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Hearing Date: July 13, 2011

STAFF REPORT: REGULAR CALENDAR

Application: 2-10-033

Applicant: City of San Francisco, Department of Public Works (City)

Location: Ocean Beach between Sloat Boulevard and Skyline Boulevard, City and County of San Francisco.

Description: Placement of temporary shoreline protection devices, including : (1) after-the-fact authorization for placement of 600 feet of quarystone rock revetment, constructed in 1997, and re-grading of the toe; (2) after-the-face reauthorization and refurbishment of 11 beach monitoring posts whose previously authorized Coastal Development Permit (CDP) (2-00-040) expired; (3) follow-up authorization for 425 feet of rock revetment placed under Emergency Permit (EP) 2-10-003-G dated February 8, 2010; (4) after-the-fact authorization for the construction of an additional 15 feet of rock revetment that was not authorized under EP 2-10-003-G; (5) new construction of 70 feet of rock revetment as a southerly extension of the structure constructed under EP 2-10-003; (6) construction of two new tangent pile walls (270 feet and 175 feet); (7) vertical access, specifically construction of stairs from the top of bluff through the revetment constructed under EP 2-10-003 down to the beach and bluff top public access trail between Sloat and Skyline Boulevards; (8) grading, vegetation, drainage improvements/corrections; and (9) the removal of existing concrete rubble/rock material that is not functioning as shoreline protection and other debris from the beach.

Previous Commission

Actions: Coastal Development Permit No. 2-00-040; Emergency Permits 2-10-003-G and 2-99-003-G

Other Approvals: National Park Service; California State Lands Commission; Regional Water Quality Control Board; U. S. Army Corps of Engineers; U. S. Department of Commerce, National Oceanic and Atmospheric Administration; and Gulf of the Farallones National Marine Sanctuary

Staff Recommendation: **Approval with Special Conditions**

I. SUMMARY OF STAFF RECOMMENDATION

The City of San Francisco is applying for a permit to construct shoreline protection devices at Ocean Beach in San Francisco, including follow-up and after-the-fact authorization for rock revetments and beach monitoring posts placed on the beach. It is also requesting authorization for new construction of protection devices that include tangent pile walls and placement of new rock as an extension to one of the revetments. The City's application includes vertical and bluff top public access improvements at three locations between Sloat and Skyline Boulevards as described in "Public Access plan in Response to 2010 Storm Damage Impacts to Ocean Beach", dated March 2011.

Coastal Act Section 30235 allows the issuance of permits for the construction of revetments and other shoreline devices when necessary to (1) protect existing structures from the danger of erosion and (2) when designed to eliminate or mitigate adverse impacts on shoreline sand supply. The City's placement of rock revetment and the proposed tangent pile walls are to temporarily protect existing infrastructure and utilities located within the Great Highway right-of-way within the three locations most directly threatened by erosion, between Sloat and Skyline Boulevards. Infrastructure includes the Lake Merced Transport Box for the combined sewer and storm water runoff facility located under the southbound roadway, as well as the roadway itself. The shoreline protection measures help to prevent/minimize the threat of potential waste water discharge to Ocean Beach and the Pacific Ocean. The revetments and the tangent pile walls are the minimum development necessary, as an interim solution, to directly protect infrastructure from damage in the near future until the development of a long-term, permanent solution consistent with the Coastal Act can be developed.

Staff recommends that the Commission approve the project for a period of five years, to allow the City to develop a long-term permanent solution to erosion at Ocean Beach. Special conditions of this permit require removal of the revetments when the temporary development authorization expires (if not extended for good cause), status reports of the process for developing the long-term solution, and public access mitigation which provides lateral (beach and top of bluff) and vertical (beach) access for public access impacts. Special conditions require that the City consider managed retreat; modification of existing infrastructure that require protection; and alternative protective devices such as a vertical seawall for its long-term solution.

As conditioned, staff recommends that the proposed project is consistent with the shoreline protection and public access policies of the Coastal Act.

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II. STAFF NOTE

The proposed development is located on a shoreline/beach and bluff top areas between the first public road and the sea. The proposed project has components located both within the City's right-of-way and Golden Gate National Recreation Area (GGNRA). The locations for the revetments are considered tidelands, submerged lands, or other areas subject to the public trust. The Coastal Commission retains jurisdiction over the review and issuance of Coastal Development Permits in these areas, pursuant to Section 30519 of the Coastal Act. Chapter 3 of the Coastal Act is the standard of review for development projects located within the Coastal Commission's jurisdiction.

III. STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution to approve coastal development permit No. 2-10-033 subject to the conditions in Section VI., below.

Motion:

I move that the Commission approve coastal development permit 2-10-033, subject to conditions in Section VI. and pursuant to the staff recommendation below.

Staff Recommendation of Approval:

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

Resolution to Approve the Permit:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below in CDP 2-10-033 on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or (2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

IV. CONDITIONS

A. STANDARD CONDITIONS

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

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

B. SPECIAL CONDITIONS

1. Scope and Time Period for which Development is Authorized.
 - A. This coastal development permit provides (1) after-the-fact authorization for the construction of 600 feet of unpermitted quarystone rock placed on Ocean Beach in 1997 as generally depicted on Exhibit 6; (2) after-the-fact authorization for 11 beach monitoring posts previously authorized by coastal development permit 2-00-040 as generally depicted on Exhibit 4; (3) after-the-fact authorization of 15 linear feet of installed in April 2010 but not authorized under 2-10-003-G, as generally depicted on Exhibit 7; (4) follow-up authorization of 425 feet of rock revetment previously authorized under emergency permit 2-10-003-G as generally depicted on Exhibit 7; (5) 70 feet of additional (new) rock revetment as generally depicted on Exhibit X; and (6) two tangent pile walls (270 feet and 140 feet), generally depicted on Exhibits 8 and 9.
 - B. This permit authorizes the afore-listed development for a period of no more than five years from the date of Commission approval of Application 2-10-033 on July 13, 2011, with an end date of July 13, 2016. The Executive Director may grant, with good cause, additional development authorization(s) for a period of five years. No later than four years from the date of Commission approval July 13, 2015, the permittee shall submit one of the following as described in 1, 2, or 3 below:
 1. A coastal development permit application to the Commission for removal of the shoreline protection structures authorized under this permit, UNLESS THE PERMITTEE HAS RECEIVED A TIME EXTENSION OF THE DEVELOPMENT AUTHORIZATION FROM THE EXECUTIVE DIRECTOR, AT LEAST SIX MONTHS PRIOR TO THE END OF THE FIVE-YEAR DEVELOPMENT AUTHORIZATION. The permittee shall include in its application a detailed Rock Removal and Restoration Plan (Removal Plan) for the Executive Director's review and approval. The goal of the Removal Plan shall be to remove the rock revetments that are authorized by this coastal development permit, from the beach and return of

the beach area occupied by the development, to its pre-revetment installation condition or better. The plan shall include:

- a. A description of all Best Management Practices (BMPs) to be implemented during removal and restoration activities.
 - b. Measures to be taken in order to avoid or minimize impacts to public views, access, and recreation during removal and restoration activities.
 - c. All of the construction requirements identified in **Special Condition No. 3**
 - d. A provision requiring the permittee to submit a report within three months after completion of the removal that i) documents all removal and restoration activities ii) contains a narrative description and photographic evidence of the removal.
2. A coastal development permit application to the Commission for a long-term permanent solution for shoreline protection, accompanied by:
 - a. A new analysis of alternatives to the existing shoreline protection that shall include, but not be limited to managed retreat, reduction or modification of the infrastructure being protected, and construction of a sea wall. The alternatives analysis should consider factors including, but not limited to: (i) the beach profile at the time of analysis, (ii) impacts to the beach profile identified in the monitoring reports required pursuant to **Special Condition No. 6** (iii) the amount of beach available to the public for recreational use, and (iv) the cost of each alternative.
 - b. An analysis of impacts on the beach and shoreline since the date of this approval of the structures covered by this permit.
 3. A formal written request to the Executive Director to extend the development authorization period for good cause. The request for an extension shall include a status report on the progress toward a long-term solution that addresses shoreline protection within the geographic area covered under this coastal development permit.

2. Removal of Concrete Rubble / Material and Debris

The permittee shall remove all existing concrete rubble/material that is not functioning as shoreline protection purposes from the beach and surf zone areas in front of the authorized revetments.

3. Water Quality Best Management Practices (BMPs) and Construction Responsibilities

These special conditions require BMPs and construction responsibilities that shall be implemented to avoid marine and water quality impacts.

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- A. Permittee shall prepare and submit a Storm Water Pollution Prevention Plan, which is required to protect water quality by controlling sediments and erosion from construction, repair, and maintenance activities, for review and approval by the Executive Director.
- B. BMPs - The permittee shall employ BMPs to prevent erosion, sediment runoff, and geologic instability of the project sites, during construction. The BMPs shall be consistent with the approved Storm Water Pollution Prevent Plan BMPs, in addition to construction responsibilities required in this subsection shall include but not be limited to:
 - 1. Use wind erosion control in bare areas within the proposed project site by placement of native vegetation, where feasible.
 - 2. Conduct work within the beach area during low tide.
 - 3. Use of silt fencing, fiber rolls, and sand bag barriers to protect water quality by controlling sediments and contaminated surface runoff.
 - 4. Protect storm drain inlets.
 - 5. Management of stock piles and solid waste by covering and prevention of exposure to wind and rain.
 - 6. Collect, contain, and properly dispose of all construction leaks, drips, by-products and any similar contaminants through the use of containment structures or equivalent.
 - 7. Keep the beach and all other areas used for construction staging and access purposes free of debris and trash.
 - 8. Haul debris, rubble, and material not suitable for construction shall be removed and disposed off-site daily.
 - 9. Conduct all equipment and vehicle fueling, cleaning, washing, and maintenance off-site.
- B. Construction Responsibilities - The permittee shall follow and adhere to the following construction responsibilities:
 - 1. Copies of the signed coastal development permit and Construction Plan shall be maintained in a conspicuous/accessible location at the construction job site at all times during construction. Such copies shall be available for public review upon

request. Construction personnel shall be briefed on the content and meaning of the coastal development permit prior to commencement of construction.

2. Permittee shall notify North Central Coast District Office permitting staff at least five workdays prior to starting construction and immediately upon completion of the work.
3. Permittee shall report any proposed changes to the approved plans. No changes to the approved plan shall occur without approval of the Executive Director.
4. Permittee shall restore all staging and access areas affected by construction activities to their pre-construction condition, or better, within five days of completion of work. Any beach sand affected by construction shall be filtered as necessary to remove all construction debris from the beach.
5. Construction activities and equipment shall avoid Pacific Ocean waters and minimize beach disturbance to the maximum extent feasible by project design and implementation including, but not limited to, limiting construction to the lowest possible tides. No construction equipment, work materials, or debris shall be placed where they may be subject or exposed to ocean waters or dispersion.
6. All construction activities that result in discharge of materials, polluted runoff, or wastes to the beach and/or the adjacent marine environment are prohibited. The Permittee shall collect, contain, and properly dispose of all construction leaks, drips, by-products, and any similar contaminants through the use of containment structures or equivalent as necessary (including through the use of collection devices and absorbent materials placed below any above-ground work where such contaminants are possible and/or expected). Equipment washing, refueling, and/or servicing shall not take place on the beach.
7. If, at any time while the work authorized by this permit is occurring, any marine mammals are located on or seaward of the subject property, work must immediately stop and the permittee must immediately call the Marine Mammal Center in Sausalito, CA or the National Marine Fisheries Service to report that a marine mammal is located on the beach. Work must not commence until either the animal is removed by the Marine Mammal Center or the National Marine Fisheries Service, or until the animal returns to the ocean on its own without any harassment.
8. All work conducted within GGNRA, which is under National Park Service (NPS) jurisdiction, shall comply with the NPS permit-required work restrictions.

4. Public Access

Permittee shall ensure that the beach area is available for public lateral access and recreation during construction to the maximum extent possible consistent with public safety.

5. Biological Resources Protection Measures

- A. Bank Swallow: Permittee shall have a qualified biologist conduct pre-construction survey of the project site for evidence of bank swallow nesting. Construction will be stopped and delayed until after the nesting season if swallows are found.

Construction activities shall avoid impacts to bank swallows and bank swallow habitat to the maximum extent feasible, and shall comply with the requirements of the National Park Service and the Department of Fish and Game related to potential impacts to biological resources, including bank swallows and bank swallow habitat.

- B. Snowy Plover: A qualified biologist shall identify the beach access route and escort the contractor/crew with heavy equipment, to and from the construction site in order to avoid potential impacts to snowy plover or other wildlife and ensure that beach habitat is not disturbed.

A qualified biologist shall monitor the project area for snowy plover during construction activities.

6. Monitoring Inspections and Surveys, Maintenance, and Reporting

Permittee shall monitor, maintain, and report on the condition of the authorized development. Permittee shall submit an update of the Ocean Beach Monitoring and Maintenance Plan prepared by CH2M Hill, Inc., dated March 28, 2000 for review and approval by the Executive Director.

- A. Monitoring and inspection of the permitted structures shall follow the guidance of the updated "Monitoring and Maintenance Plan for Bluff and Shoreline Area South of Sloat Boulevard to Fort Funston Cliffs" prepared by CH2M Hill (dated March 28, 2000) for the City and County of San Francisco, approved by the Executive Director. Monitoring, at a minimum shall include:

1. Annual visual inspection and photo documentation of the structures. Monitoring may be performed monthly, based upon erosion conditions and storm activity. The permittee shall look for the following signs of potential revetment failure or impacts to coastal resources:
 - a. Excessive scour in front of the revetments following significant storm events,
 - b. Dislodged rocks or stones on the beach and seaward of the revetment,
 - c. Gaps or exposed under layer material,
 - d. Slumping or rotation of revetment, and
 - e. Settlement of rock into underlying sand.
2. A LiDAR survey of the structures at year one (baseline) and the fifth year (total of two surveys).

3. Annual survey of the beach profile and bluff top areas between Sloat and Skyline Boulevards.
- B. Maintenance – Permittee shall maintain the revetments by: i) re-establishing or placing rock within the permitted footprint or profile of the revetments; and ii) retrieving any rock material that has moved onto the beach and seaward of the permitted footprint of the revetments re-stack or remove them from the site.
1. Maintenance Notification. Permittee shall notify in writing Coastal Commission's North Central District Office staff (Commission staff) at least two weeks prior to commencing any maintenance activity (including a decision to temporarily leave in place fallen rock from the revetments. The notification shall include:
 - a. A detailed description of the maintenance activity proposed;
 - b. Any plans, engineering and/or geology reports describing the activity;
 - c. Other agency authorizations; and
 - d. Any other supporting documentation.
 2. The maintenance activity shall not commence until the permittee has been informed by North Central District Office permitting staff that the activity complies with this coastal development permit and that the provisions of this subsection (2. B. 6, below) have not been triggered. If the permittee has not received a response within 14 working days of receiving the notification, the augmentation and/or maintenance activity shall be authorized as if planning staff affirmatively indicated that the activity complies with this coastal development permit. The notification shall clearly indicate that the maintenance activity is proposed pursuant to this coastal development permit, and that the lack of a response to the notification within 14 working days of receiving the notification constitutes approval of it as specified in the permit.
 3. In the case of an emergency requiring immediate maintenance, the notification of such emergency activity shall be made consistent with the provisions of 30611 and 30624 of the Coastal Act and the implementing regulations.
 4. No expansion or enlargement of the approved revetments is permitted.
 5. Maintenance and repairs shall be limited to removal, repositioning/re-stacking, or replacement of rock within the footprint of the approved revetments. The permittee shall remove, redeposit, or reposition any rock or material that becomes dislodged or displaced from the approved shoreline protection as soon as possible after such displacement occurs. The permittee shall contact Commission staff (as required by **Special Condition No. 6**) immediately to determine whether such activities require a coastal development permit or permit amendment. The above-referenced activities

shall not require a coastal development permit or permit amendment provided the activities occur within the envelope of the permitted revetments as shown on plans submitted to the Commission pursuant to this condition.

