing southbound lanes of the Great Highway in place, apparently to serve as temporary recreational trails. However, the existing pavement would not serve very well as recreational trails. In spite of past efforts to keep the road open, it has been closed an average of 80 days each year due to blowing sand. Recreational trails would presumably receive less maintenance emphasis than a roadway, suggesting that the trails would soon be covered with sand. The pavement itself does not act to slow or trap blowing sand, nor is there a dune field west of the trails to trap sand. Therefore, the pavement serves no purpose and should be removed. A means shall be found to temporarily stabilize the sand while final plans for this area are under consideration. A simple homogeneous planting of dune grass which would help trap sand and would require minimal maintenance is one possibility.

Removal of the old highway would, at least temporarily, end the need for emergency protection measures during storms. The City is already prohibited by previous action of the Commission from dumping rubble and is required to remove rubble seaward of the trigger line. Dumping rubble shall not be among future emergency measures taken at Ocean Beach, should such measures be necessary prior to the preparation of the required Beach Nourishment Plan.

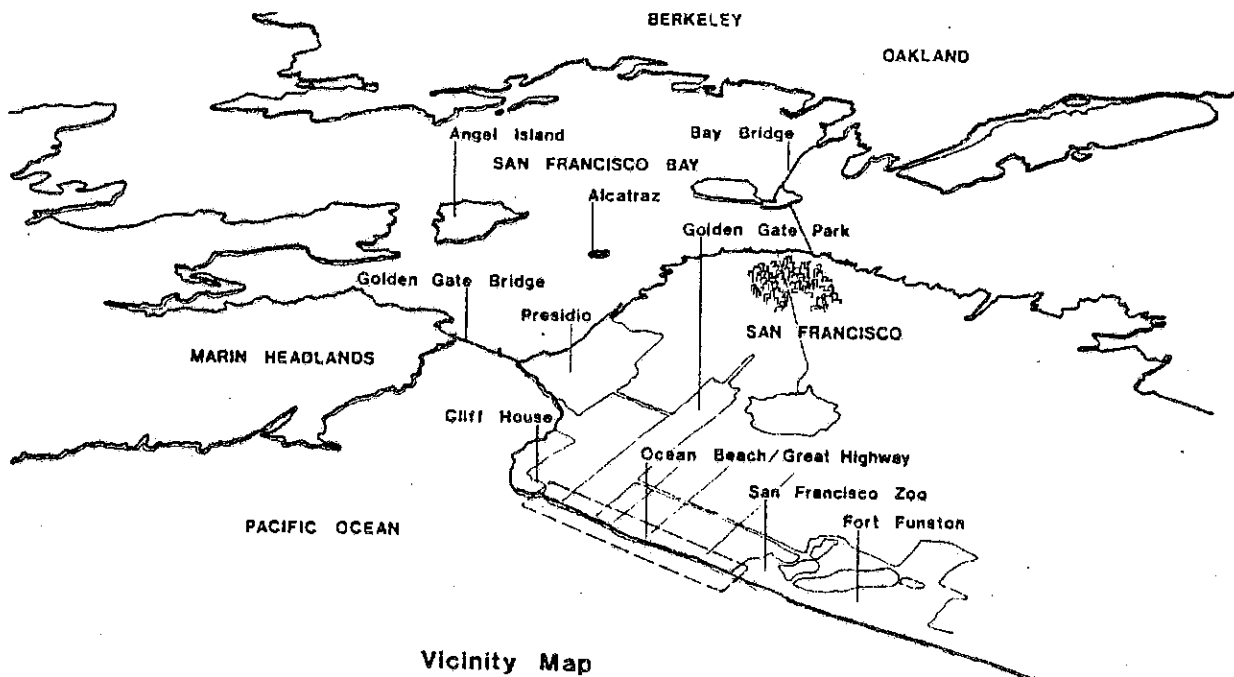
Leaving the existing berm in place south of Noriega will require installation of a means of foot access from the top of the berm to the beach. Sand ladders have been used in the past in the area with some success, although the design of the ladders previously installed by the City has not encouraged their use. The National Park Service has successfully used a simple, inexpensive sand ladder design at Fort Funston for access down the steep bluffs. The City is required

to install and maintain at least two sand ladders, of a similar design, between Noriega and Taraval.

7. Potential Additional Changes in the Great Highway Project. At recent community meetings and hearings, opposition to elements of the Great Highway project has been expressed by residents of the neighborhood. A major concern expressed by residents is the proximity of the proposed new highway to houses along the Lower Great Highway. The old northbound (easterly) lanes of the Great Highway were 85 feet from the west curb of the Lower Great Highway, whereas the new highway would be an average of 40 feet from the Lower Great Highway, with some places as close as 25 feet. The residents have expressed concern over increased noise, traffic safety on the new road, the reduction in green space between the new highway and the Lower Great Highway, and the loss of the existing trail near the Lower Great Highway.

The City is presently exploring several different sketch plans in an effort to satisfy residents' concerns. One option includes moving the new highway slightly further west, dampening the curves, and narrowing the median in order to gain greater separation between the new highway and the Lower Great Highway. With greater separation, the recreational trails could be moved partially or completely from the west to the east side of the new highway. The result could be a design which better meets the goals of area residents while maintaining the curvilinear concept of the City's Master Plan.

The Commission is concerned with the residents' desire to improve the area east of the new highway. At the same time, the Commission has an obligation to protect the area west of the new highway, including the beach, as a recreational resource. The Commission finds that a compromise design for the highway can be approved under strict limitations. The new highway may extend up to 40 feet west of the sewer box between Lincoln Way and Noriega Street where observed erosion has been the smallest and between Taraval Street and Sloat Boulevard where the highway necessarily extends west of the box to connect with the existing lanes of the Great Highway Extension. (Where the highway extends west of the sewer box, the trigger line should be measured from the highway, except that to prolong the period of time before the trigger line is exposed, it should be no more than 80 feet west of the box in any location.) Adjustments in median width and curve radii may be made in order to maximize the separation of the new road from the Lower Great Highway. One or both recreational trails may be relocated to the east side of the new highway, so long as two trails, one for hikers and bicyclists and one for runners and equestrians, are maintained in the plan. Plans showing the redesign concept finally selected by the City and incorporating the elements described in these findings and conditions shall be submitted to the Executive Director for his review and approval prior to construction of the project.



Vicinity Map

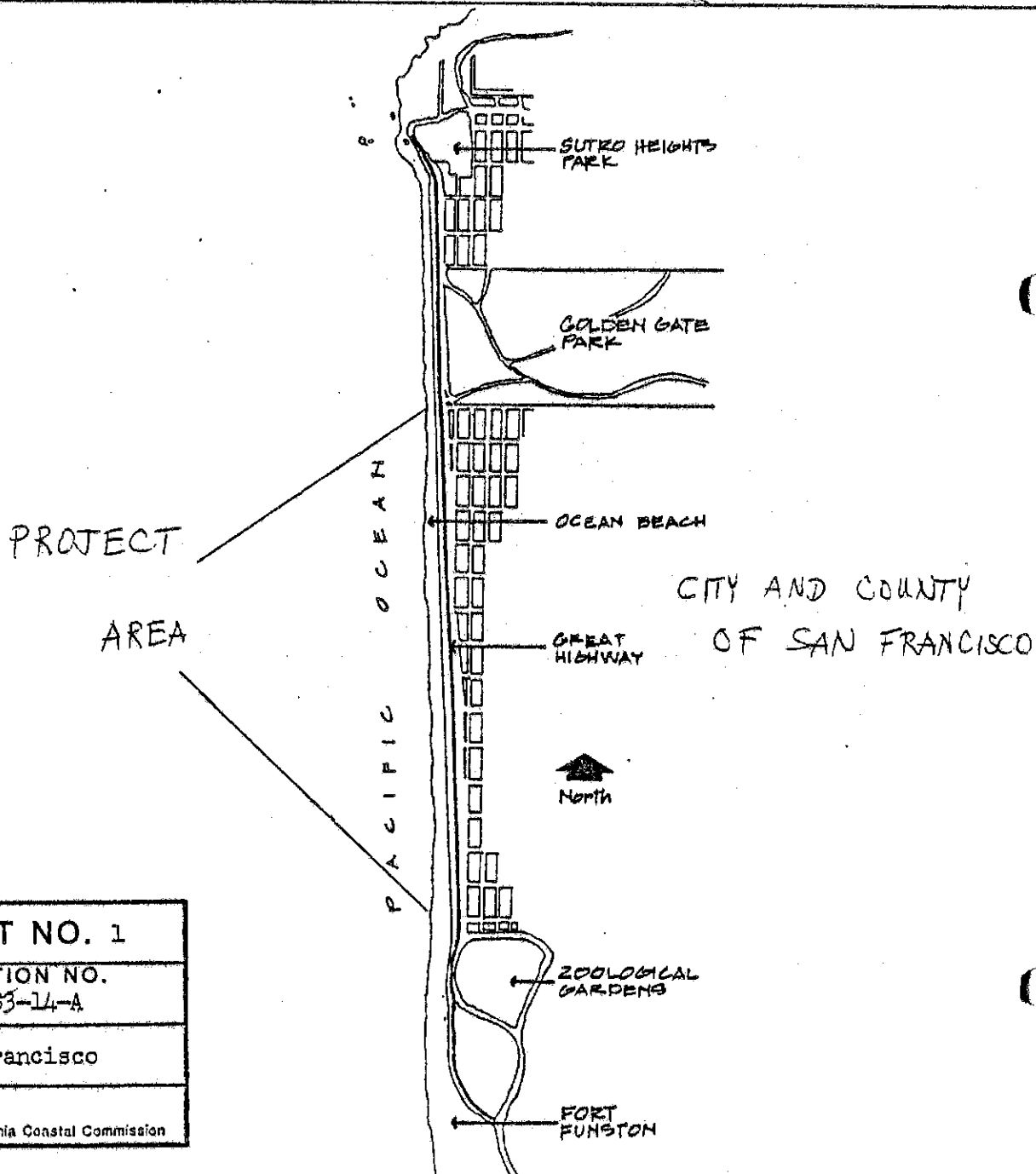



EXHIBIT NO. 1
APPLICATION NO. PW 2-83-14-A
San Francisco
 California Coastal Commission

PACIFIC OCEAN

BEACH

RECREATIONAL TRAILS

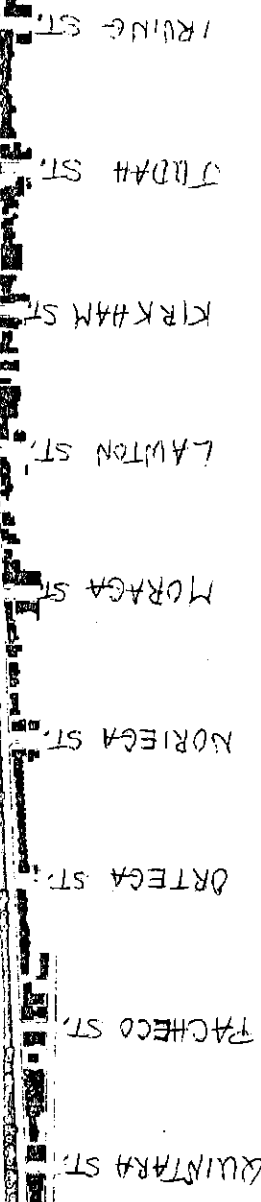
UNDERCROSSING (TYPICAL)

NEW GREAT HIGHWAY

PUNE AREA (TYPICAL)



GOLDEN GATE PARK



SUNSET RESIDENTIAL DISTRICT

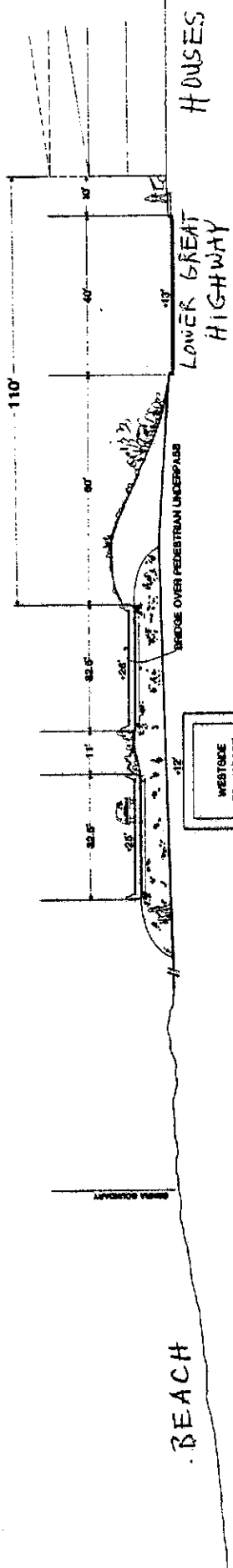
NOTE: AMENDED PLAN
 SUBMITTED TO COMMISSION
 DOES NOT SHOW CLOSURE
 OF LOWER GREAT HIGHWAY
 BETWEEN IRVINE AND KIRKHAM
 STREETS AS INDICATED ABOVE

SCHEMATIC GREAT HIGHWAY
 REDESIGN

JANUARY 1983


MICHAEL PAINTER & ASSOCIATES
 DEPARTMENT OF PUBLIC WORKS
 CLEAN WATER PROGRAM





SECTIONAL VIEW,
LOOKING NORTH

PROPOSED CURVILINEAR ROADWAY (HIGH POINT)

EXHIBIT NO. 3
APPLICATION NO. PW 2-83-14-A
San Francisco
 California Coastal Commission

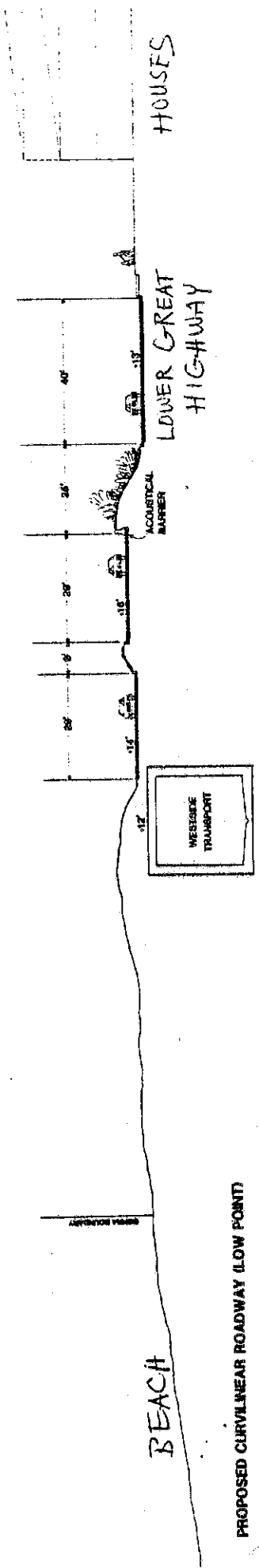

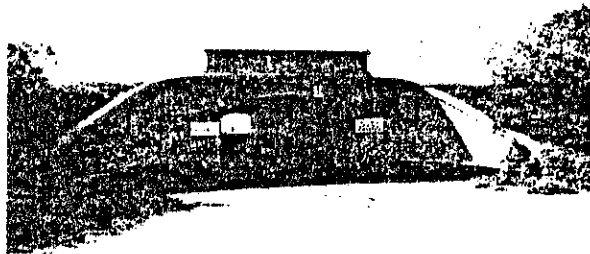
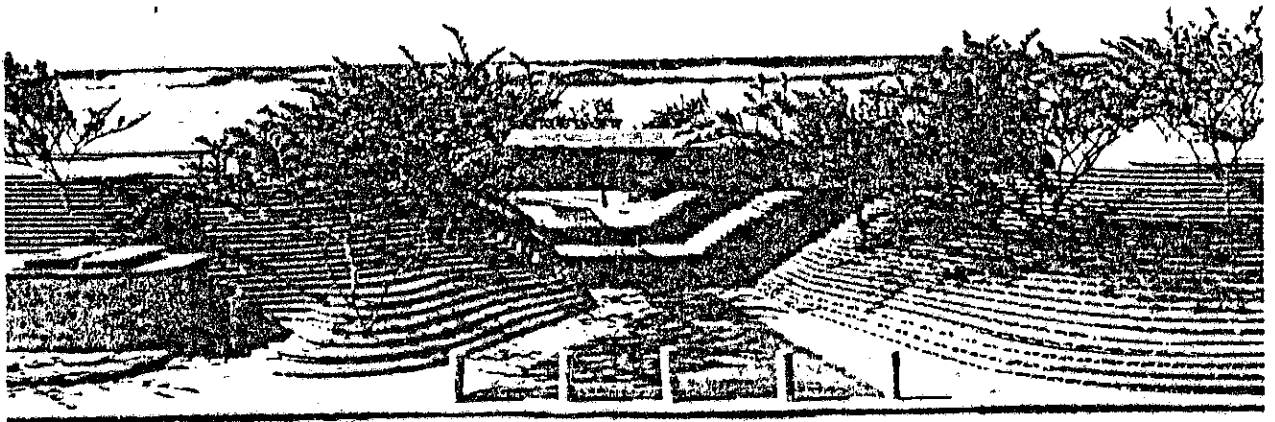


EXHIBIT NO. 4
APPLICATION NO. FW 2-83-14-A
San Francisco
 California Coastal Commission


PEDESTRIAN ACCESSWAYS

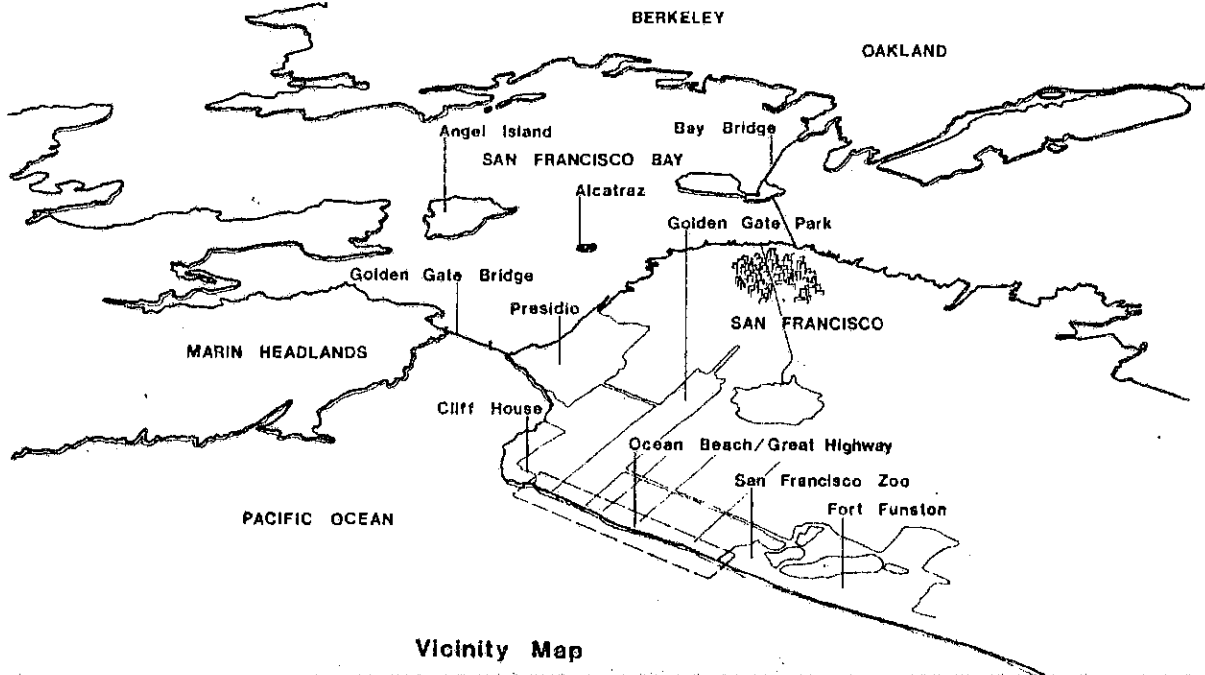


EXISTING DARK TUNNEL



MODEL OF PROPOSED UNDERCROSSING

EXHIBIT NO. 5
APPLICATION NO. PW 2-83-14-A
San Francisco
 California Coastal Commission



Vicinity Map

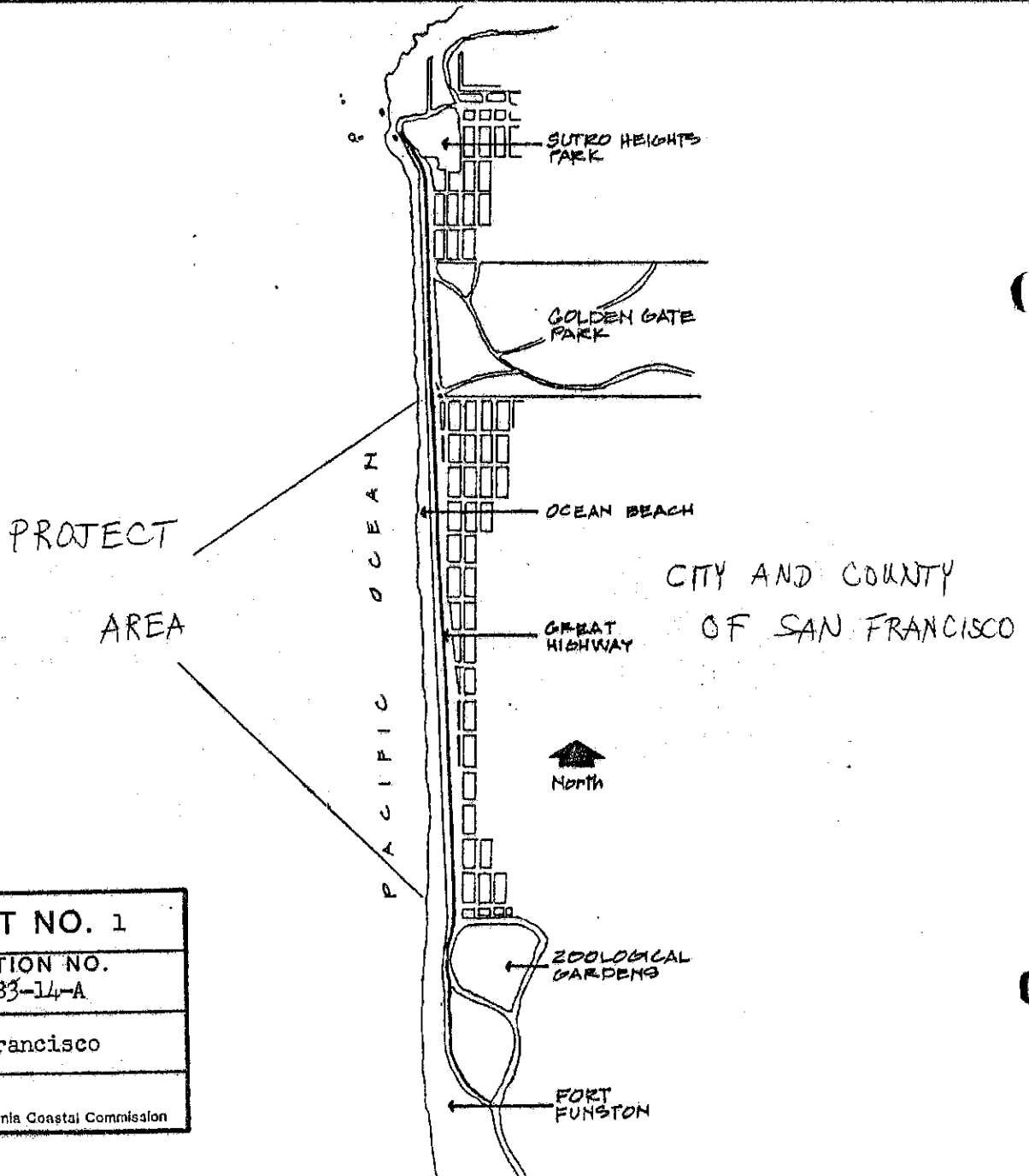

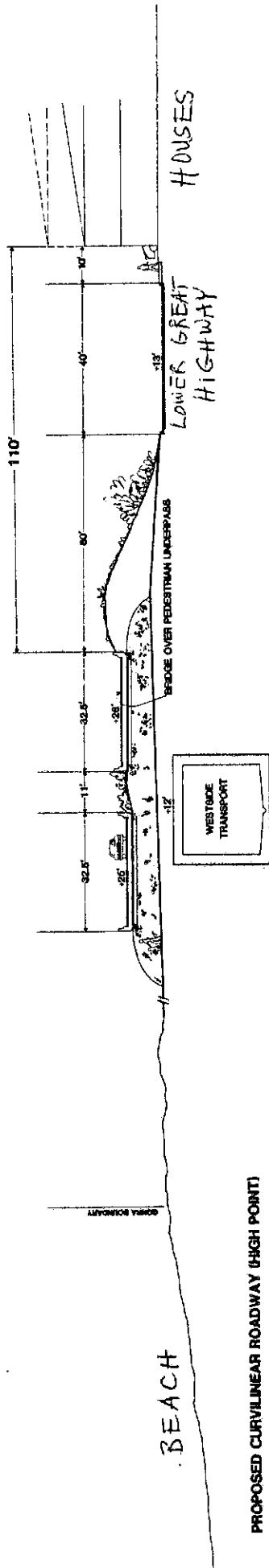



EXHIBIT NO. 1
APPLICATION NO. PW 2-83-14-A
San Francisco
 California Coastal Commission



SECTIONAL VIEW,
LOOKING NORTH

PROPOSED CURVILINEAR ROADWAY (HIGH POINT)

EXHIBIT NO. 3
APPLICATION NO. PW 2-83-14-A
San Francisco
 California Coastal Commission

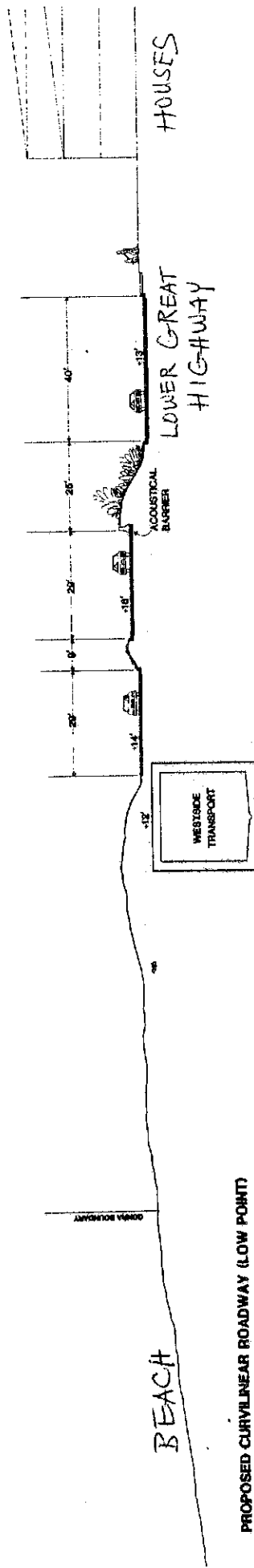

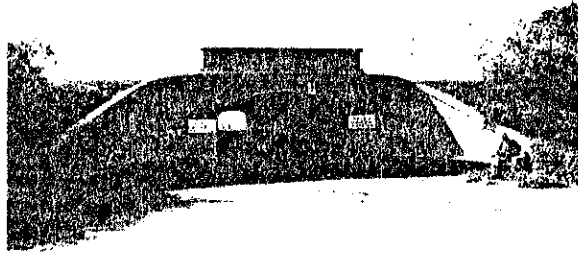
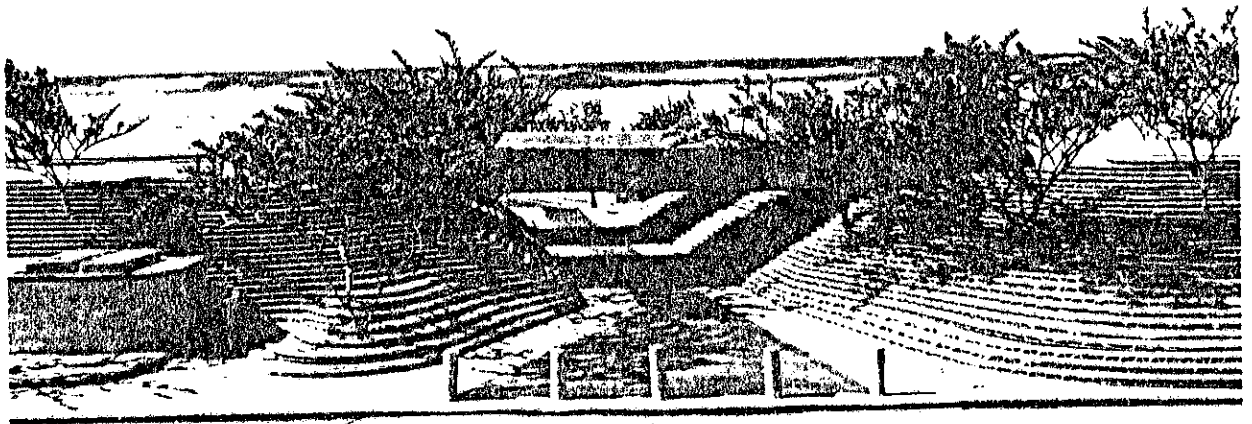


EXHIBIT NO. 4
APPLICATION NO. PW 2-83-14-A
San Francisco
 California Coastal Commission


PEDESTRIAN ACCESSWAYS



EXISTING DARK TUNNEL



MODEL OF PROPOSED UNDERCROSSING

EXHIBIT NO. 5
APPLICATION NO. PW 2-83-14-A
San Francisco
 California Coastal Commission

Not Adopted

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

January 13, 1984

TO: COMMISSIONERS, INTERESTED PUBLIC

FROM: RICHARD G. RAYBURN, NORTH COAST DISTRICT DIRECTOR

SUBJECT: REQUEST FOR AMENDMENTS TO CITY OF SAN FRANCISCO CLEAN WATER PROGRAM
PUBLIC WORKS PLAN AND SPECIFIC PROJECT APPROVALS (PW2-83-14-A)

Background

The Public Works Plan for San Francisco's Clean Water Program projects at Ocean Beach was approved by the Coastal Commission on June 6, 1979. The Public Works Plan covered the entire range of wastewater collection, storage, treatment and disposal facilities in the coastal zone. At the same time that the Public Works Plan was approved, three Specific Projects were approved under the Plan. The three Specific Projects are the Westside Transport and Pump Station (already completed), the Restoration of the Great Highway, and the Ocean Outfall.

The Commission's review of the Public Works Plan and Specific Projects focused primarily on three issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the projects into conformity with the Coastal Act, the Commission imposed conditions on the Public Works Plan and Specific Projects to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during and after construction, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a lengthy construction period. Since 1979, four amendments to the Public Works Plan and Specific Project approvals have been approved by the Commission. These amendments affect primarily the alignment of the restored Great Highway, future shoreline protection measures, the size and construction methods of the Ocean Outfall, and the design of the Pump Station.

Procedures

Sections 13365 through 13371 of the Commission Regulations provide for the review of amendments to Public Works Plans. Under the Regulations, the Executive Director shall determine whether or not a proposed amendment is minor in nature. If the Executive Director determines that the proposed amendment is not minor or if the proposed amendment affects conditions required in the Public Works Plan for the purpose of protecting a coastal resource or coastal access, then the amendment request shall be set for a regular hearing before the Commission. To approve an amendment to the Public Works Plan, the Commission must find that the amendment is in conformity with the provisions of the Coastal Act of 1976, including specific factual findings that the development is in conformity with Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

The Executive Director determined that the proposed amendments, some of which affect conditions previously imposed, were not minor in nature. Therefore, the

amendment requests were the subject of a public hearing on June 10, 1983. The hearing was continued; since then the City has held additional public hearings and on September 19, 1983 modified the amendment request to include the alignment described below and a protective structure at an unspecified location.

Summary of Proposed Amendments

The applicant has requested the following amendments to the Public Works Plan and Specific Project approvals:

- 1. Changes in the alignment of the new Great Highway, moving it westerly to a point 30' east of the City - Golden Gate National Recreation Area boundary line and building a four-lane straight roadway.
- 2. Revision of Specific Project Condition 9 to allow construction of a protective structure and to delete the requirement for sand replenishment.
- 3. Deletion of boardwalks connecting the pedestrian underpasses with the beach, requiring deletion of Specific Project Condition #4.
- 4. Change from a 5-year dune landscaping guarantee to a 3-5 year variable guarantee period, requiring amendment of Specific Project Condition #5.

Although not specifically requested as amendments by the City, the following changes also require action by the Commission:

- 5. Deletion of the stairway over the Lincoln Way emergency outfall, requiring amendment of Specific Project Condition #7.
- 6. Postponement of reconstruction of the Great Highway between Fulton Street and Lincoln Way, requiring amendment of Specific Project Condition #3.
- 7. Deletion of the requirement to recreate the dune field west of the new Great Highway between Noriega Street and Sloat Boulevard, requiring amendment of Specific Project Condition #3. The City proposes to substitute landscaping of the area, phased to coincide with construction of the protective structure, and to continue interim measures to reduce blowing sand pending completion of construction.

SYNOPSIS

The City of San Francisco has requested an amendment to the Public Works Plan and Specific Project Approvals that would in part allow for construction of a seawall between Lincoln Way and Sloat Boulevard (about 11,000 feet) and a westerly relocation of the Upper Great Highway. The City's preferred location of the seawall is on land owned by the Golden Gate National Recreation Area (GGNRA). The staff report recommends that the seawall be located on City property, 50 - 70 feet east of the City preferred location. As requested by the City, the west curb of the Upper Great Highway would be relocated about 45 to 65 feet west of the Commission approved (as amended) alignment or 30 feet east of the City/GGNRA property line. The staff recommendation could allow the highway to be located approximately 25 - 45 feet west of the Commission-approved location, depending on final seawall design and road setback from the seawall. The City has requested deletion of the presently required sand replenishment program. Staff continues to believe the program is necessary to the protection of Ocean Beach and should not be deleted.

STAFF NOTE:

The amendment requested by the City involves a major change in the basic concept of the shoreline proposed for Ocean Beach. As previously approved by the Commission, the Public Works Plan allowed the City to locate the sewer in an alignment subject to erosion with the understanding that a long term beach replenishment program would be implemented, and the Great Highway alignment would be shifted further east where it would be protected by the sewer transport structure. Although the beach replenishment program has been changed somewhat by both legislation and amendments implementing the legislation, it has remained an element of the project. In its original approval, the Commission allowed construction of the sewer transport in an area subject to erosion only because the project would eliminate the existing hazard to the Upper Great Highway by moving it further from the surfzone and because the City proposed a beach nourishment program that guaranteed dry sand at least 50 feet wide. These improvements and guarantees were found to improve the recreational qualities of the beach and avoid the need for a protective device. Now the City proposes to move the highway seaward and eliminate the sand replenishment program. In order to protect the highway at its more exposed location, the City proposes to construct a protective structure. Although not specified in the amendment request, City representatives indicate their preference for a revetment approximately 71 feet wide that would cover both beach area and the dune face. The City's preferred alternative would be located entirely on land owned by the Federal government and managed for public recreation as part of the Golden Gate National Recreation Area (GGNRA).

