CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

W22a

Filed: 1/14/15
180th Day: 7/13/15
Staff: D. Christensen
Staff Report: 4/24/15
Hearing Date: 5/13/15

STAFF REPORT: REGULAR CALENDAR

Application No.: **4-14-0687**

Applicant: **County of Santa Barbara**

Project Location: **Goleta Beach County Park, 5986 Sandspit Road, County of Santa Barbara (APNs: 071-200-017 and 071-200-009)**

Project Description: **Request for permanent authorization of an approximately 1,200 ft. long, 11 ft. high as-built rock revetment (including 950 linear ft. of revetment that was constructed pursuant to emergency coastal development permits and authorized on a limited term basis and approximately 250 linear ft. of as-built revetment for which the applicant is now requesting after-the-fact authorization).**

SUMMARY OF STAFF RECOMMENDATION

Staff recommends approval of the proposed approximately 1,200 linear ft. as-built rock revetment at the western end of Goleta Beach County Park with eight (8) special conditions regarding (1) Development Authorization Period, (2) Beach and Revetment Monitoring and Adaptive Management, (3) Limitations on Beach Grooming and Wrack Management, (4) Public Access Program, (5) Assumption of Risk, (6) Indemnification by Applicant, (7) Required Approvals, and (8) Condition Compliance. Although the Commission has previously certified a Local Coastal Program for Santa Barbara County, the project is proposed within an area where the Commission has retained jurisdiction over the issuance of coastal development permits. Thus, the standard of review for this project is the Chapter 3 policies of the Coastal Act.

Goleta Beach County Park is the largest and most developed coastal recreation and access point in the area west of the City of Santa Barbara. As such, Goleta Beach County Park represents a regionally-significant public recreational resource on the Santa Barbara County coast. In addition to the fact that the park provides significant, low-cost public access and coastal recreation opportunities, the park represents a critical access point to some of the least developed and most scenic sections of shoreline in the urban region of Santa Barbara County. It is also the only beachfront public park in more than eight miles of urban area coastline and is visited by approximately 1.5 million people annually.

The park provides both passive and active recreational experiences including swimming, kayaking, paddle boarding, boating and fishing, sunbathing, nature viewing, and picnicking. Existing facilities at Goleta Beach County Park consist of 4.2 acres of grassy lawn, public restrooms, picnic areas, a children's playground, horseshoe pits, and barbeque areas and benches. Additional important facilities include a segment of the Coastal Bike Path, Goleta Pier which includes cranes for launching boats, Beachside Bar-Café, a snack bar, a bait and tackle shop, Park Ranger residences, and storage. The park also provides substantial public coastal access parking adjacent to the beach (601 spaces) that is free to the public year-round. The park also contains public utility infrastructure, including Goleta Sanitation District's underground sewer outfall pipe and vault, a Goleta Water District reclaimed water main, Southern California Gas Company high-pressure gas line, domestic water line, and the County of Santa Barbara sanitary sewer force main.

The proposed as-built rock revetment at the west end of the beach has served to protect existing structures and upland park facilities, which constitute coastal-dependent uses, from erosion during periodic storm events since its installation. Goleta Beach County Park includes sandy beach areas that constitute a "public beach" and the existing coastal access and recreational facilities located within the upland areas of the park (the non-sandy beach areas) constitute structures and coastal-dependent uses that Coastal Act Section 30235 allows to be protected by a shoreline protective device.

Goleta Beach has experienced large changes in beach width (i.e., cycles of accretion and erosion) over the past decades. A natural cycle of erosion and accretion at Goleta Beach appears to be related to periodic reverses in large-scale oceanographic processes at decadal scales (El Niño Southern Oscillation (ENSO)) and multi-decadal scales (Pacific Decadal Oscillation (PDO)). Shoreline fluctuation at Goleta Beach is also related to changes in sand supply and longshore sediment transport, sea level rise, and man-made influences such as beach nourishment, use of flood control debris basins and shoreline armoring. Periodic erosion at Goleta Beach has threatened and/or damaged park facilities in the past and the issue continues to be a concern. The Commission has approved several coastal development permits since 1999 which have authorized various actions including construction of rock revetments (including a substantial portion of the proposed as-built revetment), sand berms, and beach nourishment activities at Goleta Beach in response to previous wave caused erosive events. Moreover, with global warming and sea level rise, increased relative wave heights and wave energy are expected. Given the effects of expected sea level rise at the subject site, the park is expected to be subjected to greater wave action more frequently in the future.

The proposed as-built revetment is sited near the back of the beach and it has remained largely buried under beach sand since its installation, but it can periodically become exposed as a result of large storm and wave events. Over the short-term, under ongoing negative Pacific Decadal Oscillation (PDO) conditions, it is anticipated that the revetment will continue to remain buried at most times and become exposed only periodically. Therefore, in the near-term, as long as the current trends continue, the buried revetment is not expected to result in significant adverse effects on coastal processes and sand supply. However, the beach will continue to be a dynamic environment with many variables that are difficult to predict at this time and it is expected that over time, the revetment would become exposed more frequently as a result of sea level rise. During potential extended erosional periods where beach width may not recover, the revetment

would incrementally contribute to increased beach erosion and may also slow recovery. Therefore, it is likely that at some point in the future, the continued need and method for coastal protection at Goleta Beach will need to be re-evaluated as part of an adaptive management strategy for the park in order to ensure that adverse impacts to the beach, downcoast areas, and public access are avoided or minimized.

Staff recommends that the Commission approve the as-built revetment for a limited, conditional term. Staff recommends that the Commission require a Beach and Revetment Monitoring and Adaptive Management Plan to provide for regular assessment and monitoring of the revetment/beach condition and to establish maintenance and adaptive management actions to maintain the desired revetment/beach condition and to prevent the revetment from becoming exposed to the maximum extent feasible. Staff also recommends that the Commission limit the duration of the authorization term to a period not to exceed 20 years from the date of Commission action, after which time authorization for retention of the approved as-built revetment shall cease and the approved project and feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application. Further, staff recommends that a mid-term assessment be performed ten (10) years from the date of Commission action in order to analyze the condition and effectiveness of the revetment, any changes in beach/shoreline profiles, any changes in the public's ability to safely access the beach, and details on any maintenance or adaptive management actions undertaken to-date. Should this mid-term assessment report reveal any significant adverse resource or public access impacts not addressed in the Commission's authorization, the Executive Director may require the submittal of a permit amendment or new coastal development permit for the review and approval by the Commission to re-evaluate the project, the permit term, feasible alternatives, and measures to address any identified adverse resource or public access impacts.

In addition, in order to avoid and minimize the frequency that the rock revetment is subject to direct wave action during periods of erosion at the site, and thereby minimize adverse impacts to shoreline processes and public access, it is important that the County maintain the buried condition of the revetment and public access to the extent feasible during the term of the permit. As such, staff is recommending maintenance provisions and triggers for maintenance actions, as detailed in Special Condition 2. Further, should changed circumstances arise during this permit term and the approved as-built revetment is succumbing to significant erosion and overtopping in which 200 linear feet or more of the revetment is exposed for 24 months in total from the date of permit issuance (despite approved maintenance actions), Special Condition 2 requires that the approved project and all feasible alternatives be re-evaluated pursuant to a new coastal development permit application. Exposure of the revetment pursuant to this threshold is a reasonable indicator the exposed revetment would likely result in long term adverse impacts to shoreline sand supply and beach profile which would narrow or eliminate the sandy beach and adversely impact lateral public beach access. In addition, should the required mid-term (10 year) assessment report reveal unanticipated significant adverse resource or public access impacts and/or changed circumstances that are not addressed in the approved permit and adaptive management plan, the approved project and all feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application.

A limited 20 year authorization in combination with specific triggers for reevaluation of the revetment allows the Commission to support an adaptive management approach to shoreline erosion at Goleta Beach in the short term, providing protection of an important low cost

recreational beach park but not authorizing a permanent shoreline structure that could result in longer term adverse impacts to the beach. As such, staff recommends the Commission approve the adaptive strategy laid out by the staff recommended special conditions in order to protect this important public beach park from periodic erosion in the short-term and require re-evaluation of the project by the County and the Coastal Commission in 20 years, or at such time the revetment triggers discussed above are reached, whichever occurs first.

Finally, given the history of controversy surrounding shoreline protection at Goleta Beach and the proposed project, staff is recommending that the applicant indemnify the Commission for any future litigation costs related to its action (Special Condition 6 of the staff recommendation).

Table of Contents

I. MOTION AND RESOLUTION 6

II. STANDARD CONDITIONS 6

III. SPECIAL CONDITIONS 7

1. Development Authorization Period 7
2. Beach and Revetment Monitoring and Adaptive Management Plan 7
3. Limitations on Beach Grooming and Wrack Management 11
4. Public Access Program 11
5. Assumption of Risk, Waiver of Liability and Indemnity 11
6. Indemnification by Applicant 12
7. Required Approvals 12
8. Condition Compliance 12

IV. FINDINGS AND DECLARATIONS 13

A. PROJECT DESCRIPTION 13
B. PROJECT LOCATION AND BACKGROUND 13
Recreational Significance of Goleta Beach County Park 14
History of Shoreline Erosion at Park and Past Commission Actions 15
Other Projects to Note in the Project Vicinity 19
C. CORRESPONDENCE RECEIVED 20
D. HAZARDS AND SHORELINE PROCESSES 20
Shoreline Protective Device Effects 21
Sea Level Rise 22
Need for Shoreline Protection at Goleta Beach and Alternatives Analysis 23
E. PUBLIC ACCESS AND RECREATION 35
F. MARINE RESOURCES AND ENVIRONMENTALLY SENSITIVE HABITAT 39
G. VISUAL RESOURCES 44
H. UNPERMITTED DEVELOPMENT 45
I. CALIFORNIA ENVIRONMENTAL QUALITY ACT 46

APPENDICES

Appendix 1 Substantive File Documents

EXHIBITS

Exhibit 1. Location Map
Exhibit 2. Proposed As-Built Revetment Site Plan
Exhibit 3. Applicant's Proposed Project Description
Exhibit 4. Regional Coastal Recreation Map
Exhibit 5. Site Photographs
Exhibit 6. Recommended Beach Profile Transect Locations
Exhibit 7. Biological Resource Map
Exhibit 8. Littoral Transport Map
Exhibit 9. Coastal Erosion Hazard Modeling Map
Exhibit 10. Correspondence Received

I. MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve Coastal Development Permit No. 4-14-0687 pursuant to the staff recommendation.

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:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the Chapter 3 policies 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.

II. STANDARD CONDITIONS

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

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. Development Authorization Period

A. This coastal development permit authorizes the approved development for a period of twenty (20) years from the date of Commission action on this permit, or until the re-evaluation triggers of Special Condition 2(E-F) are reached, whichever occurs first. After such time, the authorization for retention of the approved rock revetment shall cease and a new coastal development permit shall be required for retention of the approved rock revetment or an alternative shoreline protection plan. The new coastal development permit application shall be submitted no later than six months prior to the end of the permit term, and shall include at a minimum the results of the required beach and revetment monitoring reports in order to evaluate the effectiveness and impacts of the project and to address changed circumstances and/or unanticipated impacts. Provided the new permit application is received before the permit expiration, the expiration date shall be automatically extended until the time the Commission acts on the new application. Failure to obtain a new coastal development permit for an additional term to retain the rock revetment shall constitute a violation of the terms and conditions of this coastal development permit, unless the Executive Director grants additional time for good cause.

B. Ten (10) years from the date of Commission action on this permit, the applicant shall submit a mid-term assessment report to the Executive Director, pursuant to the requirements in Special Condition 2(E) below.

2. Beach and Revetment Monitoring and Adaptive Management Plan

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, a Beach and Revetment Monitoring and Adaptive Management Plan. The plan shall be prepared by a qualified engineer with experience in coastal engineering and incorporate the following components. The plan shall include provisions for regular assessment of the beach and revetment conditions, consistent with the following:

A. *Baseline Beach Profile Survey Data and As-built Plans:* In order to analyze changes to the beach and revetment over time, the plan shall include the existing baseline beach conditions and shoreline change, developed from historic aerial photos of the beach, profile survey data from BEACON, U.S. Geological Survey, U.S. Army Corps of Engineers, other County agencies, and background surveys of the beach used for revetment planning and design. The baseline report should include data, surveys, copies of photos, analysis of change, and the surveyed as-built revetment plans.

B. *Periodic Beach Profile Surveys*: A licensed surveyor or engineer shall survey full depth beach profiles for each of the identified beach profile transect lines at Goleta Beach (BEACON Transect Lines GB-01, GB-02, and GB-03, as shown on **Exhibit 6**, or equivalent survey locations, identified as appropriate by the County, with two lines through the revetment and one line downcoast of the revetment) on a semi-annual basis each spring and fall season for the term of this permit. Each of the beach profile transects shall be established

with a permanent location that can be identified by Baseline Survey Markers and GPS coordinates.

C. *Monthly Revetment Inspections*: A visual and, as appropriate, quantitative inspection of the area of the approved revetment shall be performed on a monthly basis for the term of this permit to detect and document exposure of the revetment rock and signs of erosion. Detailed data sheets shall be developed and used for each monthly revetment inspection that includes: the results of the inspection, including photographs from pre-determined locations; site maps upon which the location, dimensions (length and height) of exposed rock areas, and other details of any exposed portions of the revetment can be noted; and the name, title, and contact information of the person(s) undertaking the revetment inspection; and the date, time and tidal conditions of the inspection. Visual inspections may be undertaken by a qualified licensed surveyor or engineer in conjunction with the periodic beach profile surveys, or by other trained personnel.

D. *Maintenance Actions*: The plan shall reflect that future maintenance and repair of the approved rock revetment may be completed for the term of this permit consistent with the following limitations:

1. If monthly revetment monitoring identifies that 200 linear feet or more of the approved revetment rock is exposed for 6 consecutive months, sand cover shall be placed on the exposed area and appropriately planted with native coastal strand/southern foredune vegetation to help stabilize the placed sand. Any rock or other debris from the revetment that becomes dislodged through weathering, wave action, or settlement shall be removed from the beach or deposited on the revetment on an as-needed basis.

2. The rock revetment and/or sand cover may be maintained in its approved size, location, and configuration. The importation of a minor amount of new rock and/or beach-compatible sand may be allowed, if necessary, to maintain the approved size, height, footprint of the revetment and/or sand cover. In no event shall more than 10% of the approved volume of the revetment be imported for any individual revetment repair project (the addition of more than this maximum for any individual repair project shall require a new coastal development permit and is not exempt pursuant to this condition). No future repair or maintenance, enhancement, reinforcement, or any other activity affecting the rock revetment shall be undertaken if such activity extends the seaward footprint of the revetment or expands the size, height, or footprint of the approved revetment.

3. Minor sand backpassing activities may be conducted to place beach-compatible sand on the exposed portions of the revetment on an as-needed basis. Where feasible, any planned minor sand backpassing activities to maintain sand coverage on the revetment shall be coordinated to coincide with routine beach grooming activities in order to minimize the use of mechanical equipment on the beach. Appropriately-sized donor beach nourishment material generated as a result of an opportunistic beach nourishment project or program that is approved by the Commission pursuant to a separate coastal development permit may also be utilized to bury exposed portions of the approved rock revetment on an as-needed basis.

4. Maintenance actions shall be implemented in compliance with construction Best Management Practices and completed in a timely manner. No machinery or mechanized equipment shall be allowed at any time within the active surf zone, except for that necessary to remove any errant rocks from the beach seaward of the revetment. All maintenance materials and equipment shall be removed in their entirety from the beach area by sunset each day that work occurs. Any and all debris resulting from maintenance activities shall be appropriately removed from the project site within 24 hours. Equipment shall not be cleaned on the beach or in the adjacent beach parking areas. Any unsafe debris or other materials that may become exposed on the revetment or the beach in the area of the revetment shall be removed and exported to an appropriate offsite disposal area in order to protect public health and safety and coastal resources.

5. Maintenance actions shall avoid adverse impacts to protected sensitive species. Disturbance to beach wrack and coastal strand/southern foredune habitat shall be minimized to the maximum extent feasible. If maintenance actions are required during the nesting or breeding seasons of any potential sensitive species in the project area (including but not limited to western snowy plover) or during the seasonally predicted run period and egg incubation period, as identified by the California Department of Fish and Game, the applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director, to conduct sensitive species surveys prior to any maintenance activities. The environmental resource specialist shall conduct a survey of the project site to determine presence and behavior of sensitive species one day prior to commencement of any maintenance activities authorized on the project site pursuant to this permit, and immediately report the results of the survey to the applicant and the Commission. In the event that the environmental resources specialist reports finding any sensitive species within 500 ft. of the required maintenance activities, the applicant shall postpone commencement of work. If the environmental resources specialist determines that any grunion spawning activity is occurring and/or that grunion are present in or adjacent to the project site, then no maintenance activities shall occur on, or adjacent to, the area of the beach where grunion have been observed to spawn until the next predicted run in which no grunion are observed. Required maintenance activities may resume only if adverse effects to the protected sensitive species can be avoided.

6. The applicant shall submit a Project Notification Report prior to the commencement of any maintenance actions, for the review and approval of the Executive Director. The Project Notification Report shall describe all supplemental actions, timing of work, staging areas, equipment to be used and method of construction and shall include all relevant monitoring reports required pursuant to this permit for the project site to ensure that the operations are in substantial conformance with the resource protection and public access conditions of this permit. All supplemental actions and work shall be in accordance with all conditions of this coastal development permit. No change to the program beyond the supplemental actions outlined by the approved plan shall occur without a Commission-approved amendment to the permit, unless the Executive Director determines that no such amendment is required.

E. *Annual and Mid-term Reporting Requirements*: The applicant shall prepare and submit an Annual Monitoring Report, for the review and approval of the Executive Director, for the

term of this permit. The monitoring report shall include all data required by this condition, all monthly monitoring forms, and a written report prepared by a qualified coastal engineer indicating the results of the monitoring program. The monitoring report shall include analysis and conclusions regarding the condition and effectiveness of the revetment, any changes in beach/shoreline profiles, any changes in the public's ability to safely access the beach, and details on any maintenance or adaptive management actions undertaken pursuant to the approved adaptive management plan during the year. The report shall include a brief history of all previous years' monitoring results to track changes in conditions. Should the monitoring reports reveal any unanticipated significant adverse resource or public access impacts not addressed in the Commission's authorization and/or the approved Beach and Revetment Monitoring and Adaptive Management Plan, the Executive Director may require the submittal of a permit amendment for the review and approval by the Commission to address and evaluate mitigation measures to compensate for any adverse resource impacts, public access impacts, and/or require any mid-course corrections or adjustments to the plan.

Ten (10) years from the date of Commission action on this permit, the applicant shall submit a Mid-term Assessment Report to the Executive Director, that documents the results of the required Beach and Revetment Monitoring and Adaptive Management Plan and includes analysis and conclusions regarding the condition and effectiveness of the revetment, any changes in beach/shoreline profiles, any changes in the public's ability to safely access the beach, and details on any maintenance or adaptive management actions undertaken pursuant to the approved adaptive management plan during the year. Should this mid-term assessment report reveal any significant adverse resource or public access impacts not addressed in the Commission's authorization and/or the approved Beach and Revetment Monitoring and Adaptive Management Plan, the Executive Director may require the submittal of a permit amendment or new coastal development permit for the review and approval by the Commission to re-evaluate the project, the permit term, feasible alternatives, and measures to address any identified adverse resource or public access impacts.

F. *Trigger for Re-evaluation of the Approved Revetment*: Should significant erosion and overtopping of the rock revetment occur in which 200 linear feet or more of the approved revetment is exposed for 24 months in total from the date of permit issuance (despite good-faith attempts to maintain it in its approved configuration and maintain sand coverage), the applicant shall submit a new coastal development permit application for re-evaluation of the approved shoreline protection plan for Goleta Beach County Park, including a complete evaluation of all feasible alternatives to the retention of the rock revetment in its approved as-built location. The evaluation of all feasible alternatives shall address, at a minimum, removal and/or relocation of the approved rock revetment and relocation of threatened park facilities and utilities to more landward locations outside of the expected wave-caused erosion zone (managed retreat). The information concerning the alternatives evaluation shall be sufficiently detailed to enable the Coastal Commission to coequally evaluate the feasibility of each alternative for addressing shoreline protection, public access, and other coastal resource issues under the Coastal Act. The new permit application shall be submitted within six months of reporting this trigger.

G. *Public Access Maintenance and Management*: Safe pedestrian beach access shall be maintained across the approved revetment between the upland portion of the park and the sandy beach and shore. Should continuous portions of the rock revetment that are 200 feet or

more in lineal extent become exposed through wave action or erosion, and it is no longer feasible or effective to cover those portions of the rock revetment with sand pursuant to the maintenance actions identified in part D of this condition, designated beach accessways over the revetment (such as temporary steps or stairway) that are a minimum of 3 feet wide shall be constructed for every 100 feet of continuous revetment exposure. The temporary beach accessways shall be oriented at an angle to the predominate wind direction to avoid blow-outs and be maintained clear of obstructions or barriers to allow safe pedestrian access. Should the temporary beach accessways no longer be necessary to cross the revetment to reach the shore due to the build-up and coverage of sand on the revetment, the temporary beach accessways shall be removed.

The permittee shall undertake development and program management in accordance with the final approved plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Coastal Commission - approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is legally required.

3. Limitations on Beach Grooming and Wrack Management

Mechanized beach grooming activities shall be limited to above the high high water line and for no more than three (3) times per calendar year - once immediately before Labor Day, Fourth of July, and Memorial Day. Grooming activities shall be implemented in a manner that avoids the removal or disturbance of wrack to the maximum extent feasible; i.e. during grooming, backpassing, or nourishment activities, wrack shall be avoided with the exception of debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed as needed. Trash shall be removed by hand to the maximum extent feasible and the mechanical removal of large debris that poses a clear threat to public safety shall be allowed.

4. Public Access Program

By acceptance of this permit, the applicant agrees to the following:

A. Safe public access to or around areas where maintenance and adaptive management activities will occur shall be maintained during all project operations. Public parking areas shall not be used for staging or storage of maintenance equipment and materials, unless there is no feasible alternative. Where use of public parking spaces is unavoidable, the minimum number of public parking spaces (on and off-street) that are required to implement the maintenance activities and for the staging of equipment, machinery and employee parking shall be used. The applicant shall post the maintenance site with a notice indicating the expected dates of construction and/or beach closures.

B. The applicant shall continue to provide free (no charge) public access and vehicle parking at Goleta Beach County Park for the term of this permit.

5. 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 erosion, liquefaction, waves, flooding, tsunami, and sea level rise; (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.

Prior to issuance of the Coastal Development Permit, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

6. Indemnification by Applicant

Liability for Costs and Attorney's Fees: By acceptance of this permit, the Applicant/Permittee agrees to reimburse the Coastal Commission in full for all Coastal Commission costs and attorney's fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorney's fees that the Coastal Commission may be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Applicant/Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

7. Required Approvals

Prior to issuance of this coastal development permit, the applicant shall obtain all other necessary State permits that may be necessary for all aspects of the proposed project (including approvals from the California Department of Fish and Game, California State Lands Commission, and Regional Water Quality Control Board, unless evidence is submitted that such approval(s) are not required). In addition, by acceptance of this permit, the applicant agrees to obtain all necessary Federal permits that may be necessary for all aspects of the proposed project (including, but not limited to, the U.S. Army Corps of Engineers).

8. Condition Compliance

Within 6 months of Commission action on this coastal development permit, 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 Chapter 9 of the Coastal Act.

