AGREEMENT FOR SERVICES OF INDEPENDENT CONTRACTOR

THIS AGREEMENT (hereafter Agreement) is made by and between the County of Santa Barbara, a political subdivision of the State of California (hereafter COUNTY) and AMEC Environment & Infrastructure, Inc., having its principal place of business at 104 West Anapamu Street, Suite 204A, Santa Barbara, California, 93101 (hereafter CONTRACTOR) wherein CONTRACTOR agrees to provide and COUNTY agrees to accept the services specified herein.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. **DESIGNATED REPRESENTATIVE.** Kevin Drude at telephone number (805) 568-2519 is the representative of COUNTY and will administer this Agreement for and on behalf of COUNTY. Aaron Goldschmidt at telephone number (805) 962-0992 is the authorized representative for CONTRACTOR. Changes in designated representatives shall be made only after advance written notice to the other party.

2. **NOTICES.** Any notice or consent required or permitted to be given under this Agreement shall be given to the respective parties in writing, by first class mail, postage prepaid, or otherwise delivered as follows:

To COUNTY:
County of Santa Barbara
Planning and Development Department
123 E. Anapamu Street
Santa Barbara, CA 93101
Attn: Kevin Drude, Supervising Planner

To CONTRACTOR:
AMEC Environment & Infrastructure, Inc.
104 West Anapamu Street, Suite 204A
Santa Barbara, CA 93101
Attn: Aaron Goldschmidt

or at such other address or to such other person that the parties may from time to time designate. Notices and consents under this section, which are sent by mail, shall be deemed to be received five (5) days following their deposit in the U.S. mail.

3. **SCOPE OF SERVICES.** CONTRACTOR agrees to provide services to COUNTY in accordance with Exhibit A attached hereto and incorporated herein by reference.

4. **TERM.** CONTRACTOR shall commence performance on May 1, 2012 and end performance upon completion, but no later than September 1, 2013 unless otherwise directed by COUNTY or unless earlier terminated.

5. **COMPENSATION OF CONTRACTOR.** CONTRACTOR shall be paid for performance under this Agreement in accordance with the terms of Exhibit B attached hereto and incorporated herein by reference. Billing shall be made by invoice, which shall include the contract number assigned by COUNTY and which is delivered to the address given in Section 2 NOTICES above following completion of the increments identified on Exhibit B. Unless otherwise specified on Exhibit B, payment shall be net thirty (30) days from presentation of invoice.

6. **INDEPENDENT CONTRACTOR.** CONTRACTOR shall perform all of its services under this Agreement as an independent contractor and not as an employee of COUNTY. CONTRACTOR understands and acknowledges that it shall not be entitled to any of the benefits of a COUNTY employee, including but not limited to

vacation, sick leave, administrative leave, health insurance, disability insurance, retirement, unemployment insurance, workers' compensation and protection of tenure.

7. **STANDARD OF PERFORMANCE.** CONTRACTOR represents that it has the skills, expertise, and licenses/permits necessary to perform the services required under this Agreement. Accordingly, CONTRACTOR shall perform all such services in the manner and according to the standards observed by a competent practitioner of the same profession in which CONTRACTOR is engaged. All products of whatsoever nature which CONTRACTOR delivers to COUNTY pursuant to this Agreement shall be prepared in a first class and workmanlike manner and shall conform to the standards of quality normally observed by a person practicing in CONTRACTOR's profession. CONTRACTOR shall correct or revise any errors or omissions, at COUNTY'S request without additional compensation. Permits and/or licenses shall be obtained and maintained by CONTRACTOR without additional compensation.

8. **TAXES.** COUNTY shall not be responsible for paying any taxes on CONTRACTOR'S behalf, and should COUNTY be required to do so by state, federal, or local taxing agencies, CONTRACTOR agrees to promptly reimburse COUNTY for the full value of such paid taxes plus interest and penalty, if any. These taxes shall include, but not be limited to, the following: FICA (Social Security), unemployment insurance contributions, income tax, disability insurance, and workers' compensation insurance.