The staff does not believe that any of the City's three alternative designs would protect the valuable public recreational resources of Ocean Beach. Alternative 1, the only design that is located on land within the City's jurisdiction, features a vertical wall at the elevation of active shoreline processes. This alternative design maximizes scour and adverse effects on the beach. Alternatives 2 and 3 are both located on GGNRA property. Alternative 2, the City's preferred proposal, would in the City's consultants' own words result in 60 feet less beach. Since much of Ocean Beach is an eroding shoreline, that design could result in the elimination of most winter recreational use and substantially less summer recreational area. Finally, the City's consultant has recommended beach nourishment as an element of all alternatives, but the City's position is that the responsibility for nourishment lies with the landowner. The City has only agreed to "seek funds to implement a shoreline protection plan by 1985", which is in direct conflict with the City's previous agreement on nourishment and the position of the GGNRA. Given the City's lack of authority to construct a project on GGNRA land, the adverse effects of a seaward location on beach recreation, the adverse effects of seawalls, and the lack of a commitment to beach nourishment as recommended by the consultants, staff believes that the proposed seawall must be denied or moved landward, at least to the point where it is located on City property. Therefore, the staff recommends approval with conditions moving the seawall landward, and continuing the nourishment plan, as follows.

STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution:

I. APPROVAL WITH CONDITIONS

The Commission hereby approves, subject to the conditions below, the proposed amendments to the Public Works Plan and Specific Project approvals described herein, on the grounds that the proposed development, as amended and conditioned, is in conformity with the provisions of the California Coastal Act of 1976 including the provisions of Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

II. CONDITIONS

Specific Project Conditions

A. Amended and Added Conditions

3. Phasing of Restoration. Each phase of the construction of the Westside Transport shall include restoration of the highway and creation of the dune field for that portion of the shoreline, with the following two exceptions.
 - a) No later than one year from the date of Commission action on Amendment #PW 2-83-14-A, the City shall reconstruct the Great Highway between Fulton Street and Lincoln Way, or shall report to the Commission on progress in securing federal, state, or local funding for reconstruction of the highway, and shall submit for the approval of the Executive Director a timetable for reconstruction of the roadway.
 - b) Prior to final creation of the landscaped dune field (or approval by the Commission of a substitute approach) for the portion of the shoreline between Noriega Street and Sloat Boulevard, the City shall prepare a Beach Nourishment Plan, as required by Section 5, Chapter 1007, 1981 California Laws, which shall be designed to counter the effect of future erosion and which shall ensure the integrity of Ocean Beach as a recreational resource. At a minimum, the City shall contribute \$100,000 toward the preparation of this Plan. (This shall be in addition to the existing monitoring requirements pursuant to original condition 12.) The Beach Nourishment Plan shall contain or provide for appropriate funding of beach restoration measures. The City and County of San Francisco shall contribute a minimum of six hundred twenty-five thousand dollars (\$625,000) to the implementation of this plan. The Plan shall be submitted to the California Coastal Commission prior to the operation of the Westside Transport for a determination by a majority vote of the membership of the Commission that the Plan is adequate to ensure the integrity of the beach area as a recreational resource. The Plan shall be promptly implemented following any such determination.

During the construction of the seawall a drift fence shall be maintained on the scarp face between Noriega and Taraval Streets.

When the seawall construction is completed, the remaining lanes of the old Great Highway shall be removed. Sand removed during excavation of the seawall shall be placed upon the seawall to create as natural an appearance as possible. European Beach grass or other plantings satisfactory to the National Park Service and sand fencing shall be installed to control blowing sand until final creation of the landscaped dune field (or approval of a substitute approach).

4. Beach Access. The City shall provide a means of beach access acceptable to the National Park Service over the protecting dunes that will prevent wind erosion of bare sand surfaces resulting from heavy foot traffic on vegetated dunes.
5. Dune Planting. The City shall provide an irrigation system and shall guarantee the success of dune planting for a period of 5 years, or a lesser period if so provided in a Maintenance Agreement which is jointly signed by the City and the National Park Service. Design of the irrigation system, final contours, planting and fertilization schedules, and plant selection shall be approved by the National Park Service.
7. Access Over Overflows. The existing overflow structure near the end of Vicente Street shall be modified to provide decking, railing, and steps on the north and south sides and a railing on the top to allow lateral access landward of the surf zone.
8. Relocation of Westside Transport and Restored Great Highway. Consistent with the City's proposed alignment, transport shall be located with the mid point of the structure 108 feet east of the west curb of the existing upper Great Highway. The reconstructed upper Great Highway may be a straight road. It shall be located east of the structural protection, with the exact alignment to be determined during review and approval of final plans. One or both of the recreational trails may be located east of the reconstructed highway.
9. Future Shoreline Protection Measures.

Redesign. The concept of constructing a stone revetment of revised design under either of the alternatives described herein is approved. Prior to transmittal of the permit, the City shall submit revised plans selecting either Alternative A or Alternative B to the Executive Director for his review and approval in writing. Revised plans shall include further engineering detail demonstrating the design wave and associated rock sizes, and defining more precisely the elevation of the highest level of reinforcement and the elevation of the toe-stone under long term erosion trends over the life of the structure. The alternatives conceptually approved are:

Alternative A. The concept of a minimal width revetment located entirely on City property landward of the GGNRA boundary. Unless revised plans demonstrate conclusively that alternative designs are necessary for the revetment to function, the revetment shall be toed at 0 mean lower low water (MLLW), and shall have a face slope no gentler than 2:1 to minimize encroachment onto the beach. It shall

include armoring, as recommended by the City's consultants, to an elevation which will prevent overtopping from runup. The minimum elevation of the revetment crest shall be 25 feet above MLLW.

-OR-

Alternative B. The general concept of constructing Alternative 2 as recommended by the City's consultants, and entirely on City property, is approved as modified by this condition. Unless revised plans and information demonstrate conclusively that the inclusion of the rock apron will reduce scour during design storm conditions, the toe of the main revetment shall be established at 0 MLLW.

In conjunction with either of the above alternatives, all visible existing rubble shall be removed from the beach between Lincoln Way and the shoreline in front of the proposed pump station, except for material specifically provided for as part of the approval of final plans. Future placement of rubble is prohibited. The City shall place markers and perform sand replenishment as previously required unless specifically modified during Commission review and approval of the Beach Nourishment Plan.

14. Existing Great Highway. (Added condition). The asphalt pavement of the existing southbound lanes of the old Great Highway shall be removed upon completion of construction of the new Great Highway. Immediately following removal of each section of the existing highway, adequate measures, subject to the review and approval of the Executive Director, shall be taken to stabilize sand in the area between Noriega Street and Sloat Boulevard where new dunes will not be created at this time as a part of this project. If no structural protection measures are in place pursuant to other conditions of this approval, at least two sand ladders, of a design acceptable to the National Park Service, shall be installed and maintained to provide access to the beach between Noriega and Taraval Streets. The sand ladders shall remain in place until such time as an alternative means of providing access to the beach has been approved by the Executive Director.
15. Final Plans. (Added condition). Prior to the commencement of construction of the new Great Highway, the City shall submit for the review and approval of the Executive Director plans for the highway, the protective structure, the recreational trails, the pedestrian accessways, and all other features described in these findings. The plans shall include safe and adequate access over the seawall in a manner acceptable to the Executive Director, in locations and at elevations convenient to the five required undercrossings. If only a portion of the protective structure is constructed, a proportionate amount of access shall be provided, in locations and in a manner acceptable to the Executive Director. One or both recreational trails may be relocated to the east side of the new highway, so long as two trails, one hard-surfaced and one semi-hardsurfaced, are provided. Five pedestrian undercrossings shall be provided at Judah, Lawton, Noriega, Quintara and Taraval Streets. A vista parking lot for approximately 35 cars shall be provided west of the new Great Highway opposite the end of Irving Street.

B. Unchanged Conditions

All remaining conditions of the Public Works Plan and Specific Project Approvals not specifically amended herein remain in full force and effect.

III. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. Proposed Redesign of the Great Highway

The proposal for the new Great Highway which has been submitted to the Commission shows the following basic elements (including proposed amendments):

1. Substitution of a straight for a curvilinear four-lane highway. The presently approved plan for the new Great Highway extends from Lincoln Way to Sloat Boulevard. North and southbound lanes would be separated by a 17-foot wide median. Total width of the highway, including median and shoulders would be approximately 70-75 feet. Under the plan previously approved, the highway would extend generally no further west than the west edge of the Westside Transport sewer box, consistent with the Commission's previous Specific Project Approval. Where the road would curve furthest west, the east edge of the new roadway would lie approximately 70 feet from the west curb of the Lower Great Highway (or 125 feet from the nearest houses). Where the road curves furthest east, the edge of the road would lie 25-30 feet from the west curb of the Lower Great Highway (or 80-85 feet from the nearest houses). A three-foot high concrete "Jersey" barrier would be located on the east side of the new roadway where it curves closest to the Lower Great Highway. In addition to curving slightly from east to west, the road would rise and fall slightly, with high points over the pedestrian undercrossings and low points in between. In addition, the northbound (easterly) lanes would be elevated slightly above the southbound lanes in order to provide a better view for motorists.

The City now proposes to construct a four lane straight roadway approximately 75' in width with the west edge located 30' east of the City-GGNRA boundary line.

2. Pedestrian Accessways. Five pedestrian undercrossings are located at Taraval, Quintara, Noriega, Lawton and Judah Streets. (Presently available plans proposed for the curvilinear highway show the Lawton Street undercrossing as a deletable bid item, but this would not be consistent with the approved project.) These undercrossings provide pedestrian access from the Lower Great Highway to the beach. Boardwalks which were originally proposed to connect the undercrossings with the beach are now proposed to be deleted.
3. Recreational Trails. Two trails, each approximately 8 feet wide, were originally proposed to extend along the west side of the new highway from Lincoln Way south to Noriega Street. One trail would be hard-surfaced for bicycles and hikers, and the other would be surfaced with decomposed granite or a similar surface for runners and

equestrians. The trails would connect the pedestrian undercrossings at Judah, Lawton and Noriega Streets.

South of Noriega, the City proposed in April, 1983 to leave in place the existing southbound lanes of the old Great Highway (which would no longer be used for vehicles once the new highway is constructed). The City proposed at that time that the old highway lanes would serve as a temporary recreational trail connection between Noriega Street and Sloat Boulevard. City staff now indicates that the existing southbound lanes would be removed. They would propose to phase that removal to coincide with their anticipated phasing of seawall construction, so that the existing pavement could be used to provide access during construction.

The most recent amendment proposed would shift the trails to the east side of the new highway.

4. Dune Recontouring and Landscaping. North of Noriega Street, the plans prepared in April 1983 for the previously approved curvilinear highway included recontouring and planting of the dunes and installation of irrigation facilities. City staff indicates that south of Noriega, the planting is proposed to be installed only as far west as the southbound lanes of the Old Great Highway, and no dune recontouring or planting is proposed to be done west of the old highway.
5. Miscellaneous Improvements. Under the presently approved project, a vista parking lot for approximately 35 cars will be located west of the new roadway opposite the end of Irving Street. A new restroom building will replace the existing building on the Lower Great Highway at Judah Street. Existing restroom buildings at Wawona and Taraval Streets will be retained. Miscellaneous improvements such as bicycle racks, horse hitching posts, and picnic tables east of the new roadway were included in the original project description. No changes in the miscellaneous improvements have been requested by the City.

B. Coastal Act Policies and Objectives

In approving the conceptual redesign plan for the Great Highway in 1979, the Commission had two main goals under the Coastal Act: to improve public access, recreational opportunities, and the visual quality of the beach area; and to ensure that the project, although located on an eroding shoreline, would not compromise the existence of a sandy recreational shoreline during and after construction of the Westside Transport sewer box.

1. Improving recreational opportunities. The Great Highway redesign concept adopted by the San Francisco Board of Supervisors in 1977 called for removing the existing broad, flat, straight expanse of asphalt which encourages speeding and replacing it with a narrower, curving road designed to slow down traffic and improve views of the shoreline. Planting of the dunes with beach grass and other plants was intended to improve the area's appearance and help to reduce blowing sand which has frequently forced closure of the existing Great Highway and created a nuisance for nearby residents. Access to the beach was to be provided through crossings which would be grade-separated for safety and limited in number to reduce foot traffic through dunes.

Ocean Beach is located in a major urban area. It serves not only residents of the immediate neighborhood and of the City as a whole, but also visitors from all over the world who come to the Golden Gate National Recreation Area, of which Ocean Beach is a part. Ocean Beach is among the most popular units of the Recreation Area, and serves some two million visitors each year. The Commission found in originally approving the Great Highway Redesign concept that the improvement of the area would partially offset the adverse impacts on beach access of a lengthy construction period and the adverse impact of constructing the sewer box on what is recognized to be an eroding shoreline. The need to improve the Ocean Beach area for use and enjoyment of visitors and residents alike remains a goal of the highest priority.

2. Protecting the Sandy Beach. The Commission also found in 1979 that the project site is an eroding shoreline. Extensive testimony was presented to the Commission by shoreline experts and residents of the neighborhood which supported the conclusion that the Westside Transport sewer and proposed reconstructed Great Highway would be located generally seaward of natural high-water shorelines in recent historic times. The reason is that the existing Great Highway was constructed approximately 50 years ago on artificial fill that extended as much as 200 feet seaward of the natural shoreline. The Commission found that because of the artificial fill, the existing beach profile is over-steepened and out of equilibrium. The 1978 Shoreline Erosion Conference sponsored by the National Park Service agreed with other shoreline experts that without protective measures, further erosion will occur at Ocean Beach until the shoreline is approximately at the position of 1852, or about at the Lower Great Highway. Since the Westside Transport sewer is constructed west of the historic shoreline, it is likely that the sewer will be exposed some time during its lifetime, unless protective measures are taken. The City designed the transport to withstand safely the most extreme wave conditions predicted.

In originally approving the Great Highway conceptual design, the Commission sought to protect the new roadway from shoreline erosion by restricting the highway to an alignment generally above or east of the sewer box. This location also "protected" the beach from visual intrusion and physical effects of a protective device. At the request of the City, the Commission approved an amendment to the Public Works Plan in 1980 to allow the new highway to extend slightly west of the sewer (up to 20 feet) where the roadway would be adequately supported by the sewer. This amendment was made in order to preserve the curvilinearity of the highway which is presently an element of the City's Master Plan and Local Coastal Program.

The Commission's approval of the sewer construction on the beach was predicated on establishment of a sand replenishment program and a trigger line which was suggested by the City. Condition #9, as amended by the Commission in 1980, required placement of permanent markers in the sand 50 feet west of the sewer box or the highway, whichever is further west, to act as a trigger line for sand replenishment efforts. Whenever the markers would be exposed by erosion, that condition required the City to replenish the lost sand. Visible rubble west of the trigger line was required to be removed, and future placement of rubble as a protective measure was specifically prohibited. The City agreed to this approach.

As amended, Condition #9 required establishment of an escrow fund to pay for sand replenishment. In accepting this condition, the City expected federal

funds. These funds did not materialize, and the Legislature has abolished the escrow fund.

The Legislature at the same time required that the City prepare a Beach Nourishment Plan with the purpose of ensuring the integrity of the beach area as a recreational resource (Section 5, Chapter 1007, 1981 Laws). The City is required by this legislation to contribute \$625,000 toward implementation of the plan. This provision is included in the conditions of this approval. The plan is to provide for adequate funding, and shall be submitted to the Coastal Commission for a determination that it is adequate. Such a determination must be made prior to operation of the Westside Transport (now expected to occur by mid-1985).

Since the Commission approved the Public Works Plan in 1979, the evidence of a continuing erosion problem is, if anything, stronger than before. The storms of last winter (particularly in January, 1983) caused enormous losses of sand from Ocean Beach. Between Noriega Street and Sloat Boulevard, almost the entire volume of sand (some 236,000 cubic yards) from sewer construction which had been stockpiled for future recontouring into new dunes was lost to wave action. Additional sand was lost from the beach and the original bluffs. The City's shoreline consultant at that time, Richard Ecker, has stated that the sand stockpile south of Rivera Street acted as a buffer, preventing wave action from undermining the Upper Great Highway along the entire reach of shoreline between Sloat Boulevard and Noriega Street. The sand would have provided even more protection had it been properly contoured and less steep. Even with the presence of the stockpiled sand, emergency measures were necessary to protect the road from being undermined. Rubble dumped over the bluff at several locations provided additional protection to the road, although Mr. Ecker concluded that the rubble is not a permanent solution to wave-induced erosion.

The relevant sections of the Coastal Act guiding analysis of the City's amendment request are as follows:

Section 30235.

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

Section 30253.

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. (Emphasis added)

The Commission finds that erosion at Ocean Beach presents a continuing hazard to a new highway and other improvements as well as to the beach itself (the findings of the Commission on the Public Works Plan and Specific Project Approvals adopted on June 13, 1979 are hereby incorporated by reference.)

The Commission also finds that resolution of the beach erosion problem is the responsibility of the City, since the construction of the Westside Transport in a beach location rather than an inland location is the basic reason that structural measures are now proposed that could endanger the existence of the beach and dunes as a recreational and visual resource. The City also took this on as a way to "improve" beach recreation in return for potential long term impacts and the certain construction impacts. The City must make rapid progress toward such resolution. The Beach Nourishment Plan discussed above must be submitted to the Coastal Commission for a determination that it is adequate to ensure the integrity of the beach area as a recreational resource prior to operation of the Westside Transport, which is now estimated to be less than two years away. Although the erosion threat has been the subject of Commission findings in 1979, 1980, and 1982 and the subject of numerous other reports and studies, progress on preparing a Beach Nourishment Plan has been extremely slow. In particular, a majority of the littoral studies required by original Condition 12 are not proceeding in a timely manner, and that information is essential to developing an approvable Beach Nourishment Plan.

The City has formed an Ocean Beach Management Advisory Board which has discussed the outline of a beach protection plan. The City has discussed with the Army Corps of Engineers a study of erosion at Ocean Beach, and now proposes to carry out such a study under the supervision of the Corps, provided that the Board of Supervisors appropriates \$100,000 for the study. Such a contribution is included in the conditions of this amendment.

The proposed amendment involves shoreline structures which will affect the configuration of the shoreline and the beach profile and in all probability have some degree of adverse impact on the shoreline. That shoreline structures, including vertical seawalls and rock revetments, have adverse impacts on the shoreline is accepted among experts in the field of coastal engineering and geology. In Saving the American Beach: A Position Paper by Concerned Coastal Geologists (March 1981) which was signed by 94 experts in the field of coastal geology, it is stated...

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

degrade the environment and eventually help to destroy the areas they were designed to protect.

The Commission's previous decision on the Public Works Plan recognized the erosion hazard at Ocean Beach and provided for landward relocation of the Great Highway so that a protective device would not be needed. The presently proposed shoreline protection device is not to provide protection to an existing structure as allowed for in Coastal Act Section 30235 but rather to the proposed realignment of the Great Highway and therefore raises a question of adverse impacts on shoreline sand supply and consistency with 30235.

Generally, it is recognized that large structures such as proposed by the City will have impacts on sand supply and beach profiles. As stated in a publication by the State Department of Boating and Waterways (formerly called Navigation and Ocean Development), Shore Protection in California (1976),

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

This impact is reiterated in the paper, "Economic Profiling of Beach Fills" by Herman Christiansen which is contained in the proceedings of Coastal Sediments '77 (November 1977). It states:

Observations at some of the investigated beaches have shown that an optimal profile becomes instable, if structures, such as rocks, groins, revetments, piles, stairs etc., are placed within the wave action zone of a beach. Steady erosions, caused by complex high turbulent surf currents, lead to heavy sand losses.

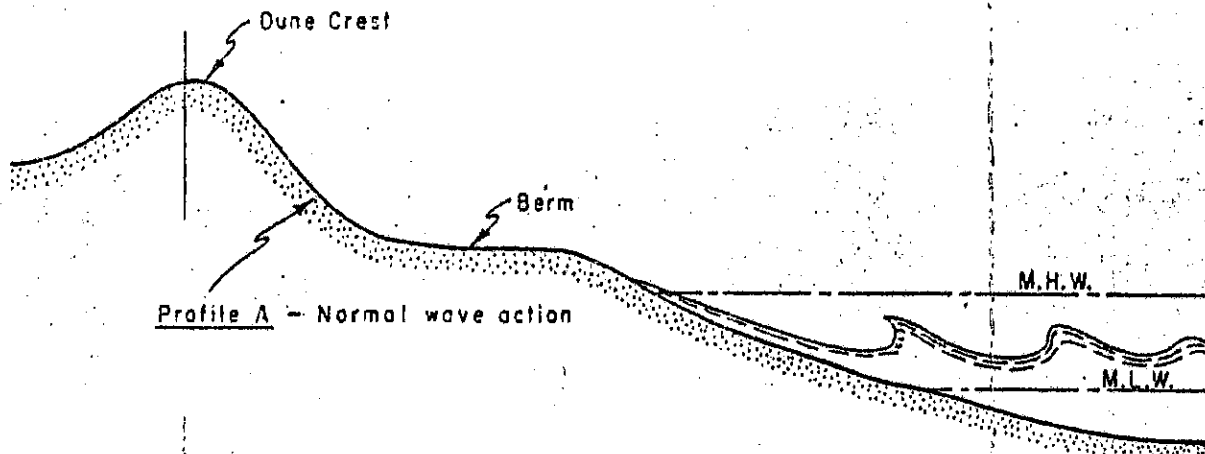
Although they do not have as great an impact as smooth, vertical seawalls, rock revetments, such as the one proposed by this amendment, have effects on the beach sand in front of and around the structure. A rock seawall operates on the principle that the wave's energy is dissipated within the voids of the wall, therefore producing less reflected wave energy. However, the rock seawall will still reflect enough energy to change the beach profile, steepen the beach, and cause accelerated erosion of the downcoast area. One mechanism that accounts for rock walls' impact on beaches is stated in "The Role of Wave Reflection in Coastal Processes" in Coastal Sediments '77 by Richard Silvester:

Rubble-mound structures can reflect long period wave components with little dissipation and hence short-crested phenomena [waves] in front of and downcoast from them should be considered in design and maintenance.

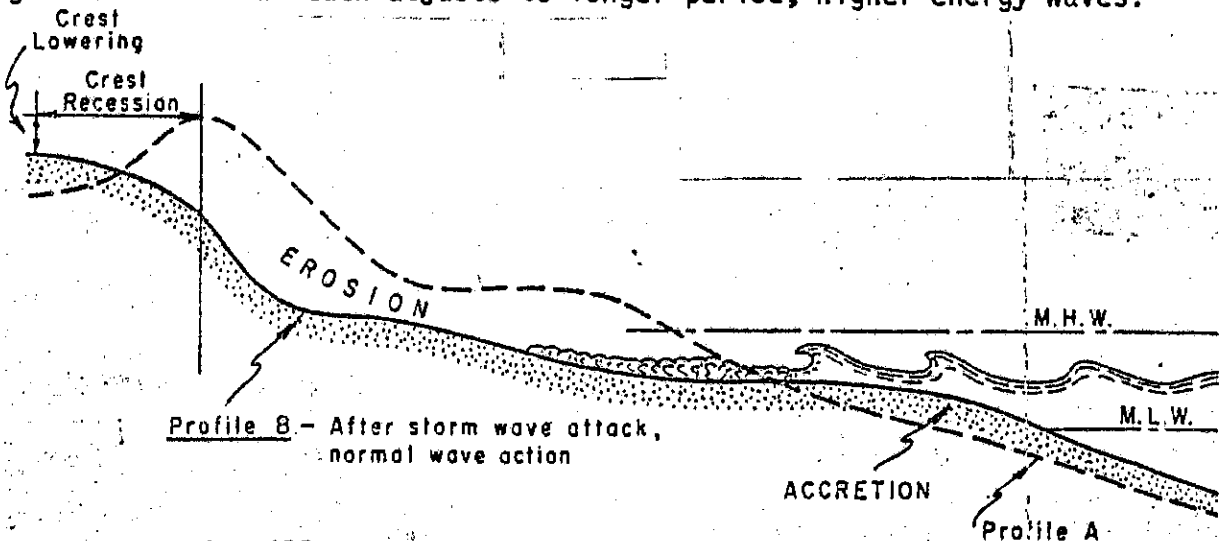
Moreover, the literature on coastal engineering repeatedly warns that unprotected properties adjacent to the seawall may experience increased erosion.

A rock wall invariably protrudes seaward from development which exacerbates this situation. Actual field observations have verified this concern, see for example the paper by Gerald G. Kuhn of the Scripps Institution of Oceanography entitled "Coastal Erosion along Oceanside Littoral Cell, San Diego County, California" (1981). In this paper, it is written and pictorially illustrated that erosion on properties adjacent to rock seawall is intensified when wave run-up is high.

A discussion of the physical processes of wave runup on a natural shore will help establish the effects of seawalls on shoreline processes. Sandy beaches are dynamic systems, the individual grains of sand adjust quickly to reflect both the overall supply of sediment and the ongoing forces of waves. A typical non-storm profile of the beach looks like this: (from "Shore Protection in California, DNOD, 1976).



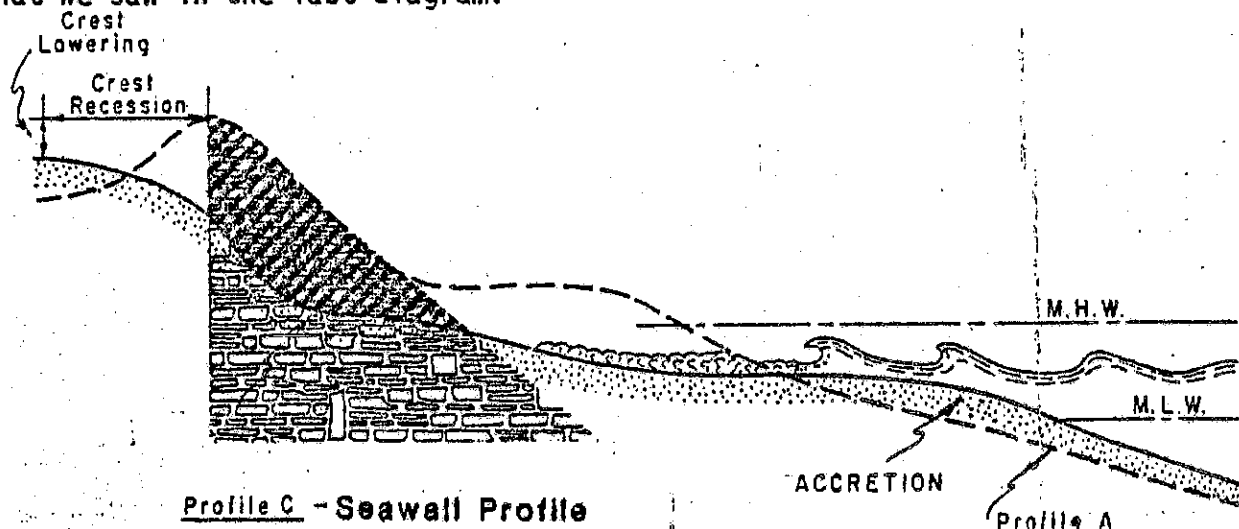
At this profile, the shore has adjusted to a low-energy wave environment, reflecting the short period, low energy waves that strike the beach. The next diagram shows how a beach adjusts to longer period, higher energy waves:



This cross section illustrates several important things about the beach's adjustment to the higher energy of striking waves. First, the wave energy has eroded material from the foreshore and deposited the material off-shore in a bar. Second, the shoreline profile flattens to absorb the greater amount of wave energy, even with waves breaking on the bar. These adjustments are

fundamental to the shore's adjustment to high wave energy. The migration of the material to an off-shore bar causes waves to break in deeper water, and begins the process of energy dissipation far from the inland extent of the beach. The dynamic process of eroding material from the foreshore enables the shoreline to absorb wave energy. This process goes on continuously. If a given shore profile is not sufficient to absorb wave energy without further erosion, additional material is moved from the shore to the bar to increase the distance between the bar and the inland extent of the wave uprush. The value of the bar cannot be overemphasized; it is on the bar that winter waves break, and the dynamic processes of the actual shoreline are affected by wave uprush, not actual breaking waves.

The next diagram was made by superimposing a revetment on the shoreline profiles that we saw in the last diagram:



Profile C - Seawall Profile

This diagram illustrates dramatically the effect of a seawall on the shoreline. The material shown in cross-hatching is the material formerly available to nourish the bar. This material is now unavailable because it is either behind the seawall, or has been replaced by the seawall. As a result, the bar receives less nourishment. This makes the bar less effective in causing waves to break offshore, and results in greater wave energy being felt on the actual shoreline. That energy is then dissipated by uprush and reflection against the face of the revetment. However, since more energy comes on-shore, more energy is reflected and sand is scoured from the base of the revetment.

The City, through its consultants, argues that the shoreline processes at Ocean Beach are substantially different because dune materials are too fine to be a significant factor in feeding beach processes. Thus, the City argues that the loss of dune materials will not affect the formation of the nearshore bar--indeed, that the effects of the San Francisco Bay bar may overwhelm the normal nearshore processes. In effect, the City proposes to armor the front of the dune, thereby making revegetation easier and reducing blowing sand. The City's argument that the dune area is not large enough to provide complete protection for the box and the Great Highway does not, however, mean that the dunes have no value as protection and as an element of shore processes. Indeed a substantial, revegetated dune should be capable of withstanding ordinary and moderately severe storms. Further, even the fine sediments in the dune system can nourish the nearshore profile which was oversteepened by construction of the Great Highway. The Commission therefore finds that the dune system must be

preserved as part of the requirement of Section 30235 to eliminate or mitigate adverse impacts on local shoreline sand supply. Revegetation remains the selected strategy for reducing blowing sand. The City further argues that, while the placement of the revetment as proposed may indeed reduce the beach width by 60 feet or more, such reduction is not important because the summer beach is 170 feet wide, and the winter beach is 20 feet wide. This portion of the City's reasoning, however, ignores the long-term erosional trends at Ocean Beach. The Commission, the National Park Service, and the City devoted a great effort to analyzing shoreline erosion at Ocean Beach in the initial preparation and approval of the public works plan. An independent coastal engineer, Dr. Cyril Galvin, prepared 4 reports on erosion, with recommendations for sand nourishment and analysis of shoreline recession trends. ("Design Recommendations for Ocean Beach" et al, 1979) Various shoreline recession rates of between 1 and 3 feet a year were reported by various observers, and the overall conclusion of the consultant was that "If the results of all human activities at Ocean Beach never had happened, the shoreline would now exist slightly east of the mean shoreline that existed around 1850." Dr. Galvin further concluded that this equilibrium position, if unaltered, "...would shift slowly inland, controlled by the rise of sea level and the erosion of the Fort Funston bluffs." The Commission affirms its previous conclusion that the Ocean Beach shoreline is presently an eroding shoreline, with erosion caused by the rise in sea level, retreat of the Fort Funston bluffs, and placement of the Great Highway on a causeway seaward of the "natural" "equilibrium" location. It should be noted that the erosion is not uniform; in fact some areas may even accrete while others erode.

Thus, any analysis of the effects of the proposed seawall must also consider the long term erosional trends of 1-3 feet per year, and the tremendous seasonal fluctuations on beach width-- on the order of 200 feet or more. The City's argument that Ocean Beach will still have sandy beaches is valid only during the short term, or if beach replenishment is practiced. The City's current posture towards nourishment, stated in their letter of January 3, 1984 is:

However, maintenance of the beach, including nourishment, is the responsibility of the Federal and State Governments who are the property owners, the National Parks Service and State Lands Commission. It would be appropriately addressed in GGNRA's maintenance budget.

The City implicitly is arguing that erosion is due to a rise in sea level, rather than the effects of location of the Great Highway. The Commission disagrees. The "erosion problem" is caused by the presence of the City's structures. Without nourishment, the beach will narrow and steepen because it is located seaward of the expected "equilibrium" location and because of continuing erosion of the Fort Funston bluffs, the hard point that anchors the beach to the south, irrespective of any changes in sea level. With a narrowing beach, the presence of an additional 60 to 70 feet of beach becomes critical to whether there is any recreational beach at all, regardless of the direct effects of the seawall. Because of the nature of the beach use, which tends to be year-round regardless of weather conditions, if the beach is particularly narrow or non-existent in winter, recreational use would be substantially adversely affected. The Commission concludes from the opinion of experts and from an analysis of the process of shoreline dynamics that placement of a seawall within the areas of a shore affected by those processes adversely affects shoreline processes in front of the seawall as well as property on either end of the seawall. Obviously the impact of a seawall is greater the more often it is

exposed to wave attack and the more rapid erosion of sand (or rise of sea level), and seawalls located far up the beach have less impact than seawalls lower on the beach. However, since most of the coast of California, including this area, is subject to overall erosional processes, even a well-designed seawall adversely affects shoreline processes, especially when reviewed over the life of the structure.

The Commission finds that the probable negative impacts of the seawall must be weighed against the City's need to protect the proposed road alignment. The Commission recognizes that the seawall will probably change the beach profile by steepening it and increasing beach erosion around it. This is particularly true in the present case, where the protective device is part of an effort to maintain a shoreline seaward of its normal "equilibrium" position. As proposed by the City, the seawall is further seaward than necessary to protect the proposed location of the Great Highway, much less the location once proposed by the City and approved by this Commission; thus the structure would increase the magnitude of those adverse impacts. As noted earlier, none of the alternatives will retain a recreational beach without nourishment and the City is reluctant to commit the financial resources to nourish the beach. The further west the structure, the higher the nourishment cost, and the more important nourishment is to the recreational beach. Therefore, the seawall has been conditioned to require redesign to minimize encroachment onto the beach and to be located on lands under the control of the City. Serious consideration has been given to the possibility of allowing construction of the 20' wide stone apron on GGNRA property. However this alternative was not recommended due to probable delays in obtaining National Park Service approvals. Even if it were determined that legislation would not be required to allow construction on Federal land, at minimum a 50 year permit and additional compliance under NEPA would apparently be necessary. This process could entail delays up to a year or more. Some interested parties may argue that the Commission should continue to require beach nourishment as a feasible, less damaging alternative, rather than allow any protective structure. Beach nourishment may well be a feasible less damaging alternative; it is certainly less damaging to the beach. However, in spite of the City's previous commitment to move the new Upper Great Highway east to the alignment of the box as a mitigation measure for constructing the Westside Transport structure on an eroding beach, the Great Highway does presently exist, and Section 30235 allows for the use of such devices to protect an existing structure. In striking a balance between these factors the Commission finds the project consistent with Sections 30235 and 30253 only if the structure is located further landward to minimize the adverse effects and the City continues to be responsible for beach nourishment.

Given the adverse effects of seawalls on shoreline processes, the Commission must now turn its attention to the overall impact that these changed shoreline processes will have on public access. The public has an ownership right in the lands of the State seaward of mean high water as well as GGNRA lands. Because the ownership lies seaward of a mean water mark, the most extraordinary high and low tides are factored out. The tidal regime along the coast varies with the season and with the lunar cycles. Theoretically, tidal cycles also vary over an 18.6 year period in response to astronomical changes (Shore and Sea Boundaries Aaron Shalowitz, US. Department of Commerce 1962, p. 95). However, as a practical matter on a coast like California's where sediment supply has been substantially altered, the location of the lower and higher water lines are

determined largely by sediment supply. All of these processes are dynamic, and the beach varies to reflect the changes.