IV.FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION

Santa Barbara County requests permanent authorization of an approximately 1,200 ft. long, 11 ft. high as-built rock revetment (approximately 950 linear ft. of which was constructed pursuant to emergency coastal development permits and authorized on a temporary basis and approximately 250 linear ft. of which was constructed without the required coastal development permit and for which the applicant is now requesting after-the-fact authorization) in order to protect public recreational facilities and utilities from erosion (**Exhibits 2-3**). The as-built 1,200 linear ft. rock revetment is comprised of two continuous approximately 600 ft. linear ft. segments that are separated by an approximately 50 ft. gap. The entire revetment covers an approximately 21,450 square ft. (0.49 acre) area and is made up of approximately 4,370 cubic yards of rock that range in size from approximately 24 to 40 inches in diameter. The existing revetment has remained largely buried under beach sand, but can be periodically exposed as a result of large storm and wave events (**Exhibit 5**). In August 2014, the toe of the revetment was covered with between 2 and 7 ft. of sand (4.7 ft. average depth), and the top of the revetment was covered with between 0.5 to 3 ft. of sand (1.5 ft. average depth). The County expects this oscillating beach trend to continue in which the revetment remains naturally buried with sand except temporarily during periodic large storm events. The County has indicated that occasional sand augmentation may occur at the subject site through the Santa Barbara County Flood Control or periodic nourishment activities occurring under the umbrella of Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) as permits allow.

B. PROJECT LOCATION AND BACKGROUND

The project site is located at Goleta Beach County Park, which occupies approximately 29 acres with approximately 4,000 feet of south-facing beach frontage located on a sandspit along Goleta Bay in Santa Barbara County (**Exhibit 1**). Goleta Beach County Park is bound to the south by the Pacific Ocean, on the west by the University of California at Santa Barbara, and to the north and east by private natural gas generation and storage facilities owned by Southern California Gas Company. An easement containing various utility and sewage lines traverses the park. To the northwest, Clarence Ward Memorial Boulevard (State Route 217) separates the park from the greater area of Goleta Slough and the Santa Barbara Municipal Airport.

Goleta Beach County Park is situated at the mouth of the Goleta Slough, which is fed by five major drainages, Tecolotito, Carneros, San Pedro/Las Vegas, San Jose, and Atascadero Creeks. The outflow channel of Goleta Slough wraps around Goleta Beach County Park along the park's northern boundary, outletting through Goleta Beach County Park property, east (downcoast) of the developed facilities. Public access is available along the entire length of the park (approximately one mile in length) that is contiguous to the beach.

All portions of Goleta Beach County Park situated landward of the sandy beach are located on top of a clay-rich fill base placed after World War II by the federal government. Prior to placement of the fill after World War II, the subject site was a sandspit extending across the mouth of Goleta Slough subject to wave action and periodic erosion. By 1977, a timber pier, restrooms, parking lots, a snack bar, lawn, and a portion of the revetment on the east end of the beach had been constructed at the park. In the 1980's the pier was extended to 1,500 ft. in total length, a restaurant was built to replace the snack shop, the parking area was upgraded, and various other improvements occurred at the park.

Currently, existing facilities at Goleta Beach County Park consist of 4.2 acres of lawn, three public restrooms, four group picnic areas, a children's playground, horseshoe pits, and approximately 13 barbeque areas and benches scattered throughout the lawn area. Additional important facilities include a segment of the Coastal Bike Path, Goleta Pier which includes cranes for launching boats, Beachside Bar-Café, a snack bar, a bait and tackle shop, Park Ranger residences, and storage. Free parking is provided for approximately 601 cars in seven different parking lots. The park and its facilities provide direct public coastal access to one of the widest sandy beaches in the Goleta area with typically excellent swimming conditions. Access to the park is provided via a 175-foot-long bridge from Sandspit Road across the main Goleta Slough channel. The park also contains public utility infrastructure, including Goleta Sanitation District's underground sewer outfall pipe and vault, a Goleta Water District reclaimed water main, Southern California Gas Company high-pressure gas line, and the County of Santa Barbara sanitary sewer force main, domestic water line, and telephone conduit. Segments of these important utility lines are located within the coastal process zone.

In recent years, particularly in 1999, 2002, 2005 and 2014, erosion of the clay-rich fill underlying the park has occurred due to wave action from winter storms. This erosion has previously formed steep undercut slopes approximately four to five feet in height between the improved areas onsite and the sandy beach. During some winter seasons, prior to the construction of the rock revetment, erosion had become so severe as to wash out portions of the parking lots and threaten facilities at the park including restrooms, picnic tables, trees, lawn area, utility lines, and parking areas.

Recreational Significance of Goleta Beach County Park

The Park is the largest and most developed coastal recreation and access point in the urban areas of the South Coast of Santa Barbara County, west of the City of Santa Barbara (**Exhibit 4**). The park provides access to the longest easily accessible public beach in the Goleta Valley for beachgoing and coastal recreational activities such as swimming, kayaking, paddle boarding, boating and fishing. The park also provides important developed park facilities in a unique coastal setting, including extensive lawn areas, individual and group barbeque sites and a children's playground. Goleta Beach County Park is the most frequented of Santa Barbara County Parks, visited by approximately 1.5 million people annually. The park also provides substantial public coastal access parking adjacent to the beach (601 spaces) that is free to the public year-round.

In addition to the fact that the park provides significant, low-cost public access and recreation opportunities along the coast, the park represents a critical access point to some of the least developed and most scenic sections of shoreline in the urban region of the County's South Coast.

Most of the developed coastal access and waterfront park facilities in the County's South Coast are located within the City of Santa Barbara's Waterfront located roughly eight miles east of Goleta Beach. There is only one other shoreline public beach park that exists in the Goleta Valley to serves this area's visitors and roughly 80,000 residents –Arroyo Burro Beach Park, which is located five miles to the east of Goleta Beach County Park. Although Goleta Valley's 12-mile-long reach of coast between Arroyo Burro Beach Park to the east and Bacara Resort and Spa to the west also provides many less developed public access points to the shore, these areas are less frequently used because they lack facilities, have limited parking, charge a fee for parking, serve local communities such as Isla Vista, or the beach can only be reached after an extended walk. As such, Goleta Beach County Park represents a regionally-significant public recreational resource on the Santa Barbara County coast.

History of Shoreline Erosion at Park and Past Commission Actions

Goleta Beach has experienced large changes in beach width (i.e., cycles of accretion and erosion) over the past decades. Coastal processes have generated long-term fluctuations in the sediment supply that reaches Goleta Beach and results in the shoreline configuration. The beach has experienced extended periods of shoreline retreat and beach erosion, as occurred during the 1940s where the average Goleta Beach width was less than 150 feet, and of sand accretion and widening beaches, which occurred from the late 1960s through at least the mid- to late-1970s when Goleta Beach reached an average width of 250 feet. Goleta Beach entered another period of erosion in the early 1980s, with major storm events leading to significant shoreline retreat. Severe erosion occurred during the 1982-1983 El Niño, with wave run-up and storm events causing beach erosion through the 1980s and early 1990s, culminating in damage to Park facilities beginning in the late 1990s and early 2000s. The beach narrowed, at places, by as much as 200 feet, damaging the parking area at the western end of the park and threatening other park infrastructure and buried utility lines. The applicant's coastal engineering consultants have estimated that erosion at the beach resulted in a loss of approximately 80,000 cubic yards of sand per year over the 1983 to 1998 time period. The beach recovered slowly after the 1997-98 El Niño season. In 2005, a sediment pulse of several hundred thousand cubic yards from flooding arrived at Goleta around the time that significant beach nourishment events (120,000 cu. yds. placed on the beach) added further sand to the beach and littoral system.

Erosion observed at Goleta Beach is a consequence of a complex set of factors operating at different time scales. A natural cycle of erosion and accretion at Goleta Beach appears to be related to periodic reverses in large-scale oceanographic processes at decadal scales (El Niño Southern Oscillation (ENSO)) and multi-decadal scales (Pacific Decadal Oscillation (PDO)). Shoreline fluctuation at Goleta Beach is related to changes in sand supply and longshore sediment transport, sea level rise, and man-made influences such as beach nourishment, use of flood control debris basins and shoreline armoring.

More recently, since about 2008, a shift in the PDO to a negative (cold) condition has been noted by scientists (University of Washington Climate Change Impacts Group 2012; NASA 2012). This negative PDO may result in a period of reduced beach erosion or even accretion; however, based on recent rapid fluctuations between PDO cycles it is not possible to identify how long this period might last or what effect it might have on the park. Regional factors such as additional dams and detention basins have affected the sand supply reaching the littoral system, and rising sea level may hinder accretion.

The park was closed for several days due to damage from a tidal surge and high surf that occurred on March 1, 2014. During this episode, waves over-washed areas of the park, damaged the Beachside Bar-Café and limited segments of Goleta Pier, and deposited sand, seaweed and debris throughout the park. While much of the beach was eroded and a large scarp formed, erosion and damage to much of the park's upland facilities were limited. Erosion was primarily confined to the beach and the coastal strand area. Approximately 80 feet of the proposed as-built revetment was exposed at the park's far west end and 25 feet in the central portion of the park. The vertical 5- to 9-foot-high erosion scarp along the beach was fenced for public safety. Immediately prior to this storm event, the mouth of the Goleta Slough was breached by the County under an emergency permit to prevent flooding of airport facilities.

Goleta Beach County Park has been subject to several previous Commission actions attempting to address the continuing problem of wave caused erosion and protection of the County's park facilities.

Four Coastal Development Permits (CDPs), 4-93-205, 4-00-206, 4-05-139, and 4-11-069 (Santa Barbara County), have been approved by the Commission, in 1993, 2000, 2005, and 2012 respectively, to the Santa Barbara County Flood Control District for the programmatic dredging of the slough/creeks and disposal of between 20,000 to 200,000 cu. yds. of material per year in the surfzone of Goleta Beach for the purpose of beach nourishment. Each of the four permits were approved by the Commission on a time-limited basis, authorizing implementation of the program for a period of 5 years. Although these permits had potentially allowed for a maximum quantity of 100,000 - 200,000 cu. yds. of beach nourishment material to be placed on the beach each year, County staff have indicated that these previously approved dredging operations typically only generated between 10,000 to 70,000 cu. yds. (over a 2 – 3 year period) of material suitable for beach nourishment at Goleta Beach.

In addition, subsequent to the expiration of CDP 4-05-139 in October 2010 but prior to Commission approval of CDP 4-11-069 in May 2012, Santa Barbara County Flood Control District received two emergency permits for dredging/desilting activities in Goleta Slough and the adjoining creeks in February 2010 (CDP 4-10-118-G) and in January 2011 (CDP 4-11-015-G). The emergency activities were necessary due to sediment accumulation from fires in the Santa Barbara/Goleta area and subsequent heavy rain events. The emergency permits required all dredged/desilted material to meet the testing criteria previously outlined in CDP 4-05-139 prior to surfzone disposal at Goleta Beach.

CDP 4-11-069, which was approved in May 2012, authorizes slough/creek dredging and deposition of dredged sand material in the surfzone at Goleta Beach County Park through May 9, 2017. CDP 4-11-069 allows Santa Barbara County Flood Control District to conduct routine maintenance as-needed, such that any need for future emergency operations will be minimal. Although much of this material is lost to the littoral cell because it is placed in the surf zone, this program has substantially augmented the sand supply on Goleta Beach.

Further, CDP 4-09-068, approved by the Commission on March 10, 2010, had authorized the Santa Barbara County Flood Control District to implement an annual dredging program for a 1.4 mile reach of Atascadero Creek that included removal of 2,000–30,000 cu. yds of sediment on an as-needed basis and potential placement of suitable excavated material in the surfzone at Goleta

Beach County Park. CDP 4-09-068 had the same five year permit term, and the same sediment testing requirements as the above-mentioned CDP's. This permit expired on March 10, 2015. However, prior to permit expiration, Santa Barbara County Flood Control District submitted a new permit application (4-14-1900) requesting authorization for another five year term of the same program. CDP Application 4-14-1900 is complete and tentatively scheduled for the Commission's June 2015 hearing.

Further, three separate CDPs 4-00-193, 4-01-136, and 4-02-128 (Santa Barbara County Parks) were approved by the Commission in 2000, 2001, and 2002 respectively, for construction of an annual temporary winter sand berm at Goleta Beach in an attempt to protect upland park facilities from wave caused erosion. Although CDPs 4-00-193 and 4-01-136 each only authorized construction of the berm for a single season, CDP 4-02-128 authorized the seasonal berm construction on a seasonal basis for a three-year period, which expired in spring of 2005.

In addition, on March 16, 2005, the Commission also approved CDP 4-02-074 to allow the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) to implement a five-year program to place a maximum of 791,500 cubic yards per year of suitable beach replenishment material at five separate beach fill sites within Santa Barbara and Ventura Counties (including the deposition of up to 100,000 cu. yds./year of beach replenishment material at Goleta Beach County Park). BEACON is a joint powers authority whose members consist of the different local government agencies in Santa Barbara and Ventura Counties, including Santa Barbara County itself. However, CDP 4-02-074 (BEACON) was only valid through March 16, 2010 and has expired. In addition, CDP 4-02-054 (BEACON) was also approved in July 2003 by the Commission for a one-time beach nourishment demonstration program at Goleta Beach utilizing up to 150,000 cubic yards of sand from the West Beach area of Santa Barbara Harbor and placing it within a 2,200 foot long by 400 foot wide beach fill deposition site at Goleta Beach County Park. All work authorized by CDP 4-02-005, including the placement of 150,000 cu. yds. of sand at Goleta Beach County Park has been previously completed.

However, despite implementation of the above referenced beach nourishment projects, Goleta Beach has continued to experience wave caused erosion of the backbeach areas, including the grassy lawn, picnic areas, and parking lot facilities within the park. In response to the continued erosion of the shoreline areas on site, the County has, over the course of several successive projects, constructed the proposed approximately 1,200 linear ft. of rock revetment on Goleta Beach to protect the upland portions of the park and the facilities associated with it. Approximately 250 linear ft. of the existing 1,200 linear ft. revetment was installed in the 1980's without the required coastal permit, and the remainder 950 linear ft. portion of the 1,200 ft. long revetment was constructed between 2002 – 2005 pursuant to the Commission's approval of CDP 4-02-251 (as amended twice), which authorized that portion of the revetment on a temporary basis only until January 2008.

In regards to the 950 ft. long portion of the existing rock revetment that was temporarily authorized by the Commission between 2002 and 2005, a 600 ft. long portion of it was installed in December 2002 under Emergency Permit 4-02-251-G to protect the western parking lot and restroom. This emergency permit authorized the revetment on a temporary basis only, requiring the applicant to either remove the revetment or obtain a regular follow-up CDP for permanent authorization. The applicant requested permanent authorization of the 600 ft. long segment of

the revetment pursuant to CDP Application 4-02-251; however, on January 14, 2004, the Commission approved CDP 4-02-051 with a special condition which specified that the authorization for the revetment would be extended on a temporary basis only for a period of an additional 30 months in order to allow the County further time to evaluate other alternative methods of resolving the problem of erosion at Goleta Beach County Park. Subsequently, in 2005, an additional 350 linear ft. segment of rock revetment was installed adjacent to the existing revetment, pursuant to Emergency Permit 4-05-005-G, in response to further erosion of the upland areas of the park. The Commission approved an amendment to Coastal Development Permit 4-02-251 to temporarily authorize this additional segment of revetment for a 30-month term as well. In addition, a second amendment to CDP 4-02-251 was approved by the Commission in 2006 to authorize an extension of time to retain all of the above referenced segments of rock revetment at the upcoast end of the park for an additional term of 18 months (until January 2008) in order to further address potential alternatives methods of shoreline protection for the subject site.

Although authorization for the approximately 1,200 linear ft. revetment has expired, Special Condition One of CDP 4-02-051, as amended, also specifically required the applicant to obtain a new coastal permit for either removal or permanent authorization of the revetment. Moreover, in its approval of CDP 4-02-251 and its two related amendments, the Commission found that insufficient information existed at the time to fully analyze the potential impacts that the permanent retention of the revetment may have on shoreline processes and biological resources at Goleta Beach and long-term alternatives that may be available. Thus, the Commission conditionally approved the permit, as amended, but required the County conduct extensive studies of alternatives that would address erosion at Goleta Beach and to develop a long-term solution to this problem. As required by the conditions of approval for CDP 4-02-251, the County had completed a public visioning process for Goleta Beach County Park to address long-term solutions to the erosion problem at Goleta Beach, and has prepared two Environmental Impact Reports addressing several alternatives.

The County submitted CDP Application 4-08-006 in January 2008, in compliance with the requirements of Special Condition One of CDP 4-02-051 (which specifically allowed the applicable timelines for removal of the revetment to be extended until the Commission acts on an application). CDP Application 4-08-006 had proposed removal of the subject revetment along with construction of an approximately 500 ft. long, 20 ft. wide, permeable pier sand retention system as an addition to the existing Goleta Beach Pier, consisting of 250 – 330 timber or composite fiberglass piles (18" – 20" in diameter) and timber decking. The project also included seasonal installation of an approximately 1,200 ft. long, 3-5 ft. high winter sand berm for a period of five years after initial development commences, offshore dredging of approximately 500,000 cu. yds. of sand and placement of dredged material on the beach immediately upcoast of the pier for the purpose of initial beach nourishment, and the implementation of an Adaptive Management and Monitoring Program that included periodic adjustments to add or remove piles from the permeable pier sand retention system and periodic offshore dredging/beach nourishment on an as-needed basis not exceed 100,000 cu. yds. of material/year. Commission staff had recommended approval of this previously proposed project subject to a number of special conditions. However, at the July 2009 Commission hearing, the Commission denied the project and directed the County to develop an alternative solution to manage erosion at the park, due to concerns over the project's potential impacts to sand supply on down-coast beaches. The previously proposed permeable pier sand retention system was an experimental concept. There

is only anecdotal evidence of coastal piers performing that intended function, such as the Huntington Beach Pier that has retained sand around the existing pier, or at Oil Piers where the beach experienced significant erosion when the piers were removed as part of the lease decommissioning; however, it appears that there have been no other pier projects that have been designed and built with the specific purpose of sand retention.

In 2014, the County completed a new Environmental Impact Report (EIR) (Goleta Beach County Park Managed Retreat Project 2.0 – March 2014) that analyzed a managed retreat project and five project alternatives. The managed retreat approach included relocating landward critical infrastructure currently located in the coastal process zone and allowing the shoreline to oscillate naturally in response to climatic cycles, with the associated potential for cyclic periods of erosion of developed areas of the park. The approach involved relocating landward several threatened utilities and two parking lots at the western end of the park, and allowing limited shoreline protection measures to protect high-value utility infrastructure that would be difficult to relocate. Key elements of this approach included:

1) Remove Parking Lots 6 and 7 (107 parking spaces) and restore this area back to sandy beach;
2) Establish a Transportation and Utility Corridor within a "high erosion protection zone";
3) Relocate at-risk utilities to the Transportation and Utility Corridor including:
    a) County of Santa Barbara 4-inch Sanitary Sewer Force Main;
    b) County of Santa Barbara 3-inch Domestic Water Line;
    c) Verizon 1-inch telephone conduit;
    d) Goleta Water District 18-inch Reclaimed Water Line;
    e) Sempra Energy/Southern California Gas Company 8-inch High-Pressure Gas Line
4) Relocate a section of the Coastal Trail Bike Path to the Transportation and Utility Corridor;
5) Protect underground sewer outfall pipe and vault with a geotextile dune and cobble revetment;
6) Remove the 1,200 feet of rock revetment at the western end of the park;
7) Consider the potential for relocation of the western restroom building outside the coastal process zone.

However, based on the conclusions of the County's EIR and several other factors, instead of a managed retreat project, the County Board of Supervisors chose to submit the subject permit application to permanently retain the existing 1,200 ft. long rock revetment to protect park facilities. The County has indicated that this is based on their finding that the project would allow continued coastal-dependent recreational use of all existing upland areas of the park while maintaining public access to the beach and would not result in significant adverse impacts to coastal processes at the beach park or down-coast beaches in the foreseeable future.

Other Projects to Note in the Project Vicinity

Access Bridge Replacement - The existing bridge across the Goleta Slough that provides the only vehicular access to Goleta Beach Park is deteriorating and is currently proposed for replacement. The replacement bridge is conceptually proposed to be located west of the existing bridge. The existing bridge is proposed to be removed. The bike path would cross the new bridge on the Park

side, as it does in the current configuration, but would then be separated by a barrier from vehicle traffic. It would then join with the existing Coastal Bike Path toward the east.

Goleta Bay Kelp Anchor Demonstration Project - At its February 2015 hearing, the Commission approved Coastal Development Permit Application No. E-12-007 proposed by the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) to carry out a pilot project to evaluate an experimental method of promoting the natural recruitment of kelp and formation of a kelp bed in an area of soft substrate offshore of Goleta Beach. This demonstration project proposed by BEACON would consist of embedding 212 granite columns into sandy subtidal substrate approximately 800 to 3,000 feet offshore of Goleta Beach Park with the intent to assess the feasibility of establishing or reestablishing a giant kelp forest in this area. Such kelp forests can potentially reduce coastal erosion by decreasing wave energy reaching the beach and may also create important habitat benefits associated with the known biological productivity of such forests.

C. CORRESPONDENCE RECEIVED

Correspondence received to-date are attached as **Exhibit 10** of this staff report. Letters from the Mayor of the City of Goleta, Michael Bennett, and Chair of the Santa Barbara Group of the Sierra Club, Katie Davis, were received which express support for the proposed project.
A letter was also received from the Environmental Defense Center (EDC) on behalf of the Santa Barbara Chapter of the Surfrider Foundation, (dated February 19, 2015) that expresses opposition to the County's proposed project to retain the as-built rock revetment. The letter states, in part, that the revetment is causing significant adverse impacts to biological, visual, and recreational resources and public safety. The letter states that the managed retreat alternative would serve to minimize erosion and downcoast impacts and allow natural beach fluctuations. All of these letters are attached as Exhibit 10.

D. HAZARDS AND SHORELINE PROCESSES

In regards to the new construction of shoreline protective devices that may alter natural shoreline processes, Section 30235 of the Coastal Act states:

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

In addition, Section 30253 of the Coastal Act states, in part, that new development shall:

> *(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding*

area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30253 of the Coastal Act mandates that new development minimize risks to life and property in areas of high geologic and flood hazard. In addition, Coastal Act Section 30235 specifically provides that shoreline protective devices must be permitted only when both of the following two criteria are met: (1) the device is required to serve coastal-dependent uses or to protect existing structures or public beaches provided that these areas/structures are in danger from erosion and (2) the device is designed to eliminate or mitigate adverse impacts on local shoreline sand supply.

Shoreline Protective Device Effects

Coastal Act Section 30235 acknowledges that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" methods designed to forestall erosion also alter natural landforms and natural shoreline processes. Accordingly, Section 30235 limits the construction of shoreline protective works to those required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion. The Coastal Act provides these limitations because shoreline structures can have a variety of adverse impacts on coastal resources, including adverse effects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach.

Shoreline protection devices also directly interfere with public access to tidelands by impeding the ambulatory nature of the mean high tide line (the boundary between public and private lands) during high tide and severe storm events, and potentially throughout the entire winter season. The impact of a shoreline protective device on public access is most evident on a beach where wave run-up and the mean high tide line are frequently observed in an extreme landward position during storm events and the winter season. As the shoreline retreats landward due to the natural process of erosion, the boundary between public and private land also retreats landward. Construction of rock revetments and seawalls to protect private property fixes a boundary on the beach and prevents any current or future migration of the shoreline and mean high tide line landward, thus eliminating the distance between the high water mark and low water mark. As the distance between the high water mark and low water mark becomes obsolete the seawall effectively eliminates lateral access opportunities along the beach as the entire area below the fixed high tideline is inundated. The ultimate result of a fixed tideline boundary (which would otherwise normally migrate and retreat landward, while maintaining a passable distance between the high water mark and low water mark overtime) is a reduction or elimination of the area of sandy beach available for public access and recreation.