9. **CONFLICT OF INTEREST.** CONTRACTOR covenants that CONTRACTOR presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. CONTRACTOR further covenants that in the performance of this Agreement, no person having any such interest shall be employed by CONTRACTOR.

The term "organizational conflict of interest" means that a relationship exists whereby CONTRACTOR has interests which may diminish the capacity to give impartial, technically sound, objective assistance and advice or may otherwise result in a biased work product or may result in an unfair competitive advantage.

CONTRACTOR agrees that if an organizational conflict of interest is discovered with respect to this CONTRACT, CONTRACTOR shall make an immediate and full disclosure in writing to COUNTY which shall include a description of the action which the CONTRACTOR has taken or proposes to take to avoid, eliminate or neutralize the conflict. COUNTY may, however, terminate the CONTRACT if it could be in the best interests of the COUNTY.

10. **RESPONSIBILITIES OF COUNTY.** COUNTY shall provide all information reasonably necessary by CONTRACTOR in performing the services provided herein.

11. **OWNERSHIP OF DOCUMENTS.** COUNTY shall be the owner of the following items incidental to this Agreement upon production, whether or not completed: all data collected, all documents of any type whatsoever, and any material necessary for the practical use of the data and/or documents from the time of collection and/or production whether or not performance under this Agreement is completed or terminated prior to completion. CONTRACTOR shall not release any materials under this section except after prior written approval of COUNTY.

No materials produced in whole or in part under this Agreement shall be subject to copyright in the United States or in any other country except as determined at the sole discretion of COUNTY. COUNTY shall have the unrestricted authority to publish, disclose, distribute, and other use in whole or in part, any reports, data, documents or other materials prepared under this Agreement.

12. **RECORDS, AUDIT, AND REVIEW.** CONTRACTOR shall keep such business records pursuant to this Agreement as would be kept by a reasonably prudent practitioner of CONTRACTOR'S profession and shall maintain such records for at least four (4) years following the termination of this Agreement. All accounting

records shall be kept in accordance with generally accepted accounting practices. COUNTY shall have the right to audit and review all such documents and records at any time during CONTRACTOR'S regular business hours or upon reasonable notice.

13. **INDEMNIFICATION AND INSURANCE.** CONTRACTOR shall agree to defend, indemnify and save harmless the COUNTY and to procure and maintain insurance in accordance with the provisions of Exhibit C attached hereto and incorporated herein by reference.

14. **NONDISCRIMINATION.** COUNTY hereby notifies CONTRACTOR that COUNTY's Unlawful Discrimination Ordinance (Article XIII of Chapter 2 of the Santa Barbara County Code) applies to this Agreement and is incorporated herein by this reference with the same force and effect as if the ordinance were specifically set out herein and CONTRACTOR agrees to comply with said ordinance.

15. **NONEXCLUSIVE AGREEMENT.** CONTRACTOR understands that this is not an exclusive Agreement and that COUNTY shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by CONTRACTOR as the COUNTY desires.

16. **ASSIGNMENT.** CONTRACTOR shall not assign any of its rights nor transfer any of its obligations under this Agreement without the prior written consent of COUNTY and any attempt to so assign or so transfer without such consent shall be void and without legal effect and shall constitute grounds for termination.

17. **TERMINATION.**

A. By COUNTY. COUNTY may, by written notice to CONTRACTOR, terminate this Agreement in whole or in part at any time, whether for COUNTY's convenience or because of the failure of CONTRACTOR to fulfill the obligations herein. Upon receipt of notice, CONTRACTOR shall immediately discontinue all services effected (unless the notice directs otherwise), and deliver to COUNTY all data, estimates, graphs, summaries, reports, and all other records, documents or papers as may have been accumulated or produced by CONTRACTOR in performing this Agreement, whether completed or in process.