6. The permittee shall remove any materials not explicitly authorized pursuant to this coastal development permit, including but not limited to debris, trash, or other materials from the shoreline protection device and shall take all necessary measures to discourage and prevent the placement of such material on the project site.
7. If in the opinion of the Executive Director permittee is out of compliance with the terms and conditions of this coastal development permit at the time that a maintenance activity is proposed, then the maintenance activity that might otherwise be allowed by this coastal development permit may not be allowed until permittee is in full compliance with this coastal development permit.

C. Reporting

By November 1 of each year covered by this coastal development permit permittee shall submit annual monitoring reports that have been prepared by a licensed engineer (geotechnical or civil) or geologist. The first report shall be submitted by November 1, 2011. The reports, at a minimum shall contain the following for all structures authorized under this permit:

1. Photo documentation of the status of the condition of the structures.
2. An evaluation/description of the condition and performance of the approved shoreline protection structures, including an assessment of whether any weathering or damage has occurred that could adversely impact future performance.
3. Annual topographic field surveys of at least three beach and bluff profiles taken twice annually (in the spring and fall) for the five-year duration of this authorization. Surveys shall be conducted within a two-week window of the previous year's survey, to make comparisons of beach width under the same wave and climate conditions over time. Profiles shall be tied into survey monuments that are constructed and surveyed-in to establish fixed reference points from which any subsequent change can be recorded.
4. An analysis of erosion trends, annual retreat, or rate of retreat of the bluff.
5. A description of any migration or movement of rock that has occurred on the site.
6. Recommendations for repair, maintenance, modifications, or other work to the structures. The recommendations described in the report shall include descriptions of the methods, materials to be used, and timeframe required to conduct the work.

7. Post-Construction Reporting

Permittee shall submit as-built plans (in full size and 11" x 17" with a graphic scale) and photo documentation for all structures authorized under this permit. The as-built plans and photos shall be submitted to the Executive Director for review and approval within 60 days of completion of work. The as-built plans must clearly identify in the site plan and cross-sections all work completed pursuant to this coastal development permit.

8. Development of Long-term Solution

Progress for the Development of a Longer-term Solution: The shoreline protection devices authorized pursuant to **Special Condition No. 1** are temporary and only permitted to be maintained in order to provide a reasonable period of time to develop and implement a long-term solution for the protection of infrastructure and existing development from erosion along the Ocean Beach area.

Permittee shall submit a semi-annual progress report to the Executive Director for review and approval that demonstrates the City's steps/actions taken toward the development of its long-term solution to erosion within the project area. The first report shall include target dates and milestones for developing the long-term alternatives. Permittee shall coordinate with the NPS and U. S. Army Corps of Engineers Permittee and actively participate in analyses for developing alternatives for the long-term solution. Permittee shall submit the first report within six months of issuance of this permit with subsequent reports to follow every six months thereafter.

9. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from landslide, bluff retreat, erosion, and earth movement; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

10. Condition Compliance

Within 90 days of Commission action on this coastal development permit application or within such additional time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements specified in the conditions hereto that the applicant is required to satisfy prior to issuance of this permit. Failure to comply with this requirement may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

11. Public Access Mitigation

Permittee shall provide mitigation for public access impacts as result of the temporary shoreline protection devices permitted under this coastal development permit, in substantial conformance with the Public Access Plan by San Francisco Department of Public Works, dated March 2011. Prior to issuance of the permit, Permittee shall prepare and submit for review and approval by the Executive Director:

- A. Detailed design plans for the public access improvements identified/described in the “Public Access Plan”, dated March 2011. The improvements shall specifically include: (a) replacement of the bluff top trail with overlooks at the top of the pile wall locations between Sloat and the Southwest Ocean Outfall (SWOO), encompassing the Reaches 3 and 2 of the project area; and (b) South of the SWOO replacement of access by constructing a rock stairway down to the beach and a public access trail along the bluff top. Permittee shall submit detailed design plans for the proposed improvements.
- B. Detailed project schedule for final design, construction, and implementation of the public access plan.
- C. Detailed plans for the removal of all existing concrete rubble/material that is not functioning as shoreline protection purposes from the beach.

13. Other Approvals

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT the applicant shall:

- A. Provide a copy of the National Park Service permit or evidence that the NPS will be issuing the permit approval for construction of these shoreline protection structures at Ocean Beach.
- B. Provide a copy of the Army Corps of Engineers approval, or evidence that the placement of the new rock revetment not included in the work covered by Army Corps of Engineers File Number SPN-2010-00059 S will be approved.

V. FINDINGS and DECLARATIONS

The Commission hereby finds and declares:

PROJECT SETTING and LOCATION

The proposed project is located along Ocean Beach west of Highway 1 (also referred to as the Great Highway) between Sloat and Skyline Boulevards in San Francisco. (Exhibit 2) Ocean

Beach is a north-south trending sandy beach (approximately 4.4 miles long) on the western side of the City, situated just south of the Golden Gate entrance to San Francisco. The Great Highway runs parallel to the beach bluff top immediately to the east. It is the primary Coastal Access roadway in the area (and within the limits of the City of San Francisco). The land west of the most western edge of the roadway is owned by the National Park Service (NPS) as part of the Golden Gate National Recreation Area (GGNRA); areas to the east are under the ownership of the City. Public access to the beach is supported by two parking lots in the project area: the Sloat Parking Lot (also referred to as the North Lot) and the South Parking Lot. These two lots were constructed in the early 1990s. The San Francisco Oceanside Water Treatment Plant is located immediately southeast of the proposed project site. The Lake Merced Transport Box, an 8,500-foot-long, 14-ft.-diameter tunnel that provides 10 Million Gallon storage capacity to the City's combined sewer and storm water system as well as transport capacity for untreated waste water, is located under the southbound lane of the Great Highway.

BACKGROUND

The City conducted emergency shoreline protection activities during 1997, 1999, and 2010 in response to erosion damage from El Niño storm events which threatened public access/recreation facilities, the existing roadway, parking lots, and waste water treatment facilities. The two existing revetments (constructed in 1997 and 2010) were constructed in part to protect the beach and near shore environment from potential waste water flows were the Lake Merced Transport Box to be threatened. The 1997 work entailed unpermitted construction of a 600-foot revetment, which the City calls the "Emergency Quarystone Revetment (EQR)". Historically there was no formal shore protection prior to placement of the rock revetment in 1997. Historic photos indicate that rubble existed on the slope from the north parking lot to the current location of the Southwest Ocean Outfall (SWOO)¹.

PROJECT DESCRIPTION

The City seeks authorization for the placement of temporary shoreline protection structures along Ocean Beach between Sloat and Skyline Boulevards. The City requests authorization for the following:

(1) After-the-fact authorization of 600 feet of quarystone rock revetment (EQR) that was placed in 1997 and re-grading of the toe. (Exhibit 6)

The City conducted unpermitted construction of a 600-ft. rock revetment in 1997. CDP 2-00-029 was a permit request for after-the-fact authorization for the 600-ft. rock revetment; however, the application was withdrawn. The EQR was designed to be the minimum size necessary to provide protection for the City's infrastructure. The infrastructure in danger from erosion in this portion of Ocean Beach includes the Great Highway and the sewer system. The sewer system, in this area comprises the Westside Transport Box, which transports and holds storm runoff, and a

¹ San Francisco Department of Public Works Photo History Report of Storm Damage Impacts to Ocean Beach; Sloat to Fort Funston Bluffs 1992 – 2010. November 29, 2010

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storm water discharge pipe for overflows. The purpose of the EQR is to slow erosion at the bluff toe until a permanent solution can be developed.² This revetment consists of two-ton rock underlain by light-class rock. It has been gradually deteriorating with age and exposure; however, it is performing its intended function to protect the sewer facilities, and to provide safe travel along the Great Highway roadway. The EQR (1997 rock revetment) is unraveling at its northern end and gullies have developed above it. The City also proposes to implement temporary measures to stabilize the bluff face above the crest for 400 feet of the northern extent. The temporary measures would entail dressing the slope to no steeper than 1:V to 1.5H from the top of the EQR, placing 2 layers of 400 to 500 lb quarystone over crushed stone and repairing erosion gullies .

(2) After-the-fact authorization for 11 beach monitoring posts previously authorized by coastal development permit 2-00-040. (Exhibit 4)

CDP 2-00-040 was issued in March 2001 authorizing the installation of 11 beach and bluff monitoring posts. It (CDP 2-00-040) was approved with conditions and had an authorization expiration date of March 2003. The beach monitoring posts are an integral component of the City's monitoring program. Ocean Beach is located within a dynamic/high energy environment that causes dramatic seasonal changes of the beach elevation due to strong alongshore-directed tidal currents caused by tidal movements in and out of the Bay. The beach monitoring posts allow for an easy method to measure the change in beach elevation at a given point in time and the changes in the distance from the top of the bluff. The City additionally proposes to refurbish the 11 posts with beaded, vertical elevation markers at 2-ft. intervals.

(3)/(4) Follow-up authorization of 425 feet of rock revetment previously authorized under Emergency Permit 2-10-003-G; and after-the-fact authorization for 15 additional linear feet of rock revetment installed in 2010, but not authorized under 2-10-003-G. (Exhibit 7)

Emergency Permit 2-10-003-G was issued in February 2010 for the construction of a 425-foot rock revetment and the construction work completed in April 2010. The City actually placed 440 linear feet of material therefore 15 feet of the structure is unpermitted. This revetment consists of two-ton class rock underlain by light class rock. The added rock material resulted in extending the 425-foot revetment to the south for a total length of 440 feet. The linear extent of the revetment was lengthened in field, to the south, to locate a proper termination point for the armoring.

(5) 70 linear feet of additional (new) rock revetment added onto the 440-ft. revetment, as described above in item (4). (Exhibit 7)

The City proposes to extend the rock revetment, constructed in 2010, 70 feet to the south of the existing limit (as-constructed) to provide for a smooth transition from the revetment to the existing bluff. The rock to be used for this 70-ft extension will come from the existing revetment, by re-grading the toe and pulling back the southern extent of the structure.

² San Francisco Department of Public Works Photo History Report of Storm Damage Impacts to Ocean Beach; Sloat to Fort Funston Bluffs 1992-2010. November 29, 2010.

(6) Two new tangent pile walls (175 feet and 270 feet) located on the bluff top south of the North Parking Lot and North of the SWOO, respectively. (Exhibits 8 and 9)

The City has also identified a need to address a segment along the top of bluff (approximately 500 feet south of Sloat Boulevard) which has eroded leaving only 20 feet between the edges of the roadway pavement and the top of bluff. The project, therefore, includes construction of a 175-foot long tangent pile wall on City property at that location. The second tangent pile wall would be constructed in the area located approximately 0.5 mile south of Sloat Boulevard (immediately north of the Southwest Ocean Outfall).

(7) Vertical and bluff top public access improvements at three locations between Sloat and Skyline Boulevards. (Exhibit 5)

The City proposes public access impact mitigation that includes: a) the Sloat Boulevard existing access point at the parking lot via a “sand ladder” will continue to be used as the primary vertical access point for beach users. The sand, which is not a naturally occurring feature, will be replenished as part of the City’s routine maintenance work as blow-sand is available from Ocean Beach/road maintenance; b) a bluff top access trail that extends between Sloat Boulevard and Skyline Boulevards, with scenic overlooks at the locations of the two tangent pile walls; and c) south of the SWOO, previously existing access that was completely eroded prior to 2008 will be re-established slightly to the north. The existing rock will be repositioned to create a vertical access “stairway” from the bluff top to the beach.

(8) Grading, vegetation, drainage improvements.

The grading and vegetation component of the project would involve removal of asphalt and other debris from the bluff top of the project sites/locations for the planting of vegetation. Debris would be removed from the proposed project site, as described in (9) below. All cleared areas will be vegetated, where appropriate, with native, non-invasive species. Drainage work includes a) relocate the existing drainage facilities in Reach 1 eastward from the bluff face, which includes 1 sand trap, 7 modified manholes with boulders at the base, 1 storm water inlet, 16 lineal feet of 10-inch diameter VCP (vitrified clay pipe) culvert, 619 lineal feet of 15-inch diameter VCP sewer on crushed rock bedding wrapped in geotextile fabric, and b) post-construction television inspections of the storm drain system. Storm water drains are approximately 7-8.5 ft. below grade and trenches are approximately 2 ft. wide.

(9) The removal of excess / unnecessary rock material, concrete rubble, and debris.

The City proposes to remove debris from bluff top areas within the proposed project site. Bluff top areas, include a) 13, 600 sq. ft. in Reach 1; b) 7,900 sq. ft. in Reach 2; and c) 1, 600 sq. ft. in Reach 3.

COASTAL ACT CONSISTENCY ANALYSIS

Altering Natural Shoreline

Applicable Coastal Act Policies

Section 30235 of the Coastal Act states in applicable 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.

Coastal Act Section 30235 acknowledges that seawalls, revetments, cliff retaining walls, groins and other such structural or “hard” methods, such as gabion walls, designed to prevent erosion also alter natural landforms and natural shoreline processes. Section 30235 only mandates the construction of shoreline protective work if they are required to serve coastal-dependant uses, or to protect existing structures or public beaches in danger from erosion, provided they are designed to eliminate or mitigate adverse impacts on shoreline sand supply. The Coastal Act provides these limitations because shoreline structures can have a variety of adverse effects on coastal resources including impacts on sand supply, public access, coastal views, alteration of natural landforms and shoreline beach dynamics on and off site that could result in the loss of public beach. The Commission must review and consider shoreline protection projects on a case-by-case basis. Section 30235 provides the review standard for evaluating shoreline protection projects. Preference and priority is given to alternatives that would not result in altering the natural coastal processes/dynamics adjacent to and within a project site or area.

Section 30235 dictates that the Commission must approve shoreline protection devices, such as the proposed project’s rock revetments and tangent pile walls, only if (1) it is required to protect an existing structure in danger from erosion and (2) it is designed to eliminate or mitigate adverse impacts on shoreline sand supply.

Existing structure: The Great Highway was originally constructed in 1915. A portion was reconstructed as part of the construction of the Westside Sewer Storage/Transport Box in the 1980s and the Lake Merced Transport Box in the 1990s. Although the roadway was partially reconstructed in the ‘80s and ‘90s the highway pre-dates the Coastal Act and as such is considered to be an “existing structures” for the purposes of Section 30235.

In Danger: The Coastal Act does not define the term “in danger.” There is some risk in maintaining development along a California coastline that is actively eroding and subject to severe storms, large waves, flooding, earthquakes, and other hazards. These risks can be exacerbated by such factors as sea level rise and localized geography that can focus storm energy at particular stretches of coastline.

The degree and timing of a potential threat to development within the Coastal Zone along the California coast are determining factors that can be considered when determining the distinction

between “danger” that represents an ordinary and acceptable risk, and “danger” that requires the construction of shoreline protection structures pursuant to Section 30235. The Commission’s practice has been to evaluate how imminent the threat is, in order determine whether an existing structure is “in danger”. The Commission has generally interpreted “in danger” to mean that an existing structure would be unsafe to use or otherwise occupy within the next two or three storm season cycles (the next few years) without the placement of shoreline protection (i.e., a no project alternative).