Interference by shoreline protective devices can result in a number of adverse effects on the dynamic shoreline system and the public's beach ownership interests. First, changes in the shoreline profile, particularly changes in the slope of the profile which results from a reduced beach berm width, alter the usable area under public ownership. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. The second effect on access is through a progressive loss of sand as shore material is not available to nourish the nearshore sand bar. The lack of an effective bar can allow such high wave energy on the

shoreline that materials may be lost far offshore where it is no longer available to nourish the beach. This affects public access again through a loss of area between the mean high water line and the actual water. Third, shoreline protective devices such as revetments and bulkheads cumulatively affect shoreline sand supply and public access by causing accelerated and increased erosion on adjacent beaches. This effect may not become clear until such devices are constructed individually along a shoreline. In addition, if a seasonal eroded beach condition occurs with greater frequency due to the placement of a shoreline protective device on the subject site, then the subject beach would also accrete at a slower rate. Fourth, if not sited landward in a location that ensures that the seawall is only acted upon during severe storm events, beach scour during the winter season will be accelerated because there is less beach area to dissipate the wave's energy.

As a result of the potential impacts arising from shoreline protective device projects, it is critical to have an alternatives analysis based upon the technical and resource data specific to the site. The Coastal Act requires such projects to be sited and designed to protect views to and along the ocean and scenic coastal areas; to eliminate or mitigate adverse impacts on local shoreline sand supply; to avoid impediments to public access; to be compatible with the continuance of sensitive habitat and recreation areas; and to prevent impacts which would degrade sensitive habitats, parks, and recreation areas.

Sea Level Rise

Sea level has been rising slightly for many years. In the past century, global mean sea level (MSL) has increased by 17 to 21 centimeters (7 to 8 inches) (IPCC, 2013). The *Global Sea Level Rise Scenarios for the United States National Climate Assessment* (2012) report provides a set of four global sea-level rise scenarios ranging from 0.2 to 2.0 meters (8 inches to 6.6 feet) reflecting different amounts of future greenhouse gas emissions, ocean warming and ice sheet loss. The low and intermediate-low scenarios assume very significant reductions in greenhouse gas emissions, and limited changes in ocean warming and ice sheet loss. The intermediate-high scenario is based on the average of the high projections from semi-empirical models, which are based on the highest IPCC 4th Assessment Report (AR4) (2007) emissions scenario (A1FI).12 The highest scenario (2.0 meters) combines the IPCC projections with the maximum possible ice sheet melt that could occur by 2100. Given the recent studies that suggest that glacier and ice sheet loss could significantly contribute to rising sea-levels (e.g. Rahmstorf, 2007 and Vermeer and Rahmstorf, 2009) and evidence that current greenhouse gas emissions are tracking with intermediate AR4 IPCC scenarios (Rahmstorf et al., 2012), the low and intermediate-low scenarios likely under represent future sea-level rise.

Tide gauges and satellite observations show that in the past century, mean sea level in California has risen 20 centimeters (8 inches), keeping pace with global rise. In the past 15 years or so, mean sea level in California has remained relatively constant, and has been suppressed due to factors such as offshore winds and other oceanographic complexities. Bromirski et al. (2011 and 2012) postulate that persistent alongshore winds have caused an extended period of offshore upwelling that has both drawn coastal waters offshore and replaced warm surface waters with cooler deep ocean water. Both of these factors cause a drop in sea level that may have cancelled out the sea rise that otherwise would be expected. As the Pacific Decadal Oscillation, wind, and other conditions shift, California sea level will continue rising, likely at an accelerated rate (NRC, 2012, Bromirski et al., 2011, 2012). Over the coming decades, sea level is projected to

increase along much of the California coast by up to 1.7 meters (5.5 feet) from 2000 to 2100, according to the 2012 National Research Council "Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future" report (NRC, 2012).

Continued and accelerated sea-level rise will have widespread adverse consequences for California's coastal resources, including increased inundation, flooding, coastal erosion, saltwater intrusion, and habitat loss. Absent any preparatory action, an increase in sea level may have serious implications for coastal property, infrastructure, and development; beaches, public access, and recreation areas; coastal habitats, and archeological and paleontological resources; fisheries, ports, and public works facilities; and some ground water aquifers. On the California coast the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore. On a relatively flat beach, with a slope of 40:1, a simple geometric model of the coast indicated that every centimeter of sea level rise will result in a 40-centimeter landward movement of the ocean/beach interface. For fixed structures on the shoreline, an increase in sea level will increase the inundation of the structure. More of the structure will be inundated or underwater than are inundated now and the portions of the structure that are now underwater part of the time will be underwater more frequently.

Accompanying this rise in sea level will be increased wave heights and wave energy. Along much of the California coast, the bottom depth controls the nearshore wave heights, with bigger waves occurring in deeper water. Since wave energy increases with the square of the wave height, a small increase in wave height can cause a significant increase in wave energy and wave damage. Combined with the physical increase in water elevation, a small rise in sea level can expose previously protected back shore development to both inundation and wave attack, and those areas that are already exposed to wave attack will be exposed to more frequent wave attack with higher wave forces. Structures that are adequate for current storm conditions may not provide as much protection in the future. Sea-level rise will also result in changes to sediment availability. Higher water levels and changing precipitation patterns could change erosion and deposition patterns. Losses of sediment could worsen beach erosion and possibly increase the need for beach nourishment projects (adding sand to a beach or other coastal area), as well as decrease the effectiveness and long-term viability of beach nourishment if sand is quickly washed away after being placed on a beach (Griggs, 2010).

Need for Shoreline Protection at Goleta Beach and Alternatives Analysis

Coastal Act Section 30235 provides that shoreline protection devices shall be permitted only when all of the following four criteria are met: (1) there is an existing structure, public beach area, or coastal dependent use; (2) the existing structure, public beach area, or coastal dependent use is in danger from erosion; (3) shoreline-altering construction is required to protect the existing threatened structure or public beach area, or to serve the coastal dependent use; and (4) the required protection is designed to eliminate or mitigate its adverse impacts on shoreline sand supply. The first three questions relate to whether the proposed shoreline protection device is necessary, while the fourth question applies to avoiding or mitigating any unavoidable impacts from it. In addition, even where all four criteria are satisfied, and thus, shoreline protection devices must be permitted, the other policies in Chapter 3 of the Coastal Act do not become irrelevant, so the devices must be located, designed, and maintained in a manner that is consistent with those other policies to the extent possible. Those issues are discussed in subsequent sections of this report.

a. Existing Development to be Protected

In regards to the first question, the subject site, Goleta Beach County Park, is a public beach park consisting of both sandy beach and upland public recreational use areas (picnic facilities, recreation areas, and parking facilities including 601 existing parking spaces) as well as various structures (including a restaurant, public restrooms, and various utility pipelines including gas and water lines). Goleta Beach County Park is the most popularly used public beach in Santa Barbara County's park system and clearly supports and enhances the public's ability for coastal access and recreation within the project area. Thus, the Commission finds Goleta Beach Park includes sandy beach areas that constitute a "public beach" and that the existing coastal access and recreational facilities located within the upland areas of the park (the non-sandy beach areas) clearly constitute structures and coastal-dependent uses as referenced by Section 30235. The Commission further finds that although existing lawns and turf areas are not structures or uses that are required to be protected by shoreline protective devices pursuant to Section 30235 of the Coastal Act; in this case, the upland recreational areas of the subject site (which include in part, public parking lots, public restrooms and showers, public picnic facilities, and public lawn/turf recreational areas) constitute a critical and important component of this public coastal park, and the park itself is a coastal dependent use.

b. Erosion Danger

In regards to the second question, the Santa Barbara County Parks Department has also established that the public recreational use areas (upland coastal recreation areas and parking facilities including 601 existing parking spaces) as well as existing structures (including a restaurant, public restrooms, and various utility pipelines including gas and water lines) are in danger of serious damage or destruction due to further wave attack and associated beach erosion. The problem of ongoing erosion at this beach has been previously established by the Commission in its previous approval of several coastal development permits since 1999 which have authorized various actions including construction of rock revetments, sand berms, and beach nourishment activities at Goleta Beach in response to previous wave caused erosive events. These previously approved coastal development permits and a full description of their project descriptions are included in the previous section of this report.

Moreover, with global warming and sea level rise, increased relative wave heights and wave energy are expected. Along much of the California coast, the bottom depth controls the nearshore wave heights, with bigger waves occurring in deeper water. Since wave energy increases with the square of the wave height, a small increase in water depth and wave height can cause a significant increase in wave energy and wave damage. Thus, combined with the physical increase in water elevation, a small rise in sea level can expose previously safe backshore development to both inundation and wave attack, and those areas that are already exposed to wave attack will be exposed to more frequent wave attack with higher wave forces. Therefore, given the effects of expected sea level rise at the subject site, the upland areas of Goleta Beach County Park are expected to be subjected to greater wave action more frequently in the future. Thus, construction of a shoreline protective device at Goleta County Beach would serve to protect existing structures and upland park facilities and the park itself, constituting a coastal-dependent use, from erosion consistent with Section 30235 of the Coastal Act.

c. Feasible Alternatives for Protection

The third criterion, pursuant to Section 30235, that must be met before approval of a shoreline protective device can be considered necessary is that the proposed device must be "required" to protect the existing threatened structure, coastal-dependent use, or public beach. In other words, a shoreline protection device must be permitted if approval of such a device is the only feasible means of protecting the endangered development or coastal dependent use. Moreover, any particular device must be approved only if it is the only feasible means of providing protection, or, if there are multiple possible means, if it is the best alternative. Thus, when read in tandem with other applicable Coastal Act policies protecting coastal resources as cited in these findings, this 30235 evaluation is often conceptualized as a search for the least environmentally damaging feasible alternative that can serve to achieve the stated project goal of protecting the threatened structure, coastal-dependent use, or public beach. Other alternatives typically considered include: the "no project" alternative; abandonment of threatened structures or use areas; relocation of the threatened structures or use areas; sand replenishment programs; and combinations of each.

The County has prepared an Environmental Impact Report (EIR) prepared by AMEC Environment & Infrastructure Inc., dated March 2014, which considers a previously proposed managed retreat project at Goleta Beach County Park, as well as a range of alternatives including temporary revetment retention and pilot coastal protection projects with beach nourishment, a 35-year westward managed retreat program alternative, removal of the as-built revetment, and retention of the as-built revetment.

Natural Shoreline Management/Cobble Berm Alternative: This alternative would consist of (1) relocation of utilities and the bike path in the western end of the Park, and removal of Parking Lot 7; (2) removal of approximately 1,200 feet of rock revetment; (3) installation of a 2,050 ft. long cobble berm and a system of geotextile (i.e., large sand bags) core dunes to minimize potential for erosional and damage to shoreline recreational facilities and to buffer the shoreline from extreme effects of climatic cycles and shoreline oscillation; and (4) installation of a small Reflected Wave Energy Dissipater (RWED) inside the eastern cove of the headland at the west end of Goleta Beach to minimize wave reflection and downcoast erosion. Prior to manmade disruptions of natural cycles that deprived the littoral system of a portion of its cobble input; the Santa Barbara Littoral Cell likely had more cobble elements that served as natural energy dissipaters. The cobble berm is intended to use natural materials found within the littoral cell to help protect the park from erosion. On many naturally occurring beaches, such cobble sills or berms are largely buried by sand during the summer months. The proposed cobble berm and geotextile core dune system would be combined with managed retreat elements and opportunistic beach nourishment to provide an improved degree of natural shoreline management to slow or minimize damage to important park facilities. Rather than remain immutable and fixed in one location as with a revetment, a cobble berm would advance and retreat in response to natural coastal processes that have historically led to accretion of a wide sandy beach at the park or its gradual erosion. However, as the shoreline fluctuates under this alternative, repeated exposure of cobbles could result in the conversion of large areas of sandy beach to a cobble beach environment for potentially sustained periods of time. During such times, adverse impacts to public access and recreation from the loss of sandy beach would be potentially significant. In addition, cobble may not have been a natural part of this particular system at Goleta Beach.

Temporary Revetment Retention and Pilot Coastal Protection Projects with Beach Nourishment Alternative: This alternative would involve retention of the proposed as-built revetment for a period of 20 years, and installation of three types of "eco-friendly" experimental shoreline protection methods, including installation of a 250 ft. long buried cobble berm and geotextile core dunes, installation of a series of buried vertical plastic pipes known as Pressure Equalizing Modules (PEMs) intended to facilitate drainage of wave run-up on the beach, and the strategic planting of trees for sand retention (vegetative revetment). This alternative also includes a single beach nourishment event of 100,000 cu. yds. to supplement ongoing nourishment efforts by SBCFCD, and retention of Parking Lots 6 and 7, utilities, and the bike path at their existing locations. The revetment would continue to provide protection from erosion along the majority of the shoreline west of the Beachside Bar-Café during this 20-year period, with the other methods used in existing gaps in the revetment. The alternative would allow testing of the efficacy of these approaches over a decade of storm seasons while retaining protection of the park provided by existing revetments. After the 20-year test period, the rock revetment at the entire west end of Goleta Beach would be removed and replaced with the selected "eco-friendly" shoreline protection technique. Each of the experimental shoreline protection methods under this alternative may prove to have some degree of effectiveness in minimizing shoreline erosion, but may be overwhelmed by larger or repeated major storm events and may become less effective over time due to the effects of sea level rise and a potential shift to a persistent positive PDO. Further, when multiple shoreline protection methods are used in tandem, it is difficult to measure the effectiveness and impacts of any one method in isolation. What may be an effective method in one reach of the beach may not be effective on another reach of the beach given site specific forces and conditions.

Permeable Pier Sand Retention System Alternative: The County's 2008 Draft Environmental Impact Report (DEIR) prepared by Chambers Group assessed the impacts of a beach-stabilization/permeable pile groin project. This project was also previously proposed by the County for Commission consideration (CDP Application 4-08-006), however, as discussed previously, the project was denied by the Commission in 2009. The project involved an experimental permeable pile groin that was to be constructed along Goleta Pier that was intended to reduce the longshore sediment transport rate to help create and maintain a wider beach for shore protection and recreation. The project included an approximately 500-foot long, 20-foot wide permeable pier groin, seasonal installation of a winter sand berm of approximately 1,200-feet long and 3 to 5-feet high, removal of approximately 1,500 linear foot of rock revetment, repair of approximately 650 linear foot of rock revetment, and offshore dredging of approximately 500,000 cubic yards of sand to be used to nourish Goleta Beach. Commission staff had recommended approval of this previously proposed project subject to a number of special conditions. However, at the July 2009 Commission hearing, the Commission denied the project and directed the County to develop an alternative solution to manage erosion at the park, due to concerns over the project's potential impacts to sand supply on down-coast beaches. The previously proposed permeable pier sand retention system was an experimental concept - there is only anecdotal evidence of coastal piers performing that intended function, such as the Huntington Beach Pier that has retained sand around the existing pier, or at Oil Piers where the beach experienced significant erosion when the piers were removed as part of the lease decommissioning; however, it appears that there have been no other pier projects that have been designed and built with the specific purpose of sand retention. While this may remain a feasible alternative; it was previously rejected by the Commission due to concerns regarding the project's potential sand supply impacts to downcoast areas.

Offshore Breakwater/Reef: This alternative would involve construction of an approximately 600 ft. long offshore breakwater or underwater reef, parallel to the shoreline of Goleta Beach. The breakwater would be constructed of rock boulders, similar to the existing revetments, would be constructed at a water depth of approximately -15 ft. below mean low low water level and would rise approximately 5 – 10 ft. in height above the average water level. The footprint of the resulting ocean bottom footprint for the rock structure would be 80 ft. wide by 600 ft. long. The effect of the offshore breakwater/reef on shoreline sand supply and processes would likely be similar to the proposed project but would result in the direct occupation of a substantially larger area (48,000 sq. ft. or more than one acre) of the ocean floor and existing subtidal habitat area resulting in a significant permanent adverse impacts. In addition, this alternative would require offshore dredging in order to "pre-fill" the subject site with the approximately 500,000 cu. yds. of sand material for beach nourishment in order to create the design beach profile and prevent or minimize downcoast erosion due to changes in shoreline sand supply. Further, construction of an offshore breakwater/reef would function similar to the previously proposed permeable pier sand retention system in regards to widening the beach at the County park; however, it would also result in greater significant adverse impacts to marine habitat areas due to filling of tidepool, rocky subtidal, and kelp bed habitat by sand or rock and an estimated increase in the potential for artificial closures of the Goleta Slough Mouth. Thus, for these reasons, this alternative is not considered feasible as it would result in significant unavoidable adverse impacts to marine habitat areas.

Retention of As-Built Rock Revetment with Nourishment: This alternative would involve permanent retention of the subject as-built revetment with beach nourishment. The County estimates that approximately 60,000 cu. yds. of sand material per year would be necessary to prevent beach erosion. However, no guaranteed source of material has been identified. Existing programs such as BEACON (Beach Erosion Authority for Clean Oceans and Nourishment) and the County's own flood control creek dredging program can generate some beach material; however, neither of these programs have consistently generated 60,000 cu. yds. of source material on a yearly basis that the County could utilize for beach nourishment operations. Thus, successful implementation of a regular beach nourishment program for this alternative would likely require an off-shore dredging program to ensure an adequate sand supply for nourishment activities which may also result in potential adverse impacts to marine habitat areas.

Managed Retreat Program Alternative: A range of managed retreat alternatives have been evaluated in this case with the goal of enhancing the natural environment and shoreline processes while still protecting significant public recreational facilities, including full retreat beyond the expected range of wave attack, partial retreat with a new "backstop" revetment, and a managed retreat option without use of a rock revetment that would include a strategic reconfiguration of the facilities within the park to avoid or minimize the loss of any critical park uses such as parking facilities. In addition, the County analyzed a specific managed retreat program over the next 35 years that would include (1) westward managed retreat of developed portions of the park away from the environmentally sensitive mouth of Goleta Slough and historic sandspit; (2) restoration of natural coastal processes of the Goleta Slough mouth and the historic sandspit at Goleta Beach through demolition and removal of Parking Lot 1 at the park's east end, including removal of 900 feet of rock revetment and approximately 15,000 cu. yds. of artificial fill; (3) restoration of two acres of natural sandpit beach and environmentally sensitive coastal strand and mud flat habitats; and (4) protection of coastal-related and coastal-dependent recreation support

facilities (e.g., parking, restrooms) and utilities from shoreline oscillation, storm damage and wave run-up over the long term by retention of the 1,200 ft. long as-built revetment for up to 20 years or until a major winter storm season erodes the beach and exposes the majority of the rock revetment, which would include 4 feet of revetment width along more than 50 percent of the length of these revetments (600 feet), whichever occurs first, and, when required, relocation of the existing revetment up to approximately 40 feet landward to the seaward edge of the historic coastal process zone and construction of a buried revetment through the existing shoreline lawn area, extending from the Beachside Bar-Café for approximately 2,000 feet to the headland at the park's west end.

According to historic analyses and erosion modeling analyzed as part of the County's 2008 and 2014 EIR's, if the subject revetment is removed, a 100-year storm event (under existing sea level conditions) would create erosion that could potentially extend inland approximately 100 feet into the developed portion of the park. When accounting for sea level rise, the 100-year erosion event could erode about 104 to 148 feet of developed park by 2030, and 120 to 176 feet by 2050. Thus, projected erosion could extend significantly inland and threaten facilities, infrastructure, and utilities in much of the park. This forecasted beach erosion would likely reverse during calmer periods when sand would again accumulate; however, park facilities would remain vulnerable to coastal processes. This alternative would result in the loss of approximately 1.3 acres of existing upland area within the park which would effectively be converted to sandy beach environment. Although this would not result in a reduction of actual park area, it would result in the conversion of upland recreational area to sandy beach recreational area. Upland areas of the park that would be lost include portions of the grassy lawn area, picnic area, and parking lot areas. This option would require relocation of an existing restroom, portions of parking area, picnic facilities, underground utility lines/pipes/easements, and the removal of the existing on-site ranger/park staff housing. In addition, if increased narrowing of the beach due to sea level rise occurs, then this expanded beach area would most likely be lost due to inundation in the future as well. Some variations of this alternative for relocation/retreat could be accomplished with no loss of public parking spaces due to reconfiguration of the facilities. However, the County asserts that in order to maintain the current level of parking spaces at the park it would be necessary to construct a "backstop" revetment in a further landward location than the existing revetment.

This alternative would result in the removal of a significant portion of the upland areas of the park that currently provide important public access and coastal recreational opportunities. Moreover, due to the geographically constrained location of the park on a historic sand spit (which is fixed at its northern (inland most) boundary by State Route 217 and the Goleta Slough and the ocean to the south), opportunities for landward relocation or expansion of the inland boundary of the park are not possible. Thus, in this case, the managed retreat alternative would result in some areas of the park currently available to be utilized for public coastal dependent uses would be reduced in scope. The Commission finds that the developed upland areas of the park (including parking, picnic, and other recreational use areas) provides important public access/recreational amenities and support facilities that are in high demand and that are different than the public access/recreational benefits provided by the sandy beach area of the park itself. Therefore, this alternative would result in some unavoidable adverse effects to public coastal access and recreational opportunities.

Temporary/Conditional Retention of As-Built Rock Revetment with Managed Retreat: This alternative would involve retention of the subject as-built revetment in its existing configuration and buried condition for a limited term to provide protection from periodic wave-caused erosion to upland park areas and facilities and to maintain public access and recreational opportunities. When beach conditions change to such a degree that the width of the beach narrows and significant portions of the revetment become exposed frequently, managed retreat alternatives and removal of the revetment shall be evaluated to allow the beach to retreat and to minimize the potential for increased downcoast erosion and scour and impacts to public access along the shore.

This alternative will serve to protect all existing coastal dependent uses and structures on site for as long as erosional cycles are temporary and the beach is able to regularly recover seaward of the revetment. At such time that the revetment is no longer adequate for protection and is resulting in adverse impacts to shoreline processes and sand supply, the revetment would be removed and a managed retreat plan would be implemented. Such an alternative is the superior alternative that would serve to minimize impacts to coastal resources to the maximum extent feasible and would also satisfy the third test of Section 30235 of the Coastal Act.

d. Potential Effects to Shoreline Processes and Sand Supply

The fourth test of Section 30235 (previously cited) that must be met in order to require Commission approval is that shoreline protective structures must be designed to eliminate or mitigate adverse impacts to local shoreline sand supply.

The primary purpose of the proposed project is to reduce periodic wave-caused erosion and damage to upland park areas and maintain public access and recreational opportunities while also maintaining existing sediment supplies to all areas downcoast of the project site to ensure that the project does not result in any increased erosion or accretion of downcoast beaches.

Studies of the dynamics of sand beaches have led to the development of the general concepts of littoral cells and littoral transport. All coasts are divided into natural compartments called littoral cells. Each cell contains a complete cycle of sedimentation including sources, transport paths, and sinks. Sediment and sand material are commonly carried to the ocean by streams and rivers or deposited on the sandy beach as a result of bluff erosion. Fine suspended sand/sediment is both carried offshore in turbid plumes and deposited in deeper water and transported along the shore (either downcoast or upcoast) by waves and currents to nourish beaches. The presence of sand on any particular beach depends on the continued transport of sand within the littoral cell.