1. For Convenience. COUNTY may terminate this Agreement upon thirty (30) days written notice. Following notice of such termination, CONTRACTOR shall promptly cease work and notify COUNTY as to the status of its performance.

Notwithstanding any other payment provision of this Agreement, COUNTY shall pay CONTRACTOR for service performed to the date of termination to include a prorated amount of compensation due hereunder less payments, if any, previously made. In no event shall CONTRACTOR be paid an amount in excess of the full price under this Agreement nor for profit on unperformed portions of service. CONTRACTOR shall furnish to COUNTY such financial information as in the judgment of COUNTY is necessary to determine the reasonable value of the services rendered by CONTRACTOR. In the event of a dispute as to the reasonable value of the services rendered by CONTRACTOR, the decision of COUNTY shall be final. The foregoing is cumulative and shall not affect any right or remedy which COUNTY may have in law or equity.

2. For Cause. Should CONTRACTOR default in the performance of this Agreement or materially breach any of its provisions, COUNTY may, at COUNTY's sole option, terminate this Agreement by written notice which shall be effective upon receipt by CONTRACTOR.

B. By CONTRACTOR. Should COUNTY fail to pay CONTRACTOR all or any part of the payment set forth in Exhibit B, CONTRACTOR may, at CONTRACTOR's option terminate this agreement if such failure is not remedied by COUNTY within thirty (30) days of written notice to COUNTY of such late payment.

18. **SECTION HEADINGS.** The headings of the several sections, and any table of contents appended hereto, shall be solely for convenience of reference and shall not affect the meaning, construction or effect hereof.

19. **SEVERABILITY.** If any one or more of the provisions contained herein shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such provision or provisions shall be deemed severable from the remaining provisions hereof, and such invalidity, illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

20. **REMEDIES NOT EXCLUSIVE.** No remedy herein conferred upon or reserved to COUNTY is intended to be exclusive of any other remedy or remedies, and each and every such remedy, to the extent permitted by law, shall be cumulative and in addition to any other remedy given hereunder or now or hereafter existing at law or in equity or otherwise.

21. **TIME IS OF THE ESSENCE.** Time is of the essence in this Agreement and each covenant and term is a condition herein.

22. **NO WAIVER OF DEFAULT.** No delay or omission of COUNTY to exercise any right or power arising upon the occurrence of any event of default shall impair any such right or power or shall be construed to be a waiver of any such default or an acquiescence therein; and every power and remedy given by this Agreement to COUNTY shall be exercised from time to time and as often as may be deemed expedient in the sole discretion of COUNTY.

23. **ENTIRE AGREEMENT AND AMENDMENT.** In conjunction with the matters considered herein, this Agreement contains the entire understanding and agreement of the parties and there have been no promises, representations, agreements, warranties or undertakings by any of the parties, either oral or written, of any character or nature hereafter binding except as set forth herein. This Agreement may be altered, amended or modified only by an instrument in writing, executed by the parties to this Agreement and by no other means. Each party waives their future right to claim, contest or assert that this Agreement was modified, canceled, superseded, or changed by any oral agreements, course of conduct, waiver or estoppel.

24. **SUCCESSORS AND ASSIGNS.** All representations, covenants and warranties set forth in this Agreement, by or on behalf of, or for the benefit of any or all of the parties hereto, shall be binding upon and inure to the benefit of such party, its successors and assigns.

25. **COMPLIANCE WITH LAW.** CONTRACTOR shall, at his sole cost and expense, comply with all County, State and Federal ordinances and statutes now in force or which may hereafter be in force with regard to this Agreement. The judgment of any court of competent jurisdiction, or the admission of CONTRACTOR in any action or proceeding against CONTRACTOR, whether COUNTY is a party thereto or not, that CONTRACTOR has violated any such ordinance or statute, shall be conclusive of that fact as between CONTRACTOR and COUNTY.