The City realigned the portion of the Great Highway roadway closest to the project site’s southern limit. This realignment, in 2002, to a single southbound lane created a buffer between the road/travel way and the edge of the eroding bluff. Shoreline protection in the area west of the Great Highway however, is still needed in order to protect existing infrastructure. The purpose of this shoreline protection project is to (a) minimize the extent of damage to the roadway and to protect existing facilities and infrastructure, such as the Lake Merced Waste Water Transport Box, from future storm damage, (b) restore the essential traffic route, (c) maintain public access to Ocean Beach, (d) ensure bluff stability, by preventing future near-term bluff damage (slip-out), and most importantly, (e) provide the minimum protection necessary to develop a long-term plan for Ocean Beach and a solution for shoreline protection from erosion.

Bluff retreat rates for the period 1995-2010 were estimated, based on surveys and aerial photographs for the area, and compared to prior work by the Army Corps of Engineers. The data indicates that on average a 5-yr return period storm has resulted in about 10-ft of bluff top retreat, an 8-yr return period storm results in about 20-ft of retreat, and a 30-yr storm results in about a 40-ft retreat.

The 2010 El Niño storms have resulted in a loss of more than 40 feet of bluff area. The proposed project is limited to three locations along Ocean Beach which the City identifies as critical areas along Ocean Beach due to the severely eroded conditions. The infrastructure at these locations is highly vulnerable to potential damage from bluff erosion, if shoreline protection measures are not implemented to prevent or delay the erosion process. The project site is separated into three geographic designations, Reaches 1, 2, and 3 (Exhibit 3). The City’s risk analysis indicates that Reach 1 is capable of withstanding a moderate storm event; however, public access could be affected by additional events. According to the City there is a 50% probability that the top of the bluff will reach the roadway pavement within the next five years. The bluff top edge in Reach 2 has a 50% probability of reaching the pavement within eight years. Reach 3 currently exhibits the greatest need for immediate action as there is 50% probability of the bluff retreating to the edge of pavement within one year.

If no action is taken to prevent or slow down bluff erosion while the existing development remains at its current location untreated waste water from the Lake Merced Transport Box, eroded roadway debris, and utility infrastructure would be discharged and deposited to the adjacent beach and ocean. This could result in adverse effects on the quality of the ocean water, marine habitat, and organisms that rely on these resources.

Required Alternative: Under Section 30235, the proposed shoreline protection devices must be approved as the appropriate response to the risk of erosion only if they are “required” to protect

existing structures in danger from erosion. Shoreline protection measures, such as the rock revetments and tangent pile walls proposed by the City, shall be permitted if they are the only feasible³ alternative capable of protecting the structures that are in danger from erosion.

When considered in conjunction with other applicable Coastal Act policies for protecting coastal resources as cited in these findings, the proposed project is required if it is the least environmentally damaging feasible alternative that can serve to protect existing structures that are in danger. Other alternatives that should be considered by the City include: “no project”; abandonment of the threatened structures; relocation of the threatened structures (managed retreat); sand replenishment programs; drainage and vegetation measures on the bluff top itself; installation of vertical walls, and some combination of these alternatives.

The City considered several alternatives for shoreline protection and repairs for the Ocean Beach area. Seven potential construction options were identified: (1) tangent or secant pile wall, (2) soldier pile wall, (3) soil nail wall, (4) geoweb or ACBM mats, (5) rock revetment, (6) low height toe wall, and (7) no action. These seven options were then developed to a concept level and evaluated for feasibility. The preferred options that emerged from the alternatives analysis were “No Action” for the upper bluff in the northernmost and southernmost length of Reach 1, Soil Nail Wall in the mid-stretch of Reach 1, and Tangent Pile Walls within Reaches 2 and 3. These alternatives are more fully described in the report Great Highway Emergency Repairs – Response to 2009/2010 Storm Season prepared by Moffatt & Nichol. Design criteria included consideration of bank swallow habitat, geotechnical conditions, infrastructure (i.e., presence of the Lake Merced Transport Box), property ownership, traffic, on-going erosion control due to surface runoff, and public access. The City’s consideration of alternatives are for interim protection measures and do not include a full analysis of long-term solutions or alternatives.

No action, i.e., no placement of shoreline protection devices to protect the highway and the Lake Merced Transport Box could result in significant adverse impacts to the Ocean Beach marine environment and associated biological resources. Water quality of the Pacific Ocean would also be negatively affected if the waste water facility failed due to erosion.

The Commission must assess both the need to protect existing development and a proposed development’s potential for adversely affecting public resources. A number of adverse impacts to public resources are associated with the construction of shoreline protective devices. These include the loss of public beach displaced by the structure, “permanently” fixing the back of the beach that halts the landward migration of the bluff and beach, the narrowing and potential elimination of beach in front of the structure, a reduction or elimination of sand contribution to the beach from adjacent bluffs, sand loss from the beach due to wave reflection and scour, accelerated erosion on adjacent unprotected properties, and visual impacts associated with the construction of a shoreline protection device on the natural bluffs.

³ Note that Coastal Act Section 30108 defines feasibility as follows: “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Ocean Beach is in a dynamic state, with the bluff naturally receding as it is exposed to erosion at the toe from severe seasonal storm events. The shoreline area is highly vulnerable to erosion from wind and ocean waves. The area within the project vicinity, between Sloat Boulevard and Fort Funston to the south, has near vertical bluffs from five feet to over 30 feet above the beach area. The total length of Sloat Boulevard to the southern edge of the 2010 revetment is approximately 3,000 feet. The predominant bluff feature from the Sloat Boulevard intersection to the Southwest Ocean Outfall is a combination of rock concrete rubble, brick and debris. The City's Risk Assessment Study conducted by Moffatt & Nichol in 2010 indicates that the proposed project segments are too vulnerable to leave them unprotected. The consequences of infrastructure failure would be loss of a coastal roadway, environmental (e.g., water quality, biological resources) impacts from potential spills, and loss of storm/sewage conveyance for the City of San Francisco. The City's application is for the minimum amount of shoreline protection devices/structure(s) that will directly protect existing infrastructure. The two revetments, two tangent pile walls, and the two existing parking lots (until they erode) will protect its infrastructure from damage in the near future.

The proposed project is the least environmentally damaging option for shoreline protection that will provide the applicant time to develop and implement a long-term solution, consistent with the Coastal Act, for the on-going erosion along Ocean Beach. The two rock revetments are designed such that the rock can easily be re-arranged, augmented, and absorb a great amount of wave force. Most importantly, rock revetments not tied into bedrock, can be removed relatively easily and leave minimal to no evidence of having been there. This is a relevant consideration because the proposed project includes removal of the rock when a more permanent, long-term, and less intrusive solution is developed. Providing the City with this five-year development authorization, as conditioned, recognizes and responds to the permitting and shoreline protection needs associated with stabilizing the toe of bluffs in the area to protect existing infrastructure while a long-term solution to the severe erosion along Ocean Beach is developed. The City's application is for only what is necessary to directly protect the existing highway, infrastructure, and public/recreation access facilities from erosion while a long term solution is pursued. The City states that the two revetments, two tangent pile walls, and the two existing parking lots (until they erode), will protect its infrastructure from damage in the near future. Therefore, long-term impacts of the revetments were not evaluated, because the temporary structures are the least environmentally damaging, feasible, alternative required to temporarily protect an existing structure until a long-term solution is developed.

This limited-duration permit only authorizes the proposed project for a five-year period, as conditioned, for the temporary protection of waste water infrastructure located within the Great Highway. The permit would only be extended upon written request to the Executive Director for good cause, pursuant to **Special Condition No. 1**. Mitigation for public access impacts is required, as described in the Public Access Plan, dated March 2011. Public Access mitigation includes construction of a bluff top access trail that extends between Sloat Boulevard and Skyline Boulevard and vertical access from the top of bluff to the beach via stairs constructed through the project's southernmost revetment (in Reach 1), pursuant to **Special Condition 12**.

The two rock revetments are already in place; except for the additional 70 feet proposed for extending the 2010 revetment to the south. They are proposed to be in place temporarily until a

long-term solution is developed for Ocean Beach, including the three critical locations within the project site. The structures would be authorized for a limited duration of five years, pursuant to **Special Condition No. 1**.

The 11 beach monitoring posts allow for an easy method to measure the change in beach elevation at a given point in time and the changes in the distance from the top of the bluff. The City additionally proposes to refurbish the 11 posts with beaded vertical elevation markers at 2-ft. intervals. Authorization of the posts for a five-year timeframe, pursuant to **Special Condition No. 1** would provide necessary data that would be used for developing a long-term solution for shoreline protection at Ocean Beach. As a component of the monitoring program these structures would provide the information required by this permit. They are necessary to comply with **Special Condition No. 6** and would assist with monitoring the function of the shoreline protection structures for maintenance purposes. Temporary placement of these small structures would not be inconsistent with the policies of the Coastal Act.

Section 30235 allows for approval of the structures as a temporary protection measure. The authorization of the temporary structures as conditioned by **Special Condition Nos. 1, 3, and 5** would not result in adverse impacts to the marine environment, biological resources, or water quality. However, retention of the structures authorized by this permit beyond the maximum five-year period would not be consistent with Section 30235 because the revetments have not been determined to be the least environmentally damaging, feasible alternative to protect the existing development for the long-term. Thus, this authorization is only for five years, subject to regular status reports on the on-going, long range planning for the Ocean Beach area.

Public Access

Applicable Coastal Act Policies

Coastal Act Section 30210 states:

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

Coastal Act Section 30211 states:

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

Coastal Act Section 30212 states in relevant part:

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

(1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) Adequate access exists nearby...

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

(5) Any repair or maintenance activity for which the Commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the Commission determines that the activity will have an adverse impact on lateral public access along the beach.

The project site is located within the Golden Gate National Recreation Area (GGNRA), which is heavily used by local residents and visitors from outside the area. GGNRA extends approximately three miles along Ocean Beach from the Cliff House, at the north, south to Fort Funston. Coastal access is served by NPS parking lots at both the north and south ends of the beach. There is also parking at the Beach Chalet restaurant east of the Great Highway. The beach also has some informal vertical access points along the Great Highway.

Winter storms have damaged or destroyed all the formal public access points to the beach, since 1992. The nearly vertical bluffs within the project area are from 5 feet to over 30 feet (above the beach area between Sloat Blvd. and Fort Funston, to the south). Erosion over the years has eliminated lateral bluff top access. The bluff area, for example, extending southward from the Southwest Ocean Outfall (SWOO) had lateral access in the year 2004 and by 2010 it no longer exists due to erosion (See Exhibit 5, Figure 5). There is no formally established vertical beach access along this area although, informal foot paths do exist, such as in front of the National Park Service parking lots. The foot traffic is a contributing factor to the eroded conditions at many bluff locations. One well-used existing vertical access is located adjacent to the Sloat parking lot near the bus turn-around. This access point consists of an open sandy area that functions as a "ladder". The public can walk down the sand slope from the top of the bluff to the beach (See Exhibit 5, Figure 3). Lateral beach access exists along the entire beach shoreline from Sloat Boulevard to Skyline Boulevard although it is inhibited by concrete rubble, armor rock, and outfall structures/infrastructure in some places.

Public access and recreation in the immediate area of the project sites could be interrupted during construction. However the public will still have the opportunity to access the beach and shoreline immediately up- and down-coast of the project area. The City proposes, consistent with the public's safety that provisions will be made to allow the public to go through the project site area during construction and maintenance activities. The rock revetments cover beach area therefore the beach available to the public for recreational use would be limited during high tide conditions. The revetments will inhibit lateral beach access. The top of bluff public access trail will mitigate public access impacts by providing access in the coastal area during high tide conditions. The public would have a continuous access route along the bluff top between Sloat Boulevard and Skyline Boulevard.

Erosion at the northern portion of the project area (Exhibit 3) has undermined a part of the existing public parking lot ("North Parking Lot") which, as a result, has been closed-off. Eroded areas at the top of slope, additionally, have been cordoned off or otherwise restrict public access due to safety concerns. The proposed project would restore public access in these areas by eliminating or reducing public safety issues at these locations once erosion is slowed down and the lot is more stabilized, thereby allowing the lot to be used.

The proposed project will result in impacts to public access by inhibiting lateral beach access along the section of the shoreline during high tides or storm events. High tides and/or storm waves may reach the base of the revetment leaving no dry beach between it and the sea during such occurrences. Measures are proposed to minimize the impacts, to the maximum extent feasible, include the following: (1) removal of rock debris/material from the beach that is not functioning to protect infrastructure; (2) use of these structures are only temporary; and (3) construction of a public access trail/path along the top of the bluff that is a condition of this coastal development permit, **Special Condition No. 12**, described below.

The City's proposal designates some area within its right-of-way for a coastal, multi-use trail that would parallel the westerly edge of the Great Highway (Exhibit 5, Figures 4, 5, and 6). There is no formalized trail at this time, however, the City has shifted the southbound roadway to the east, and the old southbound lanes west of the realigned roadway currently allow for pedestrian and bicycles uses in the area. Reserving this area was developed in coordination with the National Park Service (NPS) to informally provide top of bluff lateral access through the area, which is consistent with the NPS' future trail plans.

The purpose of the proposed project is to protect existing infrastructure such as the Great Highway, and waste water facilities (e.g., the Lake Merced Transport Box). The proposed project would provide protection along this section of the Ocean Beach shoreline temporarily, while a long-term solution is developed for the Ocean Beach area. **Special Condition 1** authorizes the revetments for a period of five years only, after which it expires on July 13, 2016, unless extended by the Executive Director for good cause. The City is required to implement its "Public Access Plan", dated March 2011 to mitigate for the public access impacts caused during the five-year period. The mitigation includes: 1) the Sloat Boulevard existing access point at the parking lot via "sand ladder" will continue to be used as the primary vertical access point for beach users. The sand, which is not a naturally occurring feature, will be replenished as part of the City's routine maintenance work as sand is available from Ocean Beach (Exhibit 5, Figure 3); 2) a bluff top access trail that extends between Sloat Boulevard and Skyline Boulevards, with scenic overlooks at the locations of the two tangent pile walls (Exhibit 5, Figures 4, 5, and 6); and 3) south of the SWOO, previously existing access that was completely eroded prior to 2008 will be reestablished slightly to the north. The existing rock will be repositioned to create a vertical access "stairway" from the bluff top to the beach (Exhibit 5, Figure 6). **Special Condition No. 6. B** requires the City to minimize the impact to lateral access by maintaining the revetments and the removal of dislodged rock from the beach area and surf zone. The provision of public access improvements as required by **Special Condition No. 12** is adequate to offset the temporary public access impacts of the revetments on the public beach during the time period for which the structures are authorized. **Special Condition No. 2** requires the removal of concrete rubble, debris, and rock material from the beach. The Commission finds that the proposed project, as conditioned to be limited to five years, will not significantly interfere with public access and public recreation and will protect public access in conformity with the requirements of Section 30210, 30211, and 30212 of the Coastal Act. Impacts to public access and other coastal resources, though, will need to be re-evaluated in the future.