In the case of the project site, Goleta Beach is located within the Santa Barbara Littoral Cell, one of the longest littoral cells in Southern California (**Exhibit 8**). The Santa Barbara Littoral Cell extends from Point Conception to the Point Mugu Submarine Canyon. The wave shelter provided by the offshore Channel Islands results in an almost unidirectional movement of sand along the coast from west (upcoast) to east (downcoast) with only occasional short-term (i.e., a few hours) reversals due to pre-frontal wind-generated seas during winters storms.

Natural shoreline processes affecting the formation and retention of sandy beaches can be significantly altered by the construction of shoreline protective devices. If new shoreline protective devices, such as groins, interfere with sand transport, then downcoast beaches would

be expected to erode. In addition, bluff retreat and erosion is a natural process resulting from many different factors and an important source of new sand/sediment for the beach areas within a littoral cell. Shoreline armoring and other shoreline protective devices can impede the important natural process of bluff erosion causing a further reduction in the sand available for maintaining an adequate beach width. Some of the effects of engineered shoreline protective devices on the beach (such as scour, end effects, increased erosion or accretion patterns, and modification to the beach profile) are temporary or are difficult to distinguish from the other naturally occurring or ambient coastal process actions that also modify the shoreline. In regards to armoring devices (such as seawalls and revetments), many of their effects on local shoreline sand supply shoreline processes can be easily quantified, such as: (1) the loss of the beach area on which the structure is located; (2) the long-term loss of beach which will result when the back beach location is fixed on an eroding shoreline (also known as "passive erosion"); and (3) the amount of material which would have been supplied to the beach if the back beach or bluff were to erode naturally.

In past permit actions, the Commission has found that adverse impacts to shoreline processes from shoreline protective devices are greater the more frequently that they are subject to wave action. As such, in past permit actions, the Commission has required that all new development on a beach, including shoreline protection devices, be located as landward as possible in order to reduce adverse impacts to the sand supply and public access resulting from the development. In this case, the proposed as-built rock revetment is located immediately seaward of existing public parking lots and park facilities. Further landward relocation of the revetment would result in elimination of some public access and recreational facilities and would not significantly reduce impacts to shoreline processes or sand supply.

The County's submitted coastal process analyses for Goleta Beach have indicated that rather than continually retreating, the width of beach at Goleta Beach has been largely oscillatory in nature, being driven by cyclic climate phenomena and a moving "pulse" of erosion that migrates along the coast within the littoral cell. The County's consultants have indicated that a sand pulse was accumulating near Coal Oil Point and this influx of sand might reach Goleta Beach in the coming decade and result in the widening of the beach. However, such widening would be temporary in nature as the pulse would continue to migrate downcoast.

In addition, at its February 2015 hearing, the Commission approved Coastal Development Permit Application No. E-12-007 proposed by the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) to carry out a pilot project to evaluate an experimental method of promoting the natural recruitment of kelp and formation of a kelp bed in an area of soft substrate offshore of Goleta Beach. The project involves the installation of 212 small (4-inches square by 30-inches long) granite columns across three areas between approximately 800 to 3,000-feet offshore of Goleta Beach. The columns would be installed vertically with only the top several inches exposed above the substrate. Typically, kelp beds form in areas of rocky reef and hard substrate that provide consistent anchoring surfaces for kelp plants. However, the approved offshore project site is within a sandy area that historically supported a large kelp bed. BEACON believes that the recovery of this historic kelp bed will be facilitated by installing small stone anchoring surfaces in this area. BEACON anticipates that over time, giant kelp (*Macrocystis pyrifera*) will attach to and grow on the exposed portions of the granite columns, leading to the formation of a kelp bed that could then spread to adjoining areas of soft substrate. In addition to evaluating this method of restoring a kelp bed, BEACON is also interested in considering the

creation or restoration of kelp beds as a possible means of reducing sand erosion rates on nearby beach areas. If this pilot project is shown to successfully promote the formation of a sand-dwelling kelp bed, BEACON may consider a similar, more substantial effort in Goleta Bay in the future. This approved pilot project and potential similar future projects may affect future shoreline conditions at Goleta Beach if the establishment of the kelp bed is successful by reducing wave energy that reaches the shoreline and; thus, associated shoreline erosion.

Over the short-term, under ongoing negative Pacific Decadal Oscillation (PDO) conditions, it is anticipated that the revetment will continue to remain buried at most times and become exposed only after particularly heavy storm events. The relatively wide dry sandy beach at Goleta Beach may persist as long as erosion events remain fairly mild. Therefore, in the near-term, as long as the current trends continue, the buried revetment is not expected to result in significant adverse effects on coastal processes and sand supply. However, the beach will continue to be a dynamic environment with many variables that are difficult to predict at this time and it is expected that over time, the revetment would become exposed more frequently as a result of sea level rise. During potential extended erosional periods where beach width may not recover, the revetment would incrementally contribute to increased beach erosion and may also slow recovery. The revetment may cause passive erosion during these periods and deprive the beach of natural room to migrate landward during such cycles, limiting sand storage capacity, with incremental effects on downcoast beaches. Therefore, it is likely that at some point in the future, the continued need and method for coastal protection at Goleta Beach will need to be re-evaluated as part of an adaptive management strategy for the park in order to ensure that adverse impacts to the beach, downcoast areas, and public access are avoided or minimized.

Moreover, during a large El Niño generated storm season, large waves would be expected to result in substantial shoreline erosion at Goleta Beach. In addition, the beach would likely retreat due to frequent storms or when the site is subjected to convergence of frequent large and long-period waves from west Pacific storms, causing rapid erosion similar to that seen in past El Niño or other extreme events. In this situation, it is possible that the shoreline would be subject to severe and potentially rapid periods of erosion and the beach profile would not have time between successive storms to reach equilibrium resulting in more frequent exposure of the rock revetment.

Given all of the above factors and uncertainties in this case, the Commission finds it necessary to limit the duration of the development approved in this permit (**Special Condition One (1)**) to a period not to exceed twenty (20) years from the date of Commission action on this permit, after which time authorization for retention of the approved as-built revetment shall cease and the approved project and feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application. Special Condition 1 also requires that the applicant submit a Mid-term Assessment Report to the Executive Director ten (10) years from the date of Commission action that documents the results of the required Beach and Revetment Monitoring and Adaptive Management Plan (discussed below) and includes analysis and conclusions regarding the condition and effectiveness of the revetment, any changes in beach/shoreline profiles, any changes in the public's ability to safely access the beach, and details on any maintenance or adaptive management actions undertaken pursuant to the approved adaptive management plan during the year. Should this mid-term assessment report reveal any significant adverse resource or public access impacts not addressed in the Commission's authorization and/or the approved Beach and Revetment Monitoring and Adaptive Management Plan, the

Executive Director may require the submittal of a permit amendment or new coastal development permit for the review and approval by the Commission to re-evaluate the project, the permit term, feasible alternatives, and measures to address any identified adverse resource or public access impacts.

In addition, given the dynamic nature of the shoreline and the potential for the proposed rock revetment to result in increased adverse impacts to shoreline sand supply over time, **Special Condition Two (2)** is necessary, which requires the submission (for review and approval of the Executive Director prior to permit issuance) and implementation of a Beach and Revetment Monitoring and Adaptive Management Plan to provide for regular assessment/monitoring of the revetment/beach condition and to establish maintenance and adaptive management actions to maintain the desired revetment/beach condition and to prevent the revetment from becoming exposed to the maximum extent feasible. Below is a summary of the required components of the Beach and Revetment Monitoring and Adaptive Management Plan required in Special Condition 2. The components of this plan are necessary in order to ensure that the project will not result in any adverse impacts to downcoast areas.

Monitoring Actions

- Beach profile surveys at a minimum of 3 transects on a semi-annual basis, each spring and fall season, to monitor changes in beach profile.
- Revetment inspections on a monthly basis to detect and document exposure of the revetment rock and signs of erosion.

Maintenance Actions

- The rock revetment and/or sand cover may be maintained in its approved size, location, and configuration.
- If monthly revetment monitoring identifies that 200 linear feet or more of the approved revetment rock is exposed for 6 consecutive months, sand cover shall be placed on the exposed area (minor backpassing or opportunistic nourishment if approved in a separate CDP) and appropriately planted with native coastal strand vegetation to help stabilize the placed sand.
- If any rock or other debris from the revetment that has become dislodged through weathering, wave action, or settlement shall be removed from the beach or deposited on the revetment on an as-needed basis.
- A Project Notification Report shall be submitted prior to the commencement of any maintenance actions, for the review and approval of the Executive Director.

Annual and Mid-term Reporting

The applicant shall prepare and submit an annual monitoring report and a mid-term (10 year) assessment report, for the review and approval of the Executive Director, that includes all monitoring and maintenance data, all monthly monitoring forms, and a written report prepared by a qualified coastal engineer indicating the results of the monitoring program. The monitoring reports shall include analysis and conclusions regarding the condition and effectiveness of the revetment, any changes in beach/shoreline profiles, any changes in the public's ability to safely access the beach, and details on any maintenance or adaptive management actions undertaken pursuant to the approved adaptive management plan during the year(s).

Triggers for Re-evaluation of the Approved Revetment

- Should significant erosion and overtopping of the rock revetment occur in which 200 linear feet or more of the approved revetment is exposed for 24 months in total (consecutive or non-consecutive) from the date of permit issuance (despite good-faith attempts to maintain it in its approved configuration and maintain sand coverage), authorization for retention of the approved

rock revetment shall cease and the applicant shall submit a new coastal development permit application for re-evaluation of the approved shoreline protection plan for Goleta Beach County Park, including a complete evaluation of all feasible alternatives to the retention of the rock revetment in its approved as-built location. The evaluation of all feasible alternatives shall address, at a minimum, removal and/or relocation of the approved rock revetment and relocation of threatened park facilities and utilities to more landward locations outside of the expected wave-caused erosion zone (managed retreat). The new permit application shall be submitted within six months of reporting this trigger.

- Should the mid-term (10-year) assessment report reveal any significant adverse resource or public access impacts not addressed in the Commission's authorization and/or the approved Beach and Revetment Monitoring and Adaptive Management Plan, the Executive Director may require the submittal of a permit amendment or new coastal development permit for the review and approval by the Commission to re-evaluate the project, the permit term, feasible alternatives, and measures to address any identified adverse resource or public access impacts. The evaluation of all feasible alternatives shall address, at a minimum, removal and/or relocation of the approved rock revetment and relocation of threatened park facilities and utilities to more landward locations outside of the expected wave-caused erosion zone (managed retreat).

Public Access Maintenance and Management

- Safe pedestrian beach access shall be maintained across the approved revetment between the upland portion of the park and the sandy beach and shore.
- Should continuous portions of the rock revetment that are 200 feet or more in lineal extent become exposed through wave action or erosion, and it is no longer feasible or effective to cover those portions of the rock revetment with sand pursuant to the approved maintenance actions, designated beach accessways over the revetment (such as temporary steps or stairway) that are a minimum of 3 feet wide shall be constructed for every 100 feet of continuous revetment exposure.

The required monitoring actions of Special Condition 2 are necessary to provide frequent inspection of the condition/sand coverage of the revetment to determine when maintenance and adaptive management activities are necessary, and to monitor and analyze changes to the beach/shoreline profile over time in order to help guide adaptive actions that may be necessary in the future.

The proposed as-built revetment has been in place since 2002/2005 (except for a 250 ft. long segment that has been in place since the mid-1980's) and has remained largely buried near the back of the sandy beach, except during limited periods as a result of heavy storm or large wave events. In order to avoid and minimize the frequency that the rock revetment is subject to direct wave action during periods of erosion at the site, and thereby minimize adverse impacts to shoreline processes from the shoreline protective device, it is important that the County maintain the buried condition of the revetment to the extent feasible during the term of the permit in order to maintain and facilitate public access to the beach and minimize adverse visual impacts. As such, Special Condition 2 includes maintenance provisions and triggers for maintenance actions. The rock revetment and/or sand cover shall be maintained in its approved size, location, and configuration. If any rock or other debris from the revetment that has become dislodged through weathering, wave action, or settlement, it shall be removed from the beach or deposited on the revetment on an as-needed basis. If monthly revetment monitoring identifies that 200 linear feet or more of the approved revetment rock is exposed for 6 consecutive months, beach-compatible sand cover shall be placed on the exposed area through minor backpassing activities, or opportunistic beach nourishment (if approved in a separate CDP). In addition, native coastal

strand vegetation shall be planted to help stabilize the placed sand and maximize its retention on the revetment.

As indicated above and in Special Condition 2, should changed circumstances arise during this permit term and the approved as-built revetment is succumbing to significant erosion and overtopping in which 200 linear feet or more of the revetment is exposed for 24 months in total from the date of permit issuance (despite approved maintenance actions), the approved project and all feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application. This 200 linear foot threshold represents approximately twenty percent of the approximately 1,200 linear foot revetment, and the 24 month (non-consecutive months) duration represents ten percent of the 20 year permit term. Dr. Lesley Ewing, Commission Staff Coastal Engineer, determined that exposure of the revetment pursuant to this threshold is a reasonable indicator the exposed revetment would likely result in long term adverse impacts to shoreline sand supply and beach profile which would narrow or eliminate the sandy beach and adversely impact lateral public beach access. In addition, should the required mid-term (10 year) assessment report reveal unanticipated significant adverse resource or public access impacts and/or changed circumstances that are not addressed in the approved permit and adaptive management plan, the approved project and all feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application. Therefore, for the reasons discussed above, the Commission finds that **Special Conditions One (1) and Two (2)** must be required in order to ensure that the project will avoid, or minimize to the maximum extent feasible, any adverse impacts to the shoreline sand supply and lateral public access for the term of the permit and that the project will be re-evaluated by the County and the Coastal Commission in 20 years, or until the revetment triggers discussed above are reached, whichever occurs first.

The Environmental Defense Center (EDC) submitted a letter (dated February 19, 2015, and attached as part of **Exhibit 10**) on behalf of the Santa Barbara Chapter of the Surfrider Foundation, expressing concern regarding the County's proposed project to retain the as-built revetment. The letter states, in part, that the condition of the proposed as-built revetment is unsafe and unsightly and is causing significant adverse impacts to biological, visual, and recreational resources and public safety. The EDC asserts that the revetment has shifted and there are gaps in the revetment and exposed concrete debris with rebar and metal pipes exposed within the rock that is unsafe for the public and wildlife. Potential impacts of the proposed revetment are analyzed in the pertinent resource sections of this report, however, regarding the issue of public safety hazards in the area of the revetment Commission staff would note that Special Condition 2 requires the County to inspect the revetment on a monthly basis and remove and dispose of any debris or unsafe materials from the revetment in a timely manner upon identification. In addition, Special Condition 2 requires the County to ensure that any errant revetment rocks are removed from the beach or placed back on the revetment.

In addition, the proposed project will involve work within tidally influenced portions of the sandy beach and may also require approval from other state and federal agencies including, but not limited to, the United States Army Corps of Engineers and California State Lands Commission. Therefore, **Special Condition Seven (7)** requires the applicant obtain all other necessary State or Federal permits that may be necessary for all aspects of the proposed project.

The Commission further finds that the proposed development is located along the shoreline in Santa Barbara County. The Santa Barbara County coast has historically been subject to

substantial damage as the result of storm and flood occurrences. The subject site is clearly susceptible to flooding and/or wave damage from storm waves, storm surges and high tides. In recent years, particularly in 1999, 2002, 2005 and 2014, erosion of the clay-rich fill underlying the park has occurred due to wave action from winter storms. This erosion has previously formed steep undercut slopes approximately four to five feet in height between the improved areas onsite and the sandy beach. During some winter seasons, erosion has periodically washed out portions of the parking lots and threaten facilities at the park including restrooms, picnic tables, trees, lawn area, utility lines, and parking areas.

Although there is substantial evidence, as described above, that Goleta Beach is an oscillating sandy beach and the as-built revetment is required to be maintained and covered with sand, pursuant to Special Condition 2 of this permit, this beach is subject to a high degree of risk due to storm waves and surges, high surf conditions, erosion, and flooding. The subject site will continue to be subject to periodic risks posed by the hazards of oceanfront development in the future. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the applicant's right to use the subject property. Thus, in this case, the Commission finds that due to the possibility of tsunami, storm waves, surges, and erosion, the applicant shall assume these risks as conditions of approval. Because this risk of harm cannot be completely eliminated, the Commission requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development. Therefore, **Special Condition Five (5)** requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development.

Therefore, for reasons discussed above, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Sections 30235 and 30253.

E. PUBLIC ACCESS AND RECREATION

Coastal Act Section 30210 states that:

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

Coastal Act Section 30211 states:

> *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 sections 30210 and 30211 mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast.

Goleta Beach County Park is the largest and most developed coastal recreation and access point in the urban areas of the South Coast of Santa Barbara County west of the City of Santa Barbara. The park provides access to the longest easily accessible public beach in the Goleta Valley for beach going and coastal recreational activities such as swimming, kayaking, paddle boarding, boating and fishing. The Park also provides important developed park facilities in a unique coastal setting, including extensive lawn areas, individual and group barbeque sites and a children's playground. An improved bicycle path (which is part of a larger regional bicycle trail system) crosses the park from west to east. In addition, public access is available throughout all areas of the park, including on the existing 1,500 ft. long recreational pier and along the entire length of the sandy beach on site. Goleta Beach County Park is the most frequented of Santa Barbara County Parks, visited by approximately 1.5 million people annually. The park also provides substantial public coastal access parking adjacent to the beach (601 spaces) that is free to the public year-round.

In addition to the fact that the park provides significant, low-cost public access and recreation opportunities along the coast, the park represents a critical access point to some of the least developed and most scenic sections of shoreline in the urban region of the County's South Coast. Most of the developed coastal access and waterfront park facilities in the County's South Coast are located within the City of Santa Barbara's Waterfront located roughly eight miles east of Goleta Beach. There is only one other shoreline public beach park that exists in the Goleta Valley to serves this area's visitors and roughly 80,000 residents –Arroyo Burro Beach Park, which is located five miles to the east of Goleta Beach County Park. Although Goleta Valley's 12-mile-long reach of coast between Arroyo Burro Beach Park to the east and Bacara Resort and Spa to the west also provides many less developed public access points to the shore, these areas are less frequently used because they lack facilities, have limited parking, charge a fee for parking, serve local communities such as Isla Vista, or the beach can only be reached after an extended walk. As such, Goleta Beach County Park represents a regionally-significant public recreational resource on the Santa Barbara County coast.

The proposed project is intended to maintain existing public recreational activities along the coast by safeguarding the upland facilities of the park from significant erosion during periodic heavy storm and wave events. The park facilities and utilities are in danger of serious periodic damage or destruction due to wave attack and associated beach erosion. The problem of ongoing erosion at this beach has been previously established by the Commission in its previous approval of several coastal development permits since 1999 which have authorized various actions including construction of rock revetments, sand berms, and beach nourishment activities at Goleta Beach in response to previous wave caused erosive events. As discussed previously, Goleta Beach Park includes sandy beach areas that constitute a "public beach" and that the existing coastal access and recreational facilities located within the upland areas of the park (the non-sandy beach areas) clearly constitute structures and coastal-dependent uses that may be protected by shoreline protective devices pursuant to Section 30235 of the Coastal Act.

However, shoreline protective devices can affect public access by causing accelerated and increased erosion of adjacent beach areas. Further, if not sited landward in a location that insures that the revetment is only acted upon during severe storm events, beach scour during the winter season will be accelerated because there is less beach area to dissipate the wave energy. Revetments also interfere directly with public access by their occupation of beach area that will

not only be unavailable during high tide and severe storm events but also potentially throughout the winter season.

In past permit actions, the Commission has found that adverse impacts to shoreline processes from shoreline protective devices are greater the more frequently that they are subject to wave action. As such, the Commission has required in past permit actions that shoreline protection devices be located as far landward as possible in order to reduce adverse impacts to the sand supply and public access/recreation resulting from the development. In this case, the proposed as-built revetment has been sited as far landward as feasible in order to protect existing recreational development on a public beach.

The proposed as-built revetment has been in place since 2002/2005 (except for a 250 ft. long segment that has been in place since the mid-1980's) and has remained largely buried near the back of the sandy beach, except during limited periods as a result of heavy storm or large wave events. As discussed in Section IV.C of this staff report, given current coastal process trends and location of the revetment, it is anticipated that the revetment will continue to remain buried at most times in the short-term and become exposed only after particularly heavy storm events. Exposure of the revetment creates an impediment to pedestrian access to the beach from the upland areas of the park. The relatively wide dry sandy beach at Goleta Beach may persist as long as erosion events remain fairly mild. Therefore, as long as the current trends continue, it is anticipated that the buried revetment will have no adverse effects on coastal processes and sand supply in the near-term. However, the beach will continue to be a dynamic environment with many variables that are difficult to predict at this time and it is expected that over time, the revetment would become exposed more frequently as a result of sea level rise. During potential extended erosional periods where beach width may not recover, the revetment would incrementally contribute to beach erosion and may also slow recovery. The revetment may cause passive erosion during these periods and deprive the beach of natural room to migrate landward during such cycles, limiting sand storage capacity, with incremental effects on downcoast beaches and public access. Therefore, it is likely that at some point in the future coastal protection at Goleta Beach will need to be re-evaluated in order to ensure that adverse impacts to the beach, downcoast areas, and public access are avoided or minimized.

Moreover, although the existing revetment has remained largely buried under beach sand, it is expected too be periodically exposed due to large storm and wave events, resulting in an impediment to pedestrian access to the beach from the upland areas of the park. In order to avoid and minimize the frequency that the rock revetment is subject to direct wave action during periods of erosion at the site, and thereby minimize adverse impacts to public access, it is important that the County maintain the buried condition of the revetment to the extent feasible during the term of the permit. As such, **Special Condition Two (2)** is required, which includes maintenance provisions and triggers for maintenance actions. The rock revetment and/or sand cover shall be maintained in its approved size, location, and configuration. If any rock or other debris from the revetment that has become dislodged through weathering, wave action, or settlement, it shall be removed from the beach or deposited on the revetment on an as-needed basis. If monthly revetment monitoring identifies that 200 linear feet or more of the approved revetment rock is exposed for 6 consecutive months, beach-compatible sand cover shall be placed on the exposed area through minor backpassing activities, or opportunistic beach nourishment (if approved in a separate CDP). In addition, native coastal strand vegetation shall be planted to help stabilize the placed sand and maximize its retention on the revetment.

However, it is possible that the shoreline would be subject to severe and potentially rapid periods of erosion and the beach profile would not have time between successive storms to reach equilibrium, and the required maintenance actions identified above may not prove to be effective in assisting the beach's recovery. Moreover, it is expected that over time, the revetment would become exposed more frequently as a result of sea level rise which would result in potential increased shoreline erosion and impacts to public access and recreation. Thus, given all of the above factors and uncertainties in this case, the Commission finds it necessary to limit the duration of the development approved in this permit (**Special Condition One (1)**) to a period not to exceed twenty (20) years from the date of Commission action on this permit, after which time authorization for retention of the approved as-built revetment shall cease and the approved project and feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application. Special Condition 1 also requires that the applicant submit a Mid-term Assessment Report to the Executive Director ten (10) years from the date of Commission action that documents the results of the required Beach and Revetment Monitoring and Adaptive Management Plan (discussed below) and includes analysis and conclusions regarding the condition and effectiveness of the revetment, any changes in beach/shoreline profiles, any changes in the public's ability to safely access the beach, and details on any maintenance or adaptive management actions undertaken pursuant to the approved adaptive management plan during the year. Should this mid-term assessment report reveal any significant adverse resource or public access impacts not addressed in the Commission's authorization and/or the approved Beach and Revetment Monitoring and Adaptive Management Plan, the Executive Director may require the submittal of a permit amendment or new coastal development permit for the review and approval by the Commission to re-evaluate the project, the permit term, feasible alternatives, and measures to address any identified adverse resource or public access impacts.