The public's ownership interest similarly varies with these changes, although the use of the "mean" tends to smooth out changes in public ownership. The important question to examine is what effect changes in shoreline processes have on public lands. We saw above that seawalls tend to steepen shorelines by reflecting wave energy and by starving the off-shore bar. This affects the public ownership by moving the mean high water line landward. But more importantly, this affects the public's ownership by tending to eventually fix the mean high water line at or near the seawall. This interference with a dynamic system then has a number of effects on the public's ownership interests. First, changes in the shoreline profile, particularly changes in the slope of the profile, alter the useable area under public ownership. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. This reduces the actual area in which the public can pass on their own property. The second effect on access is through a progressive loss of sand as shore material is not available to nourish the bar. The lack of an effective bar can allow such high wave energy on the shoreline that materials may be lost far offshore where they are no longer available to nourish the beach. The effects of this on the public are again a loss of area between the mean high water line and the actual water. Third, seawalls cumulatively affect public access by causing greater erosion on adjacent public beaches. This effect may not become clear until seawalls are constructed individually along a shoreline until they reach a public beach. Finally, seawalls interfere directly with public access by their occupation of beach area, and when materials erode from the seawall and roll onto the sandy beach where they present physical obstacles to access. The Commission recognizes the adverse effects of the proposed seawall on access, and further notes that the area adversely affected is a publicly-owned recreational area operated as a national resource. Only with conditions to limit the intrusion of the structure on the beach and restore the dune system after construction can the Commission find that the project would not interfere with public rights of access in conflict with Section 30211.

3. Beach Access. Some means of protecting the dune surface at beach access passageways or trails must be provided to prevent serious wind erosion. The original permit included boardwalks, which were designed to extend laterally from the western ends of the pedestrian underpasses out to the beach. The boardwalks were intended to encourage pedestrians to remain on the paths, rather than walking through the dunes, which are easily disturbed by foot traffic.

The City now contends that boardwalks would be quickly covered with sand and that vandalism would be a continuing problem. National Park Service officials, who patrol the area, agree that maintenance of boardwalks would be difficult. Deletion of boardwalks would not physically restrict access to the beach, but would mean that the beachgoer would have to walk on sand instead of a hard surface. In view of the potential maintenance problems of boardwalks and the fact that the public will still have to walk to the beach, the Commission finds that deletion of the boardwalks is consistent with the public access policies of the Coastal Act only if they are replaced with another trail management approach that is satisfactory to the National Park Service.

4. Dune-Planting Guarantee. The Commission originally required that the contractor who constructs the new Great Highway be responsible for the success of the dune plantings for a period of five years. The City now requests that it be responsible for the dune plantings for a minimum of three years and a maximum of five years, under an agreement with the National Park Service.

Section 30240 subsection (b) requires that development in areas adjacent to parks and recreation areas shall be sited and designed to prevent impacts which could significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30243 provides that the long-term productivity of soils shall be protected.

Section 30251 states that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to minimize the alteration of natural landforms, and, where feasible, to restore and enhance visual quality in visually degraded areas. Because the proposed structural protection under the alternative present favored by the City would result in the loss of the natural appearance of the face of the dunes, since this area would be covered with slope protection such as light riprap or Fixtone (a combination of asphaltic concrete and small rock) it is particularly important that some semblance of a natural dune system be achieved whenever possible. The City's consultants have estimated that under the most favorable conditions, sand might accrete to an elevation of approximately 16' during the summer, thus reducing somewhat the adverse visual effects of the seawall. During the winter, however, and especially during storms, the entire structure could be visible, thus resulting in major visual degradation and alteration of natural landforms, contrary to Section 30251 of the Coastal Act. Thus any mitigation which could be achieved through a dune planting program will reduce somewhat these adverse effects, which is particularly important considering the very large numbers of people who use this portion of the National Recreation Area each year.

The success of the dune plantings is crucial to the reduction of blowing sand and the achievement of a stable dune system. The National Park Service has agreed to assume maintenance of the dunes at some time in the future when construction is complete. Before the Park Service takes over maintenance, the City has an obligation to use the best efforts possible to create a thriving plant community in the dunes. The conditions are intended to provide as much protection from blowing sand as possible.

If a thriving plant community can be established in less than five years, and the Park Service is willing to assume maintenance of the area, then nothing would be gained by a continuing city responsibility in the area. Therefore, if an agreement can be reached between the City and the Park Service allowing for fewer than five years of city maintenance, under specific conditions, it would be consistent with the Commission's intent to give the plants a good start. The condition is hereby amended to allow use of a flexible maintenance agreement. If an agreement cannot be reached, then the City remains responsible for the plants for a five-year period.

5. Deletion of Stairs at Lincoln Way Outfall. Two existing concrete outfall structures extend onto the beach at the end of Lincoln Way and Vicente

Street. If the tide is high enough to prevent pedestrians from passing around the seaward end of the structures, they must climb over the structure. If sand is removed from the beach by erosion, the relative height of the structure above the beach is increased, which could make the structures a dangerous obstacle to lateral passage along the shoreline.

The City has agreed to install stairs over the outfall structure at Vicente Street, where significant erosion was observed last winter. The City proposes to delete the stairs at Lincoln Way on the grounds that access over the structure is always easily available.

Access over the structure at Lincoln Way has been available by walking to its eastern end where the sloping beach rises to cover the structure. Loss of sand from the beach during the winter of 1983 did not make access difficult. The City proposes to incorporate such access in the trail system. The Commission finds that if such an approach is incorporated in the final plans, the deletion of the Lincoln Way outfall stairs will not present a hazard to lateral access along the beach.

6. Postponement of Reconstruction of the Great Highway between Fulton Street and Lincoln Way. Plans have not been submitted to the Commission for the reconstruction of the Great Highway adjacent to Golden Gate Park. The City states that work in this area has been postponed, due to reduced federal and state funding. A separate contract will be issued for this work when funding is obtained.

The Commission required in Specific Project Condition #3 that each phase of the construction of the Westside Transport shall include restoration of the highway for that portion of the shoreline. Construction of the Westside Transport between Fulton and Lincoln was completed a year ago, but no plans have been prepared for the highway's restoration. An amendment to the condition is therefore required.

Rapid restoration of the Great Highway at the end of Golden Gate Park is not as critical as it is south of the park. When construction of the sewer at the end of the park was completed, the roadway was repaved. The road is protected from erosion by the existing seawall, and blowing sand is not a major problem. Although the road is unattractive and does not invite pedestrian use, it at least provides coastal visitors with a place to park and view the coast. Failure to reconstruct the area rapidly does not inhibit visitor use of the area or present a hazard to public improvements. Therefore the Commission finds that a delay in reconstruction of the roadway between Fulton and Lincoln is acceptable, but that the City must continue to seek funding so that the area can eventually be improved. A report to the Executive Director on progress in securing funding is required within one year.

7. Postponement of Dune Creation between Noriega Street and Sloat Boulevard. The proposed dune recontouring west of the new highway between Noriega and Sloat is proposed to be deleted because of the tremendous erosion that occurred in this area last winter. Nearly all of the sand from sewer construction which had been stockpiled for creation of new dunes was lost to the ocean waves. The City proposes to continue existing interim measures to minimize blowing sand. As described above, the City is required to prepare a Beach Nourishment Plan. The Commission finds that dune creation and

recontouring in this portion of the project area can be postponed until that Plan is prepared and approved by the Commission, provided an active program to reduce blowing sand is continued.

Between Noriega and Sloat, the City proposes to leave the existing southbound lanes of the Great Highway in place temporarily as a means of providing access during the anticipated phased construction of the seawall. As each section of the old highway is removed, the City is required to implement measures immediately to stabilize the sand temporarily while final plans for this area are under consideration. A planting of dune grass which would help trap sand and which would require minimal maintenance is one possibility; sand fences are to be used as well.

Removal of the old highway would, at least temporarily, end the need for emergency protection measures during storms. The City is already prohibited by previous action of the Commission from dumping rubble and is required to remove existing rubble. Dumping rubble shall not be among future emergency measures taken at Ocean Beach.

Leaving the existing berm in place south of Noriega, as may happen if the City phases seawall construction, will require installation of a means of foot access from the top of the berm to the beach. Sand ladders have been used in the past in the area with some success, although the design of the ladders previously installed by the City has not encouraged their use. The National Park Service has successfully used a simple, inexpensive sand ladder design at Fort Funston for access down the steep bluffs. The City is required to install and maintain at least two sand ladders, of a similar design, between Noriega and Taraval.

8. Changes in the Great Highway Alignment. At community meetings and hearings before and after the Commission's June 10, 1983 hearing on the proposed amendment, opposition to elements of the Great Highway project has been expressed by residents of the neighborhood. A major concern expressed by residents is the proximity of the new highway as originally permitted to houses along the Lower Great Highway. The old northbound (easterly) lanes of the Great Highway were 85 feet from the west curb of the Lower Great Highway, whereas under the existing permit the new highway would be an average of 40 feet from the Lower Great Highway, with some places as close as 25 feet. The residents have expressed concern over increased noise, traffic safety on the new road, the reduction in green space between the new highway and the Lower Great Highway, and the loss of the existing trail near the Lower Great Highway.

The City's revisions in the highway alignment as shown in the revised amendment request represent an effort to satisfy residents' concerns. The City wishes to locate the Upper Great Highway approximately 45 to 65 feet west of the presently approved alignment. Moving the new highway further west, eliminating the curves, and narrowing the median will gain greater separation between the new highway and the Lower Great Highway. With greater separation, the recreational trails could be moved partially or completely from the west to the east side of the new highway. The result would be a design which better meets the goals of area residents but it eliminates the curvilinear concept of the City's Master Plan.

The Commission is concerned with the residents' desire to improve the area east of the new highway. At the same time, the Commission has an obligation to

NOTES :

1. Even though the figure shows that the protection is moved to the east with the CCC alignment, it is recommended that the protection be constructed at the westerly location irrespective of the highway alignment.
2. Excavation will be necessary to construct the easterly alignment of the protection.

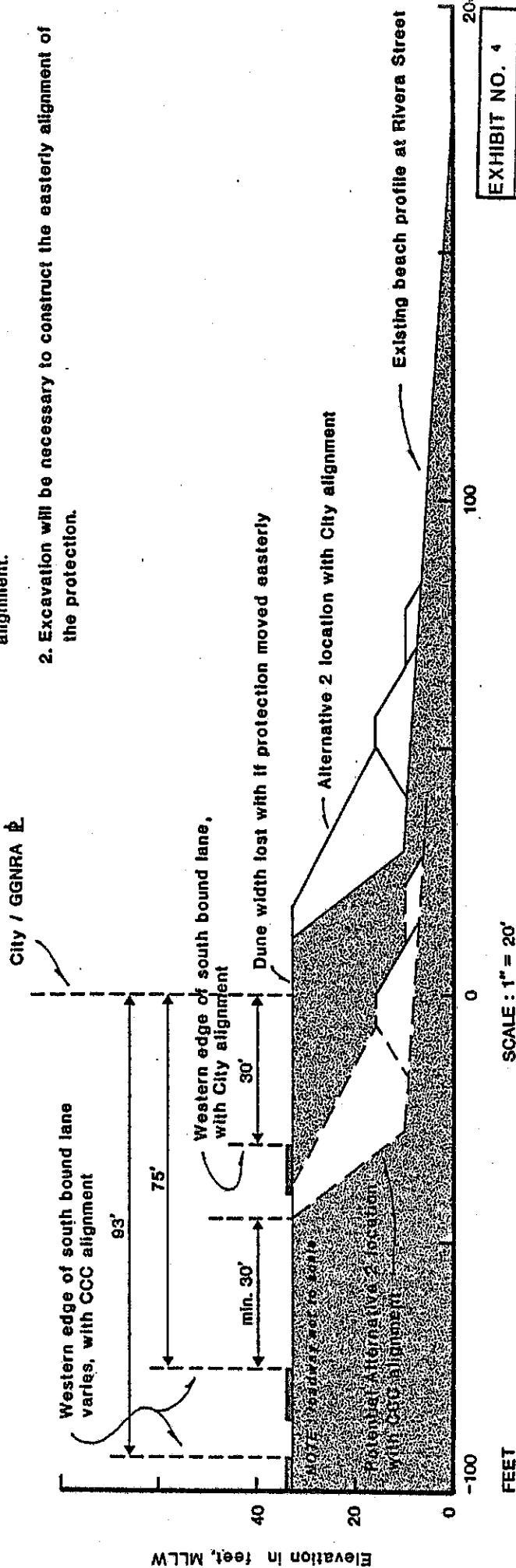


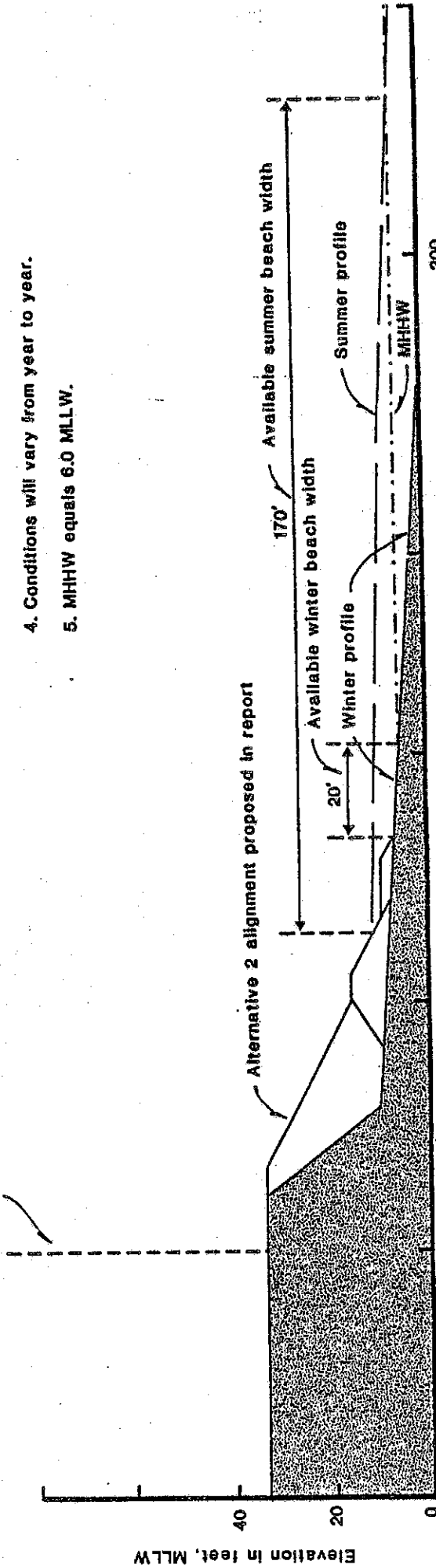
Figure A-1
Comparative Locations of Alternative 2 Between City
and CCC Highway Alignments

EXHIBIT NO. 4
APPLICATION NO. PW 2-83-14-A
San Francisco
California Coastal Commission

NOTES :

1. Profiles shown are from Ecker (1983), representing surveys at Rivera Street.
2. Summer profile from 8/24/82 survey.
3. Winter profile from 4/5/83 survey.
4. Conditions will vary from year to year.
5. MHHW equals 6.0 MLLW.

City / GGNRA \perp



FEET
SCALE : 1" = 20'

Figure A-2
Comparative Available Beach Widths for Summer
and Winter Profiles with Alternative 2 Protection

EXHIBIT NO. 5
APPLICATION NO. PW 2-83-14-A
San Francisco
California Coastal Commission

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

March 2, 1984

FINDINGS FOR SAN FRANCISCO CLEAN WATER PUBLIC WORKS (PW2-83-14-A)
ADOPTED MARCH 14, 1984

TO: COMMISSIONERS, INTERESTED PUBLIC
FROM: RICHARD G. RAYBURN, NORTH COAST DISTRICT DIRECTOR
SUBJECT: PROPOSED FINDINGS ON AMENDMENTS TO CITY OF SAN FRANCISCO CLEAN WATER
PROGRAM PUBLIC WORKS PLAN AND SPECIFIC PROJECT APPROVALS. (PW2-83-14-A)

STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following findings in support of its action of January 25, 1984 approving the amendments to the Public Works Plan and Specific Project approvals with conditions: (Note: the background material, staff note and conditions of approval are shown below for information only).

Background

The Public Works Plan for San Francisco's Clean Water Program projects at Ocean Beach was approved by the Coastal Commission on June 6, 1979. The Public Works Plan covered the entire range of wastewater collection, storage, treatment and disposal facilities in the coastal zone. At the same time that the Public Works Plan was approved, three Specific Projects were approved under the Plan. The three Specific Projects are the Westside Transport and Pump Station (already completed), the Restoration of the Great Highway, and the Ocean Outfall.

The Commission's review of the Public Works Plan and Specific Projects focused primarily on three issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the projects into conformity with the Coastal Act, the Commission imposed conditions on the Public Works Plan and Specific Projects to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during and after construction, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a lengthy construction period. Since 1979, four amendments to the Public Works Plan and Specific Project approvals have been approved by the Commission. These amendments affect primarily the alignment of the restored Great Highway, future shoreline protection measures, the size and construction methods of the Ocean Outfall, and the design of the Pump Station.

Procedures

Sections 13365 through 13371 of the Commission Regulations provide for the review of amendments to Public Works Plans. Under the Regulations, the Executive Director shall determine whether or not a proposed amendment is minor in nature. If the Executive Director determines that the proposed amendment is not minor or if the proposed amendment affects conditions required in the Public Works Plan for the purpose of protecting a coastal resource or coastal access,

then the amendment request shall be set for a regular hearing before the Commission. To approve an amendment to the Public Works Plan, the Commission must find that the amendment is in conformity with the provisions of the Coastal Act of 1976, including specific factual findings that the development is in conformity with Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

The Executive Director determined that the proposed amendments, some of which affect conditions previously imposed, were not minor in nature. Therefore, the amendment requests were the subject of a public hearing on June 10, 1983. The hearing was continued; since then the City has held additional public hearings and on September 19, 1983 modified the amendment request to include the alignment described below and a protective structure at an unspecified location.

Summary of Proposed Amendments

The applicant has requested the following amendments to the Public Works Plan and Specific Project approvals:

1. Changes in the alignment of the new Great Highway, moving it westerly to a point 30' east of the City - Golden Gate National Recreation Area boundary line and building a four-lane straight roadway.
2. Revision of Specific Project Condition 9 to allow construction of a protective structure and to delete the requirement for sand replenishment.
3. Deletion of boardwalks connecting the pedestrian underpasses with the beach, requiring deletion of Specific Project Condition #4.
4. Change from a 5-year dune landscaping guarantee to a 3-5 year variable guarantee period, requiring amendment of Specific Project Condition #5.

Although not specifically requested as amendments by the City, the following changes also require action by the Commission:

5. Deletion of the stairway over the Lincoln Way emergency outfall, requiring amendment of Specific Project Condition #7.
6. Postponement of reconstruction of the Great Highway between Fulton Street and Lincoln Way, requiring amendment of Specific Project Condition #3.
7. Deletion of the requirement to recreate the dune field west of the new Great Highway between Noriega Street and Sloat Boulevard, requiring amendment of Specific Project Condition #3. The City proposes to substitute landscaping of the area, phased to coincide with construction of the protective structure, and to continue interim measures to reduce blowing sand pending completion of construction.

SYNOPSIS

The City of San Francisco has requested an amendment to the Public Works Plan and Specific Project Approvals that would in part allow for construction of a seawall between Lincoln Way and Sloat Boulevard (about 11,000 feet) and a westerly relocation of the Upper Great Highway. The City's preferred location of the seawall is on land owned by the Golden Gate National Recreation Area (GGNRA). The staff report recommends that the seawall be located on City property, 50 - 70 feet east of the City preferred location. As requested by the City, the west curb of the Upper Great Highway would be relocated about 45 to 65 feet west of the Commission approved (as amended) alignment or 30 feet east of the City/GGNRA property line. The staff recommendation could allow the highway to be located approximately 25 - 45 feet west of the Commission-approved location, depending on final seawall design and road setback from the seawall. The City has requested deletion of the presently required sand replenishment program. Staff continues to believe the program is necessary to the protection of Ocean Beach and should not be deleted.

STAFF NOTE:

The amendment requested by the City involves a major change in the basic concept of the shoreline proposed for Ocean Beach. As previously approved by the Commission, the Public Works Plan allowed the City to locate the sewer in an alignment subject to erosion with the understanding that a long term beach replenishment program would be implemented, and the Great Highway alignment would be shifted further east where it would be protected by the sewer transport structure. Although the beach replenishment program has been changed somewhat by both legislation and amendments implementing the legislation, it has remained an element of the project. In its original approval, the Commission allowed construction of the sewer transport in an area subject to erosion only because the project would eliminate the existing hazard to the Upper Great Highway by moving it further from the surfzone and because the City proposed a beach nourishment program that guaranteed dry sand at least 50 feet wide. These improvements and guarantees were found to improve the recreational qualities of the beach and avoid the need for a protective device. Now the City proposes to move the highway seaward and eliminate the sand replenishment program. In order to protect the highway at its more exposed location, the City proposes to construct a protective structure. Although not specified in the amendment request, City representatives indicate their preference for a revetment approximately 71 feet wide that would cover both beach area and the dune face. The City's preferred alternative would be located entirely on land owned by the Federal government and managed for public recreation as part of the Golden Gate National Recreation Area (GGNRA).

The staff does not believe that any of the City's three alternative designs would protect the valuable public recreational resources of Ocean Beach. Alternative 1, the only design that is located on land within the City's jurisdiction, features a vertical wall at the elevation of active shoreline processes. This alternative design maximizes scour and adverse effects on the beach. Alternatives 2 and 3 are both located on GGNRA property. Alternative 2, the City's preferred proposal, would in the City's consultants' own words result in 60 feet less beach. Since much of Ocean Beach is an eroding shoreline, that design could result in the elimination of most winter recreational use and substantially less summer recreational area. Finally, the City's consultant has

recommended beach nourishment as an element of all alternatives, but the City's position is that the responsibility for nourishment lies with the landowner. The City has only agreed to "seek funds to implement a shoreline protection plan by 1985", which is in direct conflict with the City's previous agreement on nourishment and the position of the GGNRA. Given the City's lack of authority to construct a project on GGNRA land, the adverse effects of a seaward location on beach recreation, the adverse effects of seawalls, and the lack of a commitment to beach nourishment as recommended by the consultants, staff believes that the proposed seawall must be denied or moved landward, at least to the point where it is located on City property. Therefore, the staff recommends approval with conditions moving the seawall landward, and continuing the nourishment plan, as follows.

II. CONDITIONS

Specific Project Conditions

A. Amended and Added Conditions

3. Phasing of Restoration. Each phase of the construction of the Westside Transport shall include restoration of the highway and creation of the dune field for that portion of the shoreline, with the following two exceptions.
 - a) No later than one year from the date of Commission action on Amendment #PW 2-83-14-A, the City shall reconstruct the Great Highway between Fulton Street and Lincoln Way, or shall report to the Commission on progress in securing federal, state, or local funding for reconstruction of the highway, and shall submit for the approval of the Executive Director a timetable for reconstruction of the roadway.
 - b) Prior to final creation of the landscaped dune field (or approval by the Commission of a substitute approach) for the portion of the shoreline between Noriega Street and Sloat Boulevard, the City shall prepare a Beach Nourishment Plan, as required by Section 5, Chapter 1007, 1981 California Laws, which shall be designed to counter the effect of future erosion and which shall ensure the integrity of Ocean Beach as a recreational resource. At a minimum, the City shall contribute \$100,000 toward the preparation of this Plan. (This shall be in addition to the existing monitoring requirements pursuant to original condition 12.) The Beach Nourishment Plan shall contain or provide for appropriate funding of beach restoration measures. The City and County of San Francisco shall contribute a minimum of six hundred twenty-five thousand dollars (\$625,000) to the implementation of this plan. The Plan shall be submitted to the California Coastal Commission prior to the operation of the Westside Transport for a determination by a majority vote of the membership of the Commission that the Plan is adequate to ensure the integrity of the beach area as a recreational resource. The Plan shall be promptly implemented following any such determination.

During the construction of the seawall a drift fence shall be maintained on the scarp face between Noriega and Taraval Streets. When the seawall construction is completed, the remaining lanes of the old Great Highway shall be removed. Sand removed during excavation of the seawall shall be placed upon the seawall to create as natural an appearance as possible. European Beach grass or other plantings satisfactory to the National Park Service and sand fencing shall be installed to control blowing sand until final creation of the landscaped dune field (or approval of a substitute approach).

4. Beach Access. The City shall provide a means of beach access acceptable to the National Park Service over the protecting dunes that will prevent wind erosion of bare sand surfaces resulting from heavy foot traffic on vegetated dunes.
5. Dune Planting. The City shall provide an irrigation system and shall guarantee the success of dune planting for a period of 5 years, or a lesser period if so provided in a Maintenance Agreement which is jointly signed by the City and the National Park Service. Design of the irrigation system, final contours, planting and fertilization schedules, and plant selection shall be approved by the National Park Service.
7. Access Over Overflows. The existing overflow structure near the end of Vicente Street shall be modified to provide decking, railing, and steps on the north and south sides and a railing on the top to allow lateral access landward of the surf zone.
8. Relocation of Westside Transport and Restored Great Highway. Consistent with the City's proposed alignment, transport shall be located with the mid point of the structure 108 feet east of the west curb of the existing upper Great Highway. The reconstructed upper Great Highway may be a straight road. It shall be located east of the structural protection, with the exact alignment to be determined during review and approval of final plans. One or both of the recreational trails may be located east of the reconstructed highway.
9. Future Shoreline Protection Measures.

Redesign. The concept of constructing a stone revetment of revised design under either of the alternatives described herein is approved. Prior to transmittal of the permit, the City shall submit revised plans selecting either Alternative A or Alternative B to the Executive Director for his review and approval in writing. Revised plans shall include further engineering detail demonstrating the design wave and associated rock sizes, and defining more precisely the elevation of the highest level of reinforcement and the elevation of the toe-stone under long term erosion trends over the life of the structure. The alternatives conceptually approved are:

Alternative A. The concept of a minimal width revetment located entirely on City property landward of the GGNRA boundary. Unless revised plans demonstrate conclusively that alternative designs are necessary for the revetment to function, the revetment shall be toed at 0 mean lower low water (MLLW), and shall have a face slope no

gentler than 2:1 to minimize encroachment onto the beach. It shall include armoring, as recommended by the City's consultants, to an elevation which will prevent overtopping from runup. The minimum elevation of the revetment crest shall be 25 feet above MLLW.

-OR-

Alternative B. The general concept of constructing Alternative 2 as recommended by the City's consultants, and entirely on City property, is approved as modified by this condition. Unless revised plans and information demonstrate conclusively that the inclusion of the rock apron will reduce scour during design storm conditions, the toe of the main revetment shall be established at 0 MLLW.

In conjunction with either of the above alternatives, all visible existing rubble shall be removed from the beach between Lincoln Way and the shoreline in front of the proposed pump station, except for material specifically provided for as part of the approval of final plans. Future placement of rubble is prohibited. The City shall place markers and perform sand replenishment as previously required unless specifically modified during Commission review and approval of the Beach Nourishment Plan.

14. Existing Great Highway. (Added condition). The asphalt pavement of the existing southbound lanes of the old Great Highway shall be removed upon completion of construction of the new Great Highway. Immediately following removal of each section of the existing highway, adequate measures, subject to the review and approval of the Executive Director, shall be taken to stabilize sand in the area between Noriega Street and Sloat Boulevard where new dunes will not be created at this time as a part of this project. If no structural protection measures are in place pursuant to other conditions of this approval, at least two sand ladders, of a design acceptable to the National Park Service, shall be installed and maintained to provide access to the beach between Noriega and Taraval Streets. The sand ladders shall remain in place until such time as an alternative means of providing access to the beach has been approved by the Executive Director.
15. Final Plans. (Added condition). Prior to the commencement of construction of the new Great Highway, the City shall submit for the review and approval of the Executive Director plans for the highway, the protective structure, the recreational trails, the pedestrian accessways, and all other features described in these findings. The plans shall include safe and adequate access over the seawall in a manner acceptable to the Executive Director, in locations and at elevations convenient to the five required undercrossings. If only a portion of the protective structure is constructed, a proportionate amount of access shall be provided, in locations and in a manner acceptable to the Executive Director. One or both recreational trails may be relocated to the east side of the new highway, so long as two trails, one hard-surfaced and one semi-hardsurfaced, are provided. Five pedestrian undercrossings shall be provided at Judah, Lawton, Noriega, Quintara and Taraval Streets. A vista

parking lot for approximately 35 cars shall be provided west of the new Great Highway opposite the end of Irving Street.

B. Unchanged Conditions

All remaining conditions of the Public Works Plan and Specific Project Approvals not specifically amended herein remain in full force and effect.

III. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. Proposed Redesign of the Great Highway

The proposal for the new Great Highway which has been submitted to the Commission shows the following basic elements (including proposed amendments):

1. Substitution of a straight for a curvilinear four-lane highway. The presently approved plan for the new Great Highway extends from Lincoln Way to Sloat Boulevard. North and southbound lanes would be separated by a 17-foot wide median. Total width of the highway, including median and shoulders would be approximately 70-75 feet. Under the plan previously approved, the highway would extend generally no further west than the west edge of the Westside Transport sewer box, consistent with the Commission's previous Specific Project Approval. Where the road would curve furthest west, the east edge of the new roadway would lie approximately 70 feet from the west curb of the Lower Great Highway (or 125 feet from the nearest houses). Where the road curves furthest east, the edge of the road would lie 25-30 feet from the west curb of the Lower Great Highway (or 80-85 feet from the nearest houses). A three-foot high concrete "Jersey" barrier would be located on the east side of the new roadway where it curves closest to the Lower Great Highway. In addition to curving slightly from east to west, the road would rise and fall slightly, with high points over the pedestrian undercrossings and low points in between. In addition, the northbound (easterly) lanes would be elevated slightly above the southbound lanes in order to provide a better view for motorists.

The City now proposes to construct a four lane straight roadway approximately 75' in width with the west edge located 30' east of the City-GGNRA boundary line.

2. Pedestrian Accessways. Five pedestrian undercrossings are located at Taraval, Quintara, Noriega, Lawton and Judah Streets. (Presently available plans proposed for the curvilinear highway show the Lawton Street undercrossing as a deletable bid item, but this would not be consistent with the approved project.) These undercrossings provide pedestrian access from the Lower Great Highway to the beach. Boardwalks which were originally proposed to connect the undercrossings with the beach are now proposed to be deleted.
3. Recreational Trails. Two trails, each approximately 8 feet wide, were originally proposed to extend along the west side of the new highway from Lincoln Way south to Noriega Street. One trail would be hard-surfaced for bicycles and hikers, and the other would be surfaced

with decomposed granite or a similar surface for runners and equestrians. The trails would connect the pedestrian undercrossings at Judah, Lawton and Noriega Streets.

South of Noriega, the City proposed in April, 1983 to leave in place the existing southbound lanes of the old Great Highway (which would no longer be used for vehicles once the new highway is constructed). The City proposed at that time that the old highway lanes would serve as a temporary recreational trail connection between Noriega Street and Sloat Boulevard. City staff now indicates that the existing southbound lanes would be removed. They would propose to phase that removal to coincide with their anticipated phasing of seawall construction, so that the existing pavement could be used to provide access during construction.

The most recent amendment proposed would shift the trails to the east side of the new highway.

4. Dune Recontouring and Landscaping. North of Noriega Street, the plans prepared in April 1983 for the previously approved curvilinear highway included recontouring and planting of the dunes and installation of irrigation facilities. City staff indicates that south of Noriega, the planting is proposed to be installed only as far west as the southbound lanes of the Old Great Highway, and no dune recontouring or planting is proposed to be done west of the old highway.
5. Miscellaneous Improvements. Under the presently approved project, a vista parking lot for approximately 35 cars will be located west of the new roadway opposite the end of Irving Street. A new restroom building will replace the existing building on the Lower Great Highway at Judah Street. Existing restroom buildings at Wawona and Taraval Streets will be retained. Miscellaneous improvements such as bicycle racks, horse hitching posts, and picnic tables east of the new roadway were included in the original project description. No changes in the miscellaneous improvements have been requested by the City.

B. Coastal Act Policies and Objectives

In approving the conceptual redesign plan for the Great Highway in 1979, the Commission had two main goals under the Coastal Act: to improve public access, recreational opportunities, and the visual quality of the beach area; and to ensure that the project, although located on an eroding shoreline, would not compromise the existence of a sandy recreational shoreline during and after construction of the Westside Transport sewer box.

1. Improving recreational opportunities. The Great Highway redesign concept adopted by the San Francisco Board of Supervisors in 1977 called for removing the existing broad, flat, straight expanse of asphalt which encourages speeding and replacing it with a narrower, curving road designed to slow down traffic and improve views of the shoreline. Planting of the dunes with beach grass and other plants was intended to improve the area's appearance and help to reduce blowing sand which has frequently forced closure of the existing Great Highway and created a nuisance for nearby residents. Access to the beach was to be provided through crossings which would be grade-separated for safety and limited in number to reduce foot traffic through dunes.

Ocean Beach is located in a major urban area. It serves not only residents of the immediate neighborhood and of the City as a whole, but also visitors from all over the world who come to the Golden Gate National Recreation Area, of which Ocean Beach is a part. Ocean Beach is among the most popular units of the Recreation Area, and serves some two million visitors each year. The Commission found in originally approving the Great Highway Redesign concept that the improvement of the area would partially offset the adverse impacts on beach access of a lengthy construction period and the adverse impact of constructing the sewer box on what is recognized to be an eroding shoreline. The need to improve the Ocean Beach area for use and enjoyment of visitors and residents alike remains a goal of the highest priority.

2. Protecting the Sandy Beach. The Commission also found in 1979 that the project site is an eroding shoreline. Extensive testimony was presented to the Commission by shoreline experts and residents of the neighborhood which supported the conclusion that the Westside Transport sewer and proposed reconstructed Great Highway would be located generally seaward of natural high-water shorelines in recent historic times. The reason is that the existing Great Highway was constructed approximately 50 years ago on artificial fill that extended as much as 200 feet seaward of the natural shoreline. The Commission found that because of the artificial fill, the existing beach profile is over-steepened and out of equilibrium. The 1978 Shoreline Erosion Conference sponsored by the National Park Service agreed with other shoreline experts that without protective measures, further erosion will occur at Ocean Beach until the shoreline is approximately at the position of 1852, or about at the Lower Great Highway. Since the Westside Transport sewer is constructed west of the historic shoreline, it is likely that the sewer will be exposed some time during its lifetime, unless protective measures are taken. The City designed the transport to withstand safely the most extreme wave conditions predicted.

In originally approving the Great Highway conceptual design, the Commission sought to protect the new roadway from shoreline erosion by restricting the highway to an alignment generally above or east of the sewer box. This location also "protected" the beach from visual intrusion and physical effects of a protective device. At the request of the City, the Commission approved an amendment to the Public Works Plan in 1980 to allow the new highway to extend slightly west of the sewer (up to 20 feet) where the roadway would be adequately supported by the sewer. This amendment was made in order to preserve the curvilinearity of the highway which is presently an element of the City's Master Plan and Local Coastal Program.