The 11 beach monitoring posts allow for an easy method to measure the change in beach elevation at a given point in time and the changes in the distance from the top of the bluff. The City proposes to refurbish the 11 posts with beaded vertical elevation markers at 2-ft. intervals. Authorization of the posts for a five-year timeframe, pursuant to **Special Condition No. 1** would provide necessary data that would be useful for developing a long-term solution for shoreline protection at Ocean Beach and for evaluating the impacts of shoreline structures on beach resources. Overall, as mitigated, temporary placement of these structures would not be inconsistent with the public access policies of the Coastal Act.

Scenic and Visual Qualities; Minimization of Adverse Impacts

Applicable Coastal Act Policies

Section 30240(b), previously cited, which also protects the visual characteristics of recreation areas such as GGNRA, states:

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

Section 30251 states:

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

Coastal Act Section 30253 states in relevant part:

New development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Protecting the Lake Merced Transport Box and Great Highway will protect the public by minimizing risks associated with geologically unstable areas. Debris from this existing development, if damaged as a result of erosion would present a hazard to the public. A release of untreated waste water should the system experience failure (if the shoreline were not protected from being severely) would threaten public health and safety. Thus, the proposed shoreline protection project is consistent with the requirement of Coastal Act Section 30253 to minimize

the risk to life and property in an area of high geologic hazard. Therefore, the Commission finds that the proposed project, as conditioned, is in conformity with the requirements of Coastal Act Section 30253.

The project site is within GGNRA which is an urban recreation area under the jurisdiction of the NPS. The site is bounded by the Great Highway and residential areas to the east, the Pacific Ocean to the west, and GGNRA lands to the north and south. The recreation area includes the beach and bluff areas that provide the public a setting for a natural coastal experience. The visual characteristics of the Ocean Beach landscape include bluff tops with development (e.g., parking lots), locations with eroded exposed rubble, engineered rock structures, and naturally eroding Colma formation. The engineered revetments/structures consist of large, thick, angular material free of debris such as pieces of metal and asphalt. The rubble comprises smaller rock material interspersed with debris. The total length of shoreline south of Sloat Boulevard to the southern edge of the revetment placed in 2010 is approximately 3,000 feet. The predominant bluff feature from Sloat Boulevard to the Southwest Ocean Outfall (SWOO) is a combination of concrete rubble, brick and debris.

The City's evaluation criteria used for its analysis of alternatives includes "appearance concerns". Each alternative was reviewed and given a score from one to five (one being the best). The lower the score the less visual impact the proposed design is perceived to have. The visual appearance of the alternatives was considered for the three stretches of shoreline located south of Sloat Boulevard (identified as being in need of immediate repair and stabilization). The preferred alternative for shoreline protection in each reach was selected taking into account its visual appearance. The upland alternative of a tangent pile wall as proposed for Reaches 2 and 3 have no initial visual impact. Initially after construction the wall will be almost completely buried under the bluff top surface (only the top will be visible).

The rock revetments have an effect on shoreline views from the beach and bluff top vantage points. This type of shoreline protection would not be considered visually compatible with the surrounding natural area, thereby inconsistent with Section 30251 of the Coastal Act. However, even if a proposed shoreline protection structure is otherwise inconsistent with the Coastal Act, it shall be permitted if it meets the requirements of Section 30235 of the Coastal Act. The Commission therefore finds that while the rock revetments are inconsistent with the visual resources policies of the Coastal Act, the visual impacts must be mitigated to the maximum extent feasible consistent with Section 30235 of the Coastal Act. The City proposes placement of the minimal amount of rock revetment necessary to protect the bluffs from further erosion. Additionally the extent of shoreline area covered by the structures amounts to approximately 1/3 of the total stretch leaving the remainder in its more natural state. More importantly the shoreline protection is temporary thus may not be considered to have a significant permanent visual impact. Also, **Special Condition No. 2** requires removal of rubble and debris not necessary for stabilizing the bluff, which would clean the beach area of unsightly material. Only as conditioned can the Commission find that the visual impacts associated with the project are reduced to the maximum extent feasible, consistent with Section 30235 of the Coastal Act.

With respect to the proposed 11 beach monitoring posts, they are not generally compatible with the natural setting of Ocean Beach, however, they would be only temporary, and will provide

important data for addressing long-term planning and impact assessment at the location. The need for the monitoring posts would need to be evaluated as part of the long-term solution developed for the Ocean Beach area.

Marine Resources, Water Quality

Section 30230 of the Coastal Act states:

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

Section 30231 of the Coastal Act states:

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

There is some potential for water quality impacts to occur during construction and maintenance activities related to the recovery and replacement of rock dislodged from the revetment and from the construction and installation of the improved bluff top public access. In addition, if no action is taken to prevent or slow down bluff erosion while the existing development remains at its current location untreated waste water from the Lake Merced Transport Box, eroded roadway debris, and utility infrastructure would be discharged and deposited to the adjacent beach and ocean. This could result in adverse effects on the quality of the ocean water, marine habitat, and organisms that rely on these resources, contrary to Coastal Act Sections 30230 and 30231.

Special Condition Nos. 3 and 5 requires work to take place in a time and manner such that any potential for damaging any marine resources would be minimized. These conditions require Best Management Practices (BMPs) to be implemented to avoid marine and water quality impacts. These include conducting work within the beach area during low tide, using a sand bags, placing silt fencing, conducting beach work at low tides, protecting storm drain inlets, conducting all equipment and vehicle fueling, cleaning, and maintenance off-site, and removal of all existing concrete rubble/material that is not functioning as shoreline protection purposes from the beach. **Special Condition 3** also includes a requirement to collect, contain, and properly dispose of all construction leaks, drips, by-products, and any similar contaminants through the use of containment structures or equivalent. Equipment washing, refueling, and/or servicing shall not take place on the beach. The submission of a Storm Water Pollution Prevention Plan is required to ensure the protection of water quality by controlling sediment and erosion from construction, repair, and maintenance activities.

The Commission finds that, due to the reasons described above, the proposed shoreline protection work, as conditioned, would protect the biological productivity and the quality of coastal waters in conformity with Coastal Act Sections 30230 and 30231.

Environmentally Sensitive Habitat Areas

Applicable Coastal Act Policies

Coastal Act Section 30240(b) states:

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

The proposed rock revetments are located on Ocean Beach which is an environmentally sensitive area. The U.S. Fish and Wildlife Service, in March of 1993, listed the Pacific Coast population of the western snowy plover as “threatened” under the Endangered Species Act (ESA) of 1973, as amended. The National Park Service in the Draft Snowy Plover Management Plan of 1998 designated the area between Stairwell 21 (just north of Lincoln Ave) and Sloat Blvd as snowy plover management area. The area south of the project site, at Fort Funston is designated bank swallow habitat. The bank swallow is a California listed threatened species. Bank swallows use portions of coastal bluffs for nesting although the main colony is located at Fort Funston to the south of the project site there is a potential for nesting to occur within Reaches 1 and 2. The bank swallow nesting period is between mid-April and mid-August. The City proposes to monitor for bank swallow use of the site during construction activities. **Special Condition No. 2** requires a pre-construction survey of the project site and monitoring during construction activities to make certain that there are no adverse impacts to bank swallows. Construction activities will be stopped and delayed until after the nesting season if active nests are found.

The proposed construction and maintenance activities would require working on the beach. Coastal Act Section 30240 (b) requires protecting environmentally sensitive habitat areas from potential impacts of adjacent development and that development adjacent to park and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those recreation areas. The proposed work is located on Ocean Beach, which is within GGNRA. GGNRA comprises 75,000 acres of coastal lands. It was created for the purpose of protecting and promoting the enjoyment of natural and cultural resources on the edge of the urban San Francisco Bay Area communities.

Special Condition No. 1 allows the City to place the structures at Ocean Beach temporarily for a limited period of five years until July 13, 2016. **Special Condition No. 5** protects snowy plover and bank swallow by requiring pre-construction surveys and monitoring during construction activities. **Special Condition No. 3** requires implementation of BMPs, construction responsibilities and maintenance to protect the coastal environment; and most importantly, **Special Condition Nos. 12** protect and provide for improved coastal access for the public because it ensures the public vertical access to the beach via the continued use of the existing sand ladder (replenished and maintained by the City) a continuous bluff top access trail, and

vertical access to the beach through the 2010 revetment (the southernmost portion of the proposed project site). These conditions assure that the proposed project is consistent with the continued recreational use of the area in conformity with Section 30240. The Commission finds that the proposed development is sited and designed to prevent impacts which would significantly degrade park and recreation areas, and environmentally sensitive habitat areas, and is compatible with the continuance of those recreation areas in conformity with the requirements of Coastal Act Section 30240.

Long-term Solution

The policies of the Coastal Act require the design of any shoreline protective device to be the least environmentally damaging alternative and the most protective of shoreline processes. There is an Ocean Beach corridor Master Plan effort, which is being directed by San Francisco Planning and Urban Research (SPUR). Funding from the San Francisco Public Utilities Commission, National Park Service, and California Coastal Conservancy is supporting this effort. The Master Plan process is currently underway and is expected to provide some direction on addressing planning issues for the Ocean Beach area. These issues include solutions for protecting the infrastructure and shoreline area from erosion. The City is a stakeholder in this master planning process. The City is required to comply with this CDP, regardless of the Master Plan process. Coastal Commission staff are also actively participating in this effort to assure that Coastal Act issues and concerns are considered through the planning process.

Alleged Violation

Development consisting of the (1) construction of 600 feet of rock revetment placed in 1997, (2) 15 feet of rock revetment constructed in April 2010, and (3) non-compliance with the requirements and conditions of CDP 2-00-040 for 11 beach monitoring posts has taken place without the benefit of a regular coastal development permit from the Commission. Although development has taken place prior to submission of this permit application, consideration of the application by the Commission for development located within the Commission's original permit jurisdiction has been based solely upon the policies of the Coastal Act. Approval of the permit does not constitute a waiver of any legal action with regard to the alleged violation, nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal development permit.

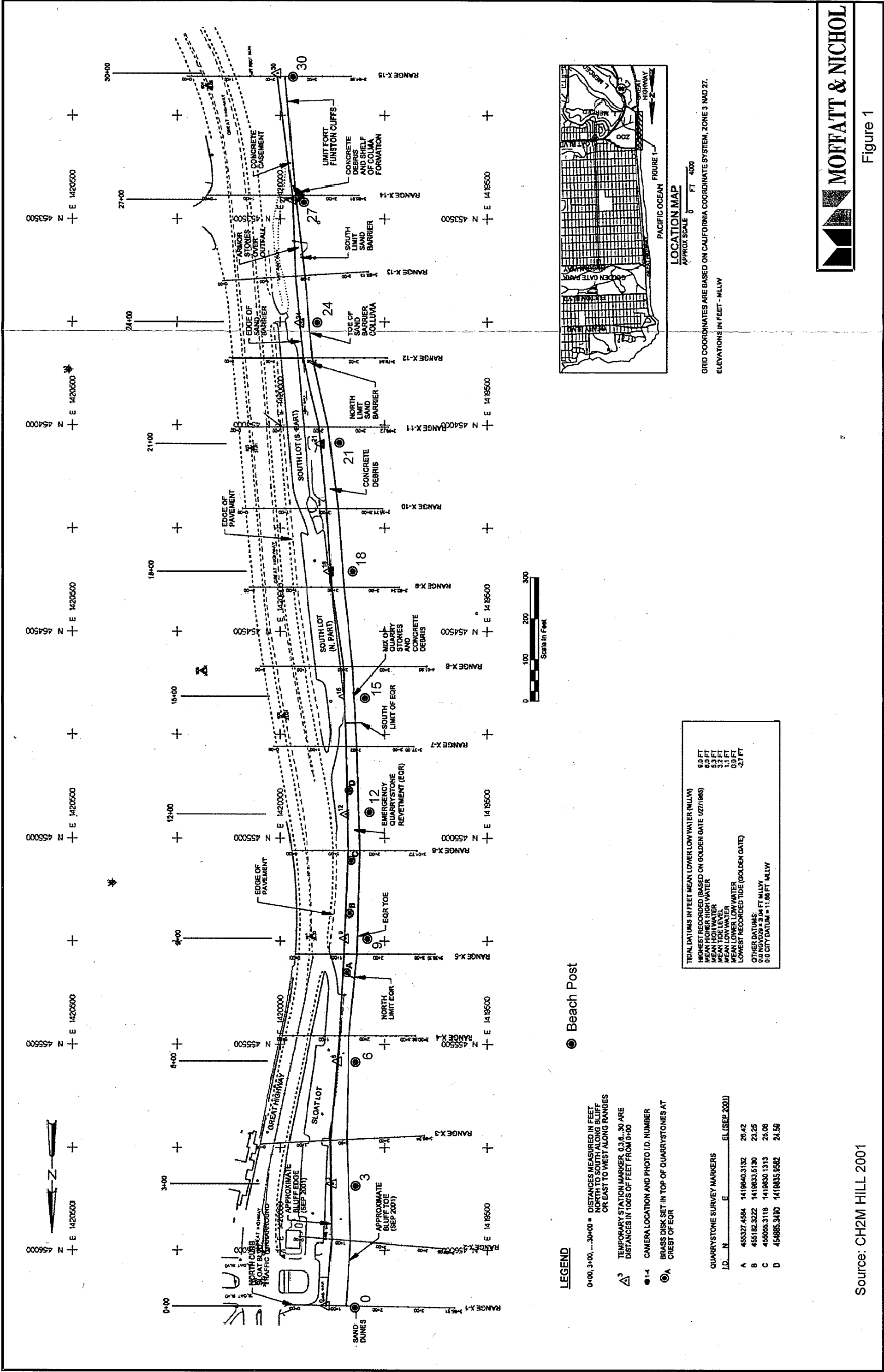
California Environmental Quality Act (CEQA)