In addition, **Special Condition Two (2)** is necessary, which requires the submission (for review and approval of the Executive Director prior to permit issuance) and implementation of a Beach and Revetment Monitoring and Adaptive Management Plan to provide for regular assessment of the revetment/beach condition and to establish maintenance and adaptive management actions to maintain the desired revetment/beach condition, to maintain public access, and to prevent the revetment from becoming exposed to the maximum extent feasible. One of the components of the plan required by Special Condition 2 is a requirement that safe pedestrian beach access be maintained across the approved revetment between the upland portion of the park and the sandy beach and shore for the duration of this permit. Should continuous portions of the rock revetment that are 200 feet or more in lineal extent become exposed through wave action or erosion, and it is no longer feasible or effective to cover those portions of the rock revetment with sand pursuant to the approved maintenance actions, Special Condition 2 requires construction of designated beach accessways over the revetment (such as temporary steps or stairway) that are a minimum of 3 feet wide for every 100 feet of continuous revetment exposure.

Further, given the above-mentioned factors and uncertainties in this case, Special Condition 2 provides that should changed circumstances arise during the permit term and the approved as-built revetment is succumbing to significant erosion and overtopping in which 200 linear feet or more of the revetment is exposed for 24 months in total from the date of permit issuance (despite approved maintenance actions), the approved project and all feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application. For the reasons discussed above, the Commission finds that **Special Conditions One (1) and Two (2)** must be required in

order to ensure that the project will avoid, or minimize to the maximum extent feasible, any adverse impacts to public access and shoreline sand supply for the term of the permit and that the project will be re-evaluated by the County and the Coastal Commission in 20 years, or until the revetment triggers are reached, whichever occurs first.

However, the project may also result in potential temporary adverse effects to public access resulting from the closure of portions of the beach to public use during maintenance and construction activities. In order to ensure that construction-related impacts to public access and recreation are minimized to the maximum extent feasible as required by Coastal Act Section 30210, **Special Condition Four (4)** requires safe public beach access be maintained during all approved project operations. Where use of public parking spaces is unavoidable, the minimum number of public parking spaces that are required for the staging of equipment, machinery and employee parking shall be used. At each site, the number of public parking spaces utilized shall be the minimum necessary to implement the required maintenance activities. The applicant shall also post a notice indicating the expected dates of construction and/or public access or parking lot closures. Further, Special Condition 3 requires the County to continue to provide free (no charge) public access and vehicle parking at Goleta Beach County Park for the term of this permit in order to mitigate for potential impacts to public access that may result as a result of the project.

In conclusion, with special conditions addressing adverse impacts to public access and recreation, impacts to public access and recreation will be minimized to the greatest extent feasible. Thus, as conditioned, the Commission finds the project consistent with Sections 30210 and 30211 of the Coastal Act.

F. MARINE RESOURCES AND ENVIRONMENTALLY SENSITIVE HABITAT

Section 30230 of the Coastal Act states:

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

Section 30231 of the Coastal Act states that:

> *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.*

Section 30240 of the Coastal Acts states:

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

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

Section 30107.5 of the Coastal Act, defines an environmentally sensitive area as:

"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Section 30231 requires that the biological productivity and quality of coastal waters be maintained. Section 30230 requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific, and educational purposes. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas shall be protected and that development within or adjacent to such areas must be designed to prevent impacts which could degrade those resources.

The majority of land within Goleta Beach County Park has been previously developed and is subject to significant daily human disturbance and activities from park visitors. As a result, natural habitat for native plants and animals is limited. Nonetheless, adjacent open areas (i.e., Pacific Ocean, Goleta Slough and its associated creeks, wetlands, and some areas of the sandy beach) contain important biological resources and provide habitat for several important plant and animal species (**Exhibit 7**).

Goleta Beach County Park is located adjacent to the Goleta Slough and its associated coastal salt marsh is designated environmentally sensitive habitat. The slough is the drainage basin for five creeks that originate on the southern slopes of the nearby Santa Ynez Mountains: Atascadero Creek, San Jose Creek, San Pedro Creek, Carneros Creek, and Tecolotito Creek. Historically, Goleta Slough was a relatively deep water lagoon environment. Since the 1850's, progressive sedimentation from these five creeks have transformed the Goleta Slough from a deep water wetland habitat to a shallow coastal salt marsh crossed by numerous tidal channels. The Goleta Slough provides perennial and seasonal habitat for several endangered and sensitive wildlife species including Belding's savannah sparrow, steelhead trout, white-tailed kite, light-footed clapper rail, western snowy plover, great blue heron, great egret, and at least 26 other bird species. The Belding's savannah sparrow is a state endangered species. According to the Goleta Beach County Park Environmental Carrying Capacity Study and Management Plan, savannah sparrows are permanent residents in the Goleta Slough wetlands and occasionally use outlying areas. In the case of the proposed project, no development is proposed within the slough or adjacent to any wetland areas.

There is also existing coastal strand vegetation and wrack on the sandy beach within the project area that both constitute important habitat for several species of coastal flora and fauna. Coastal strand habitat has been identified along the backbeach of the subject site (in the narrow transition zone between the upland areas of the park and the sandy beach). Coastal strand is a band of habitat that occurs on the upper beach above the swash zone. It is comprised of plant species that are adapted to harsh sandy beach conditions and is the zone of early successional dune vegetation that merges with southern foredune habitat. Coastal strand habitat may support the silvery legless lizard (*Anniella pulchra pulchra)* and the globose dune beetle (*Coelus globosus*), both California species of special concern, and a number of plants including beach saltbush (*Atriplex leucophylla),* sand verbena (*Abronia umbellata),* beach bur (*Ambrosia chamissonis),* and non-native and non-invasive sea rocket (*Cakile maritime),* all of which also occur in southern foredune habitat. According to site-specific surveys at Goleta Beach, limited patches of coastal strand vegetation occur in the project area. However, the vegetation is highly degraded and lacks substantial characteristic vegetative cover. A portion of the coastal strand supports a single localized patch of red sand verbena (*Abronia umbellata)* which was observed during site surveys. Other coastal strand and southern foredune species which are present in limited coverage in the area of the project site include beachbur (*Ambrosia chamissonis*), sea rocket (*Cakile maritime*), and beach saltbush (*Atriplex leucophylla*). Some saltgrass (*Distichlis spicata*) is also present along the seaward edge of the grassy lawn.

Due to the ongoing and frequent high levels of disturbance associated with heavy recreational use of this area and the periods of significant erosion that has occurred on the beach, prior to installation of the proposed as-built rock revetment there was a lack of intact coastal strand/southern foredune vegetation on the project site. Given the historical and current high level of disturbance due to public park use and the fragmented nature and limited extent of coastal strand vegetation in the area of the proposed project, the project site does not meet the Coastal Act definition of an Environmentally Sensitive Habitat Area (ESHA). With substantial burial of the rock revetment with sand over time along the back beach some coastal strand and southern foredune vegetation has re-established in the area of the rock revetment, which will not be disturbed with proposed retention of the as-built revetment. Although the coastal strand/southern foredune vegetation on site does not constitute ESHA, this vegetation still constitutes an area of special biological significance within the marine and beach environment. Section 30230 of the Coastal Act specifically requires that protection shall be given to areas of special biological significance.

If increased erosion of the beach area occurs, the existing coastal strand and southern foredune vegetation in the project area and downcoast areas could potentially be adversely impacted. As discussed in greater detail in the preceding sections of this report, given the landward location of the rock revetment and the oscillating nature of sand supply at this beach, it is anticipated that the project will have no adverse effects on coastal processes and sand supply in the near-term. However, the beach will continue to be a dynamic environment with many variables that are difficult to predict at this time. Changes in beach width and profile are driven primarily by natural erosional forces associated with climatic cycles and increasingly by sea level rise. During potential extended erosional periods where beach width may not recover, the revetment would incrementally contribute to beach erosion and may also slow recovery. The revetment may cause passive erosion during these periods and deprive the beach of natural room to migrate landward during such cycles, limiting sand storage capacity, with incremental effects on downcoast beaches. For these reasons, **Special Condition Two (2)** is necessary, which requires the

submission (for review and approval of the Executive Director prior to permit issuance) and implementation of a Beach and Revetment Monitoring and Adaptive Management Plan to provide for regular assessment of the revetment/beach condition and to establish maintenance actions to maintain the desired revetment/beach condition and to prevent the revetment from becoming exposed to the maximum extent feasible. The rock revetment and/or sand cover shall be maintained in its approved size, location, and configuration. If any rock or other debris from the revetment that has become dislodged through weathering, wave action, or settlement, it shall be removed from the beach or deposited on the revetment on an as-needed basis. If monthly revetment monitoring identifies that 200 linear feet or more of the approved revetment rock is exposed for 6 consecutive months, beach-compatible sand cover shall be placed on the exposed area through minor backpassing activities, or opportunistic beach nourishment (if approved in a separate CDP). In addition, native coastal strand/southern foredune vegetation shall be planted to help stabilize the placed sand and maximize its retention on the revetment. Thus, as conditioned, the project would serve to minimize the potential for adverse effects to the coastal strand and southern foredune vegetation located on, or downcoast of, the project site.

Although the proposed development is not located within any environmentally sensitive habitat areas (ESHA), several sensitive species (including, but not limited to, western snowy plover, Beldings' savannah sparrow, California grunion, and globose dune beetle) may potentially be located, at times, within or near the project area and could be adversely impacted from approved revetment maintenance activities. Therefore, part D of **Special Condition Two (2)** requires that if maintenance actions are required during the nesting or breeding seasons of any potential sensitive species in the project area (including but not limited to western snowy plover) or during the seasonally predicted run period and egg incubation period, as identified by the California Department of Fish and Game, the applicant shall retain the services of a qualified biologist or environmental resources specialist to conduct sensitive species surveys prior to any maintenance activities. The environmental resource specialist is required to conduct a survey of the project site to determine presence and behavior of sensitive species one day prior to commencement of any maintenance activities and immediately report the results of the survey to the applicant and the Commission. In the event that the environmental resources specialist reports finding any sensitive species within 500 ft. of the required maintenance activities, the applicant shall postpone commencement of work. If the environmental resources specialist determines that any grunion spawning activity is occurring and/or that grunion are present in or adjacent to the project site, then no maintenance activities shall occur on, or adjacent to, the area of the beach where grunion have been observed to spawn until the next predicted run in which no grunion are observed. Required maintenance activities may resume only if adverse effects to the protected sensitive species can be avoided.

In addition, **Special Condition Two (2)** requires that maintenance actions avoid adverse impacts to protected sensitive species and minimize disturbance to beach wrack and coastal strand and southern foredune vegetation to the maximum extent feasible. Wrack, the tangles of kelp, algae, and sea grass that wash up onto beaches and settle in large clumps along the tide line and that occurs further up the beach as it dries, forms a unique habitat of particular importance for marine and terrestrial plants, invertebrates, and birds that occur within the transition zone between the ocean and land. A diverse macrofauna, including amphipods, isopods, and insects are found in wrack. According to one study at Southern California beaches, wrack associated macrofauna

made up an average of greater than 37% of species on ungroomed beaches and comprised 25% or more of the total abundance on half of those beaches[1]. The presence and amount of wrack on beaches is, therefore, directly correlated with the abundance and diversity of crustaceans and insects at beaches. The same study also showed reduced presence of western snowy plover and black-bellied plover at beaches in Ventura and Santa Barbara counties where wrack used to be removed regularly as part of beach grooming activities. The presence of wrack on beaches has also been proven to reduce wind driven sand transport at beaches by more than 90%[2].

Since the required revetment maintenance activities may at times involve minor backpassing of sand material on the beach in order to cover an exposed portion of the revetment, there may be some unavoidable disturbance to beach wrack. Although beach grooming is not a component of the proposed project, the County is currently conducting beach grooming activities at Goleta Beach that is limited to areas above the high high water line and limited to only three times per year preceding popular summer season holiday weekends. In order to minimize the use of mechanical equipment on the beach and disturbance to beach wrack, Special Condition 2 also requires that any planned minor sand backpassing activities to maintain sand coverage on the revetment shall be coordinated to coincide with the County's routine beach grooming activities where feasible. Recognizing the important role of wrack in healthy beach ecosystems and to mitigate for any unavoidable disturbance to wrack that may occur from maintenance of the approved revetment, it is important that mechanized beach grooming activities be limited to the dry sand area only above the high high water line and to no more than three (3) times per calendar year - once immediately before Labor Day, Fourth of July, and Memorial Day, as reflected in **Special Condition Three (3)**. Wrack shall not be removed during grooming or backpassing activities with the exception that debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed as needed.

In addition, in order to avoid any unintentional introduction of debris or other chemicals into the beach and marine environment as a result of required maintenance activities, part D of **Special Condition Two (2)** requires that maintenance actions be implemented in compliance with construction Best Management Practices and completed in a timely manner. No machinery or mechanized equipment shall be allowed at any time within the active surf zone, except for that necessary to remove any errant rocks from the beach seaward of the revetment. All maintenance materials and equipment shall be removed in their entirety from the beach area by sunset each day that work occurs. Any and all debris resulting from maintenance activities shall be appropriately removed from the project site within 24 hours. Equipment shall not be cleaned on the beach or in the adjacent beach parking areas. Any unsafe debris or other materials that may become exposed on the revetment or the beach in the area of the revetment shall be removed and exported to an appropriate offsite disposal area in order to protect public health and safety and coastal resources.

---

[1] Dugan, Jenifer E., et. Al. The Response of Macrofauna Communities and Shorebirds to Macrophyte Wrack Subsidies on Exposed Sandy Beaches of Southern California. Estuarine, Coastal and Shelf Science 58S pp. 133-148. 2003

[2] Dugan, Jenifer E. and David M. Hubbard. Effects of Beach Grooming on Coastal Strand and Dune Habitats at San Buenaventura State Beach. Draft Final Report to California Resources Agency, Department of Parks and Recreation, Channel Coast District. Jan. 4, 2003.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30230, 30231, and 30240 of the Coastal Act.

G. VISUAL RESOURCES

Section 30251 of the Coastal Act states that:

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

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

In this case, the proposed as-built rock revetment has remained largely buried under beach sand, but can periodically become exposed as a result of large storm and wave events, which can on occasion, adversely affect public views of the beach/ocean and recreational access to the beach. It is anticipated that the revetment may continue to remain buried at most times and become exposed only after particularly heavy storm events. The relatively wide dry sandy beach at Goleta Beach may persist as long as erosion events remain fairly mild. However, the beach will continue to be a dynamic environment with many variables that are difficult to predict at this time and it is expected that over time, the revetment would become exposed more frequently as a result of sea level rise. During potential extended erosional periods where beach width may not recover, the revetment would incrementally contribute to beach erosion and may also slow recovery. The revetment may cause passive erosion during these periods and deprive the beach of natural room to migrate landward during such cycles, limiting sand storage capacity, with incremental effects on downcoast beaches. Therefore, it is likely that at some point in the future coastal protection at Goleta Beach will need to be re-evaluated in order to ensure that adverse impacts to the beach, downcoast areas, public views, and public access are avoided or minimized.

In addition, during a large El Niño generated storm season, large waves may cause substantial shoreline erosion at Goleta Beach. Further, the beach would be expected to retreat due to frequent storms or when the site is subjected to convergence of frequent large and long-period waves from west Pacific storms, causing rapid erosion similar to that seen in past El Niño or other extreme events. In this situation, it is possible that the shoreline would be subject to severe and potentially rapid periods of erosion and the beach profile would not have time between successive storms to reach equilibrium. Given all of the above factors and uncertainties in this case, the Commission finds it necessary to limit the duration of the development approved in this permit (**Special Condition One (1)**) to a period not to exceed twenty (20) years from the date of Commission action on this permit, after which time authorization for retention of the approved

as-built revetment shall cease and the approved project and feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application. Special Condition 1 also requires that the applicant submit a Mid-term Assessment Report to the Executive Director ten (10) years from the date of Commission action that documents the results of the required Beach and Revetment Monitoring and Adaptive Management Plan (discussed below) and includes analysis and conclusions regarding the condition and effectiveness of the revetment, any changes in beach/shoreline profiles, any changes in the public's ability to safely access the beach, and details on any maintenance or adaptive management actions undertaken pursuant to the approved adaptive management plan during the year. Should this mid-term assessment report reveal any significant adverse resource or public access impacts not addressed in the Commission's authorization and/or the approved Beach and Revetment Monitoring and Adaptive Management Plan, the Executive Director may require the submittal of a permit amendment or new coastal development permit for the review and approval by the Commission to re-evaluate the project, the permit term, feasible alternatives, and measures to address any identified adverse resource or public access impacts.

In addition, **Special Condition Two (2)** is necessary, which requires the submission (for review and approval of the Executive Director prior to permit issuance) and implementation of a Beach and Revetment Monitoring and Adaptive Management Plan to provide for regular assessment/monitoring of the revetment/beach condition and to establish maintenance and adaptive management actions to maintain the desired revetment/beach condition and to prevent the revetment from becoming exposed to the maximum extent feasible. The rock revetment and/or sand cover shall be maintained in its approved size, location, and configuration. If any rock or other debris from the revetment that has become dislodged through weathering, wave action, or settlement, it shall be removed from the beach or deposited on the revetment on an as-needed basis. If monthly revetment monitoring identifies that 200 linear feet or more of the approved revetment rock is exposed for 6 consecutive months, beach-compatible sand cover shall be placed on the exposed area through minor backpassing activities, or opportunistic beach nourishment (if approved in a separate CDP). In addition, native coastal strand vegetation shall be planted to help stabilize the placed sand and maximize its retention on the revetment.

Further, Special Condition 2 reflects that should changed circumstances arise during this permit term and the approved as-built revetment is succumbing to significant erosion and overtopping in which 200 linear feet or more of the revetment is exposed for 24 months in total from the date of permit issuance (despite approved maintenance actions), and the approved project and all feasible alternatives shall be re-evaluated pursuant to a new coastal development permit application.

Therefore, as conditioned, the proposed project will not block any public views of the ocean from any location on site or result in any significant adverse impacts to visual resources. Thus, for the reasons discussed above, the Commission finds that the project, as conditioned, is consistent with 30251 of the Coastal Act.

H. UNPERMITTED DEVELOPMENT

Unpermitted development has occurred within the project area prior to submission of this permit application. Approximately 250 linear ft. of the proposed as-built 1,200 linear ft. rock revetment was installed in the 1980's without the required coastal permit, and the remainder 950 linear ft.

portion of the 1,200 ft. long revetment was constructed between 2002 – 2005 pursuant to the Commission's approval of CDP 4-02-251 (as amended twice), which authorized that portion of the revetment on a temporary basis only until January 2008. Staff is recommending the Commission approve this application, with conditions, for the reasons discussed in full in the preceding sections of this report. Thus, the proposed project, if approved per the staff recommendation, will address going forward the above described violations located within the project area.

Staff is recommending the Commission approve this application for the reasons discussed in full in the preceding sections of this report. To ensure that the unpermitted development component of this application is resolved in a timely manner, **Special Condition Eight (8)** requires that the applicant satisfy all conditions of this permit which are prerequisite to the issuance of this permit within 6 months of Commission action. The Executive Director may grant additional time for good cause.

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

I. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that 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. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the proposed development, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. Feasible mitigation measures, which will minimize all adverse environmental effects, have been required as special conditions. The following special conditions are required to assure the project's consistency with Section 13096 of the California Code of Regulations:

Special Conditions 1 through 8

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

APPENDIX 1

Substantive File Documents

Final Environmental Impact Report for Goleta Beach County Park Managed Retreat Project 2.0 by AMEC Environment & Infrastructure Inc., dated March 2014; Final Draft Report and Addendum Shoreline Morphology Study for Goleta Beach County Park Long-Term Plan by Moffatt & Nichol dated 7/8/08; Draft Environmental Impact Report for Goleta Beach County Park Long-Term Protection Plan by Chambers Group dated March 2007; Coastal Development Permit (CDP) Application No. 4-08-006; CDPs 4-02-251-G, 4-02-251, 4-02-251-A1, & 4-02-251-A2 (Santa Barbara County Parks Dept.); CDP 4-05-005-G (Santa Barbara County Parks Dept.); CDPs 4-00-193, 4-01-136, 4-02-223 (Santa Barbara County Parks Dept.); CDP 4-02-128 (Santa Barbara County Parks Dept.); CDPs 4-02-074 and 4-02-054 (Beach Erosion Authority for Clean Oceans and Nourishment, BEACON); CDPs 4-10-118-G, 4-11-015-G (Santa Barbara Flood Control); and CDPs 4-11-069, 4-09-068, 4-05-139, 4-00-206, and 4-93-205 (Santa Barbara Flood Control).

amec

Project Location

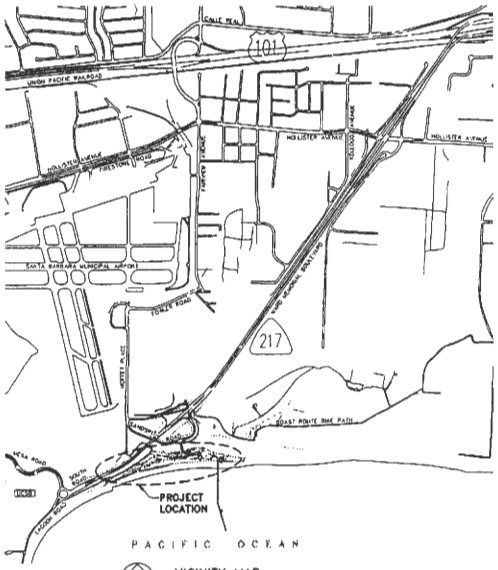
FIGURE 1-1

Exhibit 1. Location Map

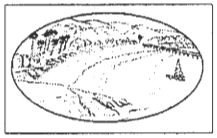
GOLETA BEACH

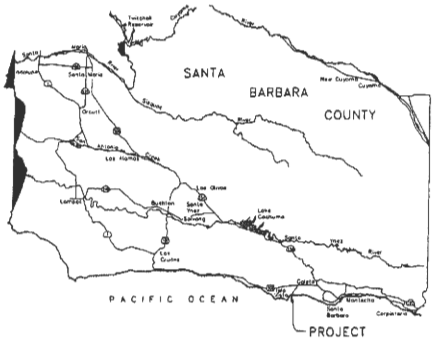
COUNTY OF SANTA BARBARA

APN 071-200-009,017

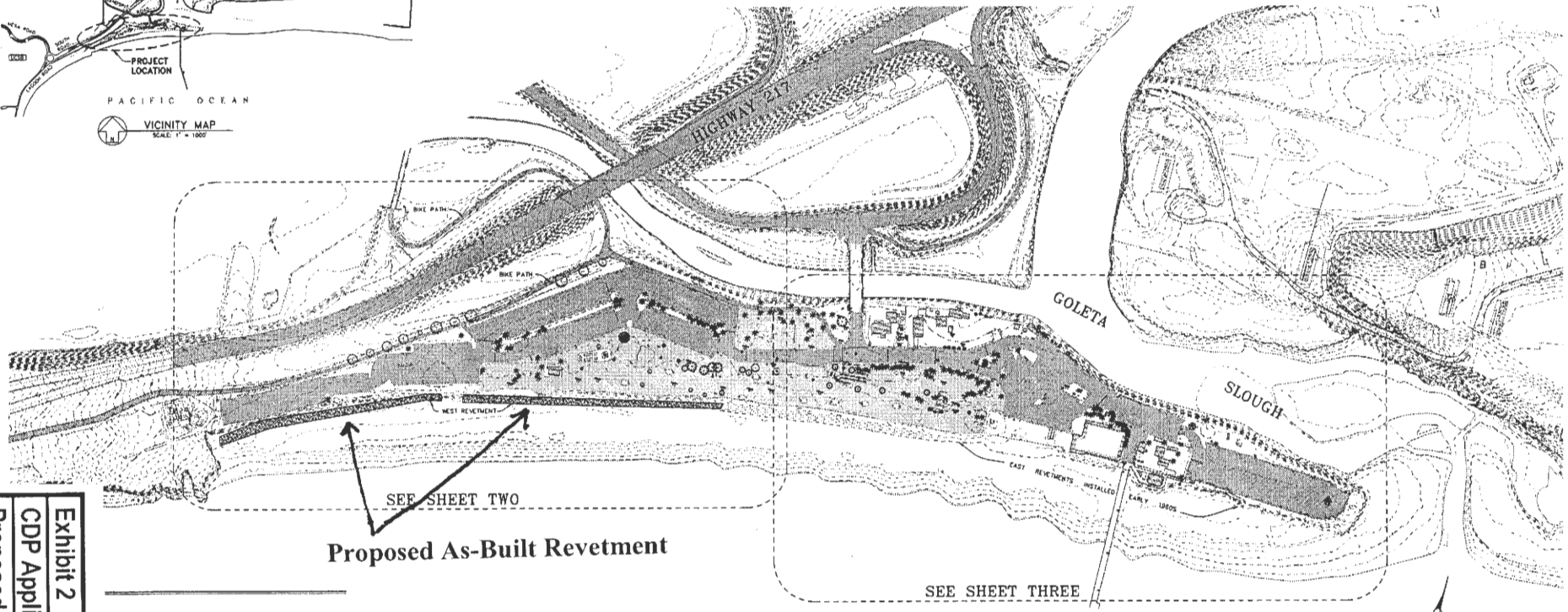


VICINITY MAP
SCALE: 1" = 1000'





LOCATION MAP
SCALE: N.T.S.