The Commission's approval of the sewer construction on the beach was predicated on establishment of a sand replenishment program and a trigger line which was suggested by the City. Condition #9, as amended by the Commission in 1980, required placement of permanent markers in the sand 50 feet west of the sewer box or the highway, whichever is further west, to act as a trigger line for sand replenishment efforts. Whenever the markers would be exposed by erosion, that condition required the City to replenish the lost sand. Visible rubble west of the trigger line was required to be removed, and future placement of rubble as a protective measure was specifically prohibited. The City agreed to this approach.

As amended, Condition #9 required establishment of an escrow fund to pay for sand replenishment. In accepting this condition, the City expected federal funds. These funds did not materialize, and the Legislature has abolished the escrow fund.

The Legislature at the same time required that the City prepare a Beach Nourishment Plan with the purpose of ensuring the integrity of the beach area as a recreational resource (Section 5, Chapter 1007, 1981 Laws). The City is required by this legislation to contribute \$625,000 toward implementation of the plan. This provision is included in the conditions of this approval. The plan is to provide for adequate funding, and shall be submitted to the Coastal Commission for a determination that it is adequate. Such a determination must be made prior to operation of the Westside Transport (now expected to occur by mid-1985).

Since the Commission approved the Public Works Plan in 1979, the evidence of a continuing erosion problem is, if anything, stronger than before. The storms of last winter (particularly in January, 1983) caused enormous losses of sand from Ocean Beach. Between Noriega Street and Sloat Boulevard, almost the entire volume of sand (some 236,000 cubic yards) from sewer construction which had been stockpiled for future recontouring into new dunes was lost to wave action. Additional sand was lost from the beach and the original bluffs. The City's shoreline consultant at that time, Richard Ecker, has stated that the sand stockpile south of Rivera Street acted as a buffer, preventing wave action from undermining the Upper Great Highway along the entire reach of shoreline between Sloat Boulevard and Noriega Street. The sand would have provided even more protection had it been properly contoured and less steep. Even with the presence of the stockpiled sand, emergency measures were necessary to protect the road from being undermined. Rubble dumped over the bluff at several locations provided additional protection to the road, although Mr. Ecker concluded that the rubble is not a permanent solution to wave-induced erosion.

The relevant sections of the Coastal Act guiding analysis of the City's amendment request are as follows:

Section 30235.

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

Section 30253.

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. (Emphasis added)

The Commission finds that erosion at Ocean Beach presents a continuing hazard to a new highway and other improvements as well as to the beach itself (the findings of the Commission on the Public Works Plan and Specific Project Approvals adopted on June 13, 1979 are hereby incorporated by reference.)

The Commission also finds that resolution of the beach erosion problem is the responsibility of the City, since the construction of the Westside Transport in a beach location rather than an inland location is the basic reason that structural measures are now proposed that could endanger the existence of the beach and dunes as a recreational and visual resource. The City also took this on as a way to "improve" beach recreation in return for potential long term impacts and the certain construction impacts. The City must make rapid progress toward such resolution. The Beach Nourishment Plan discussed above must be submitted to the Coastal Commission for a determination that it is adequate to ensure the integrity of the beach area as a recreational resource prior to operation of the Westside Transport, which is now estimated to be less than two years away. Although the erosion threat has been the subject of Commission findings in 1979, 1980, and 1982 and the subject of numerous other reports and studies, progress on preparing a Beach Nourishment Plan has been extremely slow. In particular, a majority of the littoral studies required by original Condition 12 are not proceeding in a timely manner, and that information is essential to developing an approvable Beach Nourishment Plan.

The City has formed an Ocean Beach Management Advisory Board which has discussed the outline of a beach protection plan. The City has discussed with the Army Corps of Engineers a study of erosion at Ocean Beach, and now proposes to carry out such a study under the supervision of the Corps, provided that the Board of Supervisors appropriates \$100,000 for the study. Such a contribution is included in the conditions of this amendment.

The proposed amendment involves shoreline structures which will affect the configuration of the shoreline and the beach profile and in all probability have some degree of adverse impact on the shoreline. That shoreline structures, including vertical seawalls and rock revetments, have adverse impacts on the shoreline is accepted among experts in the field of coastal engineering and geology. In Saving the American Beach: A Position Paper by Concerned Coastal Geologists (March 1981) which was signed by 94 experts in the field of coastal geology, it is stated...

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

The Commission's previous decision on the Public Works Plan recognized the erosion hazard at Ocean Beach and provided for landward relocation of the Great Highway so that a protective device would not be needed. The presently proposed shoreline protection device is not to provide protection to an existing structure as allowed for in Coastal Act Section 30235 but rather to the proposed realignment of the Great Highway and therefore raises a question of adverse impacts on shoreline sand supply and consistency with 30235.

Generally, it is recognized that large structures such as proposed by the City will have impacts on sand supply and beach profiles. As stated in a publication by the State Department of Boating and Waterways (formerly called Navigation and Ocean Development), Shore Protection in California (1976),

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

This impact is reiterated in the paper, "Economic Profiling of Beach Fills" by Herman Christiansen which is contained in the proceedings of Coastal Sediments '77 (November 1977). It states:

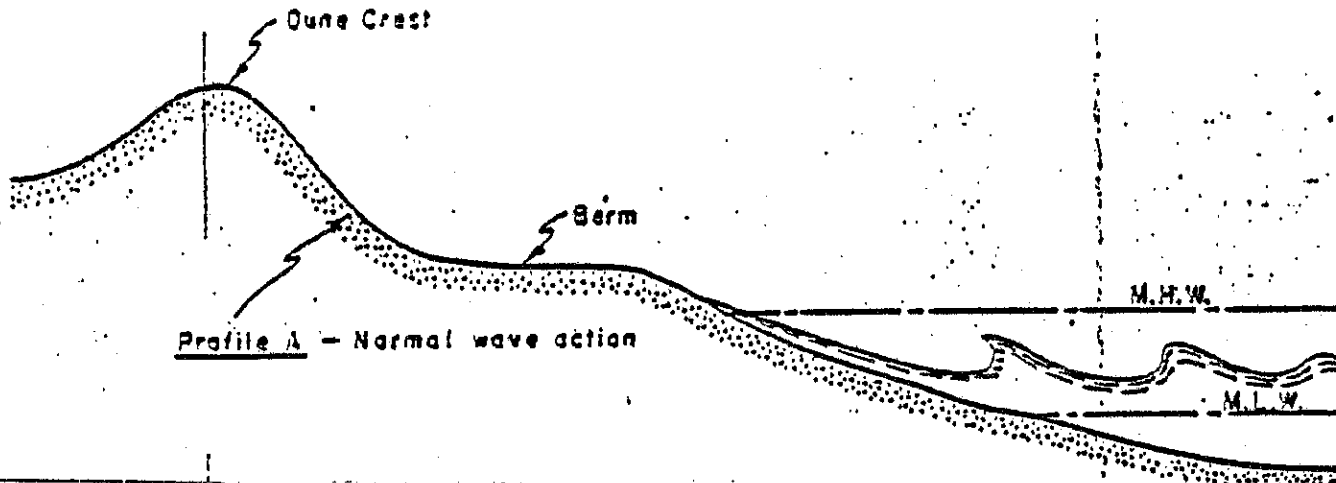
Observations at some of the investigated beaches have shown that an optimal profile becomes instable, if structures, such as rocks, groins, revetments, piles, stairs etc., are placed within the wave action zone of a beach. Steady erosions, caused by complex high turbulent surf currents, lead to heavy sand losses.

Although they do not have as great an impact as smooth, vertical seawalls, rock revetments, such as the one proposed by this amendment, have effects on the beach sand in front of and around the structure. A rock seawall operates on the principle that the wave's energy is dissipated within the voids of the wall, therefore producing less reflected wave energy. However, the rock seawall will still reflect enough energy to change the beach profile, steepen the beach, and cause accelerated erosion of the downcoast area. One mechanism that accounts for rock walls' impact on beaches is stated in "The Role of Wave Reflection in Coastal Processes" in Coastal Sediments '77 by Richard Silvester:

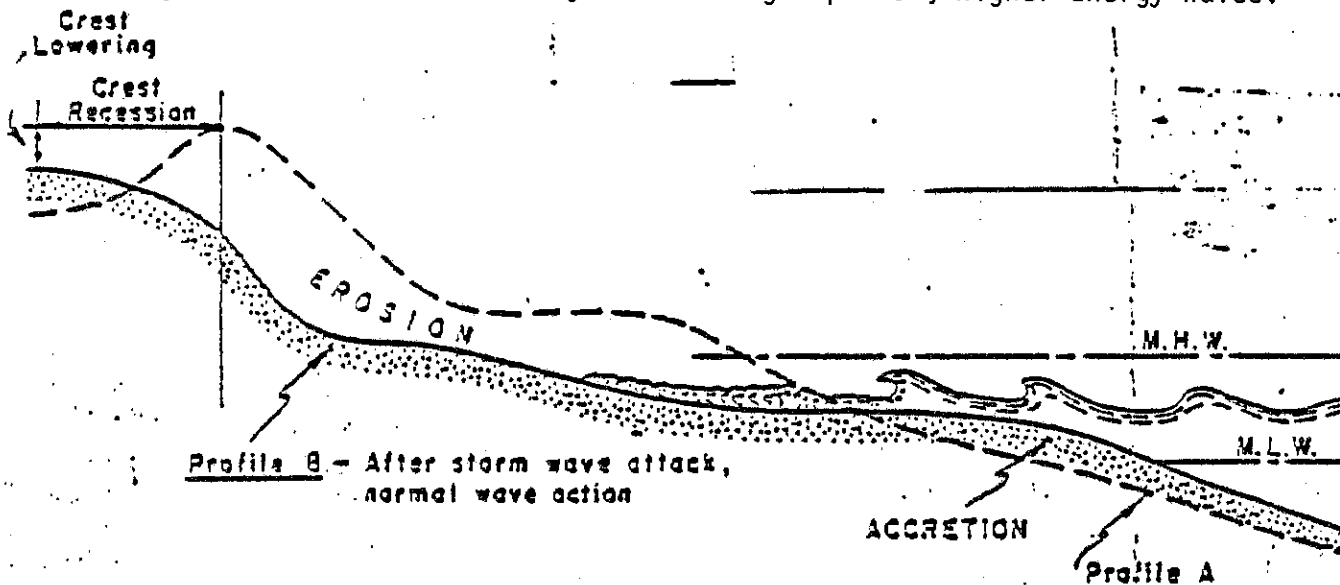
Rubble-mound structures can reflect long period wave components with little dissipation and hence short-crested phenomena [waves] in front of and downcoast from them should be considered in design and maintenance.

Moreover, the literature on coastal engineering repeatedly warns that unprotected properties adjacent to the seawall may experience increased erosion. A rock wall invariably protrudes seaward from development which exacerbates this situation. Actual field observations have verified this concern, see for example the paper by Gerald G. Kuhn of the Scripps Institution of Oceanography entitled "Coastal Erosion along Oceanside Littoral Call, San Diego County, California" (1981). In this paper, it is written and pictorially illustrated that erosion on properties adjacent to rock seawall is intensified when wave run-up is high.

A discussion of the physical processes of wave runup on a natural shore will help establish the effects of seawalls on shoreline processes. Sandy beaches are dynamic systems, the individual grains of sand adjust quickly to reflect both the overall supply of sediment and the ongoing forces of waves. A typical non-storm profile of the beach looks like this: (from "Shore Protection in California, DNOD, 1976).

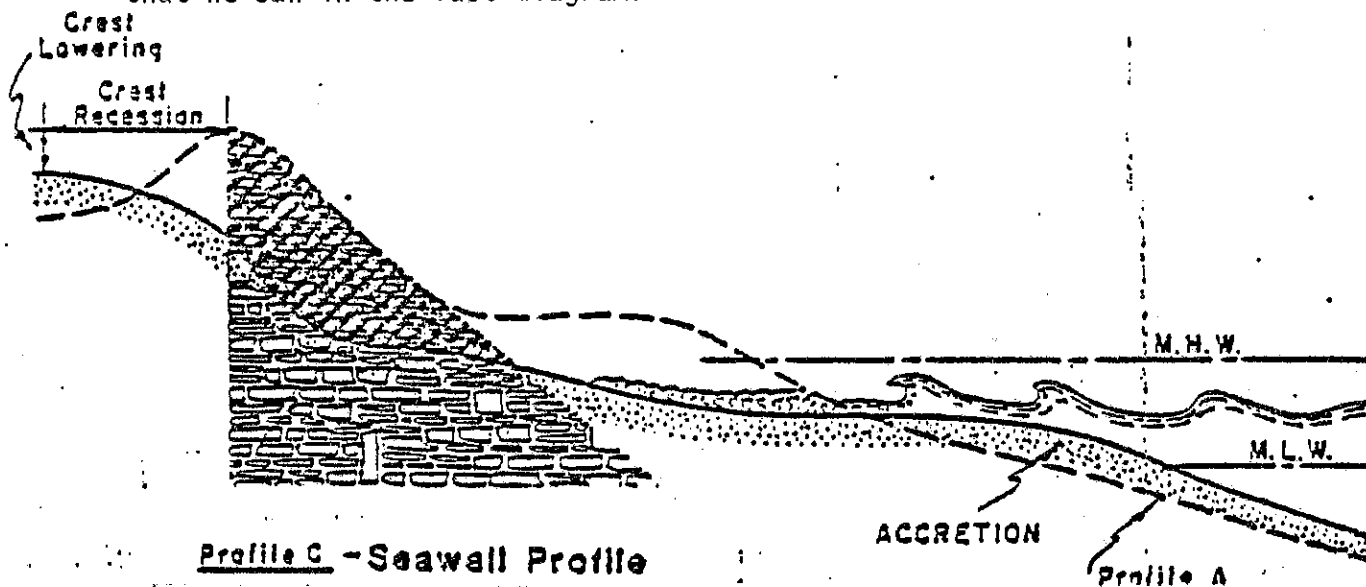


At this profile, the shore has adjusted to a low-energy wave environment, reflecting the short period, low energy waves that strike the beach. The next diagram shows how a beach adjusts to longer period, higher energy waves:



This cross section illustrates several important things about the beach's adjustment to the higher energy of striking waves. First, the wave energy has eroded material from the foreshore and deposited the material off-shore in a bar. Second, the shoreline profile flattens to absorb the greater amount of wave energy, even with waves breaking on the bar. These adjustments are fundamental to the shore's adjustment to high wave energy. The migration of the material to an off-shore bar causes waves to break in deeper water, and begins the process of energy dissipation far from the inland extent of the beach. The dynamic process of eroding material from the foreshore enables the shoreline to absorb wave energy. This process goes on continuously. If a given shore profile is not sufficient to absorb wave energy without further erosion, additional material is moved from the shore to the bar to increase the distance between the bar and the inland extent of the wave uprush. The value of the bar cannot be overemphasized; it is on the bar that winter waves break, and the dynamic processes of the actual shoreline are affected by wave uprush, not actual breaking waves.

The next diagram was made by superimposing a revetment on the shoreline profiles that we saw in the last diagram:



Profile C - Seawall Profile

This diagram illustrates dramatically the effect of a seawall on the shoreline. The material shown in cross-hatching is the material formerly available to nourish the bar. This material is now unavailable because it is either behind the seawall, or has been replaced by the seawall. As a result, the bar receives less nourishment. This makes the bar less effective in causing waves to break offshore, and results in greater wave energy being felt on the actual shoreline. That energy is then dissipated by uprush and reflection against the face of the revetment. However, since more energy comes on-shore, more energy is reflected and sand is scoured from the base of the revetment.

The City, through its consultants, argues that the shoreline processes at Ocean Beach are substantially different because dune materials are too fine to be a significant factor in feeding beach processes. Thus, the City argues that the loss of dune materials will not affect the formation of the nearshore bar--indeed, that the effects of the San Francisco Bay bar may overwhelm the normal nearshore processes. In effect, the City proposes to armor the front of the dune, thereby making revegetation easier and reducing blowing sand. The City's argument that the dune area is not large enough to provide complete protection for the box and the Great Highway does not, however, mean that the dunes have no value as protection and as an element of shore processes. Indeed a substantial, revegetated dune should be capable of withstanding ordinary and moderately severe storms. Further, even the fine sediments in the dune system can nourish the nearshore profile which was oversteepened by construction of the Great Highway. The Commission therefore finds that the dune system must be preserved as part of the requirement of Section 30235 to eliminate or mitigate adverse impacts on local shoreline sand supply. Revegetation remains the selected strategy for reducing blowing sand. The City further argues that, while the placement of the revetment as proposed may indeed reduce the beach width by 60 feet or more, such reduction is not important because the summer beach is 170 feet wide, and the winter beach is 20 feet wide. This portion of the City's reasoning, however, ignores the long-term erosional trends at Ocean Beach. The Commission, the National Park Service, and the City devoted a great effort to analyzing shoreline erosion at Ocean Beach in the initial preparation and approval of the public works plan. An independent coastal engineer, Dr. Cyril Galvin, prepared 4 reports on erosion, with recommendations for sand nourishment and analysis of shoreline recession trends. ("Design Recommendations for Ocean Beach" et al, 1979) Various shoreline recession rates of between 1 and 3 feet a year were reported by various observers, and the overall conclusion of the

consultant was that "If the results of all human activities at Ocean Beach never had happened, the shoreline would now exist slightly east of the mean shoreline that existed around 1850." Dr. Galvin further concluded that this equilibrium position, if unaltered, "...would shift slowly inland, controlled by the rise of sea level and the erosion of the Fort Funston bluffs." The Commission affirms its previous conclusion that the Ocean Beach shoreline is presently an eroding shoreline, with erosion caused by the rise in sea level, retreat of the Fort Funston bluffs, and placement of the Great Highway on a causeway seaward of the "natural" "equilibrium" location. It should be noted that the erosion is not uniform; in fact some areas may even accrete while others erode.

Thus, any analysis of the effects of the proposed seawall must also consider the long term erosional trends of 1-3 feet per year, and the tremendous seasonal fluctuations in beach width--on the order of 200 feet or more. The City's argument that Ocean Beach will still have sandy beaches is valid only during the short term, or if beach replenishment is practiced. The City's current posture towards nourishment, stated in their letter of January 3, 1984 is:

However, maintenance of the beach, including nourishment, is the responsibility of the Federal and State Governments who are the property owners, the National Parks Service and State Lands Commission. It would be appropriately addressed in GGNRA's maintenance budget.

The City implicitly is arguing that erosion is due to a rise in sea level, rather than the effects of location of the Great Highway. The Commission disagrees. The "erosion problem" is caused by the presence of the City's structures. Without nourishment, the beach will narrow and steepen because it is located seaward of the expected "equilibrium" location and because of continuing erosion of the Fort Funston bluffs, the hard point that anchors the beach to the south, irrespective of any changes in sea level. With a narrowing beach, the presence of an additional 60 to 70 feet of beach becomes critical to whether there is any recreational beach at all, regardless of the direct effects of the seawall. Because of the nature of the beach use, which tends to be year-round regardless of weather conditions, if the beach is particularly narrow or non-existent in winter, recreational use would be substantially adversely affected. The Commission concludes from the opinion of experts and from an analysis of the process of shoreline dynamics that placement of a seawall within the areas of a shore affected by those processes adversely affects shoreline processes in front of the seawall as well as property on either end of the seawall. Obviously the impact of a seawall is greater the more often it is exposed to wave attack and the more rapid erosion of sand (or rise of sea level), and seawalls located far up the beach have less impact than seawalls lower on the beach. However, since most of the coast of California, including this area, is subject to overall erosional processes, even a well-designed seawall adversely affects shoreline processes, especially when reviewed over the life of the structure.

The Commission finds that the probable negative impacts of the seawall must be weighed against the City's need to protect the proposed road alignment. The Commission recognizes that the seawall will probably change the beach profile by steepening it and increasing beach erosion around it. This is particularly true in the present case, where the protective device is part of an effort to maintain a shoreline seaward of its normal "equilibrium" position. As proposed by the City, the seawall is further seaward than necessary to protect the proposed location of the Great Highway, much less the location once proposed by the City and approved by this Commission; thus the structure would increase the

magnitude of those adverse impacts. As noted earlier, none of the alternatives will retain a recreational beach without nourishment and the City is reluctant to commit the financial resources to nourish the beach. The further west the structure, the higher the nourishment cost, and the more important nourishment is to the recreational beach. Therefore, the seawall has been conditioned to require redesign to minimize encroachment onto the beach and to be located on lands under the control of the City. Serious consideration has been given to the possibility of allowing construction of the 20' wide stone apron on GGNRA property. However this alternative was not recommended due to probable delays in obtaining National Park Service approvals. Even if it were determined that legislation would not be required to allow construction on Federal land, at minimum a 50 year permit and additional compliance under NEPA would apparently be necessary. This process could entail delays up to a year or more. Some interested parties may argue that the Commission should continue to require beach nourishment as a feasible, less damaging alternative, rather than allow any protective structure. Beach nourishment may well be a feasible less damaging alternative; it is certainly less damaging to the beach. However, in spite of the City's previous commitment to move the new Upper Great Highway east to the alignment of the box as a mitigation measure for constructing the Westside Transport structure on an eroding beach, the Great Highway does presently exist, and Section 30235 allows for the use of such devices to protect an existing structure. In striking a balance between these factors the Commission finds the project consistent with Sections 30235 and 30253 only if the structure is located further landward to minimize the adverse effects and the City continues to be responsible for beach nourishment.

Given the adverse effects of seawalls on shoreline processes, the Commission must now turn its attention to the overall impact that these changed shoreline processes will have on public access. The public has an ownership right in the lands of the State seaward of mean high water as well as GGNRA lands. Because the ownership lies seaward of a mean water mark, the most extraordinary high and low tides are factored out. The tidal regime along the coast varies with the season and with the lunar cycles. Theoretically, tidal cycles also vary over an 18.6 year period in response to astronomical changes (Shore and Sea Boundaries Aaron Shalowitz, US. Department of Commerce 1962, p. 95). However, as a practical matter on a coast like California's where sediment supply has been substantially altered, the location of the lower and higher water lines are determined largely by sediment supply. All of these processes are dynamic, and the beach varies to reflect the changes.

The public's ownership interest similarly varies with these changes, although the use of the "mean" tends to smooth out changes in public ownership. The important question to examine is what effect changes in shoreline processes have on public lands. We saw above that seawalls tend to steepen shorelines by reflecting wave energy and by starving the off-shore bar. This affects the public ownership by moving the mean high water line landward. But more importantly, this affects the public's ownership by tending to eventually fix the mean high water line at or near the seawall. This interference with a dynamic system then has a number of effects on the public's ownership interests. First, changes in the shoreline profile, particularly changes in the slope of the profile, alter the useable area under public ownership. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. This reduces the actual area in which the public can pass on their own property. The second effect on access is through a progressive loss of sand as shore material is not available to nourish the bar.

The lack of an effective bar can allow such high wave energy on the shoreline that materials may be lost far offshore where they are no longer available to nourish the beach. The effects of this on the public are again a loss of area between the mean high water line and the actual water. Third, seawalls cumulatively affect public access by causing greater erosion on adjacent public beaches. This effect may not become clear until seawalls are constructed individually along a shoreline until they reach a public beach. Finally, seawalls interfere directly with public access by their occupation of beach area, and when materials erode from the seawall and roll onto the sandy beach where they present physical obstacles to access. The Commission recognizes the adverse effects of the proposed seawall on access, and further notes that the area adversely affected is a publicly-owned recreational area operated as a national resource. Only with conditions to limit the intrusion of the structure on the beach and restore the dune system after construction can the Commission find that the project would not interfere with public rights of access in conflict with Section 30211.

3. Beach Access. Some means of protecting the dune surface at beach access passageways or trails must be provided to prevent serious wind erosion. The original permit included boardwalks, which were designed to extend laterally from the western ends of the pedestrian underpasses out to the beach. The boardwalks were intended to encourage pedestrians to remain on the paths, rather than walking through the dunes, which are easily disturbed by foot traffic.

The City now contends that boardwalks would be quickly covered with sand and that vandalism would be a continuing problem. National Park Service officials, who patrol the area, agree that maintenance of boardwalks would be difficult. Deletion of boardwalks would not physically restrict access to the beach, but would mean that the beachgoer would have to walk on sand instead of a hard surface. In view of the potential maintenance problems of boardwalks and the fact that the public will still have to walk to the beach, the Commission finds that deletion of the boardwalks is consistent with the public access policies of the Coastal Act only if they are replaced with another trail management approach that is satisfactory to the National Park Service.

4. Dune-Planting Guarantee. The Commission originally required that the contractor who constructs the new Great Highway be responsible for the success of the dune plantings for a period of five years. The City now requests that it be responsible for the dune plantings for a minimum of three years and a maximum of five years, under an agreement with the National Park Service.

Section 30240 subsection (b) requires that development in areas adjacent to parks and recreation areas shall be sited and designed to prevent impacts which could significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30243 provides that the long-term productivity of soils shall be protected.

Section 30251 states that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to minimize the alteration of natural landforms, and, where feasible, to restore and enhance visual quality in visually degraded areas. Because the proposed structural protection under the alternative present favored by the City, would result in the loss of the natural appearance of the face of the dunes, since this area would be covered with slope

protection such as light riprap or Fixtone (a combination of asphaltic concrete and small rock) it is particularly important that some semblance of a natural dune system be achieved whenever possible. The City's consultants have estimated that under the most favorable conditions, sand might accrete to an elevation of approximately 16' during the summer, thus reducing somewhat the adverse visual effects of the seawall. During the winter, however, and especially during storms, the entire structure could be visible, thus resulting in major visual degradation and alteration of natural landforms, contrary to Section 30251 of the Coastal Act. Thus any mitigation which could be achieved through a dune planting program will reduce somewhat these adverse effects, which is particularly important considering the very large numbers of people who use this portion of the National Recreation Area each year.

The success of the dune plantings is crucial to the reduction of blowing sand and the achievement of a stable dune system. The National Park Service has agreed to assume maintenance of the dunes at some time in the future when construction is complete. Before the Park Service takes over maintenance, the City has an obligation to use the best efforts possible to create a thriving plant community in the dunes. The conditions are intended to provide as much protection from blowing sand as possible.

If a thriving plant community can be established in less than five years, and the Park Service is willing to assume maintenance of the area, then nothing would be gained by a continuing city responsibility in the area. Therefore, if an agreement can be reached between the City and the Park Service allowing for fewer than five years of city maintenance, under specific conditions, it would be consistent with the Commission's intent to give the plants a good start. The condition is hereby amended to allow use of a flexible maintenance agreement. If an agreement cannot be reached, then the City remains responsible for the plants for a five-year period.

5. Deletion of Stairs at Lincoln Way Outfall. Two existing concrete outfall structures extend onto the beach at the end of Lincoln Way and Vicente Street. If the tide is high enough to prevent pedestrians from passing around the seaward end of the structures, they must climb over the structure. If sand is removed from the beach by erosion, the relative height of the structure above the beach is increased, which could make the structures a dangerous obstacle to lateral passage along the shoreline.

The City has agreed to install stairs over the outfall structure at Vicente Street, where significant erosion was observed last winter. The City proposes to delete the stairs at Lincoln Way on the grounds that access over the structure is always easily available.

Access over the structure at Lincoln Way has been available by walking to its eastern end where the sloping beach rises to cover the structure. Loss of sand from the beach during the winter of 1983 did not make access difficult. The City proposes to incorporate such access in the trail system. The Commission finds that if such an approach is incorporated in the final plans, the deletion of the Lincoln Way outfall stairs will not present a hazard to lateral access along the beach.

6. Postponement of Reconstruction of the Great Highway between Fulton Street and Lincoln Way. Plans have not been submitted to the Commission for the reconstruction of the Great Highway adjacent to Golden Gate Park. The City states that work in this area has been postponed, due to reduced federal and state funding. A separate contract will be issued for this work when funding is obtained.

The Commission required in Specific Project Condition #3 that each phase of the construction of the Westside Transport shall include restoration of the highway for that portion of the shoreline. Construction of the Westside Transport between Fulton and Lincoln was completed a year ago, but no plans have been prepared for the highway's restoration. An amendment to the condition is therefore required.

Rapid restoration of the Great Highway at the end of Golden Gate Park is not as critical as it is south of the park. When construction of the sewer at the end of the park was completed, the roadway was repaved. The road is protected from erosion by the existing seawall, and blowing sand is not a major problem. Although the road is unattractive and does not invite pedestrian use, it at least provides coastal visitors with a place to park and view the coast. Failure to reconstruct the area rapidly does not inhibit visitor use of the area or present a hazard to public improvements. Therefore the Commission finds that a delay in reconstruction of the roadway between Fulton and Lincoln is acceptable, but that the City must continue to seek funding so that the area can eventually be improved. A report to the Executive Director on progress in securing funding is required within one year.

7. Postponement of Dune Creation between Noriega Street and Sloat Boulevard. The proposed dune recontouring west of the new highway between Noriega and Sloat is proposed to be deleted because of the tremendous erosion that occurred in this area last winter. Nearly all of the sand from sewer construction which had been stockpiled for creation of new dunes was lost to the ocean waves. The City proposes to continue existing interim measures to minimize blowing sand. As described above, the City is required to prepare a Beach Nourishment Plan. The Commission finds that dune creation and recontouring in this portion of the project area can be postponed until that Plan is prepared and approved by the Commission, provided an active program to reduce blowing sand is continued.

Between Noriega and Sloat, the City proposes to leave the existing southbound lanes of the Great Highway in place temporarily as a means of providing access during the anticipated phased construction of the seawall. As each section of the old highway is removed, the City is required to implement measures immediately to stabilize the sand temporarily while final plans for this area are under consideration. A planting of dune grass which would help trap sand and which would require minimal maintenance is one possibility; sand fences are to be used as well.

Removal of the old highway would, at least temporarily, end the need for emergency protection measures during storms. The City is already prohibited by previous action of the Commission from dumping rubble and is required to remove existing rubble. Dumping rubble shall not be among future emergency measures taken at Ocean Beach.

Leaving the existing berm in place south of Noriega, as may happen if the City phases seawall construction, will require installation of a means of foot access from the top of the berm to the beach. Sand ladders have been used in the past in the area with some success, although the design of the ladders previously installed by the City has not encouraged their use. The National Park Service has successfully used a simple, inexpensive sand ladder design at Fort Funston for access down the steep bluffs. The City is required to install and maintain at least two sand ladders, of a similar design, between Noriega and Taraval.

8. Changes in the Great Highway Alignment. At community meetings and hearings before and after the Commission's June 10, 1983 hearing on the proposed amendment, opposition to elements of the Great Highway project has been expressed by residents of the neighborhood. A major concern expressed by residents is the proximity of the new highway as originally permitted to houses along the Lower Great Highway. The old northbound (easterly) lanes of the Great Highway were generally 85 feet from the west curb of the Lower Great Highway, whereas under the existing permit the new highway would be an average of 40 feet from the Lower Great Highway, with some places as close as 25 feet (see Exhibit 6 for approximate distances at Ulloa, Noriega, and Irving Streets). The residents have expressed concern over increased noise, traffic safety on the new road, the reduction in green space between the new highway and the Lower Great Highway, and the loss of the existing trail near the Lower Great Highway.

The City's revisions in the highway alignment as shown in the revised amendment request represent an effort to satisfy residents' concerns. The City wishes to locate the Upper Great Highway generally 45 to 65 feet west of the presently approved alignment. However, in some cases this distance would be greater; for example, at Ulloa Street it would be approximately 90 feet, as shown in Exhibit 6. Moving the new highway further west, eliminating the curves, and narrowing the median would gain greater separation between the new highway and the Lower Great Highway. With greater separation, the recreational trails could be moved partially or completely from the west to the east side of the new highway. The result would be a design which better meets the goals of area residents but it eliminates the curvilinear concept of the City's Master Plan.

The Commission is concerned with the residents' desire to improve the area east of the new highway. At the same time, the Commission has an obligation to protect the area west of the new highway, including the beach, as a recreational resource. It is the strong desire of the Commission that the final highway design stress protection and restoration of the landscaped green area east of the Upper Great Highway at approximately the size which existed prior to construction of the Westside Transport. Toward this end, the Commission notes that the 75' width of the highway as presently proposed could be narrowed by such means as reducing the median width, reducing the width of pullover areas, or providing intermittent rather than continuous pullover areas. It might also be possible to design the seawall in a narrower configuration than that shown on Exhibit 6. As noted above, the Commission explicitly rejects the City's contention that maintenance of the recreational beach is the responsibility of the Golden Gate National Recreation Area. City decisions to place the sewer box on an eroding shoreline rather than at an inland location and now, to request a change in the approved Great Highway alignment that will require structural protection that will degrade the appearance of the dunes and has the potential of endangering the existence of the recreational beach, must be accompanied by appropriate protective measures if they are to be found consistent with the Coastal Act. The City's desire to seek a structural solution appears based substantially upon its reluctance to participate in or help fund a beach

nourishment program. However, City responsibility to participate in such a program is explicitly required by existing provisions of law. The Commission finds that the amendment request can be approved only if it is conditioned both to minimize damage to the recreational beach and dunes by relocating the proposed structure as discussed above, and to provide for City participation in the ongoing beach nourishment program acknowledged to be necessary by the City's consultants.

The Commission finds that a revised design for the highway can be approved under the limitations set forth above. The new highway may extend west of the sewer box. The exact location will depend partly upon the seawall design option chosen by the City. The Commission recognizes that the east side green strip and the existing trail serve to buffer the residences east of the Lower Great Highway from the noise of traffic on the Great Highway. The strip also provides an important recreational resource. As part of the final highway redesign, an east side green strip equivalent in size to that which existed prior to sewer construction shall be provided. Where feasible, this strip should be broadened. The Executive Director's determination of feasibility shall take into account the final design of a seawall entirely on City property, as provided for in Condition 9, and the need to construct an Upper Great Highway which may be less than 75 feet in width, but which meets traffic safety requirements. The proposed highway width and the east side green strip width shall be approved by the Executive Director as part of his review of the final plans. Adjustments in median width may be made to maximize the separation of the new road from the Lower Great Highway. One or both recreational trails may be relocated to the east side of the new highway, so long as two trails, one for hikers and bicyclists and one for runners and equestrians, are maintained in the plan. Plans showing the redesign concept finally selected by the City and incorporating the elements described in these findings and conditions shall be submitted to the Executive Director for review and approval prior to commencement of construction of the project.

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

November 28, 1984

TO: Commissioners, Interested Parties

FROM: Richard G. Rayburn, North Coast District Director

SUBJECT: Request for amendments to City of San Francisco Clean
Water Program Public Works Plan and Specific Project Approvals
(PW-2-84-16A)

SYNOPSIS. The applicant requests an amendment to the public works plan and specific projects approved by the Commission on June 6, 1979 (and later amended). The amendment would provide for connection between the existing Richmond-Sunset sewage treatment facility and the Westside Transport/pump station/southwest ocean outfall. Staff recommends that the Commission approve the amendment that will be subject to all conditions previously approved by the Commission.

Background

The Public Works Plan for San Francisco's Clean Water Program projects at Ocean Beach was approved by the Coastal Commission on June 6, 1979. The Public Works Plan covered the entire range of wastewater collection, storage, treatment and disposal facilities in the coastal zone. At the same time that the Public Works Plan was approved, three Specific Projects were approved under the Plan. The three Specific Projects are the Westside Transport and Pump Station (already completed), the Restoration of the Great Highway, and the Ocean Outfall.