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

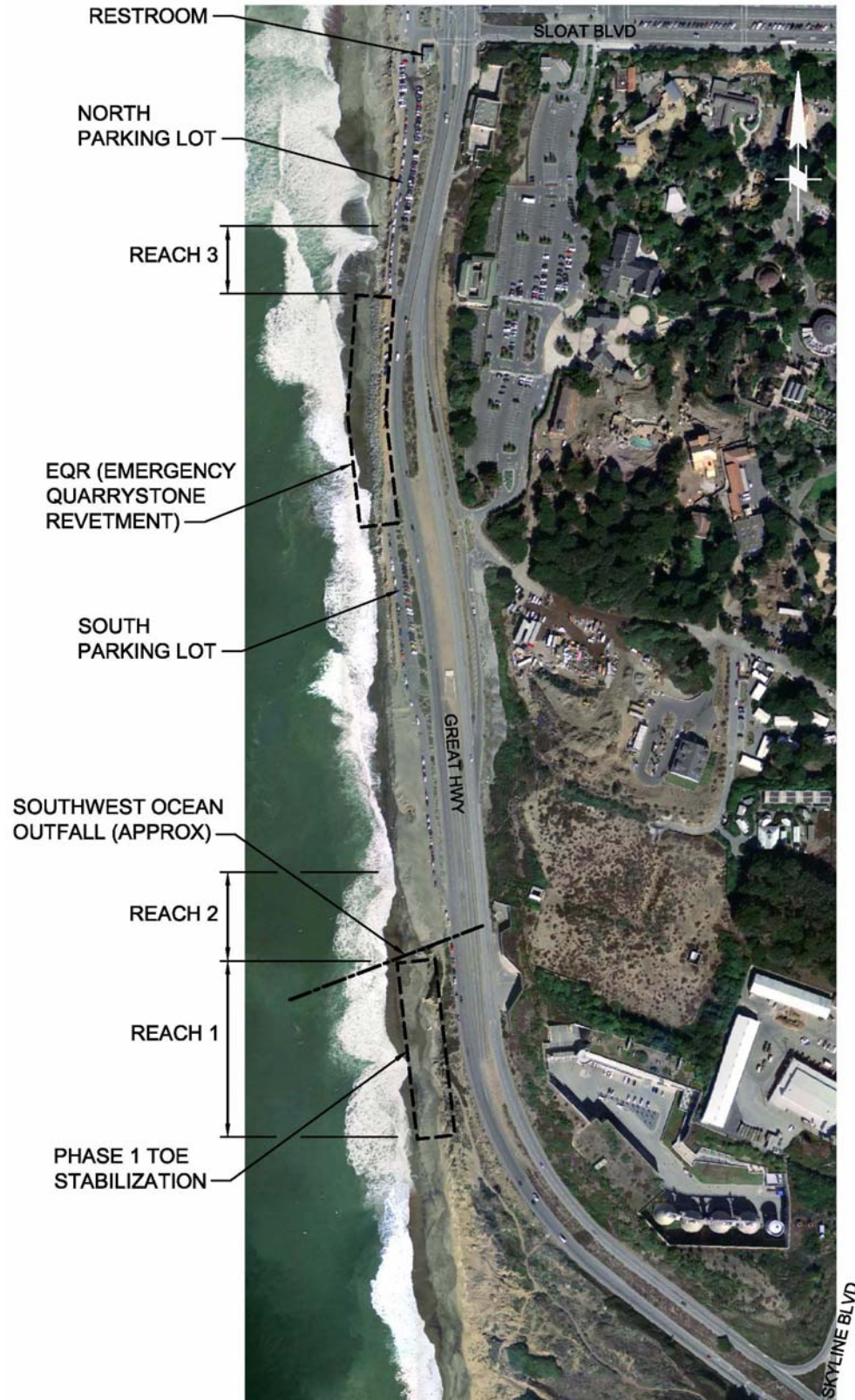
The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. The proposed project has been conditioned to mitigate or eliminate any significant impacts to public access, the marine environment, geologic hazards and visual resources. As discussed above, as conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impacts which the development may have on the environment. Therefore, the Commission finds that the proposed project has been conditioned to mitigate the identified impacts and can be found consistent with Coastal Act requirements to conform to CEQA

PROJECT SITE





Public Access Plan in Response to 2010 Storm Damage Impacts to Ocean Beach



March 2011



Public Access Plan

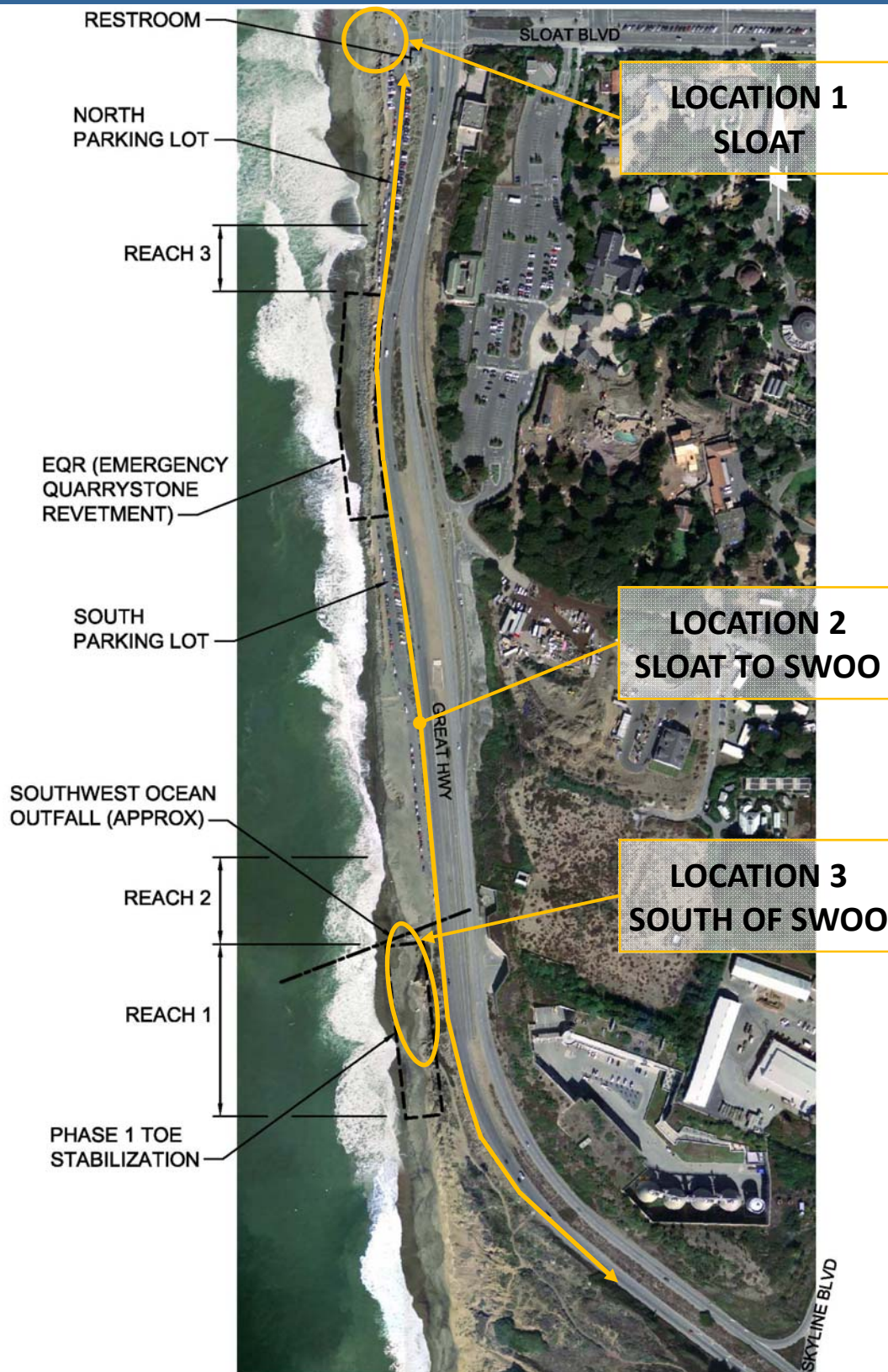


FIGURE 1— SITE PLAN

OCEAN BEACH - COASTAL ACCESS PLAN

EXISTING ACCESS—SEE FIGURE 2 (LEFT SIDE) FOR EXISTING ACCESS FEATURES:

- North of Sloat Blvd to Cliff House: This area is protected by a seawall or sand dune. Most of the beach is generally accessible at normal tide conditions (except storm conditions) and there are multiple vertical access points.
- **Location 1 – Sloat Blvd:** This is the primary access point for the public, as there is parking and an existing sand ladder to the beach.
- **Location 2 – Sloat to SWOO:** There is no formal lateral access along Great Highway (see Figure 2, NPS trail map). The beach in this area is generally accessible during the summer when beach elevations are higher, and is only partially accessible during winter due to lower beach elevations. There are no formal vertical access points; however there are informal access points where surface erosion has occurred along the bluff. The original southbound traffic lanes have been relocated to the east, and temporary concrete barriers separate the trail from vehicle traffic.
- **Location 3 – South of SWOO:** The NPS map shows lateral access along the bluff top in this area; however, significant erosion has occurred in this area (see photo sequence on Figure 5), and both the lateral access and vertical access no longer exist. The beach is usually accessible during summer when beach elevations are higher.

PROPOSED ACCESS—SEE FIGURE 2 (RIGHT SIDE) FOR PROPOSED ACCESS FEATURES:

- North of Sloat Blvd to Cliff House: No changes to access.
- **Location 1 – Sloat Blvd:** This existing access point will continue to be used as the primary vertical access point for beach users (see Figure 3). The existing sand ladder provides an access route with a slope that varies seasonally due to varying beach elevations and erosion. The sand is not a naturally occurring feature, but has been regularly placed as part of the City's routine maintenance work; sand placement will be continued as sand from Ocean Beach is made available by the NPS.
- **Location 2 – Sloat to SWOO:** Although there is no formal NPS trail in this area, the realigned traffic lanes and concrete barriers have created an opportunity for a pedestrian trail. The trail may also incorporate several scenic overlooks (possibly at the proposed pilewall locations at Reach 2 and Reach 3) to provide visual access at locations where physical access is not feasible. The Coastal Commission's *Public Access Action Plan (June 1999)* will be used for design guidance. See Figure 4 for details.
- **Location 3 – South of SWOO:** Previously existing access that was completely eroded prior to 2008 will be reestablished slightly to the north. The existing rock will be repositioned to create a vertical access "stairway" from the bluff top to the beach (see Figure 6). The access route will be rugged due to the varied rock surfaces and the need to have the rock continue to function as a revetment.

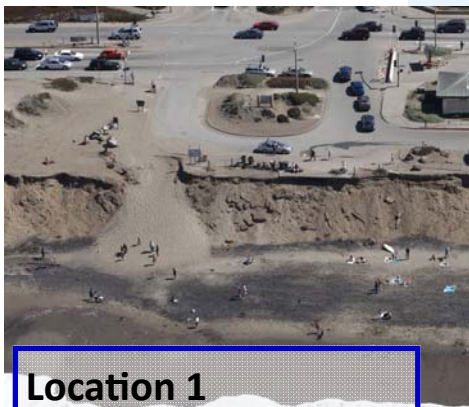
FIGURE 2— SITE OVERVIEW

EXISTING

PROPOSED



Existing Beach Access from Cliff House to Sloat Blvd



Location 1
Existing Beach Access at Sloat Blvd Parking Lot via sand ladder



Location 3
No Beach Access due to erosion of vertical access and loss of lateral trail (see Figure 5)



No change in access

Location 1
Proposed continuation of Beach Access at Sloat Blvd Parking Lot via sand ladder (see Figure 3)

Location 2
Proposed Bluff Lateral Access from Sloat Blvd to Skyline Blvd (see Figure 4)

Location 3
Proposed Beach Access to reestablish vertical access to Beach lost due to erosion (see Figure 6)

FIGURE 3— LOCATION 1 SLOAT BLVD



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www.Californiacoastline.org

Proposed Access:

Existing Beach Access via sand ladder will be continued.

FIGURE 4 — LOCATION 2
PROPOSED LATERAL ACCESS FROM SLOAT TO SWOO



FIGURE 5 — LOCATION 3
EXISTING CONDITION — EROSION SOUTH OF SWOO

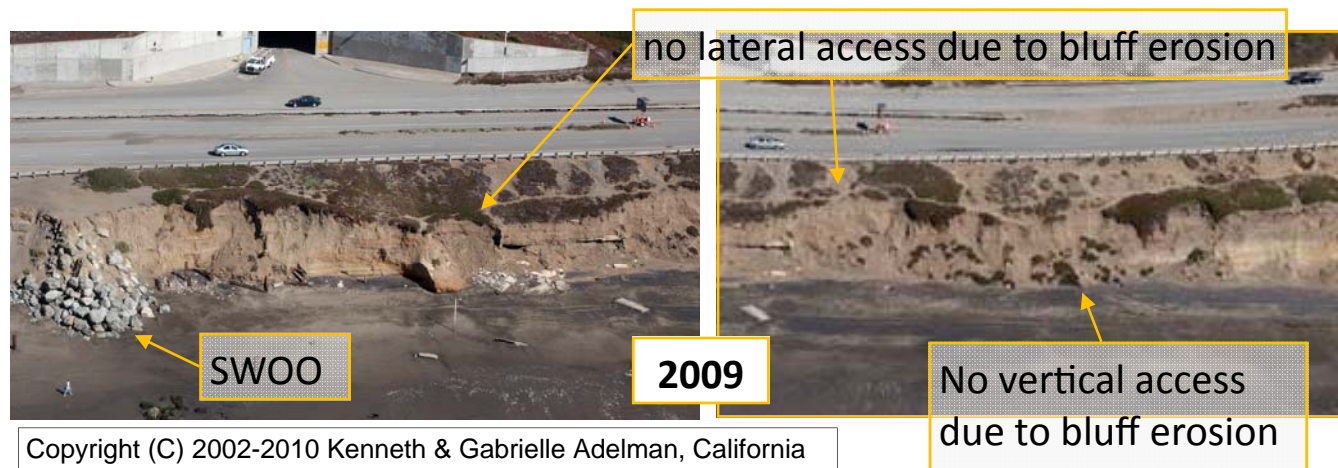
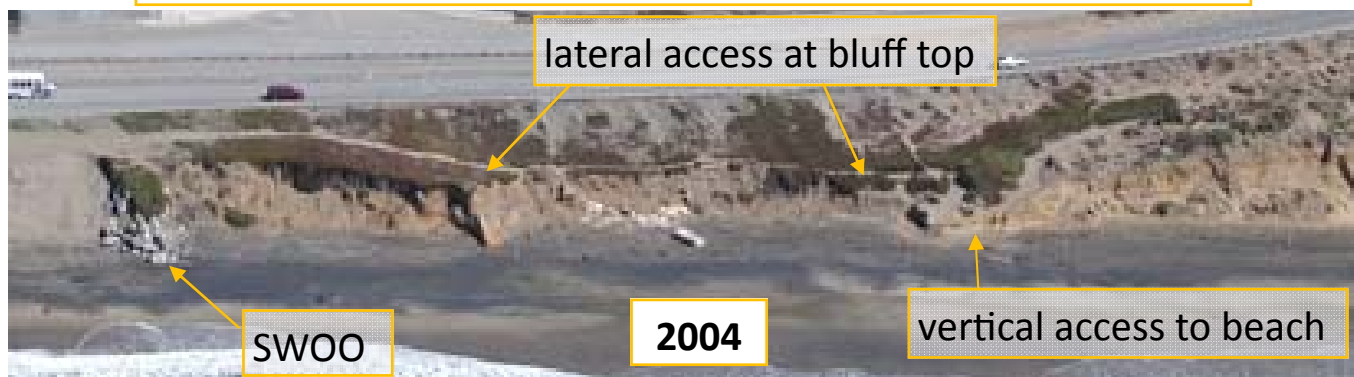
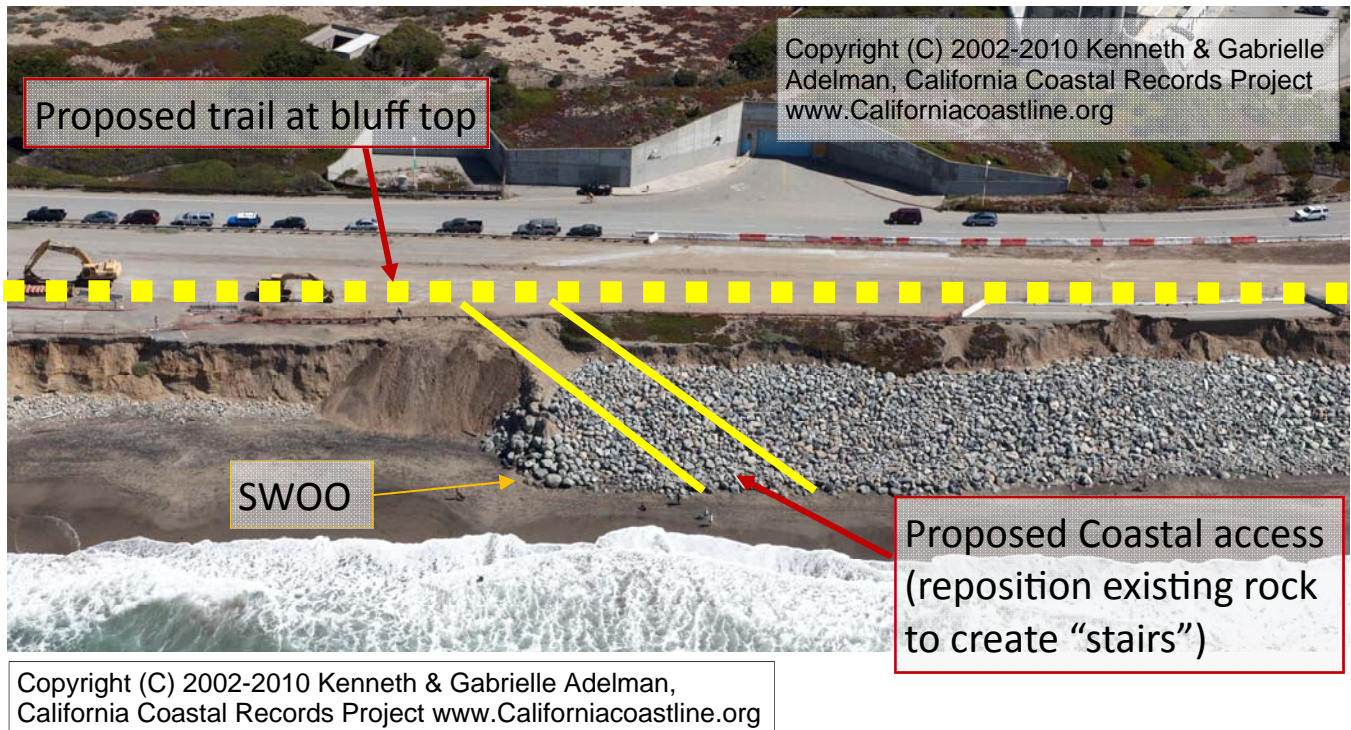


FIGURE 6 — LOCATION 3 PROPOSED CONDITION — SOUTH OF SWOO



Proposed Access:

Reestablish vertical access that was lost due to erosion (see Figure 5) by repositioning existing rock to create a rock stairway from the bluff top to the beach.