Proposed As-Built Revetment

SHOWN HEREON ARE BASED ON RECEIVED AERIAL MAPPING COMPILED BY FROM AERIAL PHOTOGRAPHY DATED DECEMBER 04, 2007, PREPARED FOR THE CONTROL DEPARTMENT.

TES

FERENCED TO THE CALIFORNIA COORDINATE SYSTEM, NAD 83, ZONE 5 GRID TIES TO THE SANTA BARBARA AIRPORT SURVEY CONTROL NETWORK AS DEFINED FILED WITH THE COUNTY SURVEYOR IN BOOK 170, PAGES 63-65 INCLUSIVE OF

ED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988, DEFINED AIRPORT SURVEY CONTROL NETWORK.

PROFESSIONAL LAND SURVEYOR — MARK A. CASTELLON — NO. 5368 — STATE OF CALIFORNIA

PROFESSIONAL CIVIL ENGINEER — CHRISTOPHER A. FLANDERS — NO 42525 — CIVIL — STATE OF CALIFORNIA

SCALE: 1"=100'
0 100 200 300

NO.	DATE	REVISIONS	APPD.

Penfield & Smith
Engineering · Surveying · Planning
· Construction Management ·
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-1001

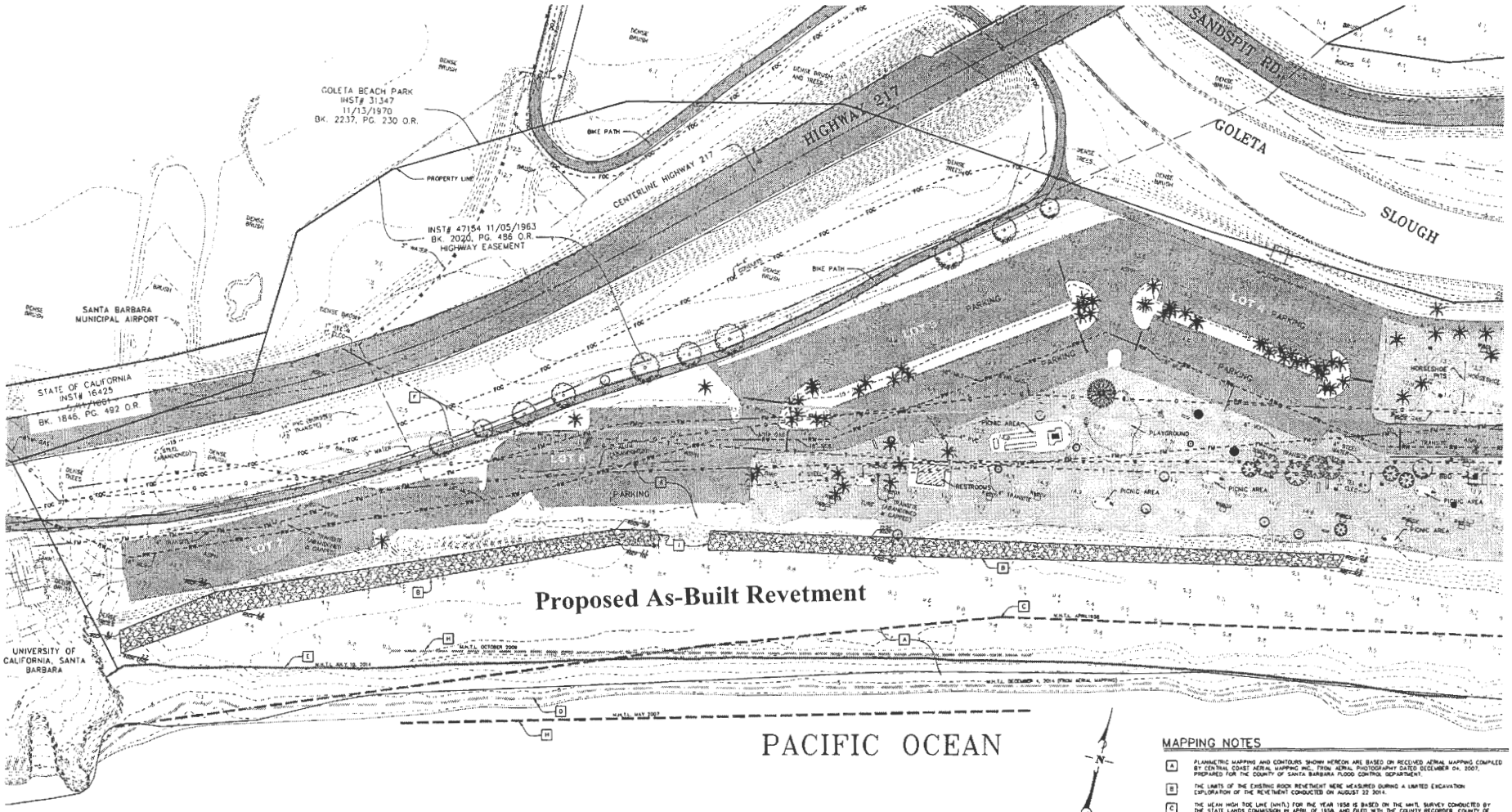
FIELD CREW: NAC & JWG
SURVEY COMPLETED: SEE NOTES
OFFICE TECH: NAC
COMPILATION COMPLETED: 2014-11-04

CDP EXHIBIT MAP
GOLETA BEACH WEST REVETMENT
COUNTY OF SANTA BARBARA, CALIFORNIA
DECEMBER 2014

WORK ORDER: 19514.09
SHEET: 1 of 3
DWG: 19514EX01.DWG

Exhibit 2
CDP Application 4-14-0687
Proposed As-Built Revetment Site Plan

Exhibit 2. Proposed As-built Revetment Site Plan



MAPPING LEGEND

ABBREVIATIONS		LINETYPES	
ALUM	ALUMINUM		EDGE OF PAVEMENT
ASPH	ASPHALT CONCRETE		M.H.T.L. APRIL 1858
ELEC	ELECTRICAL		M.H.T.L. DECEMBER 04, 2007 (FROM AERIAL MAPPING)
HP	HIGH PRESSURE		M.H.T.L. JULY 7, 2014
MHTL	MEAN HIGH TIDE LINE		M.H.T.L. MAY 2007 (FROM USGS DATA)
MLS	MORTAR LINED STEEL		M.H.T.L. OCTOBER 2008 (FROM USGS DATA)
PVC	POLYVINYL CHLORIDE		WAVE UPRUSH LIMIT
SD	STORM DRAIN		AERIAL CONTOUR MINOR
TEL	TELECOMMUNICATIONS		AERIAL CONTOUR MAJOR
VCP	VITRIFIED CLAY PIPE		ELECTRIC
			FIBER OPTIC CABLE
			FORCE MAIN
			NATURAL GAS
			RECLAIMED WATER
			SANITARY SEWER
			TELECOMMUNICATIONS
			WATER
			OVERHEAD WIRE

SYMBOLS	
	SEWER CLEANOUT
	SEWER MANHOLE
	STORM DRAIN MANHOLE
	IRRIGATION PULL BOX
	RECLAIMED WATER VALVE
	RECLAIMED WATER PULL BOX
	WATER PULL BOX OR METER
	UTILITY POLE
	PEPPER
	CYPRESS
	PINE
	PALM

HATCHING

- LAWN AREA
- ASPHALT AREA

BENCHMARK NOTES

ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988, FOR THE JULY, 2014 SURVEY. A LOCAL BENCHMARK WAS ESTABLISHED FROM A 90 MINUTE STATIC GNSS TIE TO AIRPORT SURVEY CONTROL NETWORK STATION 3 (ASCN 3), AND CONTINUOUS OPERATING REFERENCE STATION (CORS) "CDPR". BOTH PUBLISHED ELEVATIONS WERE CONSTRAINED IN A LEAST SQUARES ADJUSTMENT UTILIZING GEOID MODEL GEOID12B(0). CONSTRAINED ELEVATIONS HELD WERE:

ASCN 3 = 10.40 US SURVEY FEET PER RECORD OF SURVEY FILED IN BOOK, 170, PAGES 63-65 OF MAPS, COUNTY OF SANTA BARBARA.

CDPR = 45.35 US SURVEY FEET AT GEODETIC REFERENCE MARK PER CALIFORNIA SPATIAL REFERENCE CENTER SECOND ORDER, CLASS II LEVEL PROJECT CONDUCTED IN AUGUST 2001.

0.00 NAVD = -0.10 MLLW ±

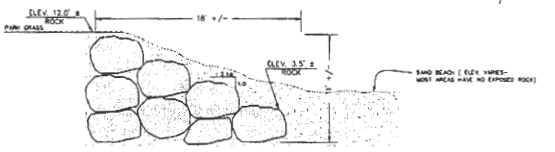
MEAN HIGH TIDE LINE NOTES

FIVE MEAN HIGH TIDE LINES (MHTL'S) HAVE BEEN PLOTTED, USING DATA RANGING FROM 1858 TO 2014, OBTAINED AT VARIOUS TIMES OF THE YEAR. IT SHOULD BE NOTED THAT OVER A SPAN OF NEARLY 40 YEARS AND MANY WEATHER PATTERNS, THE MHTL VARIES HORIZONTALLY BY ON THE ORDER OF 100 FEET.

UTILITY NOTE

SURFACE UTILITY FEATURES SHOWN HEREON WERE LOCATED AS A PART OF THE FIELD SURVEY PERFORMED BY PENFIELD & SMITH BASED ON VISIBILITY ON THE DATE OF SURVEY.

THE SUBSURFACE UTILITIES SHOWN HEREON HAVE BEEN COMPILED FROM RECORD INFORMATION GATHERED FROM VARIOUS PUBLIC AND PRIVATE UTILITY PROVIDERS. IN CONJUNCTION WITH FIELD LOCATED SURFACE UTILITIES. THE SUBSURFACE INFORMATION, INCLUDING LOCATION, SIZES, AND CAPACITIES IS AN ESTIMATION BASED ON AVAILABLE DATA MAY NOT REPRESENT ACTUAL FIELD CONDITIONS. PENFIELD & SMITH DOES NOT WARRANT THE ACCURACY OF COMPLETENESS OF SAID RECORD INFORMATION.



DETAIL G
SCALE: NONE

APPROXIMATE AREA OF REVETMENT: 21,450 SQUARE FEET OR 0.49 ACRES
APPROXIMATE VOLUME OF REVETMENT: 4370 CUBIC YARDS

SCALE: 1"=40'
0 40 80 120

MAPPING NOTES

A. PLANIMETRIC MAPPING AND CONTOURS SHOWN HEREON ARE BASED ON RECEIVED AERIAL MAPPING COMPILED BY CENTRAL COAST AERIAL MAPPING INC., FROM AERIAL PHOTOGRAPHY DATED DECEMBER 04, 2007, PREPARED FOR THE COUNTY OF SANTA BARBARA FLOOD CONTROL DEPARTMENT.

B. THE LIMITS OF THE EXISTING ROCK REVETMENT WERE MEASURED DURING A LIMITED EXCAVATION EXPLORATION OF THE REVETMENT CONDUCTED ON AUGUST 22 2014.

C. THE MEAN HIGH TIDE LINE (MHTL) FOR THE YEAR 1858 IS BASED ON THE MHTL SURVEY CONDUCTED BY THE STATE LANDS COMMISSION IN APRIL OF 1858, AND FILED WITH THE COUNTY RECORDER, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, IN BOOK 31, PAGES 52-72 OF MAPS. THE MHTL ELEVATION FOR THIS SURVEY WAS 3.02 FEET (NGVD 29) WHICH APPROXIMATELY EQUATES TO 4.8 FEET NAVD88.

D. THE MEAN HIGH TIDE LINE (MHTL) IS SHOWN AT ELEVATION 4.35 FEET AND WAS INTERPOLATED FROM THE AERIAL MAPPING CONTOURS DEFINED IN MAPPING NOTE "A" ABOVE, AND IS NOT BASE ON A GROUND SURVEY.

E. THE MEAN HIGH TIDE LINE (MHTL) IS BASED ON A BEACH PROFILE SURVEY CONDUCTED BY PENFIELD & SMITH ON JULY 10, 2014. THE LINE SHOWN IS AT THE CALCULATED 4.55 FOOT CONTOUR ELEVATION (NAVD88 VERTICAL DATUM). THE MHTL ELEVATION WAS INTERPOLATED FROM NOAA TIDAL DATA AND BENCHMARKS. THIS SURVEY USED STATION "927 RESET" (NGS PID# EW0067) LOCATED IN GAVIOTA, CA., AND STATION "TIDAL 3" (NGS PID# EW7026) LOCATED IN SANTA BARBARA CALIFORNIA.

F. WAVE UPRUSH LINE IS BASED ON THE CURRENT 100-YEAR EROSION EVENT SHOWN ON FIGURE 9, OF MEMORANDUM PREPARED FOR PENFIELD & SMITH BY ESA PWA, DATED SEPTEMBER 10, 2013.

G. THIS DETAIL IS BASED ON AVERAGE SLOPES AND DEPTHS OBSERVED AND MEASURED DURING THE EXCAVATION EXPLORATION NOTED IN "B" ABOVE. BOULDERS RANGED IN SIZE FROM APPROXIMATELY 24 INCHES TO APPROXIMATELY 40 INCHES WITH A TYPICAL SIZE OF APPROXIMATELY 36 INCHES IN DIAMETER. THIS CROSS-SECTION IS GENERALLY CONSISTENT WITH THE AUGUST 21, 2002 CROSS-SECTION PREPARED BY MOFFATT & NICHOL. CURRENTLY, NO RECORD DRAWINGS HAVE BEEN FOUND. MOST OF THE REVETMENT WAS BELOW GRADE AT THE TIME OF PENFIELD & SMITH'S SURVEY.

H. THE MEAN HIGH TIDE LINE (MHTL) IS BASED ON SECTIONAL PROFILE DATA OBTAINED FROM THE UNITED STATES GEOLOGICAL SURVEY (USGS) USING REAL-TIME KINEMATIC SURVEYING PROCEDURES. THE MHTL SHOWN IS PLOTTED AT ELEVATION 4.55 FEET.

I. THE EXTENTS OF THE GAP IN THE ROCK REVETMENT WAS MEASURED TO BE APPROXIMATELY 50 FEET.

NO.	DATE	REVISIONS	APPD.

Penfield & Smith
Engineering • Surveying • Planning
"Construction Management"
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

FIELD CREW: MAC & RMG
SURVEY COMPLETED: SEE NOTES
OFFICE TECH: MAC
COMPILATION COMPLETED: 2014-11-04

CDP EXHIBIT MAP
GOLETA BEACH WEST REVETMENT
COUNTY OF SANTA BARBARA, CALIFORNIA
DECEMBER 2014

WORK ORDER 19514.09
SHEET 2 OF 3
DWG 19514EX01.DWG

MAPPING LEGEND

ABBREVIATIONS

ALUM	ALUMINUM
ASPH	ASPHALT CONCRETE
ELEC	ELECTRICAL
HP	HIGH PRESSURE
MHTL	MEAN HIGH TIDE LINE
MLS	MORTAR LINED STEEL
PVC	POLYVINYL CHLORIDE
SD	STORM DRAIN
TEL	TELECOMMUNICATIONS
VCP	VITRIFIED CLAY PIPE

LINETYPES

- EDGE OF PAVEMENT
- AERIAL CONTOUR MINOR
- AERIAL CONTOUR MAJOR

HATCHING

- LAWN AREA
- ASPHALT AREA

- E – ELECTRIC
- FOC – FIBER OPTIC CABLE
- FM – FORCE MAIN
- G – NATURAL GAS
- RW – RECLAIMED WATER
- S – SANITARY SEWER
- T – TELECOMMUNICATIONS
- W – WATER
- OHW – OVERHEAD WIRE

SYMBOLS

- SEWER CLEANOUT
- SEWER MANHOLE
- STORM DRAIN MANHOLE
- IRRIGATION PULL BOX
- RECLAIMED WATER VALVE
- RECLAIMED WATER PULL BOX
- WATER PULL BOX OR METER
- UTILITY POLE
- PEPPER
- CYPRESS
- PINE
- PALM

UTILITY NOTE

SURFACE UTILITY FEATURES SHOWN HEREON WERE LOCATED AS A PART OF THE FIELD SURVEY PERFORMED BY PENFIELD & SMITH BASED ON VISIBILITY ON THE DATE OF SURVEY.

THE SUBSURFACE UTILITIES SHOWN HEREON HAVE BEEN COMPILED FROM RECORD INFORMATION GATHERED FROM VARIOUS PUBLIC AND PRIVATE UTILITY PROVIDERS. IN CONJUNCTION WITH FIELD LOCATED SURFACE UTILITIES. THE SUBSURFACE INFORMATION, INCLUDING LOCATION, SIZES, AND CAPACITIES IS AN ESTIMATION BASED ON AVAILABLE DATA MAY NOT REPRESENT ACTUAL FIELD CONDITIONS. PENFIELD & SMITH DOES NOT WARRANT THE ACCURACY OF COMPLETENESS OF SAID RECORD INFORMATION.

NO.	DATE	REVISIONS	APPR.

Penfield & Smith
Engineering · Surveying · Planning
· Construction Management ·
111 East Victoria Street, Santa Barbara, CA 93101
Phone: (805) 963-9532 Fax: (805) 966-9801

FIELD CREW: MAC & RNG
SURVEY COMPLETED: SEE NOTES
OFFICE TECH: MAC & REN
COMPILATION COMPLETED: 2014-11-04

CDP EXHIBIT MAP
GOLETA BEACH WEST REVETMENT
COUNTY OF SANTA BARBARA, CALIFORNIA
DECEMBER 2014

WORK ORDER 19514.09
SHEET 3 OF 3
DWG 19514EX01.DWG

REVISED PROJECT DESCRIPTION (File No. 4-14-0687):

Goleta Beach County Park is a 29-acre park located in the unincorporated area of Santa Barbara near the University of California at Santa Barbara. With over 1.5 million visitors per year, it is one of the most highly used public parks in the County of Santa Barbara. With the combination of recreational amenities it provides (grass and associated picnic facilities, sandy beach, ocean and pier), Goleta Beach County Park is heavily visited by lower to moderate income members of our community. There is no charge for parking at this County Park, providing cost-free opportunities to all visitors.

The proposed project serves to protect a highly visitor served coastal-dependent and coastal-related recreational resource by retaining approximately 1,200 linear feet of rock revetments, approximately 950 linear feet of which was installed in 2002 and 2005 under emergency and temporary permits to protect Goleta Beach County Park infrastructure from large storm events. The far western 250 linear feet of revetment was installed without permits in the mid-1980s to protect Goleta Beach County Park. The 1,200 linear feet of rock revetment is comprised of approximately 4,560 cubic yards of rock, and these rocks/boulders range in size from approximately 24 inches to approximately 40 inches in diameter, with a typical size of approximately 36 inches in diameter, and a total revetment footprint of approximately 22,400 square feet. While the mean high tide line (MHTL) is seaward of the revetments, based on conversations with CCC Staff, it has been assumed that the revetments lie at least partially within the CCC's jurisdiction since most of them were installed upon issuance of the temporary emergency permits.

The County continues to invest resources in this Park to make it more accessible for all users. On September 16, 2014, the Board of Supervisors appropriated $3.2 million to build a new Goleta Beach Park bridge that spans the Goleta Slough and provides the only access to Goleta Beach Park. It also serves as a vital connection for the Coastal Route bike path across the Slough to the park and continuing west to University of California, Santa Barbara. The new bridge includes a 12-foot-wide Class 1 bicycle path, a 5-foot-wide raised pedestrian walkway, and a bus turn-out, for buses to pull out of the main traveled way for passenger pick and drop off – the first bus stop at the Beach Park. The County continues to find ways to enhance coastal access; retaining the rock revetments will maximize the public's usable area and continue to encourage coastal access for all, notably the low to moderate income visitors within the immediate and surrounding service areas of the Park.

Beginning in the 1950's portions of the Park's ocean and slough frontages were armored with rock revetment to protect the Park from wave run-up, storm damage and high flows in the slough, with approximately 2,400 feet armored at present (1,200 feet of which are currently un-permitted or were installed under emergency and temporary permits). The rock revetment is intermittent along both the seaward and slough sides of the Park. Park facilities west of the Beachside Restaurant are protected by 1,200 feet of revetment, with two gaps of approximately 50 and 700 feet. In particular, approximately 650 feet of the western half of the shoreline lawn and associated recreational facilities are protected by the revetment along with all of parking lot 7 and

Exhibit 3
CDP Application 4-14-0687
Applicant's Proposed Project Description

portions of parking lot 6. Existing revetments and park management actions by the County have protected much of the Park from significant damage and erosion during storm events since the early 2000s.

Goleta Beach County Park experiences episodes of shoreline erosion from intense El Nino type storm events. From the late 1980s through the early 2000s, these storms resulted in the loss of sandy beach area and over one acre of developed park land, including turf, recreational facilities and parking lots. Until the most recent storm in early March 2014, the Park was restored and the beach was relatively wide and sandy; the 1,200 feet of unpermitted revetments have remained largely buried. Markedly, by August 2014, the beach had returned to a profile very similar to its pre-storm condition. In December 2002, the Executive Director of the California Coastal Commission (CCC) issued an emergency permit (No. 4-02-251-G) for the placement of 600 linear feet of rock revetment. Prior to the expiration of the permit in May 2003, the County submitted an application for the temporary retention of the revetment for an additional two years. The County had initially considered applying for the permanent retention of the revetment; however, CCC staff encouraged the County to request a temporary retention of the revetment in order to give sufficient time to undertake substantive studies of alternatives to address coastal erosion at Goleta Beach as well as fully evaluate the potential impacts that the permanent retention of the revetment may have on shoreline processes and biological resources. In January 2004, the CCC approved a Coastal Development Permit (No. 4-02-251) for a 30-month temporary retention of the 600 feet of emergency revetments. The 30-month timeframe was approved in order to give the County time to develop a management strategy for long-term protection of the Park and was based on a supposition that insufficient information was available to permit the revetment on a more permanent basis. This CDP was conditioned to require the County to conduct various studies of erosion at Goleta Beach and effects of shoreline protection structures on coastal processed and biological resources, as well as studies of alternative solutions (e.g., beach nourishment or managed retreat) to shoreline erosion protection.