The Commission's review of the Public Works Plan and Specific Projects focused primarily on three issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the projects into conformity with the Coastal Act, the Commission imposed conditions on the Public Works Plan and Specific Projects to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during and after construction, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a lengthy construction period. Since 1979, four amendments to the Public Works Plan and Specific Project approvals have been approved by the Commission. These amendments affect primarily the alignment of the restored Great Highway, future shoreline protection measures, the size and construction methods of the Ocean Outfall, and the design of the Pump Station.

Procedures

Sections 13365 through 13371 of the Commission Regulations provide for the review of amendments to Public Works Plans. Under the Regulations, the Executive Director shall determine whether or not a proposed amendment is minor in nature. If the Executive Director determines that the proposed amendment is not minor or if the proposed amendment affects conditions required in the Public Works Plan for the purpose of protecting a coastal resource or coastal access, then the amendment request shall be set for a regular hearing before the Commission. To approve an amendment to the Public Works Plan, the Commission must find that the amendment is in conformity with the provisions of the Coastal Act of 1976, including specific factual findings that the development is in conformity with Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

The Executive Director determined that the proposed amendment is not minor in nature.

Staff Recommendation

The staff recommends that the Commission adopt the following resolution:

I. APPROVAL WITH CONDITION

The Commission hereby approves, subject to the condition below, the proposed amendments to the Public Works Plan and Specific Project approvals described herein, on the grounds that the proposed development, as amended and conditioned, is in conformity with the provisions of the California Coastal Act of 1976 including the provisions of Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

II. Condition: All conditions of the Public Works Plan and Specific Project Approvals as previously amended remain in full force and effect.

III. Findings and Declaration.

The Commission hereby finds and declares, as follows:

A. Proposed Amendment:

The amendment request, commonly referred to as the Westside Activation Project, would connect existing facilities and facilities under construction with the Richmond/Sunset Plant by a series of new pipelines to create a modified sewage system. The amendment includes (1) installation of a 54 inch gravity pipeline and a 42 inch force main in the existing Westside Transport Structure; (2) underground lines to the Richmond/Sunset Plant along South Drive through a portion of Golden Gate Park, (3) 30 inch flushing pipeline and 54 inch influent bypass pipeline in the Westside Transport Structure. The South Drive, Great

Highway and Lincoln Way intersection would be reconstructed, including landscaping of associated traffic islands, after trench excavation in this area is completed. Trench excavation for the proposed pipelines and installation of those pipelines would occur east of the Great Highway and south of Golden Gate Park, which is largely residential; and in Golden Gate Park and adjacent to Ocean Beach, which are major recreation areas. The purpose of the amendment is to meet Regional Water Quality Control Board cease and desist order that requires wastewater treatment and disposal corrective measures by Oct. 1, 1986. Originally, the city proposed to meet RWQCB requirements by, in part, by constructing the new Southwest Water Pollution Control Plant near Sloat Blvd. However, construction of this facility will take four years and funding has been deferred indefinitely. Therefore, the Westside Activation Project would operate as an interim alternative. This project has been approved by the RWQCB.

Presently, all sewage from the west side of San Francisco is treated at the Richmond/Sunset Plant, averaging approximately 22 million gallons per day (mgd), of dry weather flow. This treated effluent is discharged at the Mile Rock Outfall. During wet weather, storm flows and sewage in excess of the Plant's 45 mgd capacity are discharged untreated at the Mile Rock Outfall and eight other locations along Ocean Beach, including the Lincoln Way and Vicente Street structures. Untreated overflows average 58 annually, resulting in an average of 100 days per year in which Ocean Beach is posted as unsafe by the San Francisco Department of Public Health.

The Project would require at a maximum 16 months of construction. Trenching excavation would occur at the intersection of Lincoln Way and the Great Highway. In Golden Gate Park, about 1000 feet of trench excavation would occur along South Drive and the southernmost soccer field north of the Richmond/Sunset Plant. The park work would take about 9 months.

Coastal Act Policies:

1. Access and Recreation: The prior Commission action on the project, as amended, focused a great deal of attention on project impacts and improvements on public access and recreational opportunities. The approved project provides for improved lateral access adjacent to the Great Highway between Sloat Blvd and Lincoln Way. Numerous vertical access points from Lower Great Highway to Ocean Beach have been approved. The important recreational values of Ocean Beach have been well documented and discussed in prior findings. Of central concern to the Commission is the effect of shoreline protective structures on the future beach profiles. All development subject to the amendment will be underground and are east of the approved Great Highway and shoreline protective structures alignments. The amendment will not impact these access and recreational provisions. The City will reroute some traffic to lanes to and along Ocean Beach during construction, but will not preclude such vehicular access. Parking requirements for construction crews will be 7 to 10 spaces. These spaces will be utilized along the Great Highway west of Lincoln and Fulton Streets. Present use figures presented by the City indicate that 35% to 75% of this parking area (in excess of 100 spaces) is used, including weekends. The temporary loss of 7-10 parking spaces in an area that is rarely filled to capacity will not adversely affect public access to Ocean Beach. Sections 30211 and 30212 require that new development not interfere with the public's right of access to the sea and that access be provided to the sea. The amended project will provide lateral and vertical access improvements. The amendment will have no adverse

impacts on existing or proposed access. The City has reviewed all impacts of the project to activities in Golden Gate Park. The City Recreation and Park Commission has approved the project. Impacts to the Park will be temporary (9 months) and be restored. Section 30213 and 30221 require protection of low cost recreational opportunities and protection of oceanfront land for recreational use. The approved permit will increase recreational opportunities by in part (1) providing improved lateral and vertical access to Ocean Beach, (2) insuring Ocean Beach resources are protected by through seawall design and beach replenishment, (3) restoring dune areas, and (4) highway reconstruction, including extensive landscaping.

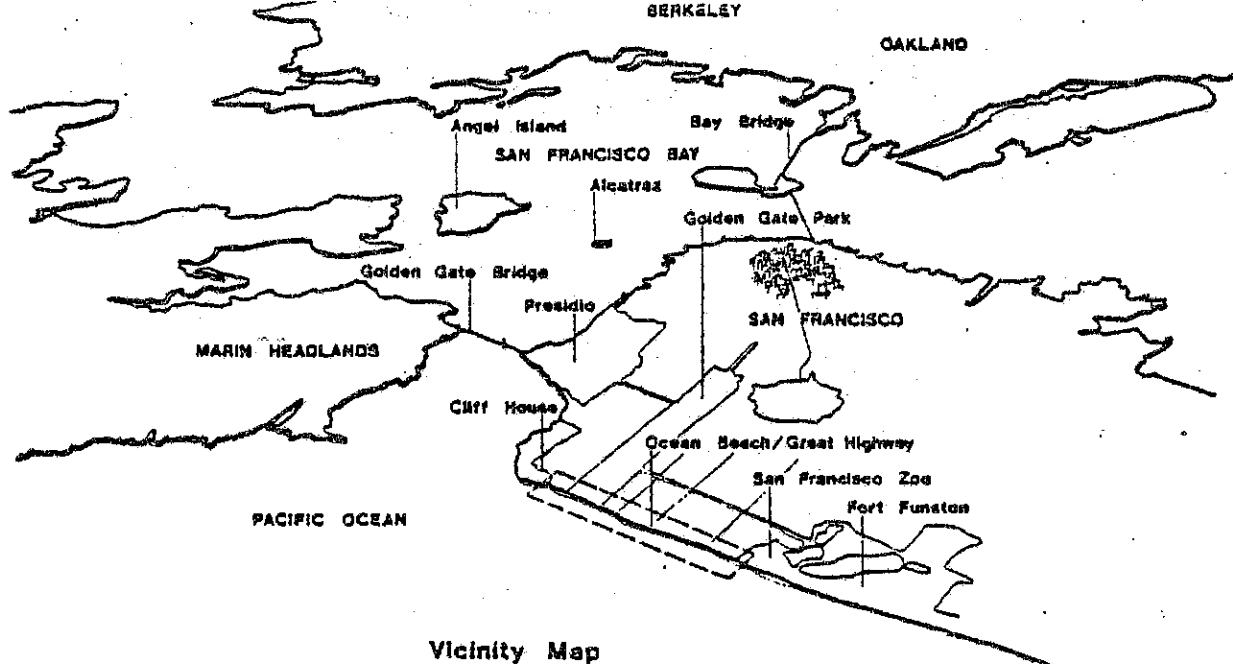
2. Marine Resources: The San Francisco Clean Water Program proposes the Westside Activation Projection as part of a staged implementation of the Wastewater Master Plan. The project would activate elements of the westside system by connecting the Richmond/Sunset Water Pollution Control Plant in Golden Gate Park with the Westside Transport Structure under the Upper Great Highway, the Westside Pump Station near Sloat Blvd., and the Southwest Ocean Outfall. The Westside Activation project would operate until completion of the approved Southwest Water Pollution Control Plant. The Southwest Plant would treat all dry and wet weather flows from the west side of the City. Construction of the Southwest Plant would take four years to complete; however, funding for the new plant has been deferred indefinitely.

Presently, all sewage from the west side of San Francisco is treated at the Richmond/Sunset Plant, averaging approximately 22 million gallons per day (mgd), of dry weather flow. This treated effluent is discharged at the Mile Rock Outfall. During wet weather, storm flows and sewage in excess of the Plant's 45 mgd capacity are discharged untreated at the Mile Rock Outfall and eight other locations along Ocean Beach, including the Lincoln Way and Vicente Street structures. Untreated overflows average 58 annually, resulting in an average of 100 days per year in which Ocean Beach is posted as unsafe by the San Francisco Department of Public Health.

The amendment request will allow all sewage flows to be treated at the Richmond/Sunset Plant, carried through the Westside Transport Structure and disposed through the Southwest Ocean Outfall 4.5 miles offshore. Only during emergency shutdown of this Outfall would the Mile Rock Outfall be used. During heavy rainfall periods this interim system would result in eight overflows of untreated waste water into Ocean Beach waters at existing discharge points. The design of the system will be approved by the Regional Water Quality Control Board to ensure that this objective (reduction of 58 to 8 times of annual untreated overflow) is met. The Board has approved the amendment. Sections 30230 and 30231 require protection of maximum resources and biological productivity in coastal waters. As discussed above the Westside Activation Project is an interim method of improving Wastewater Treatment required by the Regional Water Quality Control Board. Eventually, the Southwest Treatment facility will be constructed that will provide greater water quality protection. The Commission finds that the amendment is consistent with policies requiring protection of marine resources, in that treated wastewater will be discharged 4.5 miles off Ocean Beach, rather than the current one mile offshore discharge. In addition, the amendment is projected to decrease nearshore discharge during high rainfall from 58 to 8 times a year.

3. Prior Actions: As noted above the Commission has approved a public works plan and specific project proposed by the applicant. The initial approval was subsequently amended four times. Past approvals addressed the following issues: recreation, access, water quality, geologic and shoreline processes, dune restoration, seismic hazards, ground water depletion, and scenic resources. Most approvals were conditioned to bring the various project components into conformance with the Coastal Act. Prior conditions of approval are carried over through this amendment and must be met to ensure conformance with the Coastal Act.

rlw/EDL



Vicinity Map

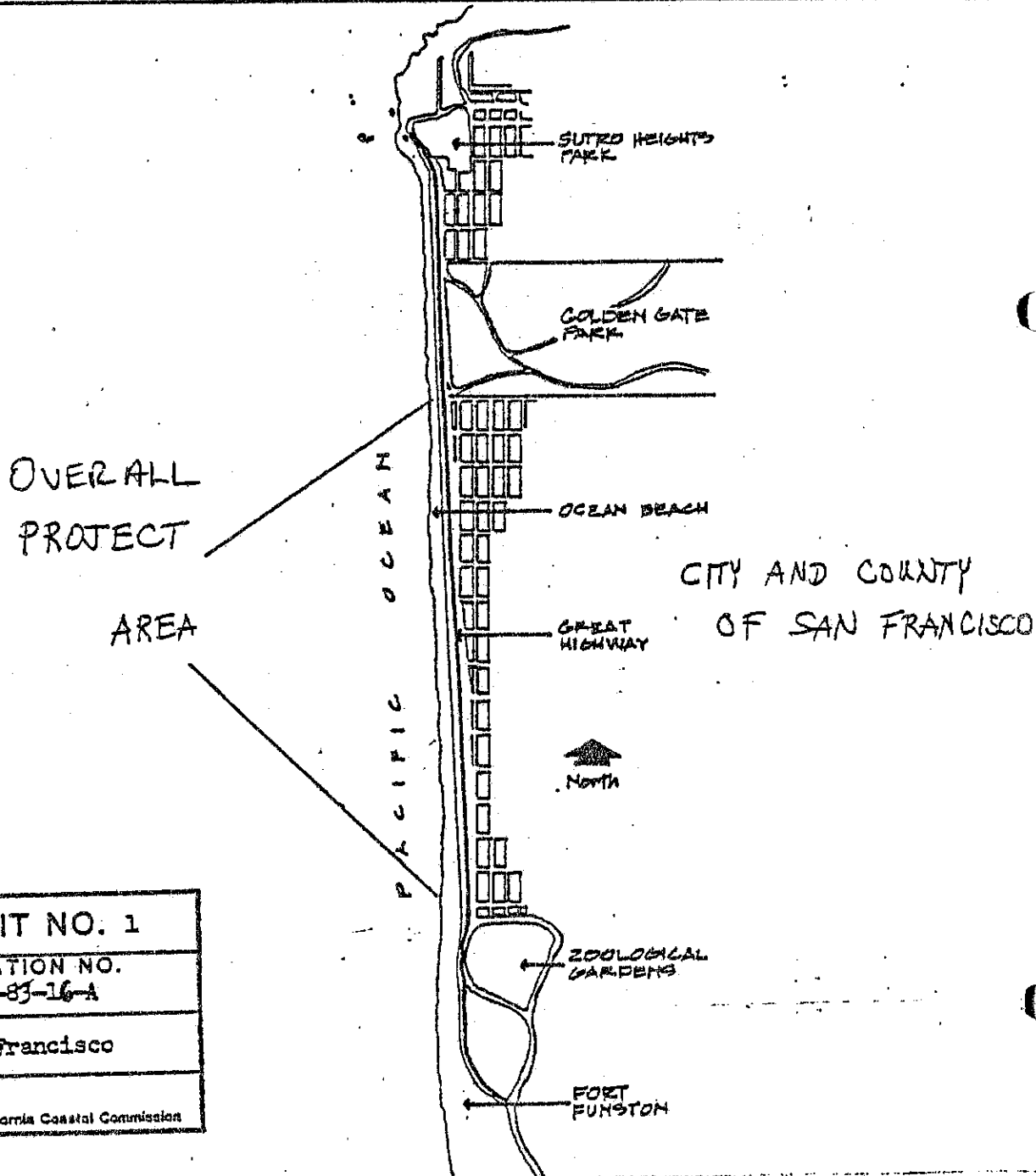

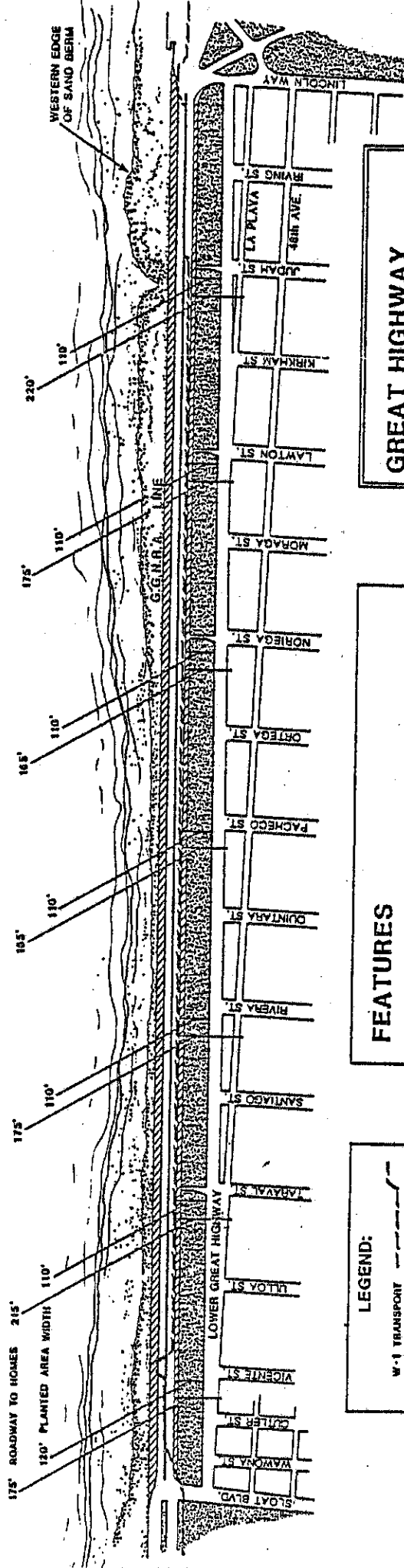


EXHIBIT NO. 1
APPLICATION NO. PW 2-83-16-A
San Francisco
 California Coastal Commission

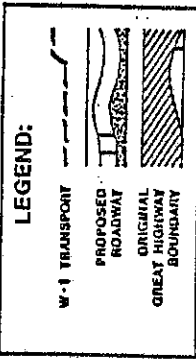
DPW/CLEAN WATER PROGRAM RECOMMENDATION



GREAT HIGHWAY RESTORATION PROJECT

North ↑

- FEATURES**
1. NEW HIGHWAY IS 20 FEET WEST OF PAVEMENT LINE OF OLD GREAT HIGHWAY.
 2. HIGHWAY IS 65 FEET WEST OF SEWER LINE ALONG ITS ENTIRE LENGTH.

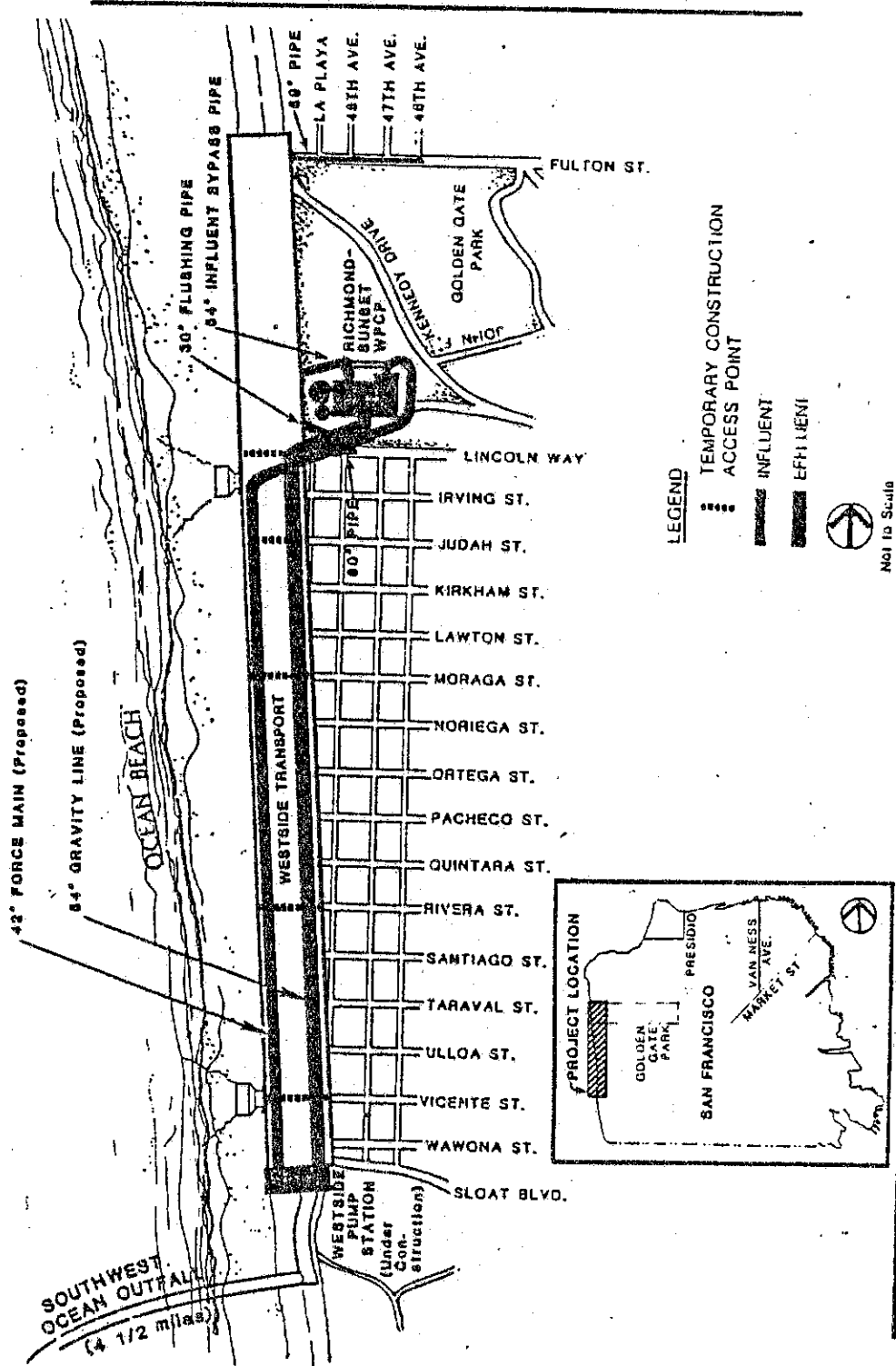


DRAWING NOT TO SCALE

EXHIBIT NO. 2
APPLICATION NO. PH 2-83-16A
San Francisco
California Coastal Commission

FIGURE 1

WESTSIDE ACTIVATION
PROJECT LOCATION



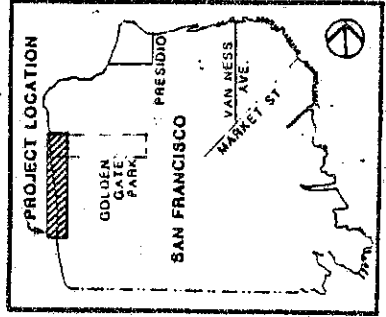
Source:
 San Francisco Clean Water Program
 and
 Bendix Environmental Research, Inc.

EXHIBIT 3
 SAN FRANCISCO
 AMENDMENT
 PW 2-84-16A

LEGEND

- TEMPORARY CONSTRUCTION
- ACCESS POINT
- INFLUENT
- EFFLUENT

Not to Scale



CALIFORNIA COASTAL COMMISSION



NORTH COAST DISTRICT
 350 'E' Street, Fourth Floor
 BOX 4946
 SA, CALIFORNIA 95501
 (707) 443-1623

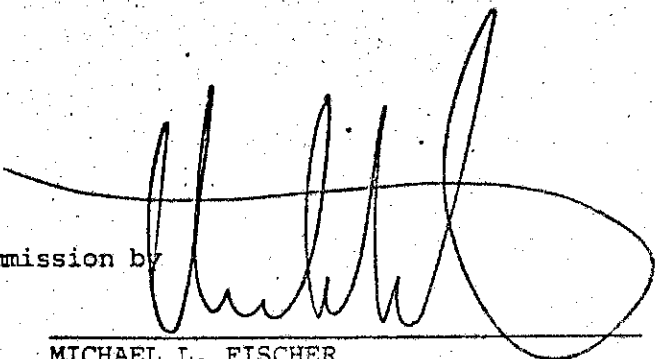
COASTAL DEVELOPMENT PERMIT

No. PW-2-84-16APage 1 of 2

On December 13, 1984, the California Coastal Commission granted to
City and County of San Francisco, Clean Water Program
 this permit for the development described below, subject to the attached
 Standard and Special conditions.

The amendment would provide for connection between the
 existing Richmond-Sunset sewage treatment facility and
 the Westside Transport/pump station/southwest ocean
 outfall. For a more specific description of the amendment,
 see the attached report.

Issued on behalf of the California Coastal Commission by


 MICHAEL L. FISCHER
 Executive Director
 and

RICHARD G. RAYBURN
 NORTH COAST DISTRICT, Director

RECEIVED

JAN 03 1985

**CALIFORNIA
 COASTAL COMMISSION**

ACKNOWLEDGEMENT

The undersigned permittee acknowledges receipt of
 this permit and agrees to abide by all terms and
 conditions thereof.

Date

Signature of Permittee

Coast 11: 7/31

STANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgement. The permit is not valid and construction shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If construction has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Construction shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All construction must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

SPECIAL CONDITIONS:

1. All conditions of the Public Works Plan and specific project approvals as previously amended, remain in full force and effect.

ALIFORNIA COASTAL COMMISS. JN
631 Howard Street, San Francisco 94105 — (415) 543-8555

November 28, 1984

TO: Commissioners, Interested Parties

FROM: Richard G. Rayburn, North Coast District Director

SUBJECT: Request for amendments to City of San Francisco Clean
Water Program Public Works Plan and Specific Project Approvals
(PW-2-84-16A)

SYNOPSIS. The applicant requests an amendment to the public works plan and specific projects approved by the Commission on June 6, 1979 (and later amended). The amendment would provide for connection between the existing Richmond-Sunset sewage treatment facility and the Westside Transport/pump station/southwest ocean outfall. Staff recommends that the Commission approve the amendment that will be subject to all conditions previously approved by the Commission.

Background

The Public Works Plan for San Francisco's Clean Water Program projects at Ocean Beach was approved by the Coastal Commission on June 6, 1979. The Public Works Plan covered the entire range of wastewater collection, storage, treatment and disposal facilities in the coastal zone. At the same time that the Public Works Plan was approved, three Specific Projects were approved under the Plan. The three Specific Projects are the Westside Transport and Pump Station (already completed), the Restoration of the Great Highway, and the Ocean Outfall.

The Commission's review of the Public Works Plan and Specific Projects focused primarily on three issues: (1) shoreline processes and their relationship to the projects, (2) coastal access and recreation, and (3) construction impacts and mitigation measures. In order to bring the projects into conformity with the Coastal Act, the Commission imposed conditions on the Public Works Plan and Specific Projects to assure that: (1) the projects would not compromise the existence of a sandy recreational shoreline during and after construction, (2) public access to and within the project area would not be adversely affected by the projects, and (3) mitigation measures would be incorporated in the projects to offset the adverse impacts associated with a lengthy construction period. Since 1979, four amendments to the Public Works Plan and Specific Project approvals have been approved by the Commission. These amendments affect primarily the alignment of the restored Great Highway, future shoreline protection measures, the size and construction methods of the Ocean Outfall, and the design of the Pump Station.

Procedures

Sections 13365 through 13371 of the Commission Regulations provide for the review of amendments to Public Works Plans. Under the Regulations, the Executive Director shall determine whether or not a proposed amendment is minor in nature. If the Executive Director determines that the proposed amendment is not minor or if the proposed amendment affects conditions required in the Public Works Plan for the purpose of protecting a coastal resource or coastal access, then the amendment request shall be set for a regular hearing before the Commission. To approve an amendment to the Public Works Plan, the Commission must find that the amendment is in conformity with the provisions of the Coastal Act of 1976, including specific factual findings that the development is in conformity with Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

The Executive Director determined that the proposed amendment is not minor in nature.

Staff Recommendation

The staff recommends that the Commission adopt the following resolution:

I. APPROVAL WITH CONDITION

The Commission hereby approves, subject to the condition below, the proposed amendments to the Public Works Plan and Specific Project approvals described herein, on the grounds that the proposed development, as amended and conditioned, is in conformity with the provisions of the California Coastal Act of 1976 including the provisions of Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

II. Condition: All conditions of the Public Works Plan and Specific Project Approvals as previously amended remain in full force and effect.

III. Findings and Declaration.

The Commission hereby finds and declares, as follows:

A. Proposed Amendment:

The amendment request, commonly referred to as the Westside Activation Project, would connect existing facilities and facilities under construction with the Richmond/Sunset Plant by a series of new pipelines to create a modified sewage system. The amendment includes (1) installation of a 54 inch gravity pipeline and a 42 inch force main in the existing Westside Transport Structure; (2) underground lines to the Richmond/Sunset Plant along South Drive through a portion of Golden Gate Park, (3) 30 inch flushing pipeline and 54 inch influent bypass pipeline in the Westside Transport Structure. The South Drive, Great

Highway and Lincoln Way intersection would be reconstructed, including landscaping of associated traffic islands, after trench excavation in this area is completed. Trench excavation for the proposed pipelines and installation of those pipelines would occur east of the Great Highway and south of Golden Gate Park, which is largely residential; and in Golden Gate Park and adjacent to Ocean Beach, which are major recreation areas. The purpose of the amendment is to meet Regional Water Quality Control Board cease and desist order that requires wastewater treatment and disposal corrective measures by Oct. 1, 1986. Originally, the city proposed to meet RWQCB requirements by, in part, by constructing the new Southwest Water Pollution Control Plant near Sloat Blvd. However, construction of this facility will take four years and funding has been deferred indefinitely. Therefore, the Westside Activation Project would operate as an interim alternative. This project has been approved by the RWQCB.

Presently, all sewage from the west side of San Francisco is treated at the Richmond/Sunset Plant, averaging approximately 22 million gallons per day (mgd), of dry weather flow. This treated effluent is discharged at the Mile Rock Outfall. During wet weather, storm flows and sewage in excess of the Plant's 45 mgd capacity are discharged untreated at the Mile Rock Outfall and eight other locations along Ocean Beach, including the Lincoln Way and Vicente Street structures. Untreated overflows average 58 annually, resulting in an average of 100 days per year in which Ocean Beach is posted as unsafe by the San Francisco Department of Public Health.

The Project would require at a maximum 16 months of construction. Trenching excavation would occur at the intersection of Lincoln Way and the Great Highway. In Golden Gate Park, about 1000 feet of trench excavation would occur along South Drive and the southernmost soccer field north of the Richmond/Sunset Plant. The park work would take about 9 months.

Coastal Act Policies:

1. Access and Recreation: The prior Commission action on the project, as amended, focused a great deal of attention on project impacts and improvements on public access and recreational opportunities. The approved project provides for improved lateral access adjacent to the Great Highway between Sloat Blvd and Lincoln Way. Numerous vertical access points from Lower Great Highway to Ocean Beach have been approved. The important recreational values of Ocean Beach have been well documented and discussed in prior findings. Of central concern to the Commission is the effect of shoreline protective structures on the future beach profiles. All development subject to the amendment will be underground and are east of the approved Great Highway and shoreline protective structures alignments. The amendment will not impact these access and recreational provisions. The City will reroute some traffic to lanes to and along Ocean Beach during construction, but will not preclude such vehicular access. Parking requirements for construction crews will be 7 to 10 spaces. These spaces will be utilized along the Great Highway west of Lincoln and Fulton Streets. Present use figures presented by the City indicate that 35% to 75% of this parking area (in excess of 100 spaces) is used, including weekends. The temporary loss of 7-10 parking spaces in an area that is rarely filled to capacity will not adversely affect public access to Ocean Beach. Sections 30211 and 30212 require that new development not interfere with the public's right of access to the sea and that access be provided to the sea. The amended project will provide lateral and vertical access improvements. The amendment will have no adverse

impacts on existing or proposed access. The City has reviewed all impacts of the project to activities in Golden Gate Park. The City Recreation and Park Commission has approved the project. Impacts to the Park will be temporary (9 months) and be restored. Section 30213 and 30221 require protection of low cost recreational opportunities and protection of oceanfront land for recreational use. The approved permit will increase recreational opportunities by in part (1) providing improved lateral and vertical access to Ocean Beach, (2) insuring Ocean Beach resources are protected by through seawall design and beach replenishment, (3) restoring dune areas, and (4) highway reconstruction, including extensive landscaping.

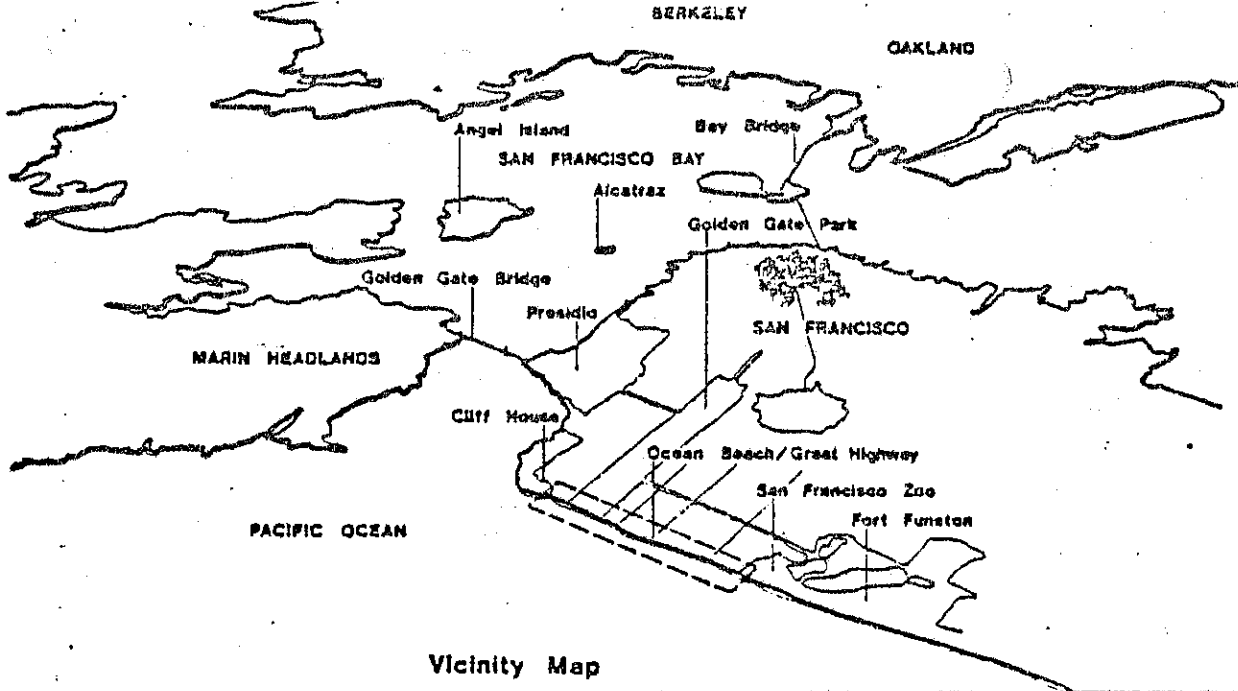
2. Marine Resources: The San Francisco Clean Water Program proposes the Westside Activation Projection as part of a staged implementation of the Wastewater Master Plan. The project would activate elements of the westside system by connecting the Richmond/Sunset Water Pollution Control Plant in Golden Gate Park with the Westside Transport Structure under the Upper Great Highway, the Westside Pump Station near Sloat Blvd., and the Southwest Ocean Outfall. The Westside Activation project would operate until completion of the approved Southwest Water Pollution Control Plant. The Southwest Plant would treat all dry and wet weather flows from the west side of the City. Construction of the Southwest Plant would take four years to complete; however, funding for the new plant has been deferred indefinitely.

Presently, all sewage from the west side of San Francisco is treated at the Richmond/Sunset Plant, averaging approximately 22 million gallons per day (mgd), of dry weather flow. This treated effluent is discharged at the Mile Rock Outfall. During wet weather, storm flows and sewage in excess of the Plant's 45 mgd capacity are discharged untreated at the Mile Rock Outfall and eight other locations along Ocean Beach, including the Lincoln Way and Vicente Street structures. Untreated overflows average 58 annually, resulting in an average of 100 days per year in which Ocean Beach is posted as unsafe by the San Francisco Department of Public Health.