Replace lateral access that was lost due to upper bluff erosion (see Figure 5) by providing a trail along the bluff top along original southbound traffic lanes.

ALTERNATIVE ACCESS CONCEPT

A permanent access point can be constructed to provide public coastal access at Sloat Blvd, Reach 2 (immediately north of SWOO), or Reach 3 (immediately north of the EQR). The access would consist of a concrete seawall with an access ramp and stairs; an example of this concept is presented by the existing facility at China Beach Park shown below.



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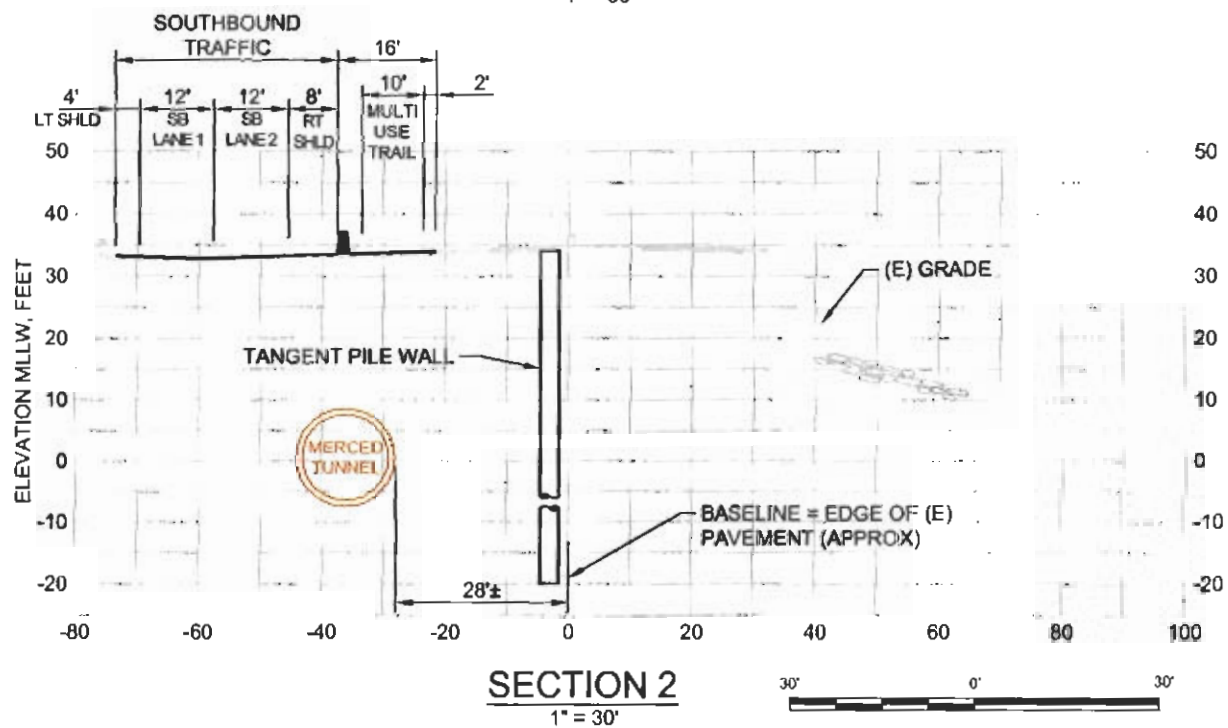
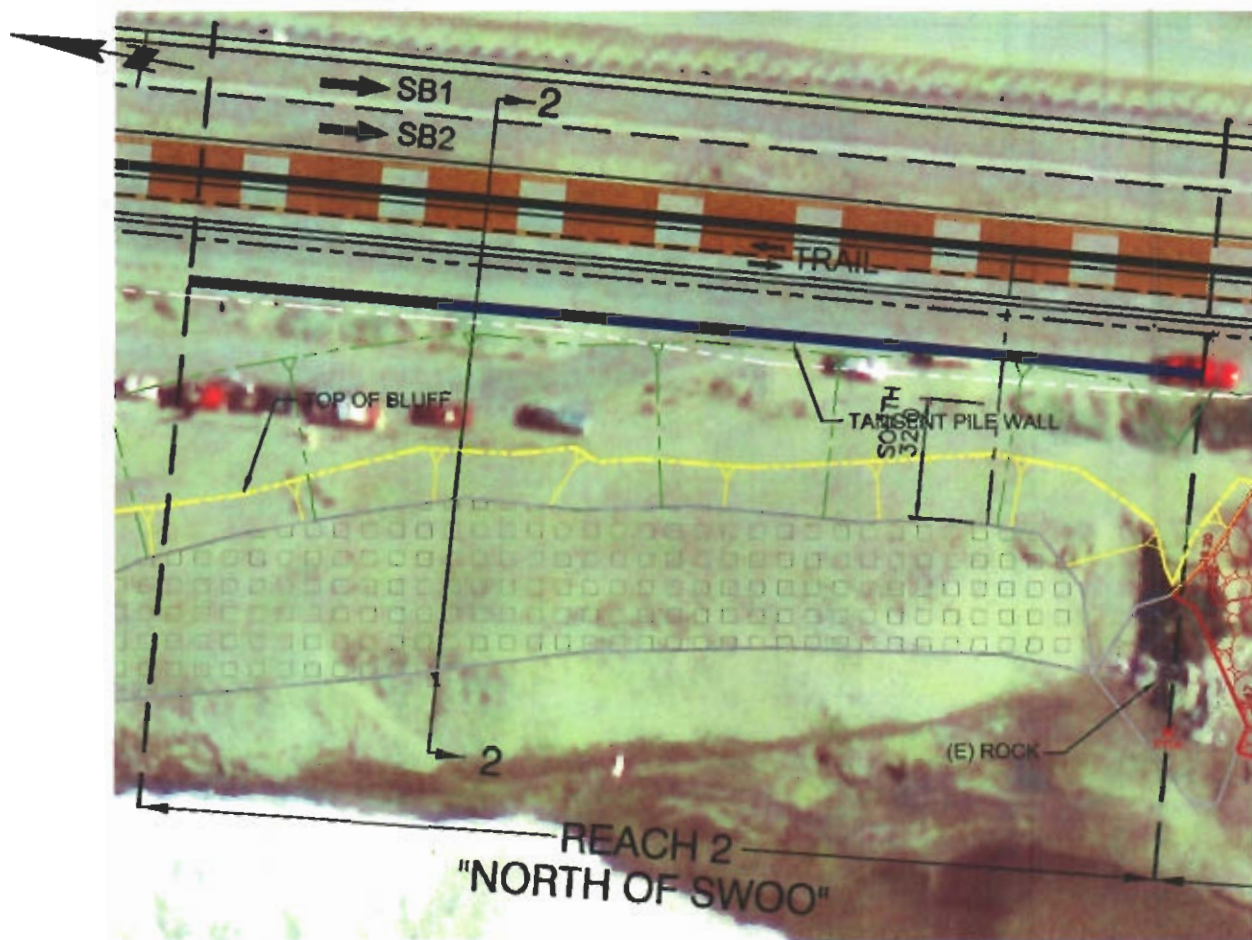
Alternative Coastal Access Concept
Existing Coastal Access at China Beach Park
(over 40 years old)

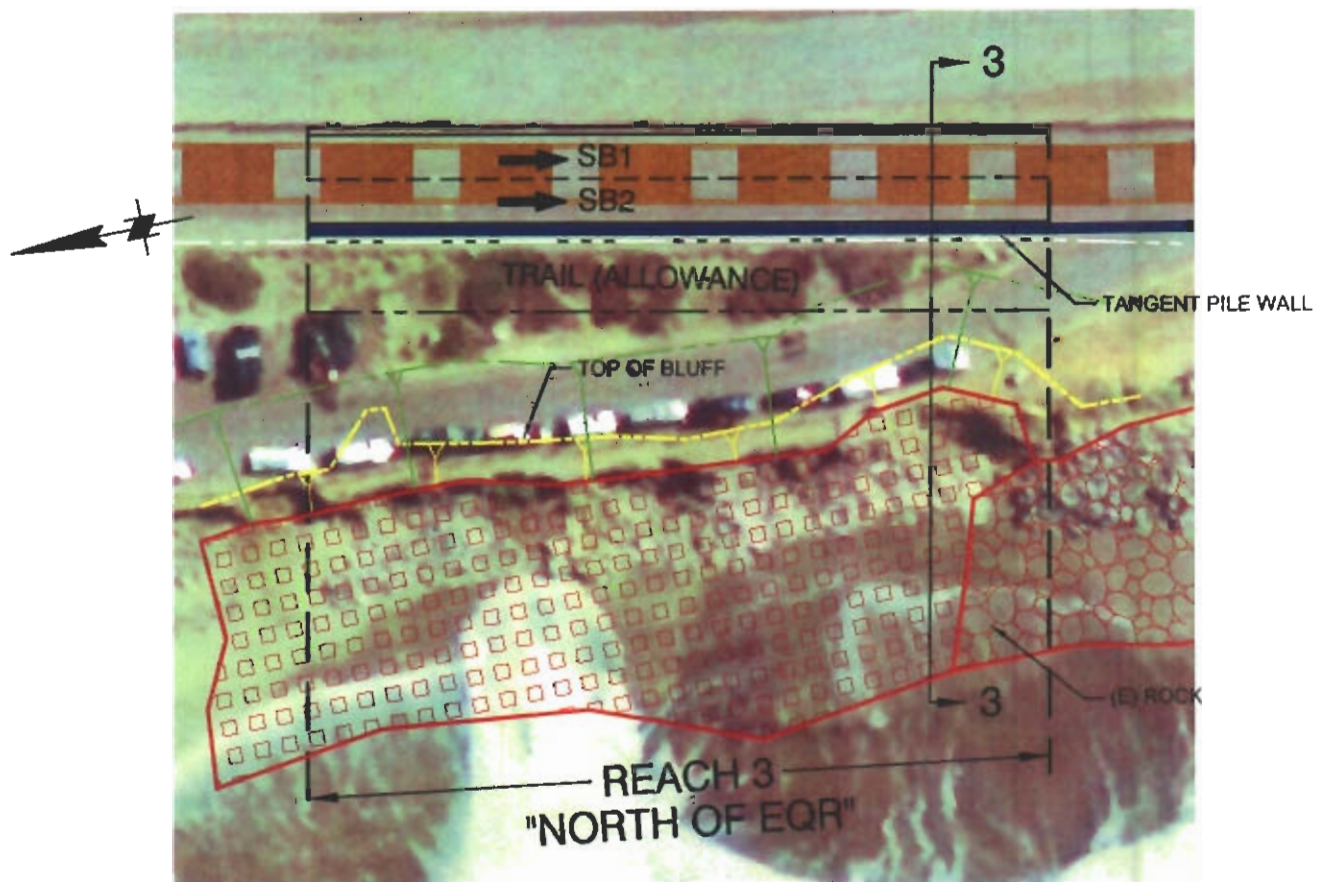
**EMERGENCY QUARRYSTONE REVETMENT (EQR)
600 LINEAR FEET
CONSTRUCTED IN 1997**



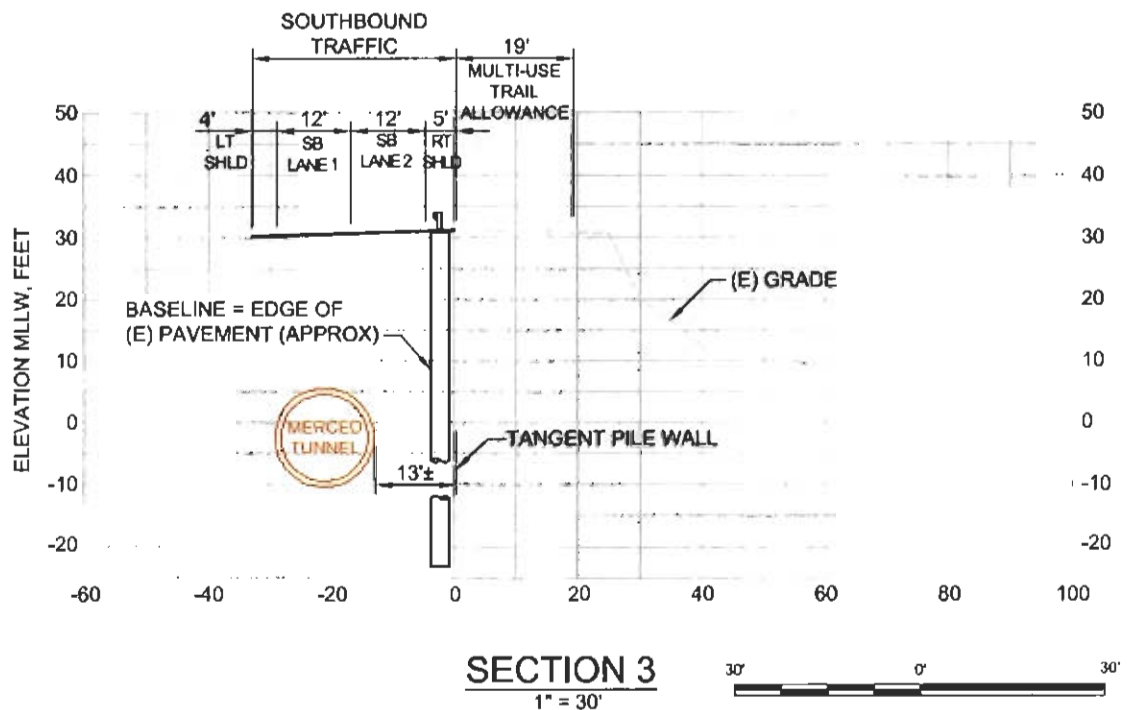
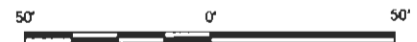
**EMERGENCY REVETMENT
440 LINEAR FEET
(425 feet authorized plus 15 feet unauthorized)
CONSTRUCTED IN 2010**



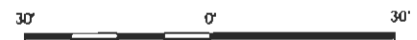




PLAN
1" = 50'



SECTION 3
1" = 30'



2185 N. California Blvd., Suite 500
Walnut Creek, California 94596
(925) 944-5411

GREAT HIGHWAY EMERGENCY REPAIRS

REACH 3 - ALT 1
TANGENT PILE WALL

FIGURE
4.6a

Exhibit No. 9

2-10-033 City & County of San Francisco Dept. of Public Works
Reach 3 Tangent Pile Wall

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5260
FAX (415) 904- 5400



EMERGENCY PERMIT

Frank Filice
San Francisco Department of Public Works
30 Van Ness Ave., 5th Floor
San Francisco, CA 94102

Date: February 8, 2010
Emergency Permit No. 2-10-003-G

LOCATION OF EMERGENCY

Bluff west of the Great Highway, south of Sloat Avenue (San Francisco)

EMERGENCY WORK

Installation of a riprap revetment of approximately 425 linear feet, consisting of a 2-Ton armor layer over a light-class underlayer, extending from south of the South West Ocean outfall to the southern "Limit of Emergency Repair," as shown on the annotated Moffatt & Nichol Existing Conditions plan dated January 26, 2010 and attached as Exhibit 1. The revetment will not extend north of the South West Ocean Outfall.