In January 2005, the Executive Director of the CCC approved a second emergency permit (No. 4-05-005-G) for the installation of an additional 350 feet of revetment. In July 2005, the CCC approved an amendment to the CDP (No. 4-02-251-A1) to incorporate the 350 feet of revetment with the previously approved 600 feet of revetment for the 30-month temporary term. Finally, in November 2006 the CCC approved a second amendment to the CDP (No. 4-02-251-A2) to grant an additional 18-month extension to January 14, 2008 in order to give the County additional time to complete the required studies and submit an application for the long-term management of the Park. Pursuant to CCC direction, the County initiated a master planning process culminating in a 2007 EIR which assessed both managed retreat and shoreline stabilization through use of a permeable pile groin and beach nourishment. In 2008, before the expiration of the temporary CDP, the County submitted a CDP application for the permeable pier groin project to the CCC for approval. This project was denied by the CCC in July 2009 due in large part to concerns over the potential impacts of that type of project on sand supply to down-coast beaches. The revetments have remained

in place while the CCC directed the County to develop an alternative solution to managing the Park.

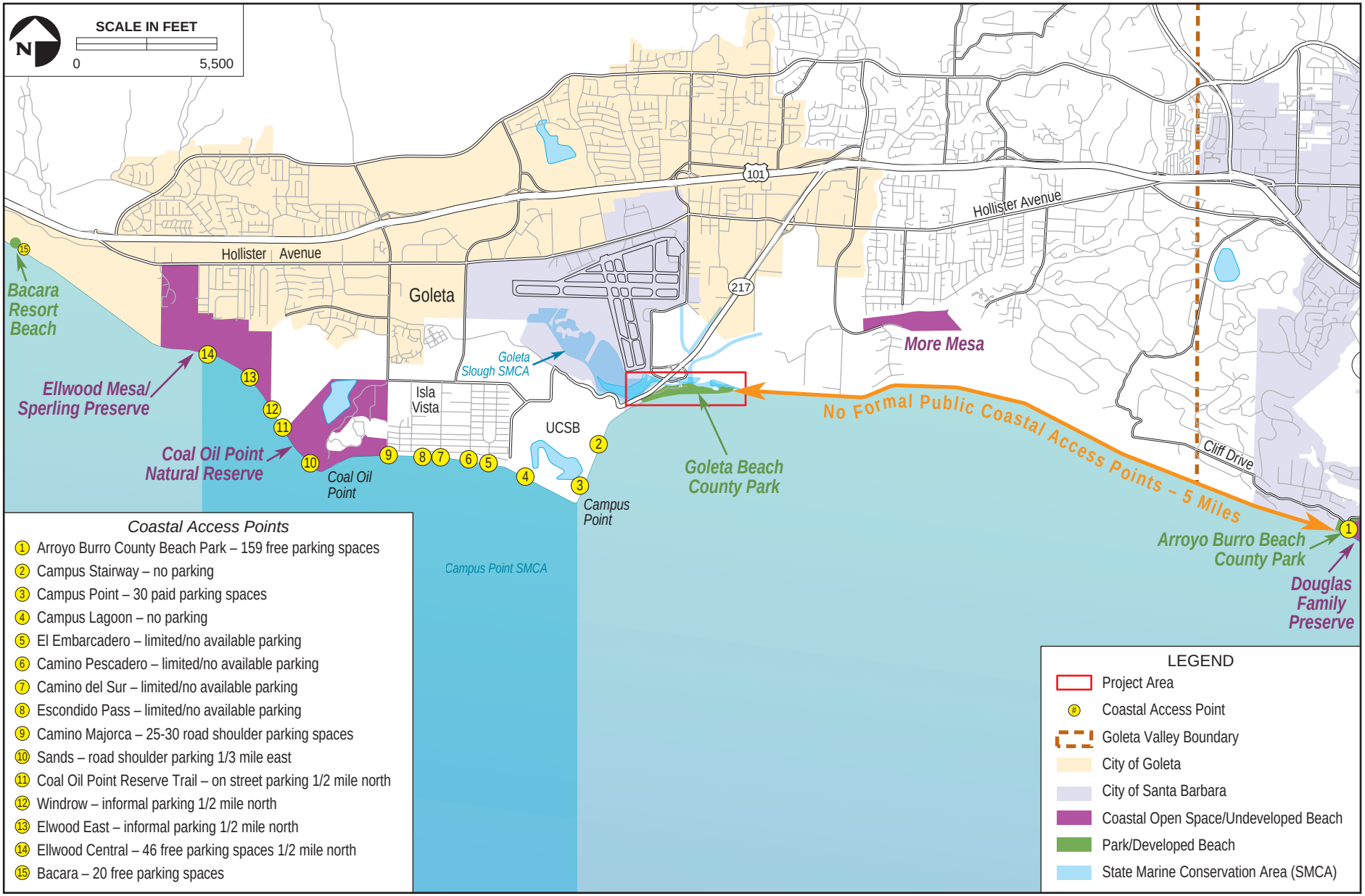
In 2014, a new EIR was completed analyzing a managed retreat project and five project alternatives Based on the conclusions of the EIR and several other factors, the County has chosen to submit a CDP application to permanently retain the existing unpermitted rock revetments to protect Beach Park facilities. This is based on the insignificant adverse impacts to coastal processes at Goleta Beach County Park and down-coast beaches in the foreseeable future and the beneficial impacts that retention of the revetment would have on continued coastal-dependent and coastal-related recreational use of Goleta Beach County Park and public access to the beach. No additional physical alterations would occur at Goleta Beach as part of this project, and no additional shoreline protection would be installed. Occasional sand augmentation through the Santa Barbara County Flood Control or periodic nourishment activities occurring under the umbrella of BEACON may occur, as permits allow. Several factors contributed to the submittal of this project for permit approval, including:

- That, unlike many areas along the coast, the shoreline at Goleta Beach appears to fluctuate between a wide beach and narrow beach, rather than continually retreating. These cycles are primarily tied to various climatic phenomena including El Nino and Pacific Decadal Oscillation cycles.

- That the 1,200 feet of revetment in question is placed relatively high up on the beach and has been largely buried since its installation. The higher up on the beach, the less likely it is that the revetment will contribute to erosion or affect sand supply to downcoast beaches. Given its location high on the beach profile, the revetment is likely to remain largely buried for the foreseeable future and any exposure or impacts on narrowing beach widths would be infrequent and temporary.

- That wave modeling, and a review of the historic position of the beach based on old aerial photos, show that the upland portion of the Park could be subject to substantial erosion during a severe storm event absent protection by the revetment.

In accordance with Coastal Act Section 30235 and Coastal Land Use Plan Policy 3-2, the County determined that retention of the revetment is required to protect existing structures and coastal dependent uses from erosion damage while having no adverse effect on shoreline sand supply or public access to a Park which is heavily utilized by lower to moderate income members of our community for the foreseeable future.



amec

Major Parks, Open Spaces, and Beaches in the Project Vicinity

FIGURE 4.10-1

Exhibit 4. Regional Coastal Recreation Map

The rock revetment at the west end of Goleta Beach is largely covered by sand for much or all of the year, as shown above (summer 2012) when the revetment (yellow line) was entirely covered. However, winter storms can partially expose the boulders. Further, major periodic storm events under El Niño conditions can expose the boulders of the revetment for weeks or months, as shown below (2004).

Exhibit 5. Site Photographs

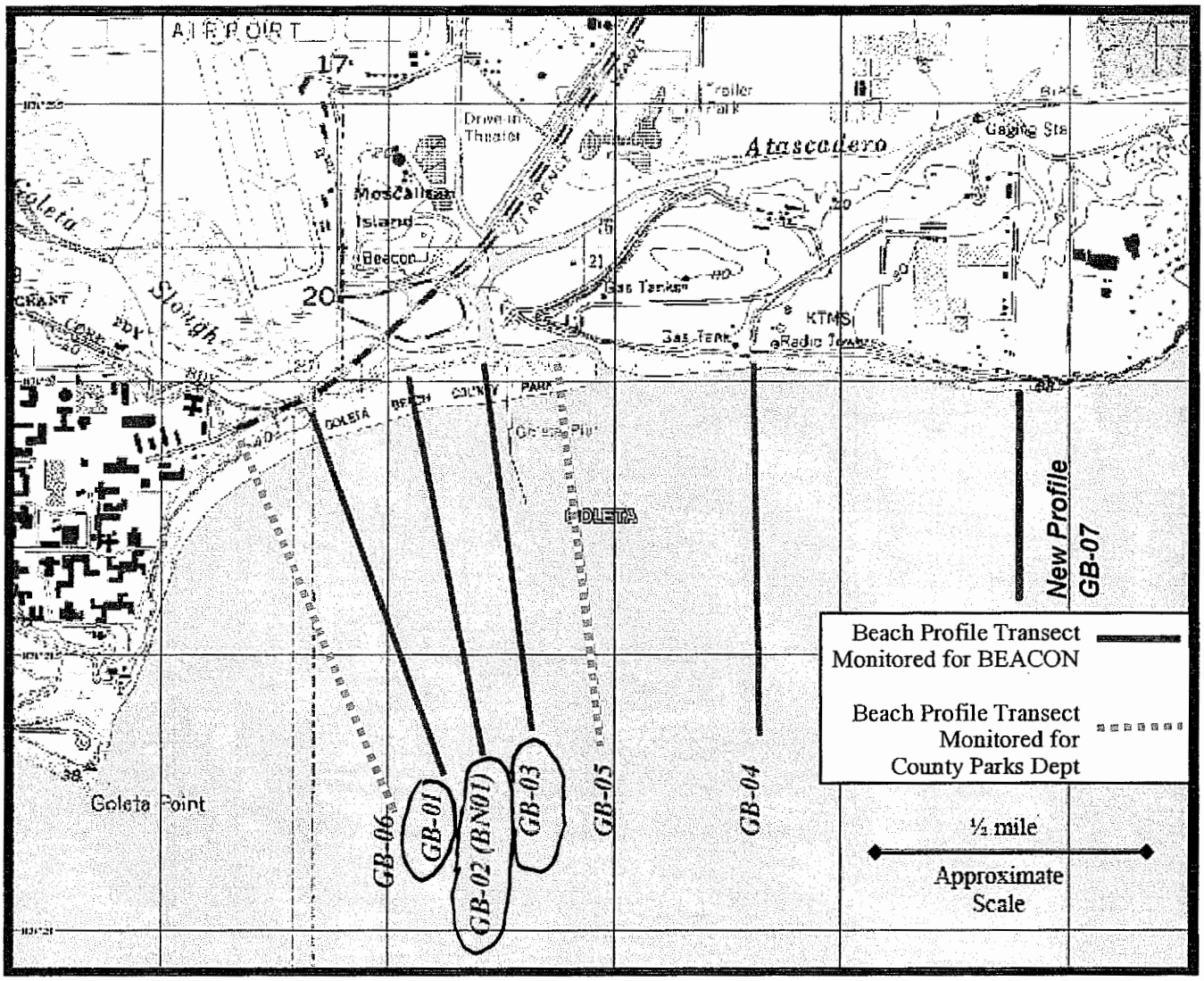
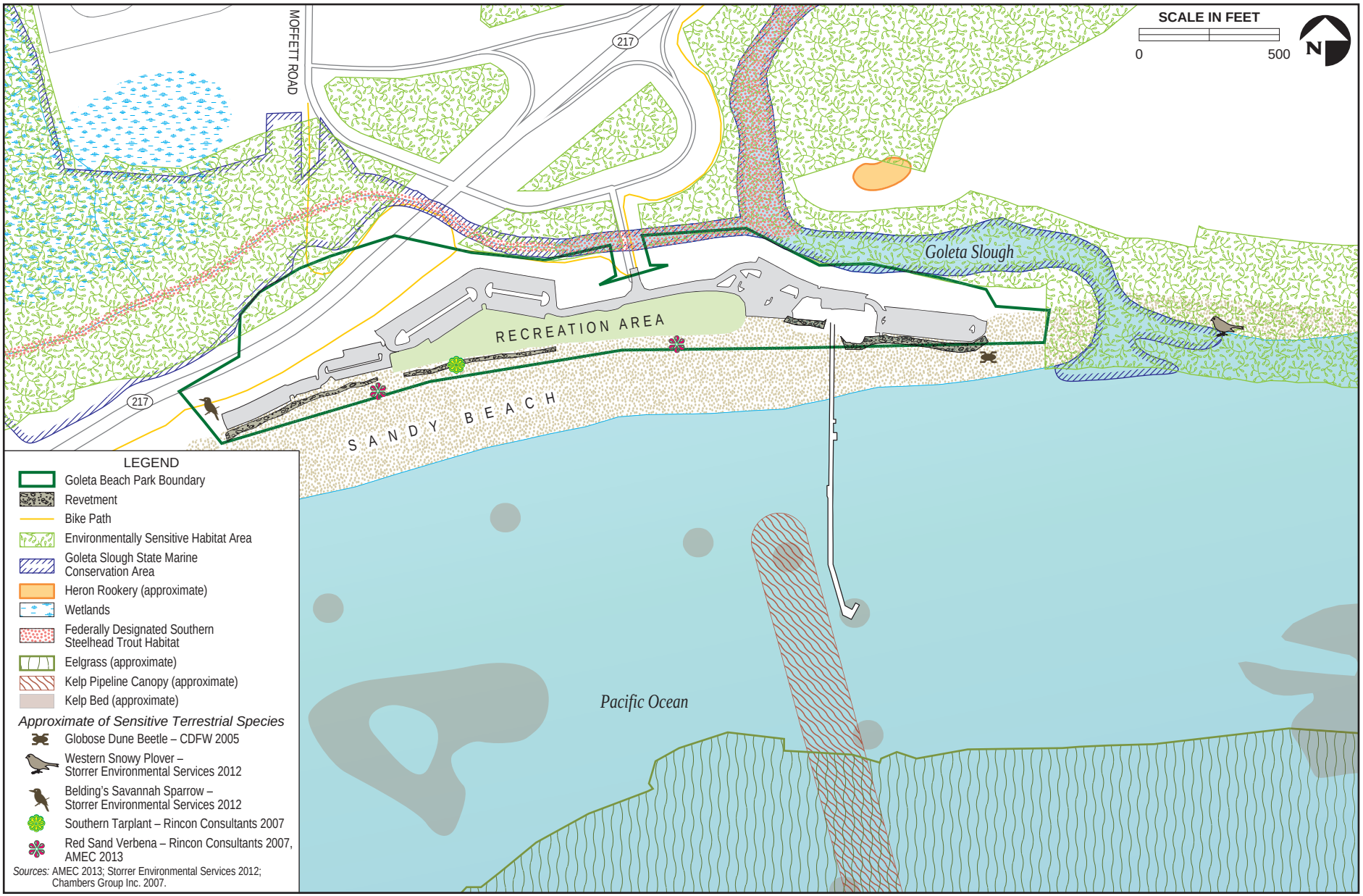


Exhibit 6
CDP Application 4-14-0687
Recommended Beach Profile Transect Locations



amec

Biological Resources in the Vicinity of Goleta Beach Park

FIGURE 4.3-1

Exhibit 7. Biological Resources Map

amec

Western Segment of Goleta Littoral Subcell

FIGURE 4.4-5

Exhibit 8. Littoral Transport Map

Sources: Figure by ESA PWA, 2012. Imagery from NAIP 2012.

Note: Sea level rise (SLR) amounts are relative to 2010.
Large portions of Goleta Beach are already at risk for erosion damage in the event of a large (100-year) storm. With sea level rise, these areas of potential erosion damage are projected to grow by up to 25 feet.

N

200 100 0 200 Feet

Exhibit 9. Coastal Erosion Modeling Map

figure 9

Goleta Beach EIR Additional Wave Modeling

Coastal Erosion Hazard Areas

ESA PWA Ref# - DW2051.01

ESA PWA

G:\Projects\DW2051.01_GoletaBeach\MXDs\ReportFigures\Fig - Erosion HZs.mxd

CITY OF GOLETA

May 20, 2014

Mr. Charles Lester, Executive Director
California Coastal Commission
45 Fremont, Suite 2000
San Francisco, CA 94105- 2219

RE: Goleta Beach County Park Revetment Retention Project
Coastal Commission Application No. 4-14-0687

Dear Mr. Lester:

The purpose of this letter is to express the City's support for the Goleta Beach County Park Revetment Retention Project (Project) and related permit application submittal by the County of Santa Barbara to the California Coastal Commission, dated April 25, 2014. The Goleta City Council is committed to the protection and preservation of Goleta Beach and Goleta Beach Park as public resources. Preserving the rock revetment, which has protected the beach and the park for years, is a logical, simple, and cost effective strategy to protect our County's most popular park.

Because the Park is so widely used and serves as a critical recreational facility for the region, we were pleased that the County Board of Supervisors unanimously directed County staff to submit a permit application to the Coastal Commission to preserve the rock revetments. Without the revetments, infrastructure will become exposed and eventually will be lost, having a devastating impact on this regionally significant coastal resource.

The City believes there are strong arguments to support permitting the revetments and we would appreciate the opportunity to meet with your staff prior to the issuance of the Project permit application completeness/incompleteness letter. City staff has conducted a detailed Park permit inventory and has downcoast sand supply reference documents that will benefit the Commission's staff as they evaluate the Project for policy consistency with the Coastal Act.

Exhibit 10
CDP Application 4-14-0687
Correspondence Received

130 Cremona Drive, Suite B, Goleta, CA 93117 P 805.961.7500 F 805.6

I look forward to working in partnership with you, your staff and the County to protect this important regional coastal resource and to ensure that the Board's direction to County staff on March 18 is effectuated via the issuance of a Coastal Commission permit. Anne Wells, the City's Advance Planning Manager and the program manager for the City's Local Coastal Program Project, is your main point of contact from a staff perspective. She is available at 805-961-7557 or awells@cityofgoleta.org. You may also reach me at 805-961-7535 or mbennett@cityofgoleta.org.

Sincerely,

Michael T. Bennett
Mayor

cc. John (Jack) Ainsworth, Senior Deputy Director
Steve Hudson, South Central Coast District Manager
Councilmembers, City of Goleta
Mona Miyasato, County Executive Officer
Michelle Greene, Goleta Interim City Manager

SIERRA CLUB
FOUNDED 1892
Santa Barbara Group

April 9, 2015

Sierra Club Santa Barbara Group
PO Box 31241
Santa Barbara, CA 93130-1241

South Central Coast District Office, Coastal Commission
c/o Jack Ainsworth, Deputy Director
Steve Hudson, District Manager
89 South California Street, Suite 200
Ventura, CA 93001-2801

Re: Statement of Position on Goleta Beach

Dear Coastal Commission Members:

The Sierra Club – Santa Barbara Group supports the Santa Barbara County Board of Supervisors position on Goleta Beach: To approve the existing revetments that are buried in the sand and that protect Goleta Beach Park from storm impacts.

Climate change is going to bring ever more powerful storms and rising high tide levels to our area. In the long term, we are going to face serious problems far beyond the protection of Goleta Beach Park. The Sierra Club advocates for reducing climate change at its source by promoting sustainable energy and sustainable transportation.

In the short and medium term it is necessary to protect important public and environmental resources such as Goleta Beach Park from storms and rising tides.

The revetment has done its job well for many years. Most of the time it is buried in the sand and no one even notices its presence. However, during powerful storms it has protected the park. At those times the rocks have been exposed. But they have soon been covered up again with sand by natural processes.

Each of these cases has to be examined on its individual merits. Each location is unique.

Goleta Beach is especially unique: It is a south-facing beach. It is in a protected zone between the mainland and the Channel Islands. It is in an area where the prevailing currents are warm currents from the south rather than the northern currents along most of the California coast.

Goleta Beach Park has approximately one million visits each year. It is a rare place that is completely free to the public. There is nothing "natural" about this area. The adjacent Santa Barbara Airport is built on landfill, as is most of this area.

But environmental justice recognizes the rights of the public to have coastal recreation and access maintained at this unique location.

If the existing revetment is not given a permit, there really is no sustainable alternative. At some point a line will have to be drawn to protect the airport, the freeway and bike path.

Historically, that line was drawn at Goleta Beach Park by a series of revetments. Even if this revetment were removed, the other revetments in the park would remain. It makes no sense to allow the others to remain, but to remove this one.

In summary, we respectfully ask that the existing protective revetment in Goleta Beach Park be given a permit to remain where it has been working well for many years.

Sincerely,

Katie Davis
Chair, Sierra Club Santa Barbara Group

environmental
DEFENSE CENTER

February 19, 2015

Mr. Steve Hudson
California Coastal Commission
South Central Coast Area
89 South California Street, Suite 200
Ventura, CA 93001

Re: Goleta Beach County Park Project

Dear Mr. Hudson,

This letter is submitted by the Environmental Defense Center ("EDC") on behalf of the Santa Barbara Chapter of the Surfrider Foundation, regarding the California Coastal Commission's ("Commission") review of Santa Barbara County's Goleta Beach County Park Project ("Project"). Surfrider's mission is the protection and enjoyment of oceans, waves and beaches through a powerful activist network. EDC protects and enhances the environment through education, advocacy and legal action.

Surfrider and EDC have been working since 2000 to protect the public resources at Goleta Beach, including the sandy beach as well as inland parking and recreational amenities. We recognize the Commission's important role as a permitting agency in reviewing the impacts and policy implications of this coastal project. We urge the Commission to conduct thorough review of this project, including a careful analysis of the issues previously identified by the Commission in its August 30, 2013, letter to the County of Santa Barbara.[1] Several outstanding issues remain regarding the adequacy of the County's environmental review.

Most important, as noted by the Commission in 2013, the Environmental Impact Report ("EIR") prepared by the County failed to accurately assess impacts from the proposed Project and alternatives because the EIR relied on baseline conditions that included the existing unpermitted rock revetments. Thus, the impacts of the revetments, which are included in the Project proposal, continue to evade environmental review. We are concerned about the precedent that will be established if the Commission accepts the existing baseline in its analysis, as that

[1] Letter from A. Amber Geraghty, California Coastal Commission, to Alex Tuttle, County of Santa Barbara County, *RE: Draft Environmental Impact Report, Goleta Beach County Park Long-Term Protection Plan*, August 30, 2013, attached hereto as Exhibit A.

906 Garden St. Santa Barbara, CA 93101
PHONE (805) 963-1622 FAX (805) 962-3152
840 County Square Dr. Ventura, CA 93003
PHONE (805) 658-2688 FAX (805) 648-8092
www.EnvironmentalDefenseCenter.org

will send a message to other property owners and agencies that they can armor the coast without review. In other words, they will be able to obtain an emergency permit that subsequently expires, and then apply to retain the armor using an EIR with the armored coast as the baseline and thereby avoid the obligation to address project impacts through adoption of appropriate mitigation measures or alternatives.