The amendment request will allow all sewage flows to be treated at the Richmond/Sunset Plant, carried through the Westside Transport Structure and disposed through the Southwest Ocean Outfall 4.5 miles offshore. Only during emergency shutdown of this Outfall would the Mile Rock Outfall be used. During heavy rainfall periods this interim system would result in eight overflows of untreated waste water into Ocean Beach waters at existing discharge points. The design of the system will be approved by the Regional Water Quality Control Board to ensure that this objective (reduction of 58 to 8 times of annual untreated overflow) is met. The Board has approved the amendment. Sections 30230 and 30231 require protection of maximum resources and biological productivity in coastal waters. As discussed above the Westside Activation Project is an interim method of improving Wastewater Treatment required by the Regional Water Quality Control Board. Eventually, the Southwest Treatment facility will be constructed that will provide greater water quality protection. The Commission finds that the amendment is consistent with policies requiring protection of marine resources, in that treated wastewater will be discharged 4.5 miles off Ocean Beach, rather than the current one mile offshore discharge. In addition, the amendment is projected to decrease nearshore discharge during high rainfall from 58 to 8 times a year.

3. Prior Actions: As noted above the Commission has approved a public works plan and specific project proposed by the applicant. The initial approval was subsequently amended four times. Past approvals addressed the following issues: recreation, access, water quality, geologic and shoreline processes, dune restoration, seismic hazards, ground water depletion, and scenic resources. Most approvals were conditioned to bring the various project components into conformance with the Coastal Act. Prior conditions of approval are carried over through this amendment and must be met to ensure conformance with the Coastal Act.

rlw/EDL



Vicinity Map

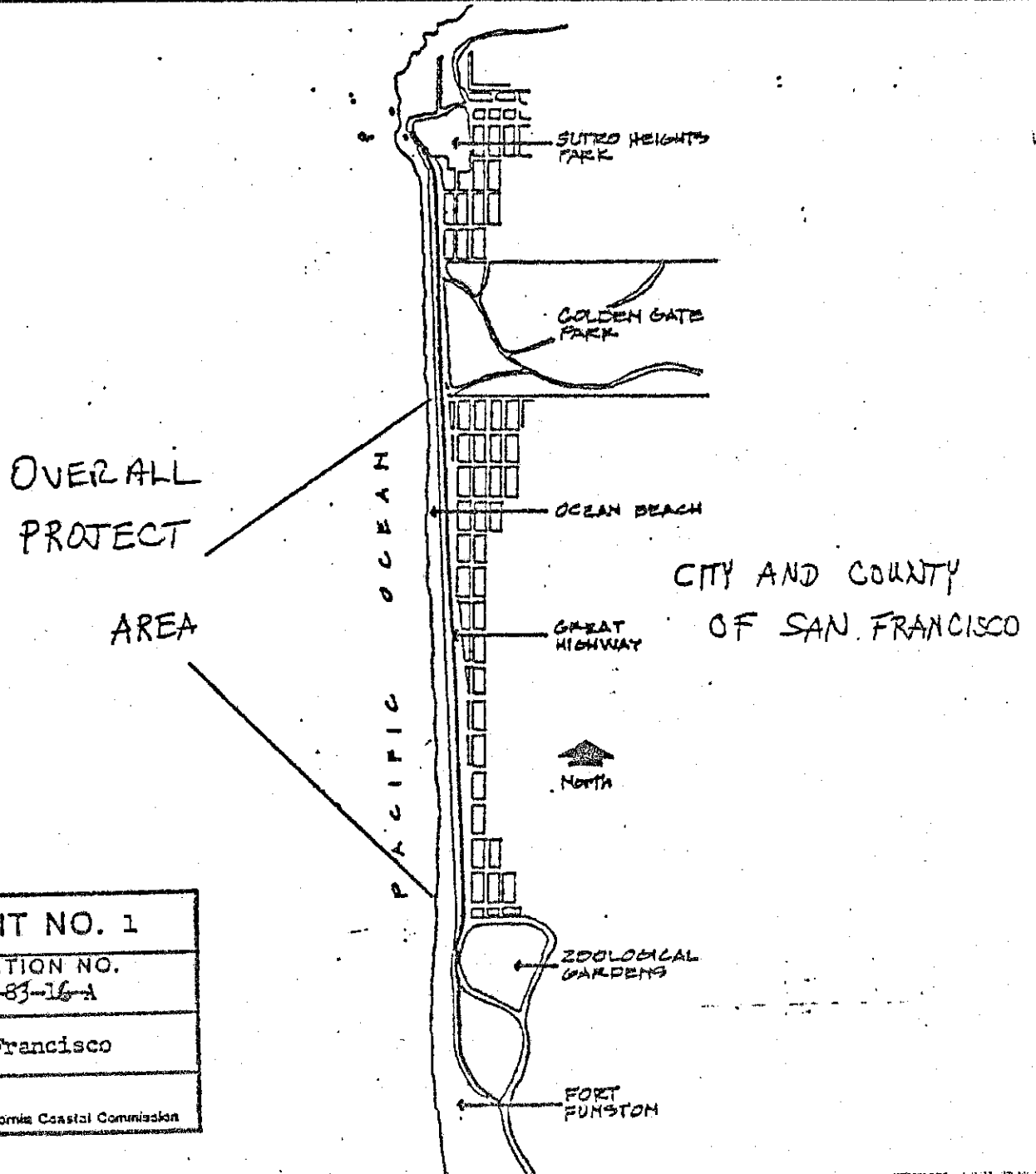

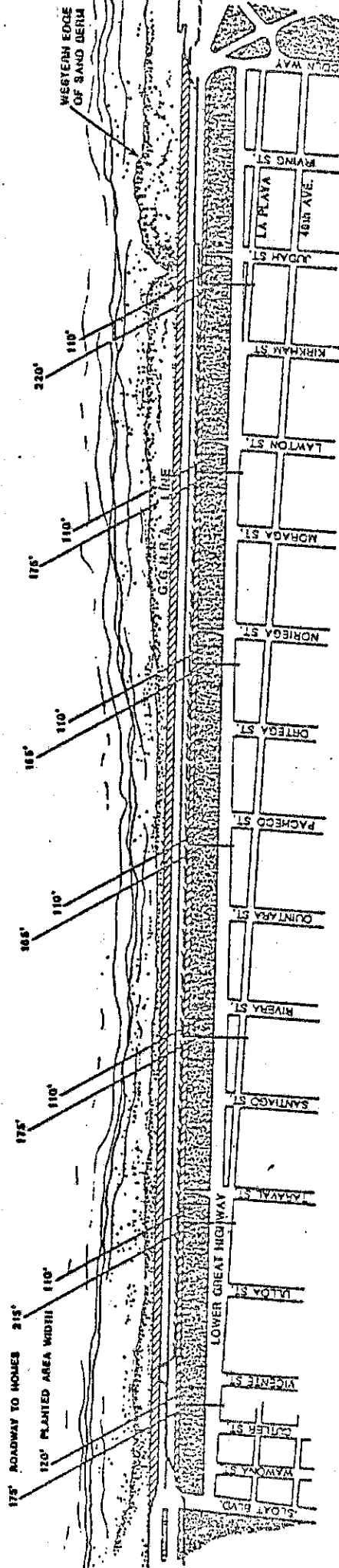


EXHIBIT NO. 1
APPLICATION NO. FW 2-83-16-A
San Francisco
 California Coastal Commission

DPW/CLEAN WATER PROGRAM RECOMMENDATION



LEGEND:

- W-1 TRANSPORT
- PROPOSED ROADWAY
- ORIGINAL GREAT HIGHWAY BOUNDARY

FEATURES

1. NEW HIGHWAY IS 20 FEET WEST OF PAVEMENT LINE OF OLD GREAT HIGHWAY.
2. HIGHWAY IS 65 FEET WEST OF SEWER LINE ALONG ITS ENTIRE LENGTH.

GREAT HIGHWAY RESTORATION PROJECT

North →

DRAWING NOT TO SCALE

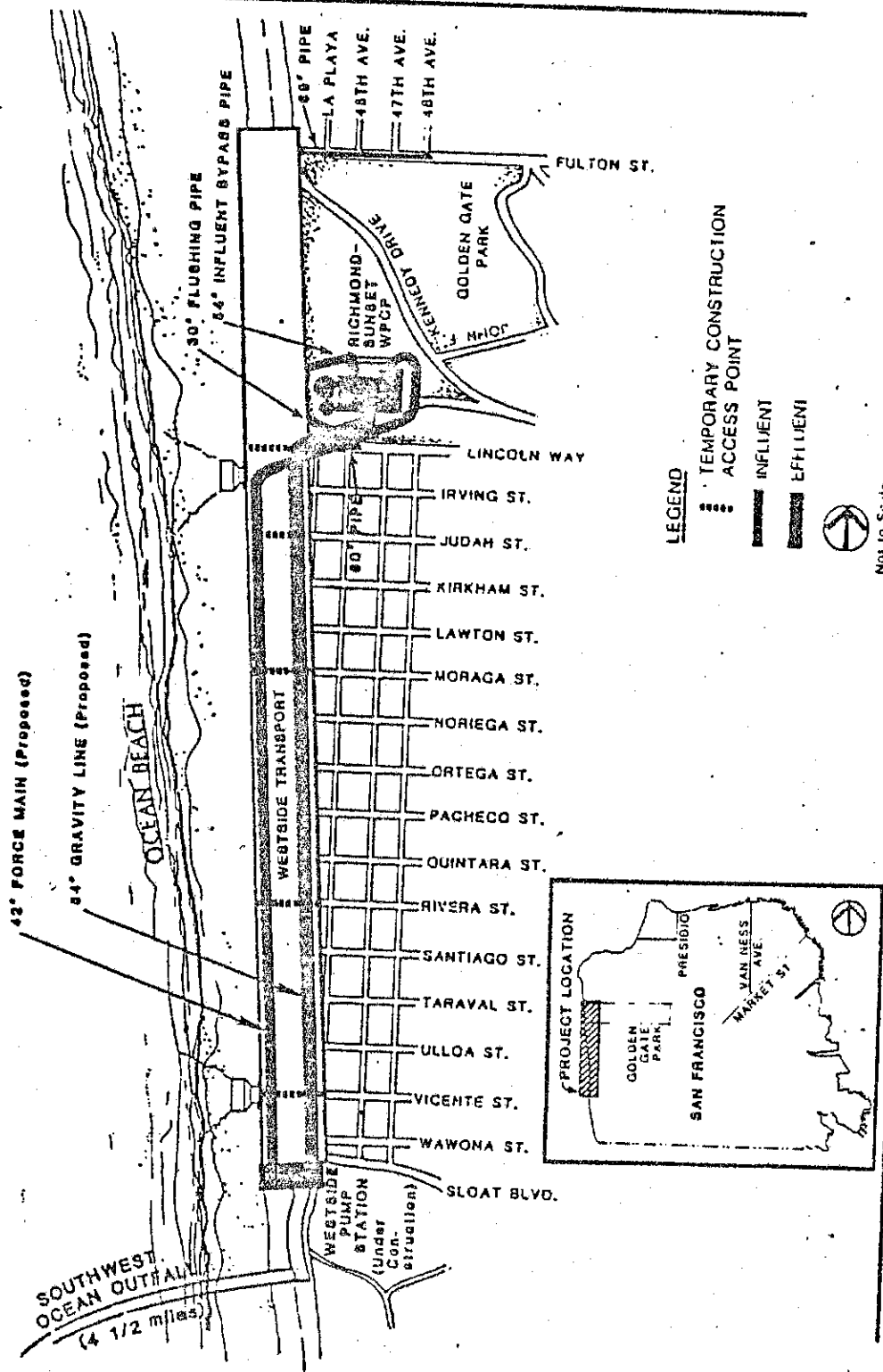
EXHIBIT NO. 2
APPLICATION NO. PM 2-83-16A
San Francisco
California Coastal Commission

FIGURE 1

WESTSIDE ACTIVATION
PROJECT LOCATION

Source:
San Francisco Clean Water Program
and
Bendix Environmental Research, Inc

EXHIBIT 3
SAN FRANCISCO
WASTEWATER
PW 2-84-16A



CALIFORNIA COASTAL COMMISSION

631 HOWARD STREET, 4TH FLOOR
SAN FRANCISCO, CA 94105
3-8555

Amendment Approved
July 23, 1985



TO: Coastal Commissioners, Interested Public

FROM: Noah Tilghman, Coastal Program Manager
Steve Scholl, Staff Analyst

SUBJECT: City and County of San Francisco
Amendment Request, Public Works Plan and
Specific Project Approvals
Clean Water Program, Ocean Beach (PW-2-85-8-A)

SYNOPSIS.

The City and County of San Francisco requests an amendment to the Public Works Plan and Specific Project approvals for elements of the Clean Water Program construction at Ocean Beach. This amendment would allow construction of a concrete seawall, similar to the existing O'Shaughnessy seawall located near the Cliff House, along the shoreline between Lincoln Way and Sloat Boulevard. The amendment would also permit construction of a straight Great Highway with at-grade pedestrian crossings for beach access and a shoreline trail for pedestrians and bicyclists. The staff recommends approval of the amendment request, subject to amended conditions.

BACKGROUND.

The Public Works Plan for San Francisco's Clean Water Program projects at Ocean Beach was approved by the Coastal Commission on June 6, 1979. The Public Works Plan covered the entire range of wastewater collection, storage, treatment and disposal facilities in the coastal zone. At the same time, three Specific Projects were approved under the Plan. The three Specific Projects are the Westside Transport and Pump Station, the restoration of the Great Highway, and the Ocean Outfall. The Westside Transport has been completed, and construction of the Pump Station and Ocean Outfall is continuing. The restoration of the Great Highway has not yet commenced.

Six amendments to the Public Works Plan and Specific Projects have been reviewed and approved by the Commission (September 30, 1980, January 7, 1981, April 1, 1981, July 15, 1982, January 25, 1984, and December 13, 1984). The amendments have been directed at the alignment and design of the Great Highway, future shoreline protective measures, the size and construction techniques for the Ocean Outfall, the design of the Pump Station, and facilities to allow interim use of portions of the system.

The Great Highway has been the subject of three amendment requests, including the present request. The original Specific Project approval was for a four-lane curvilinear roadway passing through undulating, landscaped dunes with a pedestrian/bicycle path paralleling the roadway and pedestrian underpasses to provide beach access. The first amendment to the Specific Project approval allowed revisions to the curvilinear design of the roadway.

Amendment #5 allowed a straight alignment of the Great Highway with recreational trails and pedestrian undercrossings. The straight alignment was proposed by the city after members of the community complained that the previous curvilinear design would have brought portions of the roadway closer to existing residences on the Lower Great Highway than the original Great Highway had been and after major winter storms in 1983 reduced the width of the corridor available for reconstruction of the Great Highway.

The current amendment request is a refinement of the straight highway concept. The proposal includes a four-lane roadway linked to a concrete seawall, only a portion of which is proposed for construction at this time. The plan includes recreational walkways on both sides of the roadway and surface pedestrian crossings for beach access.

Shoreline protection measures have also been the subject of several amendments to the Public Works Plan and Specific Projects. The Commission's original approval was based on the natural shoreline protection afforded by the then-existing dune field. As erosion occurred, the dune field was to be artificially replenished through beach nourishment. The Commission required that the location of the Westside Transport be shifted to a more easterly alignment than originally proposed by the city in order to minimize the risk of its exposure through shoreline recession. A trigger line was to be established through use of buried markers 50 feet west of the Transport to signal the need for sand replenishment.

Amendment #2 established a fund of \$5.4 million to cover eventual costs of sand replenishment and required the city to prepare a beach nourishment plan with the goal of protecting the natural appearance and recreational value of Ocean Beach. When it became apparent that city funds placed in the fund would not be reimbursed by the federal government, the State Legislature terminated the fund, but retained the requirement for preparation

of a beach nourishment plan designed to ensure the structural integrity of sewer improvements and the integrity of the beach area as a recreational resource. San Francisco's contribution to implementation of the plan was established at \$625,000.

Amendment #4 recognized that the construction methods for the Ocean Outfall as finally adopted would not produce significant amounts of sand for use in replenishing Ocean Beach. Original estimates had been that the outfall construction could indirectly benefit the littoral sand supply, but this proved not to be the case.

Amendment #5 reflected the city's amended plans for not only the Great Highway, as noted above, but also shoreline protection methods. The city proposed construction of a seawall, to be constructed of rock riprap, between Lincoln Way and Sloat Boulevard. The seawall was to be located in a westerly location where it would extend onto land owned by the Federal Government and managed as part of the Golden Gate National Recreation Area (GGNRA). The westerly location of the proposed wall resulted from the city's attempt to meet the demands of neighbors that the new Great Highway be located as far as possible from their homes.

The Commission approved the concept of a rock revetment, but attached conditions requiring that it be located completely on city property and not extend westerly onto the GGNRA beach. In so doing, the Commission balanced the need for protecting a usable recreational beach with the goal of preserving an adequate green space east of the new Great Highway. The Commission did not change the prior requirement for beach nourishment as a means to assure long-term existence of a usable recreational beach.

PROCEDURES.

Sections 13365 through 13371 of the Commission's regulations provide for the review of amendments to approved Public Works Plans. Under the regulations, the Executive Director shall determine whether or not a proposed amendment is minor in nature. If the Executive Director determines that the proposed amendment is not minor or if the proposed amendment affects conditions required in the Public Works Plan for the purpose of protecting a coastal resource or coastal access, then the amendment request shall be set for a regular hearing before the Commission. To approve an amendment to the Public Works Plan, the Commission must find that the amendment is in conformity with the provisions of the Coastal Act of 1976, including specific factual findings that the development is in conformity with Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

The Executive Director has determined that the proposed amendments

which affect conditions previously imposed are not minor in nature. Therefore, the amendment requests have been set for a public hearing before the Commission.

DESCRIPTION OF THE PROJECT AREA.

Construction of the Westside Transport sewer box has been completed. Following construction of the sewer box, it was buried with material produced by excavation. The Great Highway detour roadway, which consists of four narrow lanes separated by a concrete median barrier, is located west of the Transport. The detour roadway occupies the pavement of the old southbound lanes of the Great Highway. (The northbound lanes were removed to allow excavation for the Westside Transport.) The west edge of the existing Great Highway detour roadway lies approximately 93 feet west of the edge of the sewer box.

West of the Great Highway detour roadway is a sand berm of varying width. This berm is the remnant of the sand which was stockpiled west of the roadway during construction of the Westside Transport. The berm is a flat-topped mound of material running parallel with the shoreline. The top of the berm is approximately 5-6 feet above the elevation of the roadway.

Between Noriega and Taraval Streets, the berm west of the Great Highway detour roadway is very narrow. (This area is identified as the "high erosion area" on Attachment #2.) Between about Ortega and Santiago Streets, the distance between the highway lanes and the edge of the bluff is about ten feet or less. The City has placed chunks of concrete, rocks and other rubble along much of the bluff face in this area to protect the roadway. Even at the time of this writing, with a generally wide summer beach, this area exhibits the narrowest beach of the shoreline between the Cliff House and Sloat Boulevard.

From Santiago Street south to Vicente and from Noriega north to Lawton, the berm west of the Great Highway detour roadway is somewhat wider than in the area described above. (These areas are termed "moderate erosion areas".) From Lawton Street north to Lincoln Way, the berm is widest of all ("low erosion area").

In January, 1985, the city planted dune grass plugs on most of the north and south sections of the berm where it is not immediately threatened by erosion (low and moderate erosion areas). Sand fences and signs have been installed also to minimize foot traffic on the planted berm. At this writing, the grass is growing and appears to have helped stabilize the berm and reduce blowing sand.

The city has graded three earth ramps down the face of the berm north of Noriega Street. These provide easy, safe access to the beach. South of Noriega, where the berm is narrowest, there is no formal means of access down the bluff face, other than scrambling up or down the edge.

The old pedestrian underpasses at Judah and Taraval still connect the Lower Great Highway with the beach, although they are dark and uninviting. In addition, there are several surface crossings on the Great Highway detour roadway. These are not signalized crossings, and not all of them connect with the access ramps described above.

There is an existing seawall extending approximately 665 feet from Santiago Street to just south of Taraval Street. This low concrete wall was constructed nearly 50 years ago to provide protection from storms for the Taraval pedestrian underpass. The wall lies approximately 105 feet west of the westerly edge of the Great Highway. The cap of the wall is located at a relatively low elevation of 13' (MLLW) where it remains covered with sand most of the time, although it has been exposed occasionally during storms and the top of the wall is discernible at the present time.

SUMMARY OF PROPOSED AMENDMENTS.

The city submitted a request for amendment of the Public Works Plan and Specific Project Approvals on May 13, 1985. The request outlined the major components of the proposed seawall and highway as now proposed by the city. Since the amendment request was made, the city has submitted a document entitled "Great Highway - Ocean Beach Coastal Engineering Report - Seawall Design" (Noble Coastal and Harbor Engineering, Ltd., July 3, 1985). This report contains more specific recommendations for the configuration of the seawall. Although the consultant considered five different configurations for the seawall, and the city has not indicated which configuration it will pursue, each alternative is the same or nearly the same in several important parameters. The findings and conditions below are based on the preferred alternative design as recommended by the consultant, but sufficient flexibility is allowed so that minor details may be refined during the final design of the project.

The city has also submitted additional materials since May 13 showing the design of the Great Highway and associated improvements. The findings and conditions describe the overall arrangement of these proposed facilities, while allowing flexibility in final design.

The revised project which is the subject of this amendment request consists of the following elements:

1. Phased construction of a seawall along the shoreline on city property. The configuration of the wall would be similar to the existing O'Shaughnessy seawall located north of Lincoln Way, consisting of a cutoff wall at the seaward edge, a set of broad, concrete steps rising landward, and a low parapet wall (see Exhibit 5). Behind the parapet, on the landward side, would be a pedestrian sidewalk, or promenade, also similar to that adjacent to the O'Shaughnessy wall. Stairs at regular intervals would allow access through the

seawall down to the beach. The width of the seawall (in cross-section) would be approximately 30-35 feet, not including the promenade.

Depending on the availability of funds, the seawall/promenade would be constructed in phases, beginning with the area of highest erosion between Noriega and Santiago Streets, a distance of 3,470 feet. If funds are not available to construct all of this section at once, then a portion only would be constructed in the first phase. Later phases would include construction of the seawall in the areas of moderate erosion hazard between Noriega and Lawton and between Taraval and Vicente Streets.

2. Graded and landscaped dunes in the low and moderate erosion areas. Dune grass has already been established in most of this area. Additional sand produced by highway construction would be added to the existing berm and additional landscaping would be provided.

3. A straight four-lane roadway, whose speed would be limited to 35 mph through synchronized signals. The roadway would include shoulders on both sides and a planted median strip in the center (see Exhibits 7, 8 and 9). A second planted strip would separate the roadway from the pedestrian promenade along the ocean. Total width of the roadway would be approximately 70 feet.

4. Surface crossings of the reconstructed Great Highway at intervals of every other block (approximately 1,400 feet). From the ocean side of the Great Highway, accessways down to the beach would be provided at every block (where the seawall is constructed) or at every other block (where there is no seawall).

5. A recreational trail measuring approximately 14 feet wide located east of the reconstructed Great Highway. One side of the trail would be hard-surfaced for bicyclists, and the other would be of decomposed granite or similar material for joggers.

6. The existing landscaped strip located adjacent to the Lower Great Highway would be retained. This strip would measure 80 to 100 feet in width, which is approximately the same distance as originally existed between the edge of the old Upper Great Highway and the Lower Great Highway.

STAFF RECOMMENDATION.

The staff recommends that the Commission adopt the following resolution:

I. APPROVAL WITH CONDITIONS

The Commission hereby approves, subject to the conditions below, the proposed amendments to the Public Works Plan and Specific

Project approvals described herein, on the grounds that the proposed development, as amended and conditioned, is in conformity with the provisions of the California Coastal Act of 1976 including the provisions of Chapter 3 of the Coastal Act and that there are no feasible alternatives available, or feasible mitigation measures, as provided in the California Environmental Quality Act, which would substantially lessen any significant adverse impact that the development as finally proposed may have on the environment.

II. CONDITIONS.

[NOTE: Those conditions which were modified or added through the Commission's previous approval of amendments on January 25, 1984 are reproduced below. Deletions are indicated by overstriking; additions are indicated by underscoring.]

Specific Project Conditions

A. Amended and Added Conditions

3. Phasing of Restoration // Each phase of the construction of the Westside Transport shall include restoration of the highway and creation of the dune field that portion of the shoreline with the following exceptions:

a) No later than one year from the date of Commission action on Amendment #PW/2+33+14+11 the City shall

reconstruct the Great Highway between Fallon Street and Lincoln Way // or shall report to the Commission on progress in securing federal // state // or local funding for reconstruction of the highway, and shall submit to the approval of the Executive Director a timetable for reconstruction of the roadway.

b) Prior to final creation of the landscaped dune field (or approval by the Commission of a substitute approval) for the portion of the shoreline between Noriega Street and Sycamore Boulevard, commencement of construction of the Great Highway or seawall the City shall prepare submit a Beach Nourishment Plan for the review of the Coastal Commission and a determination by a majority vote of the membership of the Commission that the plan is adequate to ensure the integrity of the beach area as a recreational resource. The Beach Nourishment Plan, as required by Section 5, Chapter 1007, 1981 California Laws, which shall be designed to counter the effect of future erosion and which shall ensure the integrity of Ocean Beach as a recreational resource. At a minimum, The City shall contribute up to \$100,000 toward the preparation of this Plan. (This shall be in addition to the existing monitoring requirements pursuant to original condition 12.) The

Beach Nourishment Plan shall contain or provide for appropriate funding of beach restoration measures. The City and County of San Francisco shall contribute a minimum of six hundred twenty-five thousand dollars (\$625,000) to the implementation of this plan. The extent of additional contribution by the city beyond \$625,000 to the implementation of the plan shall be established in the plan itself. The Plan shall be submitted to the California Coastal Commission prior to the adoption by the Westside Transpoort for a determination by a majority vote of the membership of the Commission that the Plan is adequate to ensure the integrity of the beach area as a recreational resource. The Plan shall be promptly implemented following any such determination approval by the Coastal Commission.

During the construction of the seawall and dune fence shall be maintained on the steep face between Moraga and Taraval Streets. When the seawall construction is completed the remaining dunes of the Old Great Highway shall be removed. Sand removed during excavation of the seawall shall be placed upon the seawall to create a natural dune appearance as possible. Turf sod, Beach grass or other plantings satisfactory to the National Park Service and sand fencing shall be installed to control blowing sand until final creation of the landscaped dune field or approval of a substitute approach.

Excess sand produced by excavation for the seawall or the new Great Highway shall be placed seaward of the new highway, if consistent with the Beach Nourishment Plan described above. Placement of sand on GGNRA property shall have the approval of the National Park Service. Beach grass or other plants and sand fences or similar measures to control blowing sand, as approved by the National Park Service, shall be installed on any exposed sand areas (see Condition #5 below).

4. Beach Access. The City shall provide a means of beach access acceptable to the National Park Service over the protecting dunes that will prevent wind erosion of bare sand surfaces resulting from heavy foot traffic on vegetated dunes.
5. Dune Planting. The City shall provide an irrigation system and shall guarantee the success of dune planting for a period of 5 years, or a lesser period if so provided in a Maintenance Agreement which is jointly signed by the City and the National Park Service. Design of the irrigation system, final contours, planting and fertilization schedules, and plant selection shall be approved by the National Park Service.

7. Access Over Overflows. The existing overflow structure near the end of Vicente Street shall be modified to provide decking, railing, and steps on the north and south sides and a railing on the top to allow lateral access landward of the surf zone.

8. Relocation of Westside Transport and Restored Great Highway. Consistent with the City's proposed alignment, transport shall be located with the main portion of the roadway to the east of the west side of the existing upper Great Highway. The reconstructed upper Great Highway may be a straight road. It shall be located east of the structure's projection with the exact alignment to be determined during review and approval of final plans. One or both of the recreational trails may be located east of the reconstructed highway.

The reconstructed Great Highway shall be a straight four-lane road, of which the western edge shall be located approximately 55-60 feet east of the Golden Gate National Recreation Area/City boundary line. The roadway shall be approximately 70 feet in width. The easterly edge of the reconstructed Great Highway shall be approximately the same distance from the Lower Great Highway as the edge of the old Great Highway (approximately 80-100 feet).

At-grade pedestrian crossings of the reconstructed Great Highway shall be provided at approximately every other block between Lincoln Way and Sloat Boulevard. Pedestrian access from the west side of the reconstructed Great Highway to the beach shall be provided at intervals of every block (approximately 700 feet) where the seawall is constructed or every other block (approximately 1,400 feet) where the seawall is not constructed. A recreational trail approximately 14 feet in width shall be located east of the Great Highway.

9. Future Shoreline Protection Measures.

Redesign the concept of construction of a stone revetment of revised design under review of the alternatives described herein as approved. Upon receipt of the permit, the City shall submit revised plans selecting either alternative A or alternative B to the Executive Director for his review and approval in writing. Revised plans shall include sketch engineering details demonstrating the design wave and design rock sizes, and defining more precisely the elevation of the high water level of the reinforced and the elevation of the toe stone under long term erosion over the life of the structure. The alternatives conceptually approved are:

Alternative A // The concept of a structure with revetment located seaward of City property landward of the CGNRA boundary // Under revised plans //

demonstrate conclusively that alternative designs are necessary for the development of the shoreline shall be based on mean low water (MLW) and shall have a face slope no gentler than 2:1 to minimize encroachment onto the beach. It shall include a sketch of the recommended by the City's consultants to be elevated with a wall to prevent overtopping. The minimum elevation of the development crest shall be 23 feet above MLW.

FOR

Alternative B. The general concept of constructing Alternative Z as recommended by the City's consultants and submitted on the plan is approved as a final plan by the Council unless revised plans and alternatives demonstrate conclusively that the proposed use of the rock apron will reduce scour during design storm conditions. The toe of the main development shall be established at 0 MLW.

A concrete seawall shall be constructed along all or a part of the shoreline identified as high or moderate erosion areas in the report entitled: "Great Highway - Ocean Beach Coastal Engineering Report - Seawall Design" (Noble Coastal and Harbor Engineering, Ltd., July 3, 1985). The seawall shall be of a stepped design with a cutoff wall on the seaward side and wave screen on the landward side and shall be constructed with the configuration and approximate dimensions recommended by the above-cited report (see p. 83). The configuration of the wall shall include:

- a. Cutoff wall pile cap elevation at 6.0 feet MLLW. Bottom of the cutoff wall at -6.0 feet MLLW or lower.
- b. A bench approximately seven feet or more in width between the cutoff wall and the stepped slope.
- c. A 1:2 stepped slope.
- d. Top of stepped slope at approximately 17.1 feet MLLW.
- e. Berm (or platform) at top of stepped slope.
- f. Curved or angled wave screen with a top elevation of approximately 27.2 feet MLLW.
- g. The total width of the seawall in cross-section shall not exceed 38 feet, not counting the landside promenade.

It is recommended that where the concrete seawall is constructed, any visible existing rubble shall be removed from the beach between

Kindly way and the shoreline in front of the proposed pump station, except for material specifically provided for as part of the approval of the plan. Future placement of rubble is prohibited. The City shall place markers and perform sand replenishment as previously required unless specifically modified during Commission review and approval of the Beach Nourishment Plan.

14. Existing Great Highway. The asphalt pavement of the existing southbound lanes of the old Great Highway shall be removed upon completion of as a part of construction of the new Great Highway. Immediately following removal of each section of the existing highway Adequate measures, subject to the review and approval of the Executive Director, shall be taken to stabilize excavated sand in the area between Noriega Street and Sloat Boulevard where new dunes will not be created at this time as a part of this project. If no structural protection measures are in place pursuant to other conditions of this approval at least two sand ladders or ramps, of a design acceptable to the National Park Service, shall be installed and maintained to provide access to the beach between Noriega and Van Ness Streets. The sand ladders or ramps shall remain in place until such time as an alternative means of providing access to the beach has been approved by the Executive Director.

15. Final Plans. Prior to the commencement of construction of the new Great Highway, the City shall submit for the review and approval of the Executive Director plans for the highway, the protective structure, the recreational trails, the pedestrian accessways, and all other features described in these findings. The plans shall include safe and adequate beach access in all areas, whether the concrete seawall, transition structure, or no seawall is constructed, over the seawall in a manner acceptable to the Executive Director in locations and at elevations convenient to the five required undercrossings. If any portion of the protective structure is constructed a proportionate amount of access shall be provided in locations and in a manner acceptable to the Executive Director. One or both Recreational trails may be relocated to on the east side of the new highway, so long as two trails, one hard-surfaced and one semi-hardsurfaced, are provided. Five pedestrian undercrossings shall be provided at Judson, Lawton, Noriega, Quintara and Taraval Streets. A vista parking lot for approximately 35 cars shall may be provided west of the new Great Highway opposite the end of Irving Street.

B. Unchanged Conditions

All remaining conditions of the Public Works Plan and Specific Project Approvals not specifically amended herein remain in full force and effect.

III. FINDINGS AND DECLARATIONS.

The Commission hereby finds and declares as follows:

Amendment #5 approved by the Commission January 25, 1984 permitted a shoreline protective device and reconstruction of the Great Highway as a straight roadway. The current amendment request contains the same general elements. Submittal of this amendment request was made necessary not by a wholly different proposal for reconstruction of the Ocean Beach area, but rather by differences in the design of features which were previously given general approval. These findings address primarily the differences between the project now proposed and that which was previously approved. The findings adopted on March 14, 1984 concerning the previous amendment which support the approved alignment on city property remain valid and are hereby incorporated by reference, except where amended specifically by these findings.

A. Reconstruction of the Great Highway near Golden Gate Park.

In order to mitigate the adverse impacts on beach access of a lengthy construction period, the Commission required as a condition of its original approval in 1979 that the reconstructed highway and landscaped dunes be completed immediately following construction of each segment of the sewer box. At this writing, however, reconstruction of the Great Highway has not taken place.

Reconstruction of the highway between Fulton and Lincoln (adjacent to the end of Golden Gate Park) to implement the city's master plan for the area is no longer proposed by the city to occur within the foreseeable future. Therefore, the city requests that reconstruction of the Great Highway in this area be deleted as a requirement of the Public Works Plan and Specific Project approval.

The city states that federal funding for highway reconstruction has not been made available. Without funding for major improvements, the old Great Highway was simply repaved following construction of the Westside Transport in this area. Recently the area was restriped so that the parking area within the roadway is located adjacent to the beach. Neither shoreline protection nor blowing sand are issues in this area, due to the existence of the O'Shaughnessy seawall. Since the existing roadway is functional and public access and other concerns are not raised by its current condition, the Commission agrees that it is no longer appropriate to require immediate reconstruction of the Great Highway between Fulton Street and Lincoln Way. The Commission supports improvements to access facilities even where these are not required by a coastal permit, and therefore the Commission encourages reconstruction of the highway in this area to provide more attractive and usable facilities. The city states that when funds become available, the city will submit an application for reconstruction of this area. The Commission welcomes such an application.