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information that an unexpected occurrence in the form of accelerated bluff erosion posing a threat to the 14-foot wide Lake Merced Tunnel requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services pursuant to 14 Cal. Admin. Code Section 13009. The Executive Director of the California Coastal Commission hereby finds that:

- (a) An emergency exists that requires action more quickly than permitted by the procedures for administrative or ordinary coastal development permits (CDPs), and that the development can and will be completed within 30 days unless otherwise specified by the terms of this Emergency Permit; and
- (b) Public comment on the proposed emergency development has been reviewed if time allows.

The emergency work is hereby approved, subject to the conditions listed on the attached pages.

Sincerely,

A handwritten signature in dark ink, appearing to read "Peter M. Douglas" followed by a stylized mark that looks like "(for)".

PETER M. DOUGLAS

Executive Director

cc: Steve Ortega, NPS

Enclosure: Acceptance Form

CONDITIONS OF APPROVAL:

1. The enclosed Emergency Permit Acceptance form must be signed by the APPLICANT and the PROPERTY OWNER and returned to our office **within 15 days**.
2. Only that work specifically described in this permit and for the specific property listed above is authorized. The riprap revetment shall be no longer than approximately 425 linear feet, consisting of a 2-Ton rock armor layer over a light-class underlayer, and shall extend no further than from south of the South West Ocean outfall to the southern "Limit of Emergency Repair," as shown on the annotated Moffatt & Nichol Existing Conditions plan dated January 26, 2010 and attached as Exhibit 1. The revetment shall not extend north of the South West Ocean Outfall. Work is further limited to the installation of rock rip-rap consistent with the Emergency Repair Plan & Sections provided by Moffatt & Nichol, attached as Exhibit 2. Any additional work or extension of the revetment requires separate authorization from the Executive Director.
3. All work shall take place in a time and manner to minimize any potential damages to any resources, including intertidal species, and to minimize impacts to public access.
4. The work authorized by this permit must be completed **within 60 days** of the date of this permit, which shall become null and void unless extended by the Executive Director for good cause.
5. The applicant recognizes that the emergency work is considered temporary and subject to removal unless and until a regular coastal development permit permanently authorizing the work is approved. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly. These conditions may include provisions for public access (such as offers to dedicate, easements, in-lieu fees, etc.) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from storm waves.
6. In exercising this permit, the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.
7. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies, including but not limited to, the National Park Service, California Department of Fish & Game, U.S. Fish & Wildlife, U.S. Army Corps of Engineers, and the California State Lands Commission. All work conducted under this emergency permit shall comply with the conditions and requirements of all necessary authorizations and/or

permits, including, but not limited to, the Special Use Permit issued by the National Park Service.

8. Public access to and along the shoreline in the project area shall be permitted and provided to the maximum extent feasible, consistent with public safety.

Construction Responsibilities:

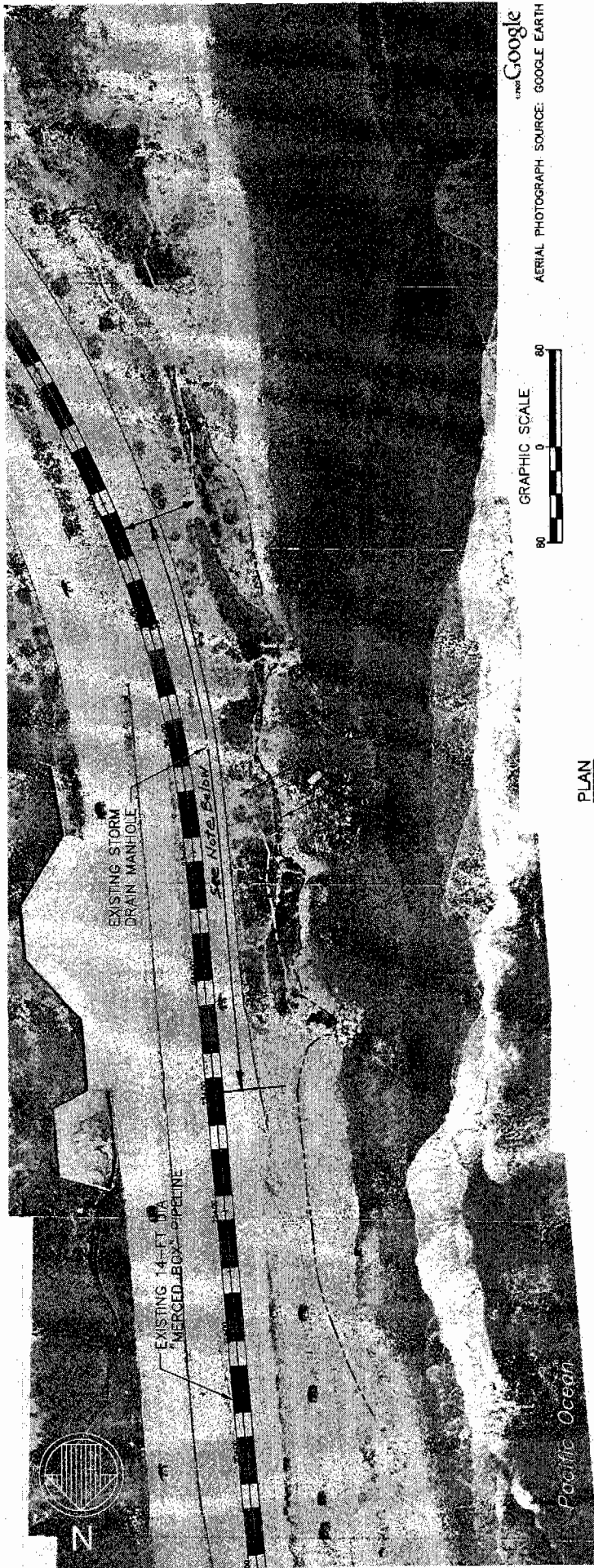
9. The beach and all other areas used for construction staging and access purposes shall be kept free from any debris or trash not needed for construction. Daily debris haul shall be implemented.
10. No construction equipment or materials shall be stored on the beach.
11. If, at any time while the work authorized by this Emergency Permit is occurring, any marine mammals are located on or seaward of the subject property, work must immediately stop and the Property Owner must immediately call the Marine Mammal Center in Sausalito, CA or the National Marine Fisheries Service to report that a marine mammal is located on the beach. Work must not commence until either the animal is removed by the Marine Mammal Center or the National Marine Fisheries Service, or until the animal returns to the ocean on its own without any harassment.
12. Construction activities shall avoid impacts to bank swallows and bank swallow habitat to the maximum extent feasible, and shall comply with the requirements of the National Park Service and the Department of Fish and Game related to potential impacts to biological resources, including bank swallows and bank swallow habitat.
13. Construction activities and equipment shall avoid Pacific Ocean waters and minimize beach disturbance to the maximum extent feasible by project design and implementation including, but not limited to, limiting construction to the lowest possible tides. No construction equipment, materials, or debris shall be placed where they may be subject to ocean waters or dispersion.
14. All construction activities that result in discharge of materials, polluted runoff, or wastes to the beach and/or the adjacent marine environment are prohibited. The Permittee shall collect, contain, and properly dispose of all construction leaks, drips, by-products, and any similar contaminants through the use of containment structures or equivalent as necessary (including through the use of collection devices and absorbent materials placed below any above-ground work where such contaminants are possible and/or expected). Equipment washing, refueling, and/or servicing shall not take place on the beach.

15. A copy of the signed Emergency Permit shall be maintained in a conspicuous location at the staging area site at all times, and such copy shall be available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the Emergency Permit, including all of its terms and conditions, prior to commencement of construction.
16. Particular care shall be exercised to prevent foreign materials (e.g., construction scraps, outfall discharge, other chemicals, etc.) from entering Pacific Ocean waters. A floating containment boom shall be placed around all active portions of the construction site where any floatable debris could enter the water. Contractors shall insure that work crews are carefully briefed on the importance of observing the appropriate precautions and reporting any accidental spills. Construction contracts shall contain appropriate penalty provisions, sufficient to offset the cost of retrieving or clean up of foreign materials not properly contained.
17. The construction site and staging area(s) shall be maintained with good construction housekeeping measures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain); dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; and remove all construction debris from the beach.
18. All hazardous materials located on the property (e.g., paint cans, solvents, household chemicals, etc.), shall be removed from the property and deposited at an authorized disposal and/or storage site located inland of Esplanade Avenue.
19. Concrete slabs that are scattered on the beach may be collected and resized for incorporation into the revetment core in place of some or all the light-class underlayer. Concrete may not substitute for the 2-Ton armor layer.

Post-Construction Responsibilities:

20. All beach areas and all beach access points impacted by construction activities shall be restored to their pre-construction condition or better **within three days** of completion of construction.
21. Any beach sand impacted by construction shall be filtered as necessary to remove all construction debris from the beach.
22. **Within seven days** of completion of the work authorized by the Emergency Permit, the property owner shall submit photographic evidence of compliance with the Emergency Permit.

23. **Within 30 days** of completion of the construction authorized by this Emergency Permit, the permittee shall submit site plans and cross sections prepared by a certified civil engineer or engineering geologist, clearly identifying the work completed under the emergency authorization and a narrative description of all emergency construction activities undertaken pursuant to this Emergency Permit. The permittee shall also provide records of actual rock placed, such as receipts from construction firms, slab concrete retrieved from the beach and incorporated into the revetment, and costs to complete the authorized work.
24. **Within 60 days** of the date of this Emergency Permit, the permittee shall apply for a regular coastal development permit to have the emergency work be considered permanent. Such application shall include a complete analysis of alternatives to protect the structure, including, but not limited, to re-location of the structure out of harms way, beach nourishment, and/or a vertical seawall. Such application shall also include a plan for mitigation of impacts to bank swallows and bank swallow habitat. If no such application is received, the emergency work shall be removed in its entirety within 150 days of the date of this permit unless waived by the Director.
25. The permittee shall be responsible for removing or re-depositing any rock or other material that becomes dislodged after completion of the temporary construction authorized by this Emergency permit as soon as possible after such displacement occurs. The permittee shall contact the Coastal Commission North Central District Office immediately to determine whether such activities require a coastal development permit.
26. Failure to comply with the conditions of this approval may result in enforcement action under the provisions of Chapter 9 of the Coastal Act.



PLAN

*Note: Limit of Emergency Repair to Provide
60-foot Minimum Plan View Distance
Between West Side of Lake Merced Tunnel Pipe
and Current Bluff Crest.*

PROGRESS DRAWING - NOT FOR CONSTRUCTION

MURPHY & NICHOLS
2001 N. Main Street, Suite 360
Walnut Creek, California 94596
(925) 944-5411

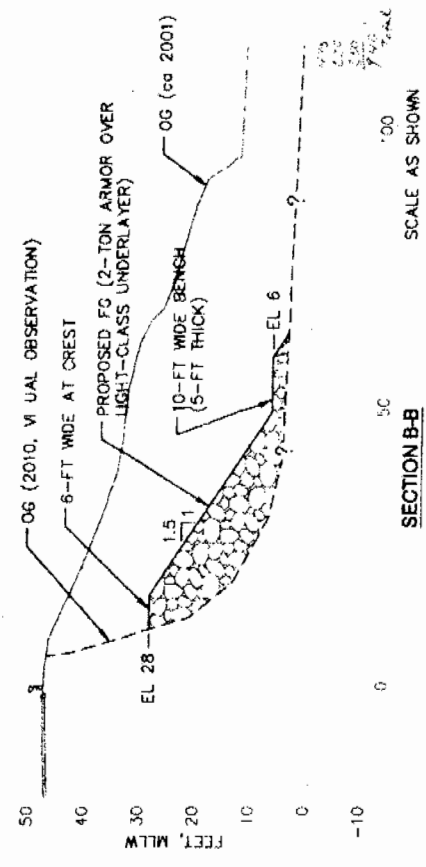
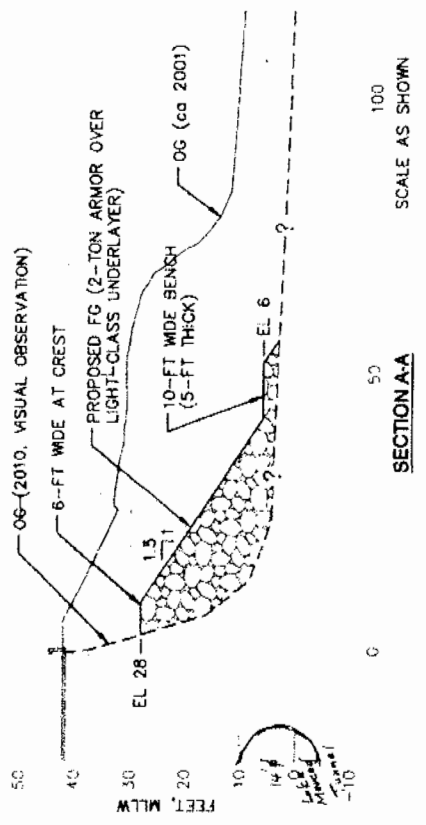
OCEAN BEACH

Emergency Permit No. 2-10-003-G
San Francisco Dept. of Public Works

2010 JAN 26



PLAN



PROGRESS DRAWING - NOT FOR CONSTRUCTION

2000 S. Main Street, Suite 300
San Francisco, California 94108
(415) 444-3411

OCEAN BEACH
FIGURE 1
EMERGENCY REPAIR - PLAN & SECTIONS

Emergency Permit No. 2-10-003-G
San Francisco Dept. of Public Works

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2 219
VOICE AND TDD (415) 904-5 260
FAX (4 15) 904-5 400

**EMERGENCY PERMIT ACCEPTANCE FORM**

TO: CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
(415) 904-5260 FAX (415) 904-5400

RE: **Emergency Permit No. 2-10-003-G** (San Francisco Dept. of Public Works)

INSTRUCTIONS: After reading the Emergency Permit, please sign this form and return to the North Central Coast District Office within 15 working days from the permit's date.