The Commission has also noted concerns regarding the adequacy of the Managed Retreat Implementation Plan and inadequate analysis of beach nourishment. Importantly, the Commission directed the County to analyze an alternative that would provide for an Adaptive Management/Phased Approach and avoid adverse impacts caused by coastal armoring. Each of these issues should be fully analyzed by the Commission as part of its review of the County's application for a Coastal Development Permit ("CDP").

The County's EIR Failed to Accurately Identify and Analyze Project Impacts.

Although the County prepared an EIR for the proposed rock revetment project, the County declined to certify the EIR or approve the Project pending review by the Coastal Commission. The Commission identified numerous deficiencies with the Draft EIR; many of these deficiencies remain in the proposed Final EIR. Most important and pervasive is the fact that the EIR included the unpermitted rock revetments in the baseline and thus did not fully analyze the impacts of such revetments. Other significant deficiencies deal with the manner in which the EIR analyzed the potential impacts of a more environmentally sound design that would address long-term coastal processes in the area. The Commission is required to exercise its authority under CEQA to conduct its own review of the proposed Project's impacts as well as mitigation measures and alternatives that are capable of avoiding or reducing such impacts.[2] (CEQA Guidelines § 15251(c); see also Pub. Res. Code § 21080.5; CEQA Guidelines § 15250-15253.)

A. The Use of an Improper Baseline Misstates the Impacts of the Project.

The EIR's analysis of Project impacts considers the existing rock revetments to be part of the "baseline" and thus omits any environmental review of the impacts caused by construction or operation of such revetments, despite the fact that they are unpermitted and have never been subject to environmental review. It is important that the Project's impacts be evaluated in comparison to the physical conditions that existed prior to the construction of the unpermitted revetments in order to provide an accurate assessment of the Project's impacts and purported benefits.

[2] Although the Commission is exempt from the requirements for preparing its own EIR, the Commission "remains subject to other provisions in CEQA such as the policy of avoiding significant adverse effects on the environment where feasible." CEQA Guidelines § 15250. The Commission must also prepare a "substitute document" that includes (1) a description of the proposed activity; and (2) a determination that the project will not result in any significant or potentially significant impacts on the environment *or* identification of alternatives and mitigation measure that will avoid or reduce significant or potentially significant impacts. CEQA Guidelines § 15252.

1. *CEQA Requires that the Commission Fully Analyze the Impacts of the Proposed Project, Including the Impacts of Retaining the Existing Unpermitted Rock Revetments.*

CEQA requires that an EIR shall include a detailed analysis setting forth "[a]ll significant effects on the environment of the proposed action."[3] *Normally,* the environmental setting against which project impacts are evaluated is comprised of the "physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published."[4] If, however, reliance on existing physical conditions will preclude an accurate evaluation, the environmental setting should be adjusted to allow for meaningful analysis and disclosure of project impacts.

As the California Supreme Court held in *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 328, "[n]either CEQA nor the CEQA Guidelines mandates a uniform, inflexible rule for determination of the existing conditions baseline. Rather, an agency enjoys the discretion to decide, in the first instance, exactly how the existing physical conditions without the project can most realistically be measured, subject to review, as with all CEQA factual determinations, for support by substantial evidence." In that case, the Court noted the importance of ensuring that environmental analysis under CEQA "employ a realistic baseline that will give the public and decision makers the most accurate picture practically possible of the project's likely impacts."[5]

The Supreme Court recently confirmed this approach in *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority*, ruling that "CEQA imposes no 'uniform, inflexible rule for determination of the existing conditions baseline,' instead leaving to a sound exercise of agency discretion the exact method of measuring the existing environmental conditions upon which the project will operate."[6] As the Court noted, "[t]o the extent a departure from the 'norm' of an existing conditions baseline (Guidelines, § 15125(a)) promotes public participation and more informed decisionmaking by providing a more accurate picture of a proposed project's likely impacts, CEQA permits the departure."[7] In fact, not only does CEQA *permit* such departure, CEQA *demands* such departure if analysis based on existing physical conditions "would be uninformative or misleading to decision makers and the public."[8] In the current case, it would be "uninformative and misleading" to not include an evaluation of the impacts of the unpermitted rock seawalls at Goleta Beach. These seawalls have never been subject to environmental review, and thus the impacts of their construction and ongoing effect on the environment have not been previously studied or disclosed to decision makers and the public.

---

[3] Pub.Res.Code § 21100(b)(1); see also CEQA Guidelines § 15126.2(a) ("An EIR shall identify and focus on the significant environmental effects of the proposed project"); *No Oil, Inc., v. City of Los Angeles* (1974) 13 Cal.3d 68; *People ex rel. Department of Public Works v. Bosio* (1975) 47 Cal.App.3d 495.

[4] CEQA Guidelines § 15125(a).

[5] *Communities for a Better Environment,* 48 Cal.4th at pp. 322, 325, 328.

[6] *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal. 4th 439, 449.

[7] *Id.* at 453. See also *Cherry Valley Pass Acres & Neighbors v. City of Beaumont*, 190 Cal. App. 4th 316, 336 (2010) ("In using the word 'normally,' … the Guidelines necessarily contemplates that physical conditions *at other points in time* may constitute the appropriate baseline or environmental setting.") (emphasis in original).

[8] *Id.*

The Coastal Commission has repeatedly notified the County that the baseline for review in the EIR must be the conditions that preceded the unpermitted rock revetments. As far back as 2006, in comments on the scope of the EIR, the Commission informed the County that:

> Any analysis submitted to the Coastal Commission must evaluate the impacts of each alternative relative to the shoreline that would exist if shoreline protection (including "soft" solutions such as geotubes, sand bags, sand berms or nourishment) was not present. *The baseline conditions cannot be the existing as-built condition since it would not provide useful information regarding the impact of the revetment alternative*. All alternatives must be considered from the same baseline.[9]

When the County failed to follow this guidance in the DEIR[10], the Commission again admonished the County to include the proper baseline in the EIR:

> *Any analysis submitted to the Coastal Commission in the future for permitting purposes must evaluate the impacts of the project and each alternative relative to the shoreline that would exist if the existing unauthorized rock revetment was not present*. The baseline conditions cannot be the existing as-built condition since it would not provide useful information regarding potential impacts. Given that the as-built approximately 1,200 ft. long revetment has not yet been authorized, the proposed project and all alternatives for management of erosion at Goleta Beach must be considered relative to the shoreline that would exist without this shoreline protection."[11]

The Commission further noted that the determination in the EIR that removal of the existing rock revetment would cause a significant impact was flawed because it was the "result of using the incorrect baseline for analysis."[12] Instead, "the baseline for analysis should be the site conditions that would exist but-for the unauthorized revetment."[13] The County was directed to provide "an analysis of impacts to coastal processes from the proposed Project and alternative assuming the unpermitted revetment does not exist. ***This analysis is essential for future processing of a CDP application submitted to the Coastal Commission***."[14]

---

[9] Letter from Shana Gray, California Coastal Commission, to Coleen Lund, Santa Barbara County Parks, *RE: Notice of Preparation (NOP) of Draft Environmental Impact Report (DEIR) and Scope of Work for Goleta Beach EIR and Coastal Development Permit Amendment 4-02-251-A2*, July 19, 2006, at pp. 1-2, emphasis added, attached hereto as Exhibit B.

[10] This approach was at odds with a statement by the County in a similar context acknowledging that "because the property was operating under emergency permits, which require follow-up permits and environmental review, that the baseline issue is clearly pre-project." See email from Dianne Black, Santa Barbara County Planning and Development Department, to Brian Trautwein, Environmental Defense Center, November 21, 2013, attached hereto as Exhibit C.

[11] Letter from A. Amber Geraghty, *supra*, p 1, emphasis added.

[12] *Id.*, p. 5.

[13] *Id.*

[14] *Id.*, emphasis added.

This approach is consistent with the longstanding principle that CEQA is to "be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language."[15] The purpose of an EIR is to allow "the public to be informed in such a way that it can intelligently weigh the environmental consequences of any contemplated action and have an appropriate voice in the formulation of any decision."[16] The fact that the rock seawalls have evaded environmental review in the past does not excuse the omission of such analysis now, either in the County's EIR or as part of the Commission's environmental review.

2. *The Existing Rock Revetments Cause Significant Impacts on the Environment.*

The existing rock revetments, which would be retained if the County's application is approved, cause significant impacts to biological resources, recreation, public safety, and aesthetics. Here are some recent photographs that depict the unsightly and unsafe nature of the revetments:

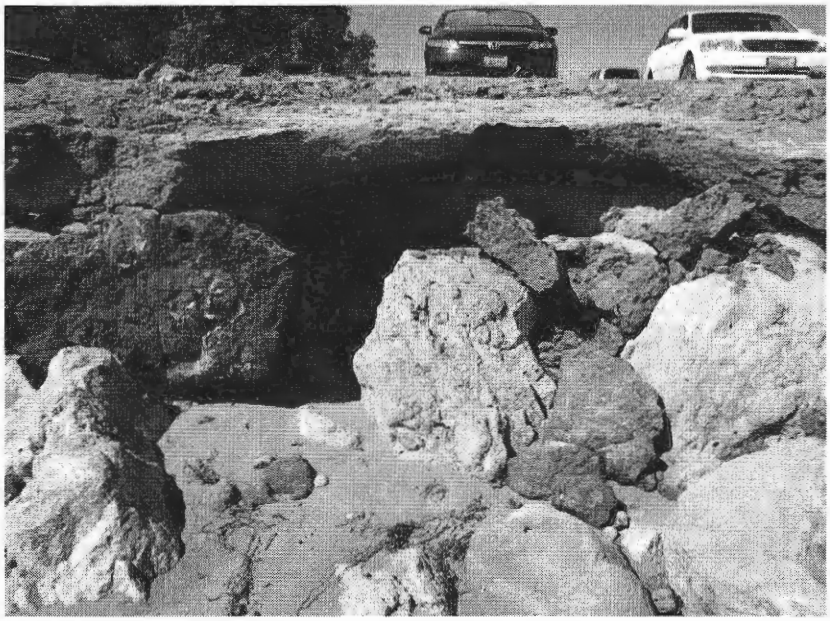


Photo 1. The rock revetment was placed quickly as an emergency measure and was apparently not carefully engineered or constructed. As a result, the revetment already has gaps caused by the shifting of large rip rap boulders. Everett Lipman March 17, 2014.

[15] *No Oil Inc. v. City of Los Angeles* (1974) 13 Cal. 3d 68, 86 (quoting *Friends of Mammoth v. Bd. of Supervisors* (1972) 8 Cal. 3d 247).
[16] *Karlson v. City of Camarillo* (1980) 100 Cal. App. 3d 789, 804.

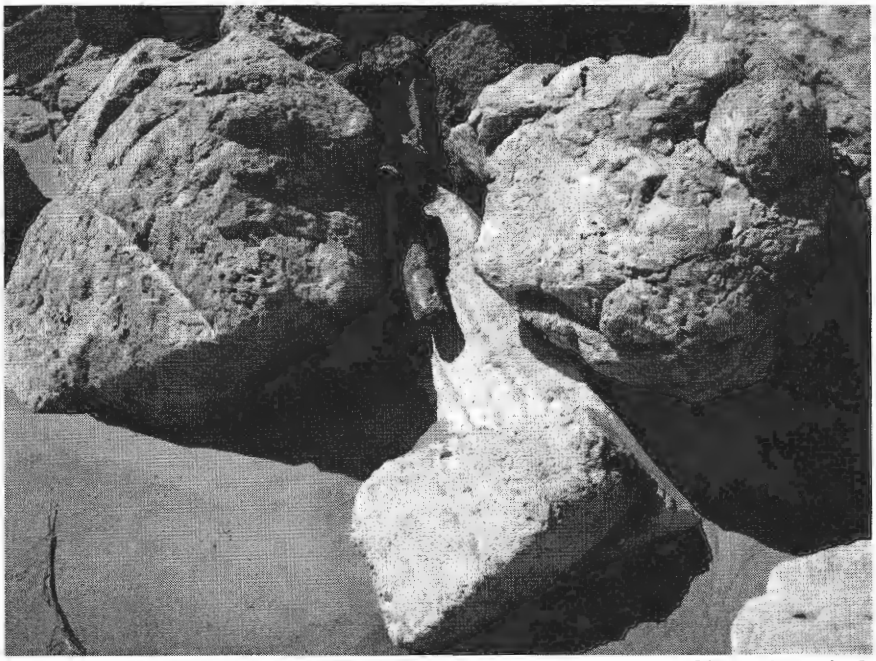


Photo 2. While the Project Description notes the revetment is made of boulders, it fails to note that the revetment contains a significant amount of construction debris, including concrete and metal pipes. Everett Lipman. March 17, 2014.

Photo 3. The emergency revetment also has rebar sticking out of it in places creating an unsafe condition for beach goers, pets and wildlife. Everett Lipman. March 17, 2014.

Photo 4. Close up of rebar in Goleta Beach rock revetment seawall. Everett Lipman. March 17, 2014.

In addition to significant impacts to safety, recreation and views caused by the rebar and other construction debris in the unpermitted revetment, retention of the rock revetment seawall will also cause significant coastal processes impacts which the EIR downplays. Specifically, retention of the rock revetment will eventually lead to complete loss of the sandy beach at Goleta Beach Park. According to Dr. Orrin Pilkey, a leading expert on coastal processes:

> Of course no one knows rates of beach narrowing for certain but as coastal engineer Michael Walther of Coastal Tech has pointed out in his comments on the EIR, the extent of narrowing on a decadal time frame is more or less predictable based on current erosion rates along this coastal reach with an adjustment for sea level rise...
>
> Long-term impacts can and should be assessed in the DEIR.
>
> Strong impacts on adjacent beaches are a near certainty. As the beaches narrow due to passive erosion in front of a revetment the surface from which sand is stirred up by the surf and then transported becomes narrower and the amount of sand transported laterally becomes proportionately smaller. Eventually as the revetment protrudes out onto the original beach, it has a groin effect, trapping sand, causing both beach narrowing and further reducing lateral sand transport, starving the downdrift beaches.

> The use of hard structures proposed to protect buildings and park areas will result in loss of the beach."[17]

These impacts to coastal processes must be analyzed as part of the Commission's environmental review of the Goleta Beach County Park Project application.

B. Contrary to the Determination in the County's EIR, Removing the West End Unpermitted Revetments Would Not Result in Unmitigable Significant Impacts to Aesthetics and Visual Resources, Land Use and Recreation, and Coastal Processes.

The County originally proposed a project that would have respected coastal processes while preserving public beach access and recreation by removing the unpermitted rock revetments at the west end of the Park. Specifically, this proposal would:

> [R]edevelop key Park and infrastructure facilities to recognize ongoing natural coastal processes. The proposed Project would include relocating several threatened utility corridors and infrastructure at the western end of the Park, and using limited shoreline protection measures to protect high value and difficult to relocate utility infrastructure (Figure 2-2). The Project elements include:
>
> 1) Remove Parking Lots 6 and 7 (107 parking spaces) and restore this area back to sandy beach;
>
> 2) Establish a Transportation and Utility Corridor within a "high erosion protection zone;"
>
> 3) Relocate at-risk utilities to the Transportation and Utility Corridor including:
> County of Santa Barbara 4-inch Sanitary Sewer Force Main;
> County of Santa Barbara 3-inch Domestic Water Line;
> Verizon 1-inch telephone conduit;
> Goleta Water District 18-inch Reclaimed Water Line;
> Sempra Energy/ Southern California Gas Company 8-inch High-Pressure Gas Line;
>
> 4) Relocate a section of the Coastal Trail bike path to the Transportation and Utility Corridor;
>
> 5) Protect Goleta Sanitary District's underground sewer outfall pipe and vault with a geotextile and cobble revetment;
>
> 6) Remove approximately 1,200 feet of rock revetment at the western end of the Park; and

[17] Dr. Orrin Pilkey comments on the County's DEIR. October 30, 2013, attached as Exhibit D.

7) Consider the potential for relocation of the western restroom outside the coastal process zone.[18]

This project description was based on work performed by Philip Williams and Associates ("PWA"), a professional hydrology and engineering firm. PWA's engineers conceived, modeled and presented this alternative which "reasonably minimizes potential future erosion damage, allows natural beach fluctuations, optimizes the natural beach width, and avoids downcoast impacts."[19] Unfortunately, however, the County abandoned this proposal and instead decided to submit an application to the Commission to retain the existing rock revetments. In doing so, the County relied on an EIR that not only used the improper baseline (thus skewing the entire environmental impact analysis), but also misrepresented the impacts of removing the unpermitted revetments.

Coastal engineer Michael Walther of Coastal Tech, Inc. has worked on the Goleta Beach issue since 2003. Walther reviewed the EIR and disagrees that removing the unpermitted rock revetments would cause significant impacts to coastal processes, views, recreation or land use at Goleta Beach Park. Walther concludes that these changes are ongoing and "would likely occur with or without" removal of the revetment.[20]

1. *Removing the Rock Revetments on the West End Would Result in Beneficial, not Adverse, Impacts to Aesthetics and Visual Resources.*

When analyzing the option of removing rock revetments from the west end of the Park, the County's EIR provided conflicting information. On the one hand the EIR acknowledged the *beneficial* impacts to aesthetics and visual resources associated with creation of an attractive white sandy beach to replace the oil-stained asphalt and cars in this area,[21] but on the other hand, the EIR also found detrimental visual effects related to potential loss of trees and turf.[22]

Of course, had the correct baseline been used, this option would not cause any adverse impacts. Notwithstanding this fact, from a practical standpoint any potential detrimental visual impacts are clearly offset by the beneficial impact of restoring a larger beach area. The Commission should reject the County's faulty analysis and improper determination that increasing the beach would result in an adverse impact to aesthetics and visual resources.

2. *Removing the Rocks at the West End Would Not Result in Adverse Impacts to Land Use and Recreation.*

The County's EIR incorrectly determined that the option of removing rocks and parking from the west end of the Park would result in unavoidable impacts. On the contrary, the EIR itself demonstrates that any potential impacts can be adequately mitigated.

---

[18] FEIR at 2-4 and 2-7.
[19] Philip Williams and Associates, *Park Reconfiguration Alternative*, 2008, attached as Exhibit E.
[20] Michael Walther, Coastal Tech, Inc. *Comments on DEIR*, July 24, 2013, attached as Exhibit F.
[21] FEIR at 4.1-17.
[22] FEIR at 4.1-21 – 4.1-27.

a. Parking Spaces can be Relocated On-Site to Respect Coastal Processes while Enhancing Public Access.

The County's proposed FEIR incorrectly determined that moving parking away from the problematic west end would result in a significant impact to Recreation and Land Use. This conclusion is not supported by the evidence. The FEIR itself notes that *all* affected parking spaces can be replaced onsite, closer to the pier, restrooms, restaurant, picnic areas and other facilities (see Mitigation Measure REC-5b).[23] Given this fact, there would be no decrease in public coastal access parking.

Additionally, parking surveys conducted by the County and EDC demonstrate that the Park has more than enough parking spaces to meet current and projected needs.[24]

b. The Park's Lawn can be Protected Without Maintaining the Existing Rock Revetments.

Again, if the proper baseline is used, there would be no new significant impacts to the existing lawn and picnic areas. Even under existing conditions, most of the lawn and almost all picnic facilities are not fronted by revetment and are thus subject to erosion with or without the Project.[25] Even if some of the lawn area is replaced with sandy beach, this would not constitute a significant land use impact as sandy beach is coastal dependent recreation while turf is not. Moreover, turf can be replanted at relatively low cost in existing locations and/or installed in the northern portions of Lots 6 and 7. Thus, there would be no impact, or any potentially adverse impact could be mitigated.

3. *Impacts to Coastal Processes Caused by Removing the West End Revetments can be Feasibly Mitigated.*

If the EIR had used the proper baseline, there would be no impacts associated with removal of the west end rock revetments. Even relying on the County's improper baseline, however, the EIR notes that such impacts could be minimized by installing a buried cobble berm that would "substantially increase shoreline protection".[26] Cobble berms have been demonstrated through testing to be effective at protecting parks from 20-foot tall waves.[27] During storms, cobbles are stacked up by the waves providing protection to upland areas. However, because cobbles also move with waves, studies indicate they do not cause active or passive beach erosion. Therefore, cobble berms can provide an effective alternative approach to reduce impacts associated with removal of the existing rock revetments.

Surfrider and EDC urge the Commission to use the proper baseline to analyze impacts and benefits caused by (1) retention of, and (2) removal of the west end revetments. In addition,

---

[23] FEIR at 4.10-49.
[24] Environmental Defense Center, *Goleta Beach Parking Lot Surveys*, 2012 – 2014, attached as Exhibit G.
[25] Walther, page 8.
[26] FEIR at 7-31.
[27] Komar and Allan, 2010 http://pubs.usgs.gov/sir/2010/5254/pdf/sir20105254_chap12.pdf.

the Commission should analyze the potential impacts and benefits of a buried cobble berm as part of a comprehensive package that removes unpermitted rock seawalls, enlarges and restores the beach and relocates threatened infrastructure including the bike path and the parking spaces and sewer line that are located in the critical erosion zone.

C. The County EIR did not properly analyze consistency with LCP Policies.

The County's EIR evaluated the Goleta Beach 2.0 Project's consistency with the Coastal Land Use Plan ("CLUP") and Coastal Act. EDC's and Surfrider's attached comments on the DEIR identify areas in which the Project – i.e., retention of the rock revetments - would be inconsistent with CLUP policies and the Coastal Act.[28]

Furthermore, CLUP Policy 7-4 requires an analysis of the carrying capacity of Goleta Beach Park. The County drafted but has not yet finalized the Goleta Beach Carrying Capacity Study which concludes that the Park's environmental carrying capacity has already been met or exceeded by human uses and activities.[29] The Commission should carefully analyze the Project's consistency with the CLUP and Coastal Act, and should request the County complete and submit the Carrying Capacity Study as part of this CDP process to help inform the Commission's decision regarding the Goleta Beach County Park Project.

In conclusion, we urge the Commission to ensure full and accurate analysis and disclosure of the impacts of the proposed Project as well as an alternative that will achieve the Project objectives of protecting the beach and park facilities, while respecting coastal processes and avoiding adverse significant impacts. Thank you for your consideration of these comments.

Sincerely,

Linda Krop,
Chief Counsel

cc: Surfrider Foundation, Santa Barbara Chapter

Attachments:

Exhibit A: Letter from A. Amber Geraghty, California Coastal Commission, to Alex Tuttle, County of Santa Barbara County, *RE: Draft Environmental Impact Report, Goleta Beach County Park Long-Term Protection Plan*, August 30, 2013

Exhibit B: Letter from Shana Gray, California Coastal Commission, to Coleen Lund, Santa Barbara County Parks, *RE: Notice of Preparation (NOP) of Draft Environmental Impact Report (DEIR) and Scope of Work for Goleta Beach EIR and Coastal Development Permit Amendment 4-02-251-A2*, July 19, 2006

[28] See EDC letters re DEIR and FEIR, attached hereto as Exhibit H.
[29] *Draft Goleta Beach Carrying Capacity Study*, 1998, at page 4, attached as Exhibit I.

Exhibit C: Email from Dianne Black, Santa Barbara County Planning and Development Department, to Brian Trautwein, EDC, November 21, 2013

Exhibit D: Dr. Orrin Pilkey letter regarding Santa Barbara County DEIR, October 30, 2013

Exhibit E: Philip Williams and Associates, *Goleta Beach Park Reconfiguration Alternative*, 2008

Exhibit F: Coastal Tech, Inc. letter regarding Santa Barbara County DEIR, July 24, 2013

Exhibit G: EDC Parking Surveys

Exhibit H: EDC letters re DEIR, FEIR

Exhibit I: Goleta Beach Carrying Capacity Study