B. Beach Nourishment Plan.

The city requests that the language of the condition regarding the Beach Nourishment Plan be revised to conform to the legislation which requires it. As the condition now stands, it requires preparation of the Beach Nourishment Plan prior to creation of landscaped dunes or a substitute approach in the high and moderate erosion areas, whereas the legislation requires approval of the Beach Nourishment Plan by the Commission prior to activation of the Westside Transport. Since construction of landscaped dunes is no longer proposed in the high erosion area, the Commission agrees that the language of the condition needs to be updated.

The Commission has consistently found, based on reports prepared by the city's own shoreline consultant and by others, that beach nourishment is a necessity to ensure the long-term viability of a recreational beach at Ocean Beach. Although the seawall as now proposed is designed to minimize impacts on shoreline sand supply, the fact remains that the city has established a fixed line through construction of the Westside Transport which does not permit natural shoreline processes to take place. The effects of shoreline recession must be dealt with through artificial means such as beach nourishment if a usable recreational beach is to be maintained on this eroding shoreline.

The "Great Highway-Ocean Beach Coastal Engineering Report - Seawall Design" estimates the time remaining before dunes retreat to the City/GGNRA property line (where the seaward edge of the seawall would be constructed.) Between Noriega and Santiago Streets, the line has been reached or virtually reached already; this is the area in which the first phase of the seawall would be constructed. The estimated time to reach the property line from Lawton to Noriega and from Ulloa to Wawona varies from 0 to 45 years, which is within the estimated 50-year life of the Westside Transport and Great Highway.

The consultant's report also considers the impact of a long-term rise in sea level. Although there is disagreement among experts on the rate of sea level rise, even an optimistic estimate reinforces the conclusion that the seawall will be exposed to ocean waves during its lifetime and that of the reconstructed Great Highway. The consultant states that:

In the long-term, as beach material is lost, the seawall will be subjected to greater wave attack. At a certain point in time, highly dependent on the rate of sea level rise, it will be necessary to consider beach nourishment for long-term stability of the wall and for beach availability. Again, this is a result predominantly of long-term sea level projections and not from the effect of the seawall on the beach.

It is recommended that beach nourishment be performed when the normal beach level at the foot of the structure, not

during a storm, regularly reaches elevation of about 94 ft Project (6' MLLW). It is further recommended that beach monitoring be continued so that changes in the beach can be followed.

The Commission emphasizes that, should the seawall be exposed to wave action, nourishment may be necessary to assure the existence of a usable beach, whether or not the structural stability of the seawall is in question. In fact, given the energy-dissipating stepped design and the conservative elevation of the top of the seawall, it is entirely possible that exposure of the seawall would pose no real threat to the seawall itself, but would still entail a loss of the recreational beach during high tides or periods of high waves. Such an outcome is not acceptable. The Commission finds that protection of a usable recreational beach remains among the highest priorities for Ocean Beach.

The concept of beach nourishment was reinforced through state legislation adopted in 1981. Although four years have gone by, and the project has undergone many changes, that concept remains a valid one. The city was required by the 1981 legislation, as well as by conditions imposed by the Commission, to prepare a Beach Nourishment Plan for a determination by the Coastal Commission that it is adequate to ensure the integrity of the beach area as a recreational resource. Such a plan has not yet been prepared.

Although the legislation requiring the preparation of the plan states that the plan shall be approved by the Coastal Commission prior to activation of the Westside Transport, now scheduled for January, 1987, the Commission is concerned with the prompt preparation of the plan. In order to address short-term sand losses, such as occurred in the severe storms of 1983, and to avoid possible delays in activation of the Westside Transport if the plan is not submitted for another year and a half, the Commission finds it is necessary for the city to prepare the plan in a more timely manner. Therefore, Condition #3 is revised to require submittal to the Commission of the Beach Nourishment Plan prior to commencement of construction of the facilities covered by this amendment (the seawall and the reconstructed Great Highway). The city has previously made a commitment to contribute up to \$100,000 to the preparation of the plan, and the legislation referred to above requires the contribution of \$625,000 to the implementation of the plan. The condition reflects the financial responsibility of the city to the plan.

The Beach Nourishment Plan should address the possible need for long-term sand replenishment, the cost of which could easily exceed \$625,000. The plan should indicate how in such a case the city's responsibility to protect its highway improvements and the recreational beach will be carried out. Shared responsibility with the National Park Service which maintains the beach is one possibility. The plan should address that and other alternatives.

C. Dune Planting.

The city requests that the requirement for an irrigation system for the landscaped dunes be deleted on the basis that experience has shown it is not necessary. Originally irrigation was thought to be necessary, at least at first, due to the area's rainless summers. Since the original requirement was established, the National Park Service has questioned the need for a permanent irrigation system on the basis that plant species should be used which are adapted to the area's dry periods. At this writing, the dune grass planted in January has been in place for half a year, and it appears to be growing vigorously. Experience gained so far therefore indicates that proper selection of plant materials and timing of planting can preclude the necessity for irrigation. The requirement for irrigation is therefore removed from Condition #5.

The requirement that the city assure the success of dune landscaping remains in the condition. If future experience demonstrates that irrigation or other means are necessary after all to assure that plantings are successful, then the city will be required to implement such procedures.

D. Relocation of the Great Highway.

The condition regarding the reconstruction of the Great Highway has been revised to reflect the new design of the highway and associated access improvements. The major elements of the reconstructed highway design remain a part of the project. In fact, the new design provides for better beach access at shorter intervals than the previous design which used expensive pedestrian underpasses. Only 4-5 such underpasses were proposed previously, whereas the new design proposes seven at-grade highway crossings, not counting those at the project ends at Lincoln Way and Sloat Boulevard. Such crossings will be signalized for the safety of pedestrians. Once a pedestrian has crossed the highway, there will be more means of access down to the beach, either by means of stairs on the seawall or paths where the seawall is not constructed, than were proposed under the previous project. The increase is due to the fact that stairs down the seawall will be located at least every block (700 feet).

No change is requested or approved in Condition #4 regarding access through the dunes in areas where the seawall is not constructed. Use of ramps such as those which have already been constructed could satisfy this condition. These ramps are angled to minimize wind-blown sand and are acceptable to the National Park Service.

Neither is a change requested by the city in Condition #7 regarding access over the existing overflow structure at the end of Vicente Street. As required previously, steps must be provided over the structure to allow safe passage along the shoreline when the beach is narrow and access around the seaward end of the structure is not available.

When approving Amendment #5, the Commission found that protection of the landscaped area east of the Upper Great Highway at approximately the size which existed prior to construction of the Westside Transport was an appropriate goal. The revised design is consistent with that goal. The separation between the reconstructed Great Highway and homes located on the Lower Great Highway will be approximately the same as what formerly existed when the old Great Highway was in place. The revised Condition #8 reiterates this fact. The revised project provides adequate access to and along the shoreline, consistent with the public access and public recreation policies of Chapter 3 of the Coastal Act.

E. Shoreline Protection Measures.

The July, 1985 Noble report recommends a set of parameters for the structural configuration of the proposed seawall. These recommendations are based on tests conducted by the consultant using a physical model at a scale of 1:10. The tests were intended to compare alternative configurations of the seawall and their ability to reduce reflected wave energy, overtopping of waves, and scouring of sand at the base of the wall. The report recommends that the elevation of the cap of the cutoff wall at the front (seaward) side of the structure be located at 6' MLLW. The base of the cutoff wall should extend down to at least -6' MLLW. Inland of the cutoff wall, there should be a bench at least 7 feet wide, backed by a 1 on 2 (vertical on horizontal) stepped slope consisting of broad treads and risers. The top of the stepped slope should be at 17.1' MLLW. At the top of the stepped slope, the report recommends a second platform, backed by a vertical wave screen extending to a maximum height of 27.2' MLLW. The screen may either curve back toward the sea, as does the O'Shaughnessy wall, or angle back more sharply.

The consultant recommends Alternative #3 which includes all these design parameters. The other alternatives contain all the same basic parameters, with the exception of the platform at the base of the vertical screen, which is not included in Alternative #1. A platform at least six feet wide is recommended by the consultant as an additional means of reducing the energy of wave uprush as well as to permit pedestrian access along the seawall.

Condition #9 concerning the seawall design is revised to reflect the basic parameters of seawall configuration as recommended by the city's shoreline consultant. Initial cross-sections provided by the city show a seawall with dimensions within the ranges recommended by the consultant and with an esthetically pleasing curved wave screen, similar to the O'Shaughnessy wall (see Exhibit 5).

A very significant element of the design is the fact that the alternative seawall configurations are sufficiently narrow to allow placement of the seawall entirely on city property, as opposed to Golden Gate National Recreation Area property, while

maintaining sufficient width for the reconstructed Great Highway and retention of the existing green strip. Alternative #3, the favored alternative, would be 30-34 feet wide, not including the promenade. A rock seawall, as previously proposed by the city, would have required additional width, in order to reach a sufficient height to avoid overtopping and to be toed deeply enough, while maintaining a viable angle of repose for the riprap. The revised design makes more efficient use of the limited space which is available and avoids the necessity to encroach on the federal beach.

The city's amendment request states that construction of the seawall will be phased, as funds are made available. The consultant recommends construction of 3,470 feet of seawall between Noriega and Santiago Streets in the initial phase. At the same time, the consultant recognizes that not all of this section may be constructed in the first phase, due to funding limitations. The consultant recommends that construction in that case commence at Ortega Street and proceed southward. Since to date, no more than a small portion of the necessary funds have been committed by the city to the project, it is entirely possible that the initial seawall would be only 1-2 blocks long (700 to 1,400 feet). Protection of the highway and recreational beach adjacent to an initial seawall would remain an issue in the short-term, therefore, since the identified high erosion area is about five blocks long (3,470 feet).

The consultant recommends that transition structures be created at the ends of the first phase concrete seawall. The consultant recommends construction of rock transition structures at least 80 feet long at each end of the concrete seawall, in order to prevent flanking of the main structure by wave action.

The Commission recognizes that not all of the concrete seawall may be built in the first phase and agrees that temporary structures will be necessary to protect the permanent seawall from flanking. This approval does not, however, constitute approval of a major new riprap seawall, in the event funds are available to construct only a portion of the needed concrete wall. The city has requested approval of a concrete seawall, and a concrete seawall presents many advantages over a riprap wall, such as minimizing scouring and maximizing public access, safety, and visual appearance. The Commission approves a concrete seawall, along with such riprap transition structures only as are necessary for the protection of the permanent wall.

A design for a possible riprap transition structure is provided by the consultant. It shows a rock wall approximately equal in size and slope to the concrete seawall. Such a wall might be acceptable, but only if it could be constructed consistent with the Commission's previous requirement that it not extend onto the GGNRA beach. The height of the wall would then depend on the width that is available in which to construct it and the appropriate slope of the wall. Final plans for the transition

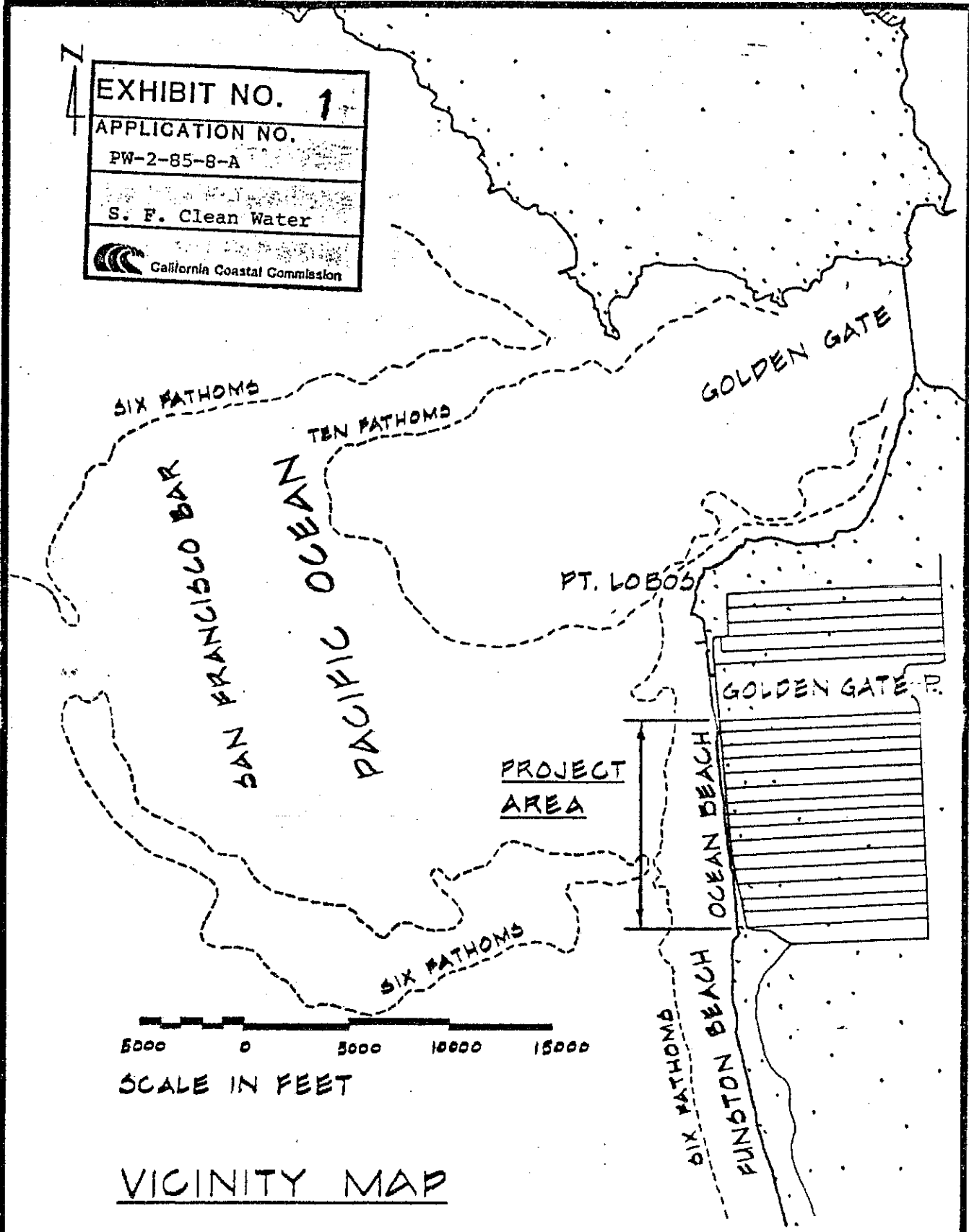
structure must be submitted to the Executive Director prior to construction.

A transition between the concrete seawall and the existing Taraval wall may also be necessary. This wall would necessarily lie on the GGNRA beach, since the Taraval wall is approximately 100 feet further seaward than the proposed new concrete wall would be. Approval of the GGNRA will be necessary prior to construction. Since final plans for such a transition structure have not been submitted to the Commission, Condition #15 requires submittal of plans for the review and approval of the Executive Director prior to construction.

The prohibition of new rubble placement remains in Condition #9. The city has continued to place rock, concrete and other rubble under emergency conditions, in spite of a requirement since 1979 that alternative measures for shoreline protection be adopted. The Commission reiterates its prohibition of placement of additional unsightly and unsafe rubble and reiterates its requirement that existing visible rubble be removed where the new concrete seawall is built. This amendment allows workable alternative methods of protecting the shoreline, and rubble placement shall not be used in the future.



EXHIBIT NO. 1
APPLICATION NO.
PW-2-85-8-A
S. F. Clean Water
California Coastal Commission



5000 0 5000 10000 15000
SCALE IN FEET

VICINITY MAP



Figure 1.1



SCALE: 1" = 1700' APPROX

STA 115 + 00

LOW
EROSION

NO PROTECTION

2,900'

STA 86 + 00
MODERATE
EROSION

FUTURE

PROTECTION

1,150'

STA 74 + 50

HIGH
EROSION

IMMEDIATE

PROTECTION

3,470'

STA 39 + 80
TARAVAL WALL *

FUTURE

PROTECTION

665'

STA 33 + 15
MODERATE
EROSION

FUTURE

PROTECTION

1,175'

STA 16 + 00
LOW EROSION

NO

PROTECTION

400'

STA 12 + 00

*NO NEW
SEAWALL

GOLDEN GATE PARK

LINCOLN WAY
IRVING

JUDAH

KIRKHAM

LAWTON

MORAGA

NORIEGA

ORTEGA

PACHECO

QUINTARA

RIVERA

SANTIAGO

TARAVAL

ULLOA

VICENTE

WAWONA

SLOAT

SAN FRANCISCO
ZOO

SHORELINE PROTECTION PLAN

EXHIBIT NO. 2

APPLICATION NO.

PW-2-85-8-A

S. F. Clean Water



Figure 2.11

EXHIBIT NO. 3

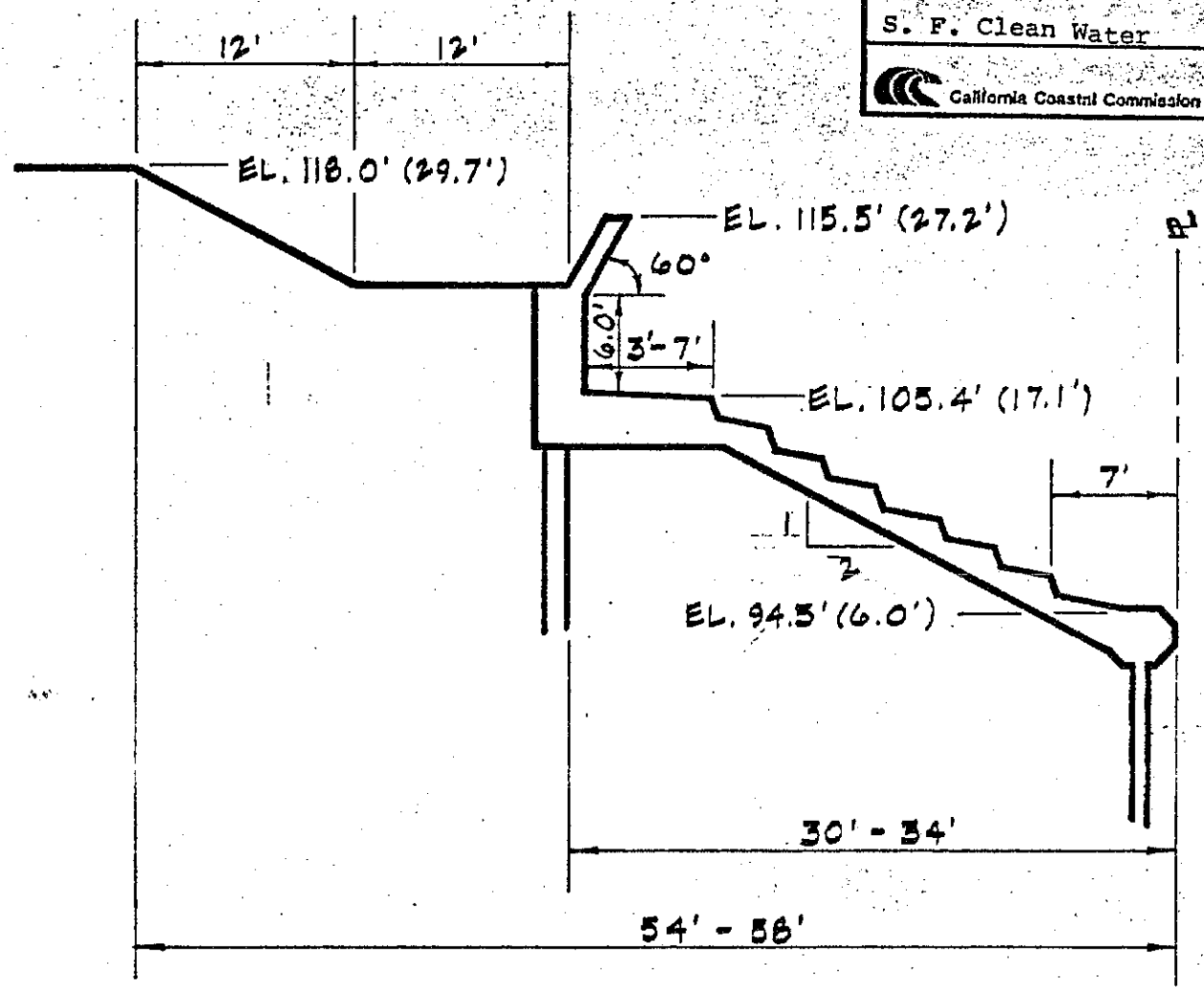
APPLICATION NO.

PW-2-85-8-A

S. F. Clean Water



California Coastal Commission



NOTE: SCALE 1"=10'
ELEVATION IN PROJ. DATUM \pm (MLLW)

ALTERNATE 3
(NOBLE REPORT RECOMMENDATION)



Figure 4.5

EXHIBIT NO. 4

APPLICATION NO.

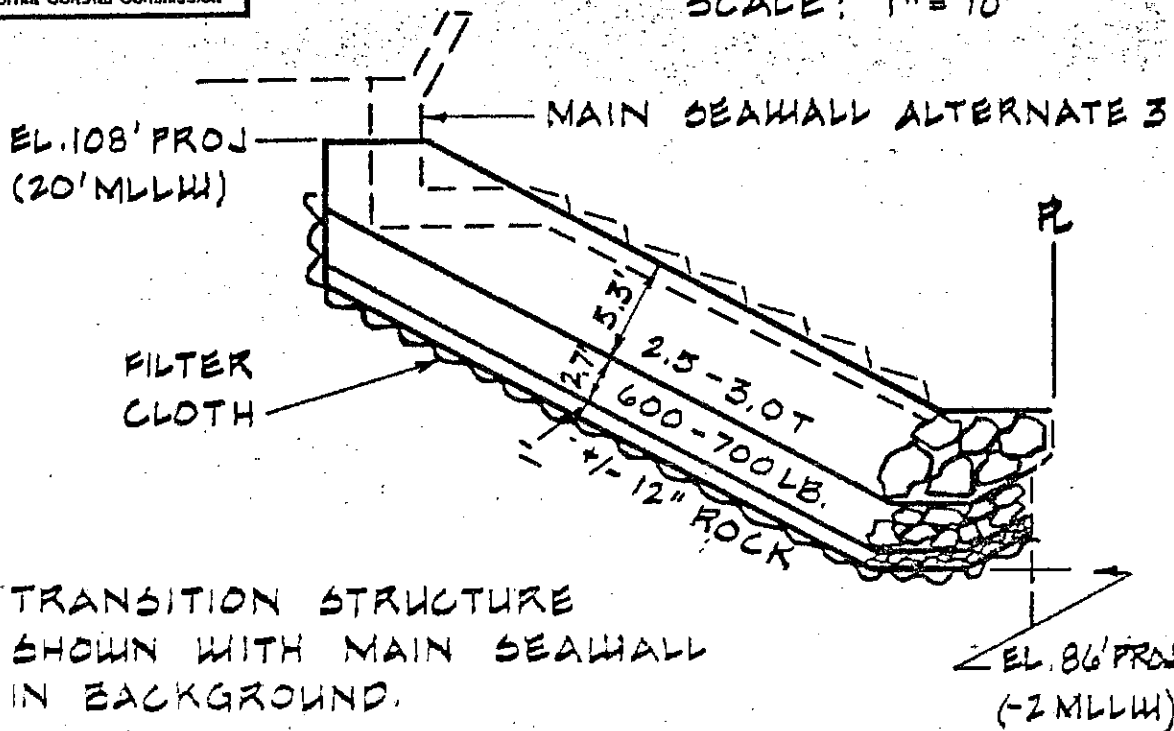
PW-2-85-8-A

S. F. Clean Water



California Coastal Commission

SCALE: 1" = 10'



ROCK RIPRAP TRANSITION



Figure 4.8

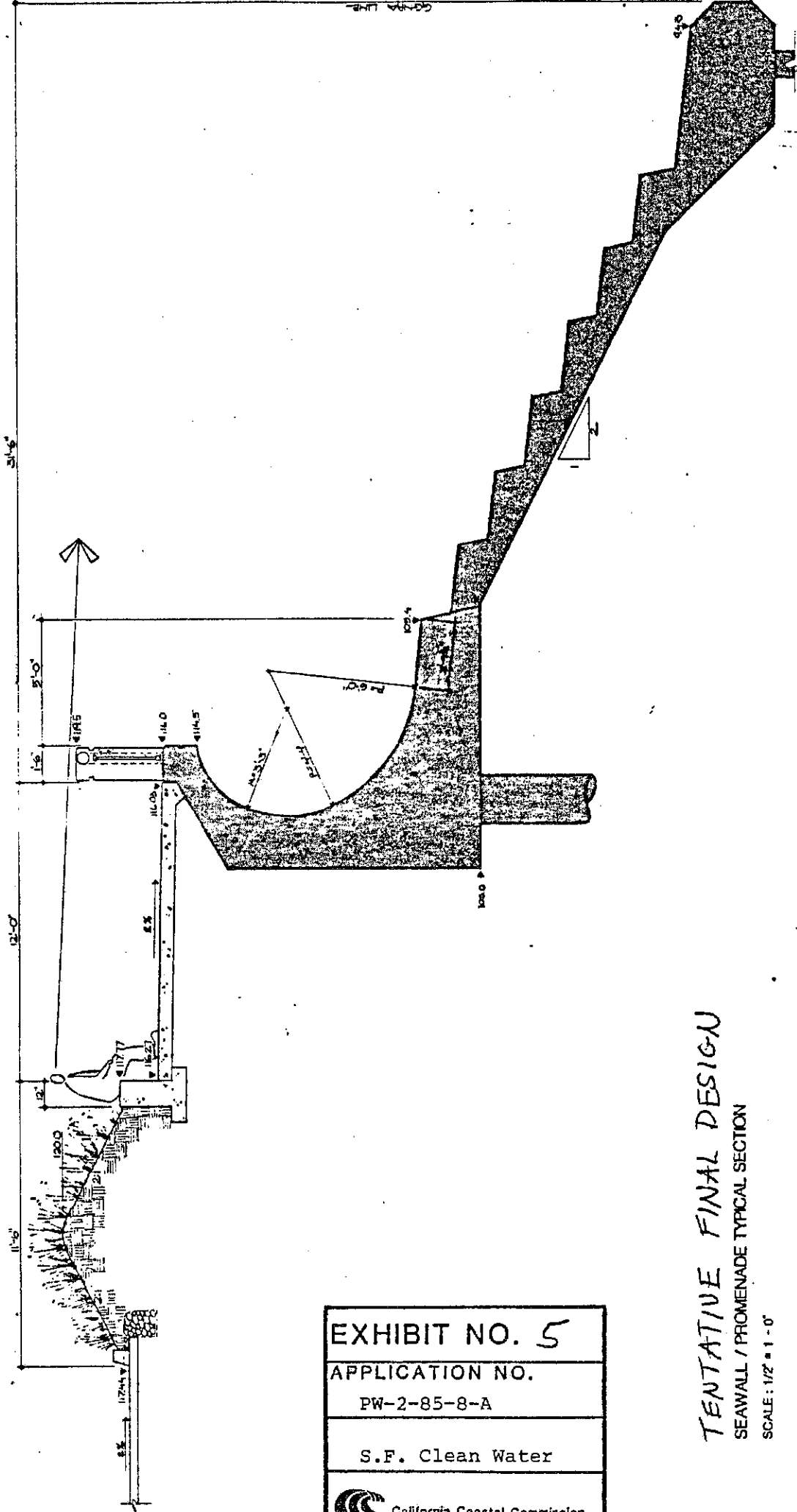


EXHIBIT NO. 5

APPLICATION NO.

PW-2-85-8-A


S.F. Clean Water

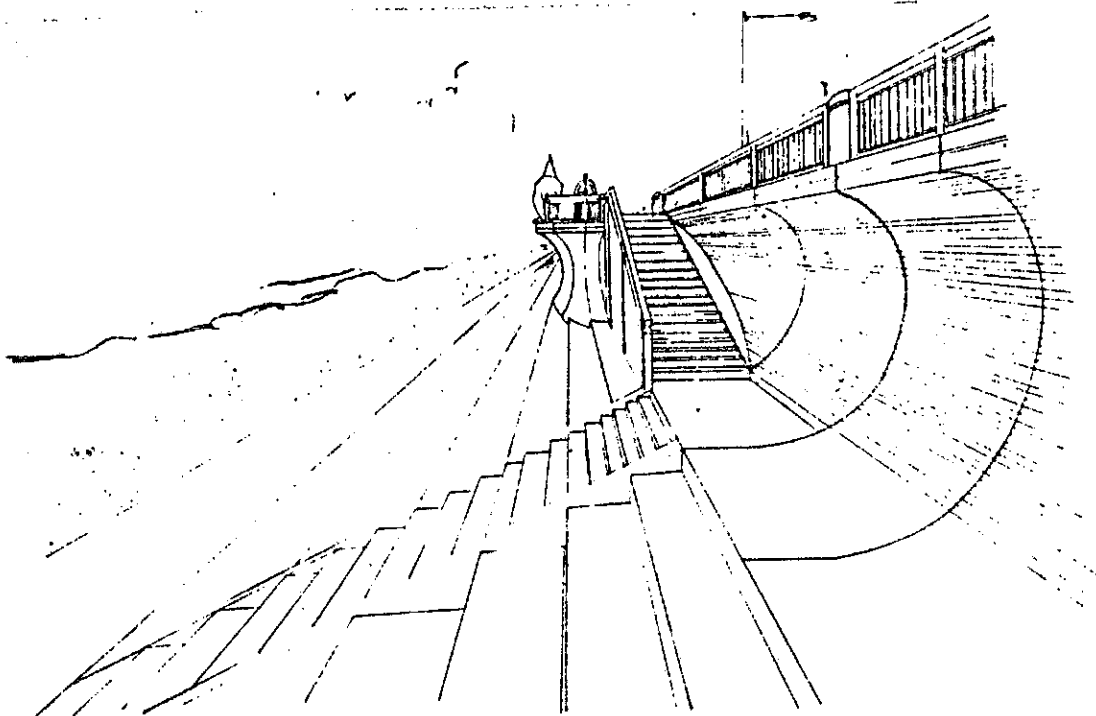


California Coastal Commission

TENTATIVE FINAL DESIGN
SEAWALL / PROMENADE TYPICAL SECTION

SCALE: 1/2" = 1'-0"

EXHIBIT NO. 6
APPLICATION NO. PW-2-85-8-A
S. F. Clean Water
 California Coastal Commission



PERSPECTIVE OF OVERLOOK BEACH ACCESS STAIRS
TENTATIVE DESIGN

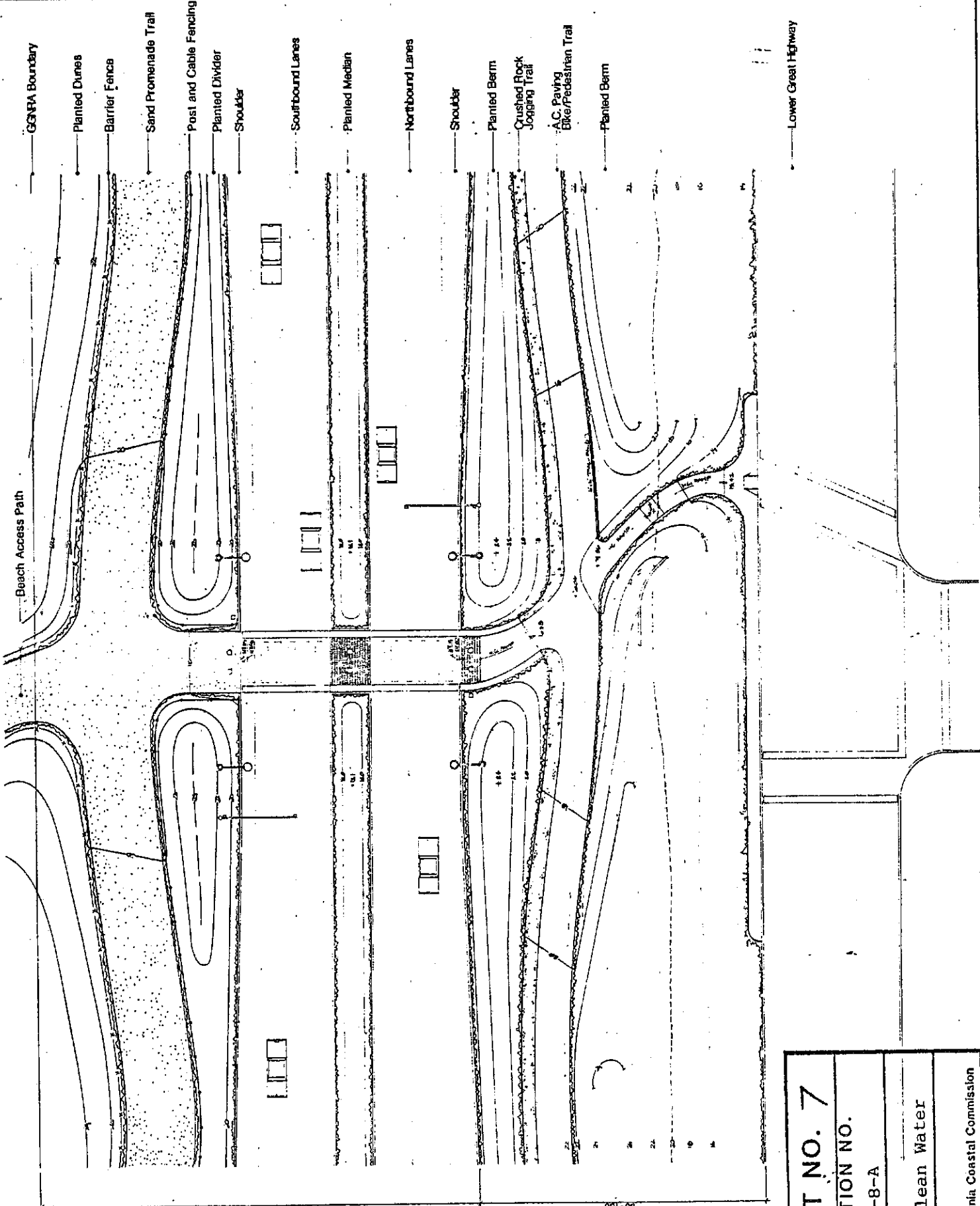


EXHIBIT NO. 7
APPLICATION NO.
 PW-2-85-8-A
S. F. Clean Water
 California Coastal Commission

127

80-100

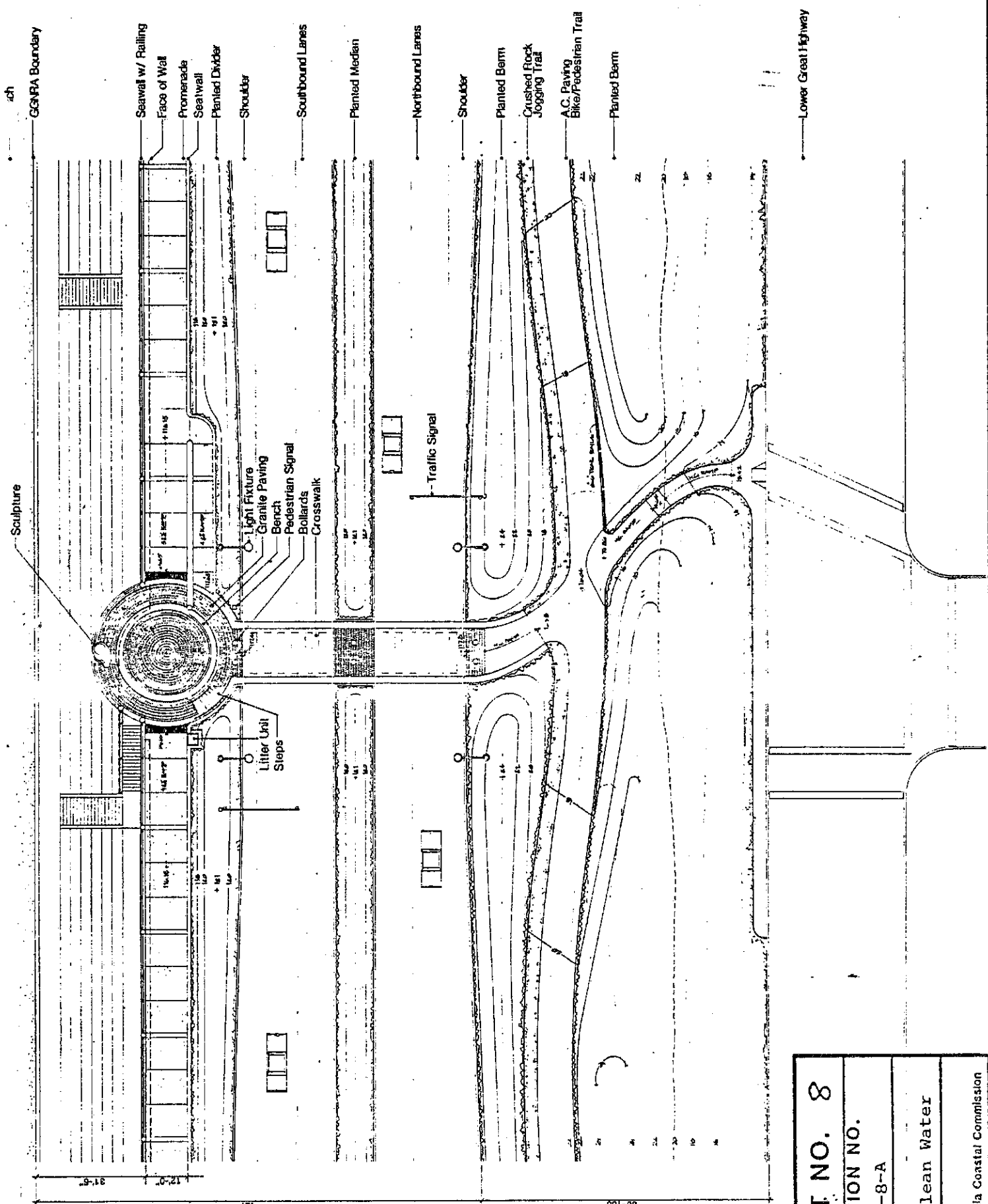
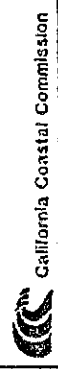


EXHIBIT NO. 8

APPLICATION NO.