I hereby understand all of the conditions of the emergency permit being issued to me and agree to abide by them.

I also understand that the emergency work is TEMPORARY and that a regular Coastal Permit is necessary for any permanent installation. I agree to apply for a regular Coastal Permit by April 9, 2010 or remove the emergency work in its entirety by July 8, 2010.

Signature of applicant or
Authorized Representative

Name

Address

Date of Signing



W126

July 11, 2011

California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219
Attention: Renee Ananda
rananda@coastal.ca.gov

RE: Application No. 2-10-33 (City & County of San Francisco) to Permit Coastal Armoring at Ocean Beach, San Francisco – Wed 10b

Via electronic mail to Renee Ananda

Dear Chair Shallenberger and Commissioners,

Please accept these written comments on behalf of the San Francisco Chapter of Surfrider Foundation ("Surfrider") and Save the Waves Coalition ("Save the Waves") in regards to the application of the City & County of San Francisco ("Applicant") to construct various armoring structures at Ocean Beach (Item Wed 10b). Surfrider Foundation is a non-profit environmental organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches, for all people. Save The Waves Coalition is a global nonprofit organization dedicated to protecting and preserving the coastal environment, with an emphasis on the surf zone, and educating the public about its value.

The Applicant seeks a permit (Application No. 2-10-33) to allow after-the-fact use of rock revetment, permit additional rock revetment, and to add additional armoring in the form of two tangent pile walls. Surfrider and Save the Waves respectfully urge the California Coastal Commission to **DENY Application No. 2-10-33 (City & County of San Francisco)**. At a very minimum, the California Coastal Commission should postpone making a decision upon the completion of the Master Plan for Ocean Beach.

Ocean Beach is a dynamic region that is home to world-class surfing and is a heavily used natural recreational resource for beach walkers, joggers, fishermen, and others. As the primary public beach serving the city, it is important to protect Ocean Beach for public use and enjoyment. The area also provides habitat for numerous wildlife species including the bluff-dwelling bank swallow, a state-listed threatened bird species, as well as the western snowy plover, a federally-listed threatened bird species. The project area, which is located on Ocean Beach along a particular area often referred to locally as Sloat, supports all of the aforementioned public uses. Additionally, the bluffs are potential habitat of the bank swallow¹, and the beach stretching from north of the project area

¹ As cited in the Staff Report: "The area south of the project site, at Fort Funston is designated bank swallow habitat. The bank swallow is a California listed threatened species. Bank swallows use portions of coastal bluffs for nesting although the main colony is located at Fort Funston to the south of the project site there is a potential for nesting to occur within Reaches 1 and 2." p. 27.



down to Sloat Blvd. at the north end of the project area is designated as Snowy Plover Management Area.²

Surfrider and Save the Waves acknowledge the complex nature of this issue and understand the need to ensure that public infrastructure is safeguarded. However, this permit should not be approved at present for a variety of reasons.

I. Failure of Applicant to Appropriately Respond to the Problem

In regards to the Applicant's track record of action responding to erosion at Sloat, the Applicant has demonstrated itself to be reactionary, not visionary, and has demonstrated its propensity to take action as it pleases. The erosion problem in this area is not new. Concerns of its potential to impact infrastructure arose with the El Niño events of the mid 1990s. The Applicant built the first unpermitted armoring structure in 1997. Thus, the Applicant has had over 14 years to consider and develop appropriate long-term solutions that could best comply with Coastal Act policies and serve the interests of the community. Not only has the Applicant failed to develop an adequate long-term plan over this time, but it has failed to even get the proper permit for the revetment that was built so long ago. The track record is poor. Allowing the Applicant to continue in this manner is unacceptable and approving a permit for this project would legitimize these piecemeal efforts and declare them to be consistent with the Coastal Act.

II. Inconsistency with Coastal Act Policies

Section 30200(b), requires the Commission to resolve policy conflicts via Section 30007.5. Section 30007.5 states the intent of the Legislature that policy conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. With this in mind, although Section 30235 allows the use of coastal armoring for the protection of an existing structure and the project seeks to maintain biological productivity through minimization of adverse effects such as wastewater discharges (as provided for in Section 30231), these policies must be balanced with policies to protect and maximize access (Sections 30210, 30211, and 30212(a)), to protect environmentally sensitive areas (Section 30240), and to protect visual resources (Section 30251).

The project as proposed may be consistent with Sections 30231 to the extent that it seeks to protect wastewater infrastructure and prevent a spill, but it is not consistent with any of the other aforementioned policies and, on balance, is not most protective of significant coastal resources.

² As cited in the Staff Report: "The National Park Service in the Draft Snowy Plover Management Plan of 1998 designated the area between Stairwell 21 (just north of Lincoln Ave) and Sloat Blvd as snowy plover management area." p. 27.



Section 32035: Section 30235 dictates that the Commission must approve shoreline protection devices, such as the proposed project's rock revetments and tangent pile walls, only if (1) it is *required* to protect an existing structure in danger from erosion and (2) it is designed to *eliminate or mitigate adverse impacts on shoreline sand supply* (emphasis added). The Commission has interpreted the term "required" to mean that the structures shall be permitted if they are the only feasible alternative capable of protecting the structures in danger from erosion.³ Per Staff's own assessment, other alternatives that should be considered by the Applicant include abandonment of the threatened structures; relocation of the threatened structures (managed retreat); sand replenishment programs; drainage and vegetation measures on the bluff top itself; installation of vertical walls, and some combination of these alternatives.⁴ Instead of interpreting Section 30235 as enumerated in Staff's own report, Staff inappropriately interprets the policy a different way, stating that "the proposed project is the least environmentally damaging option for shoreline protection *that will provide the applicant time to develop and implement a long-term solution [...]*" (p. 20, emphasis added). Additionally, the proposed project's impacts to sand supply during its life span are not considered, nor mitigated, as required by Section 30235.

Sections 30210, 30211, and 30212(a): These three sections provide for the maximization and protection, respectively, of coastal access. The proposed project is not consistent with these policies because it proposes to allow rock revetments along the beach, which require a very large footprint to maintain structural stability and effectiveness. This footprint displaces otherwise usable beach area and contributes to the loss of sandy beach seaward of the structures themselves. It is likely that **any other alternative** would be more protective of access than rock revetments, as they would not require this large footprint on the beach.

Section 30240: Section 30240 states, in part, that environmentally sensitive habitat area shall be protected against significant disruption of habitat values. "Environmentally Sensitive Area" is defined in the Coastal Act as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature [...] and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5). Given that areas adjacent to the project location are known to provide habitat and nesting area to the state-listed bank swallow and the federally-listed snowy plover, and that the project area itself is identified as a potential site for both species of bird, the project area needs to be assessed to determine whether or not it is "environmentally sensitive area" and, if so determined, the project needs to be evaluated for its potential impacts to these sensitive areas. Without such analysis, it is infeasible to determine whether or not the project is consistent with this Coastal Act policy.

³ Staff Report p. 19

⁴ Staff Report p. 19



Section 30251: Section 30251 requires that permitted development be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. Placing large expanses of rock in front of sandy bluffs on a sandy beach can hardly be described as being consistent with this policy. Similarly, tangent pile walls, which are the visual equivalent of walls comprised of concrete columns, or the additional rock that will need to be placed to protect them once they are exposed⁵, are certainly not visually compatible with the natural surroundings.

III. Inadequate Consideration of Alternatives to the Project

The Applicant has not properly assessed the feasibility of long-term, less environmentally detrimental solutions including strategic relocation of infrastructure, abandonment of structures, drainage and vegetation measures on the bluff top itself, or some combination of alternatives. The only alternatives assessed were a series of armoring options and a "no action" alternative.

IV. Structures Are Not Necessarily Temporary

Although Staff maintains that the temporary nature of these structures as provided for in Special Condition 1 minimizes the project's impacts on access, loss of access has occurred while the revetments have been in place (including over the past 14 years that the 600 ft. revetment has been in place) and will continue to occur during the "temporary" timeframe of the permit. Furthermore, it is questionable whether these structures will indeed be temporary. Despite the provisions in Special Condition 1 that limit the permit of the rock revetments to five years, there are a number of loopholes that exist. Special Condition 1(B)(3) allows for the permit to be extended an additional five years "for good cause". Special Condition 1(B)(2) allows for the Applicant to opt to submit a CDP application for a long-term solution and does not preclude the applicant from seeking to re-permit these temporary structures. There are **no provisions** for the removal of the tangent pile walls at any time. Given that the revetments will already be in place, it is highly likely they will be the lowest cost alternative, thus there will be a major incentive for the Applicant to continue to pursue a permit for their use.

V. Undermines the Ocean Beach Master Plan Process

Additionally, this project would undermine the ongoing process to create a Master Plan for Ocean Beach, which will serve as guide for policy and planning over the long haul.

⁵ Communication from San Francisco Department of Public Works to California Coastal Commission Staff.
http://www.sfdpw.org/Modules/ShowDocument.aspx?documentid=1090&rct=j&q=ocean_beach_moffatt_&_nichol_2010&ci=Mw0SToSvNILjiAKA0KDYBQ&usg=AFQjCNHSTTuhhiuTc295K-qT-V3-xDX-Mg&cad=rja Accessed July 4, 2011. pp. 6, 10, 14.



The non-governmental agency San Francisco Planning and Urban Research (SPUR) is leading this process to create the OB Master Plan to, amongst other things, identify erosion responses that best meet the diverse needs and desires of the community. In regard to timing, the Master Plan process is well underway and is set to identify solutions in late 2011/early 2012. Acting now, especially given that construction of permitted projects is not likely to start until winter⁶, would short-circuit the process and its recommended actions in a variety of ways, not the least of which is commitment of financial resources. The tangent pile wall project alone is projected to cost approximately \$5-6 million of new taxpayer money⁷ on top of \$4+ million spent on the prior revetment projects.⁸

For these reasons, Surfrider and Save the Waves respectfully urge the Commission to **Deny Application No. 2-10-33** to stop the cycle of ineffective band aid projects to address Ocean Beach's coastal erosion issues. Instead, the course of action needs to be lead by an environmentally sustainable long-term plan that has properly assessed all feasible alternatives and incorporated public input. Only then will we find the best alternatives for protecting coastal resources and public access, while also ensuring the protection of infrastructure.

Sincerely,

Katie Westfall
Environmental & Program Director
Save The Waves Coalition

/S/

Bill McLaughlin
Erosion Committee Project Manager
Surfrider Foundation
San Francisco Chapter

⁶ Personal communication from Frank Filice, San Francisco Department of Public Works, to Bill McLaughlin, Surfrider Foundation San Francisco Chapter representative, on June 20, 2011. Also, as cited in the Staff Report: "The bank swallow nesting period is between mid-April and mid-August." p. 27.

⁷ Personal communication from Frank Filice, San Francisco Department of Public Works, to Bill McLaughlin, Surfrider Foundation San Francisco Chapter representative, on June 20, 2011.

⁸ Presentation by Frank Filice, San Francisco Department of Public Works, to SPUR Master Plan Public Advisory Committee, Surfrider Foundation San Francisco Chapter representative, on June 16, 2011.



CC:

Peter Douglas, Executive Director, California Coastal Commission

Charles Lester, Senior Deputy Director, California Coastal Commission

Ruby Pap, District Supervisor, California Coastal Commission

From: Steve_Ortega@nps.gov [mailto:Steve_Ortega@nps.gov]
Sent: Monday, July 11, 2011 3:26 PM
To: Renee Ananda
Subject: Comments on Staff Report

Renee,

Please consider the following comments on your staff report. I think you did a good job overall on the report. There may be other comments that I send to you later, but I would understand if you cannot process them because of their late arrival.

SC.2: Most of the concrete rubble occurs between the two revetments. I would expand the language to include the entire project area (from Sloat to the end south end of the rock revetment). Most of the rubble is between the two rock revetments. Some of this rubble is dangerous (rebar, and hazardous - old asphalt).

SC.6.: The monitoring section requires an annual survey of the beach and bluff top areas between Sloat and Skyline blvds at a minimum, but the Reporting section (C.) requires information on topographic field surveys taken in the spring and fall of each year. These should be consistent, since they can't report on data they don't have.

SC. 6.A.2. I suggest adding an option for another Lidar Survey, for a total of 3. It would be good to see the third one occur in a year in which there were a lot of high energy wave events i.e. after an el nino winter. It is these events that we see considerable bluff erosion. Ground Based Lidar is really useful to look at impacts to the bluffs adjacent to the structures as well, please clarify the language so that the surrounding bluffs are part of the LIDAR survey, so they don't just survey the structures. Also, the reporting section doesn't mention that they should prepare a report looking at the LIDAR data collected at 1 and 5 years as a condition of the permit. There is a general item that they should prepare an analysis of erosion trends, annual retreat, or rate of retreat of the bluff. However, processing and visualization of Lidar data can be pretty technically intensive and so it might be good to actually have a reporting item that includes a comparison of those two (3) surveys to make sure they

don't intend to just send that data to CCC or NPS and expect us to do the analysis. We also suggest they utilize and contract with USGS because they have expressed interest in doing the work, and would add to their data set they are amassing for Ocean Beach.

SC.6.B.: We think the EQR revetment is causing accelerated erosion around the end of the revetment (just immediately north of the revetment). The accelerated bluff erosion is causing considerable maintenance of the bluff top parking area (cutting back asphalt so that it does not fall onto the beach, constant adjustment of k-rail to preven the public from dangerous areas, rearranging parking areas, signage and notification). We feel the DPW should assist NPS in this maintenance effort.

SC.11.: Add another condition that the Design Plans will be reviewed and approved by NPS prior to submittal to the Executive Director. We have some concerns regarding the rock stairway, so would like to have a chance to review/approve.

=====
Steve Ortega
Planning, Project Management, and Compliance
Golden Gate National Recreation Area
Office (415) 561-2841
Cell (415) 269-9916
=====

2-10-033 (City & Co. of San Francisco)
Correspondence from
Form Letter example

189 - received

Maria Elena Marquez

From: Renee Ananda
Sent: Monday, July 11, 2011 10:54 AM
To: Maria Elena Marquez
Subject: FW: Deny Permit for Ocean Beach Armoring

W12b

THANK YOU!

-----Original Message-----

From: Fletcher Chouinard [mailto:fchouinard@aol.com]
Sent: Monday, July 11, 2011 10:45 AM
To: Renee Ananda
Subject: Deny Permit for Ocean Beach Armoring

Dear Commissioners,

I do not support coastal armoring at Ocean Beach south of Sloat Blvd. The San Francisco Department of Public Works started placing unpermitted armoring here in 1997 and now is coming to you to permit this structure and allow them to expand armoring elsewhere. The residents of San Francisco and the beach-going public deserve better than giant piles of rocks on our beach.

Luckily there is a process afoot aiming to identify a better way. The Ocean Beach Master Plan process led by SPUR (San Francisco Planning and Urban Research) has been conducting a series of government/community stakeholder workshops aimed at finding a consensus long-term solution to the erosion problem in the area. The process is slated to have recommendations by late 2011/early 2012. Permitting an expansion of armoring at this juncture would undermine the integrity of the process and its outcomes.

Please deny the project, or at least postpone the decision so we can see the Master Plan process through.

Thank you for your consideration.

Fletcher Chouinard
43 s olive st
ventura, CA 93001