PW-2-85-8-A

S. F. Clean Water



California Coastal Commission

Typical At Grade Crossing
 0321 10/14/14
 7-2-85
 127
 81-5
 17-0
 80-100
 21
 21
 24
 24
 10
 4

EXHIBIT NO. 9

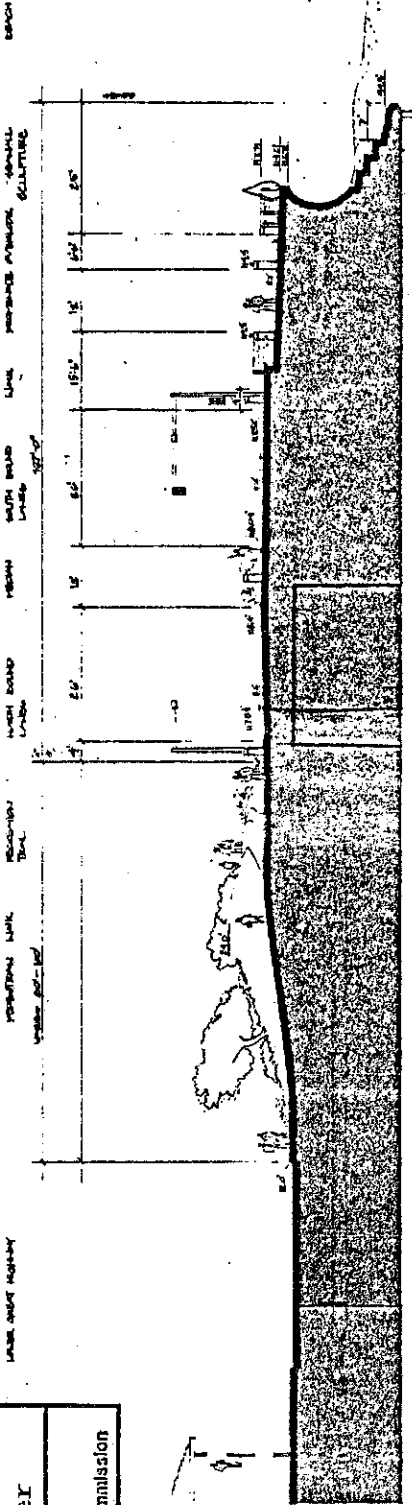
APPLICATION NO.

PW-2-85-8-A

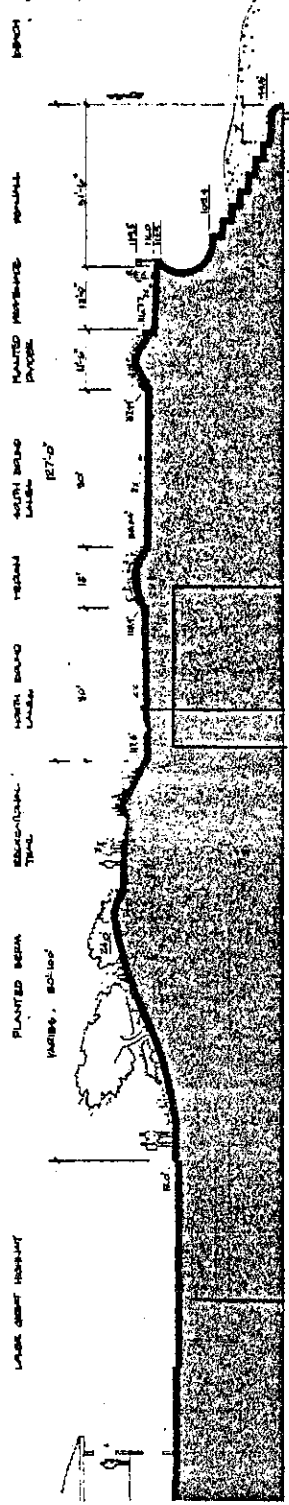
S. F. Clean Water



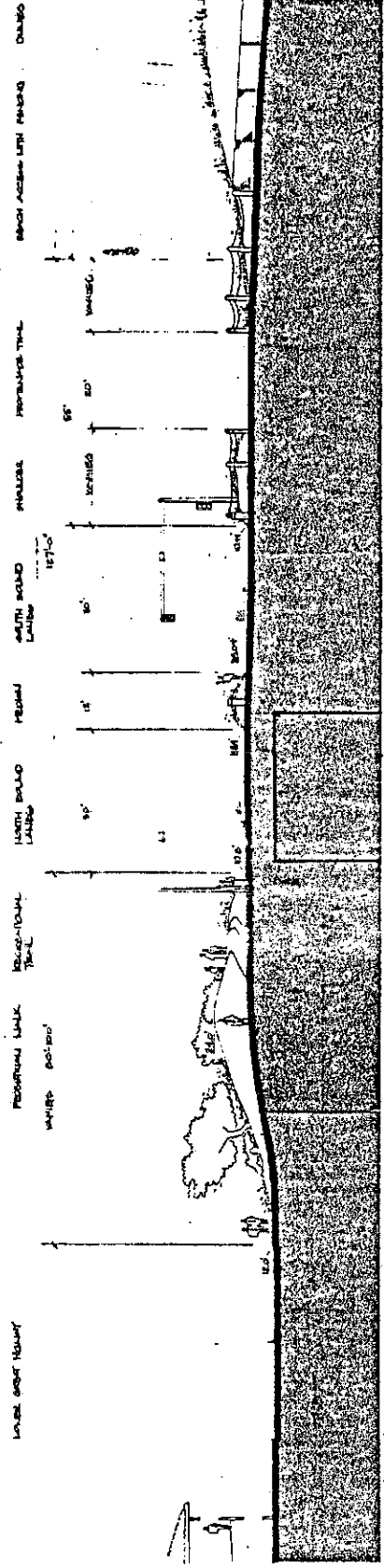
California Coastal Commission



SECTION-AT GRADE CROSSING



SECTION-TYPICAL



SECTION-AT GRADE CROSSING WITH NO SEAWALL PROMENADE
SCALE 1:10'-0"

CALIFORNIA COASTAL COMMISSION

631 HOWARD STREET, 4TH FLOOR
FRANCISCO, CA 94105
543-8555

AMENDMENT TO PUBLIC WORKS PLAN APPROVAL

On July 23, 1985, by a vote of 10 to 0, the Commission granted to the City and County of San Francisco an amendment to Public Works Plan 2-85-8-A, subject to the conditions set forth below, for changes to the development or conditions imposed on the existing permit issued on June 6, 1979. Changes approved by this amendment consist of allowing concrete seawall between Lincoln Way & Sloat Blvd, beginning with shoreline between Noriega & Santiago Streets; and reconstruction of 4-lane straight Great Highway. ^{more} specifically described in the application file in the Commission offices.

The development is within the coastal zone in San Francisco County at Lincoln Way & Sloat Blvd, San Francisco.

After public hearing held on July 23, 1985, the Commission found that, as conditioned, the proposed amendment is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976; if between the sea and the public road nearest the sea, is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act of 1976; either (1) will not have any significant adverse impact on the environment or (2) there are no feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse impact that the development as approved may have on the environment.

Issued on behalf of the California Coastal Commission
on August 2, 1985

PETER DOUGLAS
Executive Director

By Steven F. Scholl

Steven F. Scholl
Staff Analyst

The undersigned permittee acknowledges receipt of the California Coastal Commission Amendment to Public Works Plan No. 2-85-8-A, dated August 2, 1985, and fully understands its contents, including all conditions imposed.

Date

Permittee

SPECIAL PROJECT CONDITIONS: (cont.)

8. Relocation of Westside Transport and Restored Great Highway. The reconstructed Great Highway shall be a straight four-lane road, of which the western edge shall be located approximately 55-60 feet east of the Golden Gate National Recreation Area/City boundary line. The roadway shall be approximately 70 feet in width. The easterly edge of the reconstructed Great Highway shall be approximately the same distance from the Lower Great Highway as the edge of the old Great Highway (approximately 80-100 feet).

At-grade pedestrian crossings of the reconstructed Great Highway shall be provided at approximately every other block between Lincoln Way and Sloat Boulevard. Pedestrian access from the west side of the reconstructed Great Highway to the beach shall be provided at intervals of every block (approximately 700 feet) where the seawall is constructed or every other block (approximately 1,400 feet) where the seawall is not constructed. A recreational trail approximately 14 feet in width shall be located east of the Great Highway.

9. Future Shoreline Protection Measures.

A concrete seawall shall be constructed along all or a part of the shoreline identified as high or moderate erosion areas in the report entitled: "Great Highway - Ocean Beach Coastal Engineering Report - Seawall Design" (Noble Coastal and Harbor Engineering, Ltd., July 9, 1985). The seawall shall be of a stepped design with a cutoff wall on the seaward side and wave screen on the landward side and shall be constructed with the configuration and approximate dimensions recommended by the above-cited report (see p. 83). The configuration of the wall shall include:

a. Cutoff wall pile cap elevation at 6.0 feet MLLW. Bottom of the cutoff wall at -6.0 feet MLLW or lower.

b. A bench approximately seven feet or more in width between the cutoff wall and the stepped slope.

c. A 1:2 stepped slope.

d. Top of stepped slope at approximately 17.1 feet MLLW.

e. Berm (or platform) at top of stepped slope.

f. Curved or angled wave screen with a top elevation of approximately 27.2 feet MLLW.

g. The total width of the seawall in cross-section shall not exceed 38 feet, not counting the landside promenade.

SPECIFIC PROJECT CONDITIONS: (cont.)

Where the concrete seawall is constructed, any visible existing rubble shall be removed from the beach. Future placement of rubble is prohibited. The City shall place markers and perform sand replenishment as previously required unless specifically modified during Commission review and approval of the Beach Nourishment Plan.

14. Existing Great Highway. The asphalt pavement of the existing southbound lanes of the old Great Highway shall be removed as a part of construction of the new Great Highway. Adequate measures, subject to the review and approval of the Executive Director, shall be taken to stabilize excavated sand.
15. Final Plans. Prior to the commencement of construction of the new Great Highway, the City shall submit for the review and approval of the Executive Director plans for the highway, the protective structure, the recreational trails, the pedestrian accessways, and all other features described in these findings. The plans shall include safe and adequate beach access in all areas, whether the concrete seawall, transition structure, or no seawall is constructed, in a manner acceptable to the Executive Director. Recreational trails may be located on the east side of the new highway, so long as two trails, one hard-surfaced and one semi-hardsurfaced, are provided. A vista parking lot for approximately 35 cars may be provided west of the new Great Highway opposite the end of Irving Street.

B. Unchanged Conditions

All remaining conditions of the Public Works Plan and Specific Project Approvals not specifically amended herein remain in full force and effect.

III. FINDINGS AND DECLARATIONS.

The Commission hereby finds and declares as follows:

Amendment #5 approved by the Commission January 25, 1984 permitted a shoreline protective device and reconstruction of the Great Highway as a straight roadway. The current amendment request contains the same general elements. Submittal of this amendment request was made necessary not by a wholly different proposal for reconstruction of the Ocean Beach area, but rather by differences in the design of features which were previously given general approval. These findings address primarily the differences between the project now proposed and that which was previously approved. The findings adopted on March 14, 1984 concerning the previous amendment which support the approved alignment on city property remain valid and are hereby incorporated by reference, except where amended specifically by these findings.

Specific Project ConditionsA. Amended and Added Conditions

3. Prior to commencement of construction of the Great Highway or seawall the City shall submit a Beach Nourishment Plan for the review of the Coastal Commission and a determination by a majority vote of the membership of the Commission that the plan is adequate to ensure the integrity of the beach area as a recreational resource. The Beach Nourishment Plan, as required by Section 5, Chapter 1007, 1981 California Laws, shall be designed to counter the effect of future erosion and shall ensure the integrity of Ocean Beach as a recreational resource. The City shall contribute up to \$100,000 toward the preparation of this Plan. (This shall be in addition to the existing monitoring requirements pursuant to original condition 12.) The Beach Nourishment Plan shall contain or provide for appropriate funding of beach restoration measures. The City and County of San Francisco shall contribute a minimum of six hundred twenty-five thousand dollars (\$625,000) to the implementation of this plan. The extent of additional contribution by the city beyond \$625,000 to the implementation of the plan shall be established in the plan itself. The Plan shall be promptly implemented following approval by the Coastal Commission.

Excess sand produced by excavation for the seawall or the new Great Highway shall be placed seaward of the new highway, if consistent with the Beach Nourishment Plan described above. Placement of sand on GGNRA property shall have the approval of the National Park Service. Beach grass or other plants and sand fences or similar measures to control blowing sand, as approved by the National Park Service, shall be installed on any exposed sand areas (see Condition #5 below).

4. Beach Access. The City shall provide a means of beach access acceptable to the National Park Service over the protecting dunes that will prevent wind erosion of bare sand surfaces resulting from heavy foot traffic on vegetated dunes.
5. Dune Planting. The City shall guarantee the success of dune planting for a period of 5 years, or a lesser period if so provided in a Maintenance Agreement which is jointly signed by the City and the National Park Service. Design of the final contours, planting and fertilization schedules, and plant selection shall be approved by the National Park Service.
7. Access Over Overflows. The existing overflow structure near the end of Vicente Street shall be modified to provide decking, railing, and steps on the north and south sides and a railing on the top to allow lateral access landward of the surf zone.

EXHIBIT NO. 1

RECOMMENDED CONDITIONSSTANDARD CONDITIONS:

1. Notice of Receipt and Acknowledgement. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

CALIFORNIA COASTAL COMMISSION

631 HOWARD STREET, 4TH FLOOR
SAN FRANCISCO, CA 94105
543-8555

Should be PWP
179-A8
Nolloway
GEORGE DEUKMEJIAN, Governor



July 27, 1987

IMMATERIAL
AMENDMENT TO PERMIT

RECEIVED
AUG - 4 1987

CALIFORNIA
COASTAL COMMISSION

Dear Applicant:

Permit Number PW1-87-117-A8 issued to San Francisco Cleanwater Management Program has been amended to include the following change: add an underground concrete water quality sampling station (8'x 22' in size), south of the junction structure of the Southwest Ocean Outfall, approximately 900' south of the intersection of the Great Highway and Sloat Boulevard, on the east side of the Great Highway. This vault will have a sidewalk door (on a hinge) and stairs with a portable railing. There will be lighting and ventilation. An electrical conduit will be placed between the Westside Pump Station and the junction structure to provide electric sampling to the Station.

This amendment was determined by the Executive Director to be immaterial, was duly noticed, and no objections were received.

This amendment will become effective upon return of a signed copy of this form to the Central office. Please note that the remaining conditions are still in effect.

Peter Douglas
Executive Director

By: Gary L. Holloway
Title: North Coast Planner

I have read and understand the above amendment and agree to be bound by its conditions and the remaining conditions of permit number PW1-87-117-A8.

Date 7/30/87

Signature

[Signature] (2467-7)

Robert T. Cockburn
Executive Director
S.F. Clean Water Program

CALIFORNIA COASTAL COMMISSION

631 HOWARD STREET, 4TH FLOOR
SAN FRANCISCO, CA 94105
(415) 543-8555



July 27, 1987

IMMATERIAL
AMENDMENT TO PERMIT

Dear Applicant:

Permit Number PW1-87-117-A8 issued to San Francisco Cleanwater Management Program has been amended to include the following change: add an underground concrete water quality sampling station (8'x 22' in size), south of the junction structure of the Southwest Ocean Outfall, approximately 900' south of the intersection of the Great Highway and Sloat Boulevard, on the east side of the Great Highway. This vault will have a sidewalk door (on a hinge) and stairs with a portable railing. There will be lighting and ventilation. An electrical conduit will be placed between the Westside Pump Station and the junction structure to provide electric sampling to the Station.

This amendment was determined by the Executive Director to be immaterial, was duly noticed, and no objections were received.

This amendment will become effective upon return of a signed copy of this form to the Central office. Please note that the remaining conditions are still in effect.

Peter Douglas
Executive Director

By: Gary L. Holloway
Title: North Coast Planner

I have read and understand the above amendment and agree to be bound by its conditions and the remaining conditions of permit number PW1-87-117-A8.

Date _____

Signature _____

CALIFORNIA COASTAL COMMISSION

NORTH COAST AREA

31 HOWARD STREET, 4TH FLOOR
SAN FRANCISCO, CA 94105
(415) 543-8555**NOTICE OF PROPOSED PERMIT AMENDMENT**

TO: All Interested Parties

FROM: Peter Douglas, Executive Director

DATE: July 3, 1987

SUBJECT: Permit No. PW1-87-117-A8 granted to San Francisco Cleanwater Management Program on June 6, 1979 for wastewater treatment plant, ocean outfall, storage and transport structures, crosstown tunnel, pump station and recreational restoration of the Great Highway and appurtenant facilities within the Coastal Zone in San Francisco and San Mateo Counties, at various locations throughout the Coastal Zone.

The Executive Director of the Coastal Commission has reviewed a proposed amendment to the above referenced Permit, which would add an underground concrete water quality sampling station (8'x 22' in size), south of the junction structure of the Southwest Ocean Outfall, approximately 900' south of the intersection of the Great Highway and Sloat Boulevard, on the east side of the Great Highway. This vault will have a sidewalk door (on a hinge) and stairs with a portable railing. There will be lighting and ventilation. An electrical conduit will be placed between the Westside Pump Station and the junction structure to provide electric sampling to the Station.

This amendment will be considered MINOR and the Permit modified accordingly if no written objections are received within fifteen working days of the mailing of this notice. If you have any questions about the proposal, or wish to register an objection, please contact Gary L. Holloway of the Commission office.

CALIFORNIA COASTAL COMMISSION

NORTH COAST AREA

631 HOWARD STREET, 4TH FLOOR
SAN FRANCISCO, CA 94103
(415) 543-8555



APPLICATION FOR COASTAL DEVELOPMENT PERMIT

Type of application:

Standard Permit

Administrative Permit: May be applicable if development is one of the following:

- (a) improvement to any existing structure;
- (b) any new development costing less than \$100,000;
- (c) single family dwelling; (d) four dwelling units or less, within any incorporated area, that does not require demolition or subdivision of land; or (e) development authorized as a principal permitted use and proposed in an area for which the Land Use Plan has been certified.

*Amendment to
Public works Plan*

SECTION I. APPLICANT

1. Name, mailing address and telephone number of all applicants.

San Francisco Clean Water Program

P. O. Box 360

San Francisco, CA 94101 (415) 558-2131

(Area code/daytime phone number)

2. Name, mailing address and telephone number of applicant's representative, if any

(Area code/daytime phone number)

For office use only

Application Number PW-1-87-117 AR

Received 6/19/87 Filed _____

Fee _____ Date paid _____

Tentative hearing date _____

(1) Project Cost _____

Jurisdiction code _____ (3)

LCP segment _____ (4)

Geo. Ref. Code _____ (5)

X _____ (6) Y _____ (7)

3. Conflict of Interest. All applicants for the development must complete Appendix A, the declaration of campaign contributions.

SECTION II. PROPOSED DEVELOPMENT

Please answer ALL questions. Where questions do not apply to your project (for instance, project height for a land division), indicate "Not Applicable" or "N.A."

1. Project Location. Include street address, city, and/or county. If there is no street address, include other description such as nearest cross streets.

Southwest undeveloped area along the Great Highway Extension	
number (8)	street (9)
San Francisco	San Francisco
city (10)	county (11)

Assessor's Parcel Number _____

2. Describe the proposed development. Include secondary improvements such as septic tanks, water wells, roads, etc.

Underground concrete water quality sampling station. 8x22 feet south of
the junction structure of the Southwest Ocean Outfall. The vault will have
a sidewalk door (on a hinge) and stairs with a portable railing. There will be
lighting and ventilation. An electrical conduit will be placed between the
Westside Pump Station and the junction structure to provide electric sampling to
a) If residential, state: _____ the Station. Drawings are attached.

1) Number of units N/A (28)

2. Number of bedrooms per unit N/A (28)

3. Type of ownership proposed:

N/A	}	<input type="checkbox"/> rental
		<input type="checkbox"/> condominium
		<input type="checkbox"/> stock cooperative
		<input type="checkbox"/> time share
		<input type="checkbox"/> other _____

b) Number of boat slips, if applicable N/A (29)

c) If land division, number of lots to be created and size N/A

3. Present use of property.

a) Are there existing structures on the property? Yes No
 If yes, describe (including number of residential units, occupancy status, monthly rental/lease rates for each unit) and attach rent receipts for the past year.

National Guard Armory in the Southwest portion of the site.

b) Will any existing structures be demolished? Yes No

Will any existing structures be removed? Yes No

If yes to either question, describe the type of development to be demolished or removed, including the relocation site, if applicable.

(31)

4. Estimated cost of development (not including cost of land) \$ 200,000 (32)

5. Has any application for a development on this site been submitted previously to the California Coastal Zone Conservation Commission or the Coastal Commission? Yes No

If yes, state previous application number Public Works Plan 2-85-8A

6. Project height: Maximum height of structure underground (below grade) ft.

Maximum height of structure as measured from centerline of frontage road underground structure ft.

7. Total number of floors in structure, including subterranean floors, lofts, and mezzanines 1

8. Gross floor area including covered parking and accessory buildings 178 sq. ft.

Gross floor area excluding parking 600 sq. ft.

9. Lot area (within property lines) 43 acres sq. ft. or acres

<u>Lot coverages:</u>	<u>Existing</u>	<u>New proposed</u>	<u>Total</u>
Building coverage	<u>7</u> acres	<u>178 underground</u> sq. ft.	<u>7 acres of which</u> sq. ft.
Paved area	<u> </u> sq. ft.	<u> </u> sq. ft.	<u>178 underground</u> sq. ft.
Landscaped area	<u>0</u> sq. ft.	<u> </u> sq. ft.	<u>0</u> sq. ft.
Unimproved area	<u>36</u> acres sq. ft.	<u> </u> sq. ft.	<u>36</u> sq. ft.

10. Parking: number of spaces existing 0
 number of new spaces proposed 1 (turn off from the Great Highway to provide safe access to sampling station)
 Total: 1
 no. of covered spaces 0 no. of uncovered spaces _____
 no. of standard spaces 1 size 600 sq. ft. unpaved
 no. of compact spaces 0 size _____
 Is tandem parking existing and/or proposed? ___ Yes X No
 If yes, how many tandem sets? _____ size _____

11. Are utility extension for the following needed to serve the project?

- a) water ___ Yes ___ No
 b) gas ___ Yes ___ No
 c) electric X Yes ___ No
 d) sewer ___ Yes ___ No
 e) telephone ___ Yes ___ No

If yes to any of the above, would extensions be above ground? ___ Yes X No

SECTION III. ADDITIONAL INFORMATION

The relationship of the development to the applicable items below must be explained fully. Attach additional sheets if necessary.

1. If the development is between the first public road and the sea, is public access to the shoreline and along the coast currently available near the site? ___ Yes ___ No If yes, indicate the location of the nearby access, including the distance from the project site.

N/A

2. Is any grading proposed? ___ Yes X No If yes, complete the following.

- a) amount of cut N/A cu. yds.
 b) amount of fill N/A cu. yds.
 c) maximum height of fill slope N/A ft.
 d) maximum height of cut slope N/A ft.
 e) amount of import or export N/A cu. yds.
 f) location of borrow or disposal site N/A

Grading and drainage plans must be included with this application. In certain areas, and engineering ecology report must also be included. See Section V, paragraph 11 for the specifics of these requirements.

Excavation will be required. If spoil material is suitable to the GGNRA it will be deposited on the beach in accordance with Public Works Plan PW 2-85-8-A condition.

3. Does the development involve diking, filling, dredging or placing structures in open coastal waters, lands, estuaries, or lakes?

- a) diking ___ Yes X No c) dredging ___ Yes X No
- b) filling ___ Yes X No d) placement of structures ___ Yes X No

Amount of material to be dredged or filled N/A cu. yds.

Location of dredged material disposal site N/A

Has a U.S. Army Corps of Engineers permit been applied for? ___ Yes X No N/A

4. Will the development extend onto or adjoin any beach, tidelands, submerged lands or public trust lands? ___ Yes X No

For projects on State-owned lands, additional information may be required as set forth in Section V, paragraph 10.

5. Will the development protect existing lower-cost visitor and recreational facilities? ___ Yes X No N/A

Will the development provide public or private recreational opportunities? ___ Yes X No If yes, explain. N/A

6. Will the proposed development convert land currently or previously use for agriculture to another use? ___ Yes X No

If yes, how many acres will be converted? _____ acres.

7. Is the proposed development in or near:

- a) sensitive habitat areas ___ Yes X No (biological survey may be required)
- b) 100-year floodplain ___ Yes X No (hydrologic mapping may be required)
- c) park or recreation area X Yes ___ No But it is below grade so it will not effect recreational value except that CWP must have access.

8. Is the proposed development visible from:

- a) US Highway 1 or other scenic route X Yes ___ No Only as a metal plate at ground level.
- b) park, beach, or recreation area X Yes ___ No
- c) harbor area ___ Yes X No

9. Does the site contain any:

- a) historic resources ___ Yes X No
- b) archaeological resources ___ Yes X No
- c) paleontological resources ___ Yes X No

If yes to any of the above, please explain on an attached sheet.

10. Where a stream or spring is to be diverted, provide the following information:

Estimated streamflow or spring yield _____ N/A _____ gpm

If well is being used, existing yield _____ N/A _____ gpm

If water source is on adjacent property, attach Division of Water Rights approval and property owner's approval.

N/A

SECTION IV. OTHER GOVERNMENTAL REQUIREMENTS

The Local Agency Review Form, Appendix B, must be completed and signed by the local government in whose jurisdiction the project site is located. The completed and signed form must be submitted with this application for the application to be considered complete.

SECTION V. ADDITIONAL ATTACHMENTS

The following items must be submitted with this form as part of the application.

1. Proof of the applicant's legal interest in the property. (A copy of any of the following will be acceptable: current tax bill, recorded deed, signed Offer to Purchase along with a receipt of deposit, signed final escrow document, or current policy of title insurance. Preliminary title reports will not be accepted.)
2. Assessor's parcel map(s) showing the applicant's property and all other properties within 100 feet (excluding roads) of the property lines of the project site. (Available from the County Assessor)
3. Copies of required local approvals for the proposed project, including zoning variances, use permits, etc., as noted on Local Agency Review Form, Appendix B.
4. Stamped envelopes addressed to each property owner and occupant of property situated within 100 feet of the property lines of the project site (excluding roads), along with a list containing the names, addresses and assessor's parcel numbers of same. The envelopes must be plain (i.e., no return address), and regular business size (9 1/2" x 4 1/8"). Include first class postage on each one. Use Appendix C, attached, for the listing of names and addresses. (Alternate notice provisions may be employed at the discretion of the District Director under extraordinary circumstances.)
5. Stamped, addressed envelopes and a list of names and addresses of all other parties known to the applicant to have an interest in the proposed development (such as persons expressing interest at a local government hearing, etc.).
6. A vicinity or location map (copy of Thomas Bros. or other road map or USGS quad map) with the project site clearly marked.

7. Copy(s) of project plans, drawn to scale, including site plans, floor plans, elevations, grading and drainage plans, landscape plans, and septic system plans. Trees to be removed must be marked on the site plan. In addition, a reduced site plan, 8 1/2" x 11" in size, must be submitted. Reduced copies of complete project plans will be required for large projects.
8. Where septic systems are proposed, evidence of County approval or Regional Water Quality Control Board approval. Where water wells are proposed, evidence of County review and approval.
9. A copy of any Final Negative Declaration, Final Environmental Impact Report (FEIR) or Final Environmental Impact Statement (FEIS) prepared for the project. Comments of all reviewing agencies and responses to comments must be included.
10. Verification of all other permits, permissions or approvals applied for or granted by public agencies (e.g., Dept. of Fish and Game, State Lands Commission, U.S. Army Corps of Engineers, U.S. Coast Guard).
11. For development on a bluff face, bluff top, or in any area of high geologic risk, a comprehensive, site-specific geology and soils report (including maps) prepared in accordance with the Coastal Commission's Interpretive Guidelines. Copies of the guidelines are available from the District Office.

SECTION VI. NOTICE TO APPLICANTS

Under certain circumstances, additional material may be required prior to issuance of a coastal development permit. For example, where offers of access or open space dedication, or participation in a controlled housing program are required, preliminary title reports, land surveys, legal descriptions, subordination agreements, and other outside agreements will be required prior to issuance of the permit.

SECTION VII. AUTHORIZATION OF AGENT

I hereby authorize _____
to act as my representative and to bind me in all matters concerning this application.

Signature of Applicant(s)

SECTION VIII. CERTIFICATION

1. I hereby certify that I, or my authorize representative, will complete and post the Notice of Pending Permit card in a conspicuous place on the property within 3 days of receipt of the card and notification of filing of this application.
2. I hereby certify that I understand the Commission may impose reasonable conditions that must be satisfied by persons that are not a party to this application and that prior to issuance of the permit, I must submit evidence that the conditions will be satisfied by the appropriate parties.
3. I hereby certify that I have read this completed application and that, to the best of my knowledge, the information in this application and all attached appendices and exhibits is complete and correct. I understand that any misstatements or omission of the requested information or of any information subsequently requested shall be grounds for denying the permit, for suspending or revoking a permit issued on the basis of these or subsequent representations, or for seeking of such further relief as may seem proper to the Commission.
4. I hereby authorize representatives of the California Coastal Commission to conduct site inspections on my property. Unless arranged otherwise, these site inspections shall take place between the hours of 8:00 a.m. and 5:00 p.m.

SECTION XIV. COMMUNICATION WITH COMMISSIONERS

Decisions of the Coastal Commission must be made on the basis of information available to all commissioners and the public. Therefore permit applicants and interested parties and their representatives are advised not to discuss with commissioners any matters relating to a permit outside the public hearing. Such contacts may jeopardize the fairness of the hearing and result in invalidation of the Commission's decision by court. Any written material sent to a commissioner should also be sent to the commission office for inclusion in the public record and distribution to other Commissioners.

Signature of Authorized Agent or Applicant(s)

APPLICATION FOR COASTAL DEVELOPMENT PERMIT

APPENDIX A

DECLARATION OF CAMPAIGN CONTRIBUTIONS

Government Code Section 84308 prohibits any Commissioner voting on a project if he or she has received campaign contributions in excess of \$250 within the past year from project proponents or opponents, their agents, employees or family, or any person with a financial interest in the project.

In the event of such contributions, a Commissioner must disqualify him or herself from voting on the project; failure to do so may lead to revocation of the permit.

Each applicant must declare below whether any such contributions have been made to any of the Commissioners or Alternates listed on the reverse.

CHECK ONE

X The applicants, their agents, employees, family and any person with a financial interest in the project HAVE NOT CONTRIBUTED over \$250 to any Commissioner(s) or Alternates within the past year.

_____ The applicants, their agents, employees, and/or family, and/or any person having a financial interest in the project HAVE CONTRIBUTED OVER \$250 to the Commissioner(s) or Alternates listed below within the past year.

Commissioner _____

Commissioner _____

Commissioner _____

Robert Podgorny
Signature of Applicant or Authorized Agent

6-18-87
Date

Please print your name ^{for} Robert Todd Cockburn, Executive Director of the Clean Water Program City and County of San Francisco

CALIFORNIA COASTAL COMMISSION

631 HOWARD STREET, 4TH FLOOR

SAN FRANCISCO, CA 94105

543-8555

hearing Impaired/TDD (415) 896-1825



May 3, 1988

Robert T. Cockburn
San Francisco Clean Water Program
770 Golden Gate Avenue
San Francisco, CA 94102

MINOR
AMENDMENT TO PERMIT

Dear Mr. Cockburn:

Permit Number PWP-1-79-A9 issued to San Francisco Cleanwater Program has been amended to include the following change: the delivery truck circulation pattern for the facility will have all traffic enter directly from the Great Highway (with a right-turn only into the site), and with the only exit from the facility via a new tunnel opposite the intersection of Skyline Boulevard and Harding Road, again with a right-turn only permitted.

This amendment was determined by the Executive Director to be minor, was duly noticed, and no objections were received.

This amendment will become effective upon return of a signed copy of this form to this office. Please note that the remaining conditions are still in effect.

PETER M. DOUGLAS
Executive Director

Gary L. Holloway
By: Gary L. Holloway
Title: North Coast Planner

I have read and understand the above amendment and agree to be bound by its conditions and the remaining conditions of permit number PWP-1-79-A9.

Date _____ Signature _____