26. **CALIFORNIA LAW.** This Agreement shall be governed by the laws of the State of California. Any litigation regarding this Agreement or its contents shall be filed in the County of Santa Barbara, if in state court, or in the federal district court nearest to Santa Barbara County, if in federal court.

27. **EXECUTION OF COUNTERPARTS.** This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the parties shall preserve undestroyed, shall together constitute one and the same instrument.

28. **AUTHORITY.** All parties to this Agreement warrant and represent that they have the power and authority to enter into this Agreement in the names, titles and capacities herein stated and on behalf of any entities, persons, or firms represented or purported to be represented by such entity (ies), person(s), or firm(s) and that all formal requirements necessary or required by any state and/or federal law in order to enter into this Agreement have been fully complied with. Furthermore, by entering into this Agreement, CONTRACTOR hereby warrants that it shall not have breached the terms or conditions of any other contract or agreement to which CONTRACTOR is obligated, which breach would have a material effect hereon.

29. **PRECEDENCE.** In the event of conflict between the provisions contained in the numbered sections of this Agreement and the provisions contained in the Exhibits, the provisions of the Exhibits shall prevail over those in the numbered sections.

30. **SUBCONTRACTORS.** CONTRACTOR is authorized to subcontract with subcontractors identified in Contractor's Proposal. CONTRACTOR shall be fully responsible for all services performed by its subcontractor. CONTRACTOR shall secure from its subcontractor all rights for COUNTY in this Agreement, including audit rights.

31. **HANDLING OF PROPRIETARY INFORMATION.** CONTRACTOR understands and agrees that certain materials which may be provided may be classified and conspicuously labeled as proprietary confidential information. That material is to be subject to the following special provisions:

A. All reasonable steps will be taken to prevent disclosure of the material to any person except those personnel of CONTRACTOR working on the project that have a need to use the material.

B. Upon conclusion of CONTRACTOR'S work, CONTRACTOR shall return all copies of the material direct to party providing such material. CONTRACTOR shall contact COUNTY to obtain the name of the specific party authorized to receive the material.

32. **IMMATERIAL CHANGES.** CONTRACTOR and COUNTY agree that immaterial changes to the work program (time frame and mutually agreeable work program changes which will not result in a change to the total contract amount) may be authorized by Planning and Development Director, or designee in writing, and will not constitute an amendment to the Agreement.

33. **NEWS RELEASES/INTERVIEWS.** CONTRACTOR agrees for itself, its agents, employees and subcontractors, it will not communicate with representatives of the communications media concerning the subject matter of this Agreement without prior written approval of COUNTY. CONTRACTOR further agrees that all media requests for communication will be referred to COUNTY.

Agreement for Services of Independent Contractor between the **County of Santa Barbara** and **AMEC Environment and Infrastructure, Inc.**

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective on the date executed by COUNTY.

COUNTY OF SANTA BARBARA

By: _____
Chair, Board of Supervisors

Date: _____

ATTEST:
CHANDRA L. WALLAR
CLERK OF THE BOARD

By: _____
Deputy

CONTRACTOR
AARON GOLDSCHMIDT
AMEC ENVIRONMENT & INFRASTRUCTURE, INC.

By: _____

Tax ID Number: 911641772

APPROVED AS TO FORM:
DENNIS MARSHAL
COUNTY COUNSEL

By: _____
Deputy County Counsel

APPROVED AS TO ACCOUNTING FORM:
ROBERT W GEIS, CPA
AUDITOR-CONTROLLER

By: _____
Deputy
Deputy Auditor-Controller
Gregory Eric Levin
Advanced and Specialty Accounting

APPROVED AS TO FORM:
SUPERVISING RISK ANALYST

By: _____
Risk Management

G:\GROUP\PERMITTING\Case Files\DVP\11Cases\11DVP-00000-00016 Goleta Beach 2.0\EIR Contract \Agreement for Services Contract.doc

EXHIBIT A

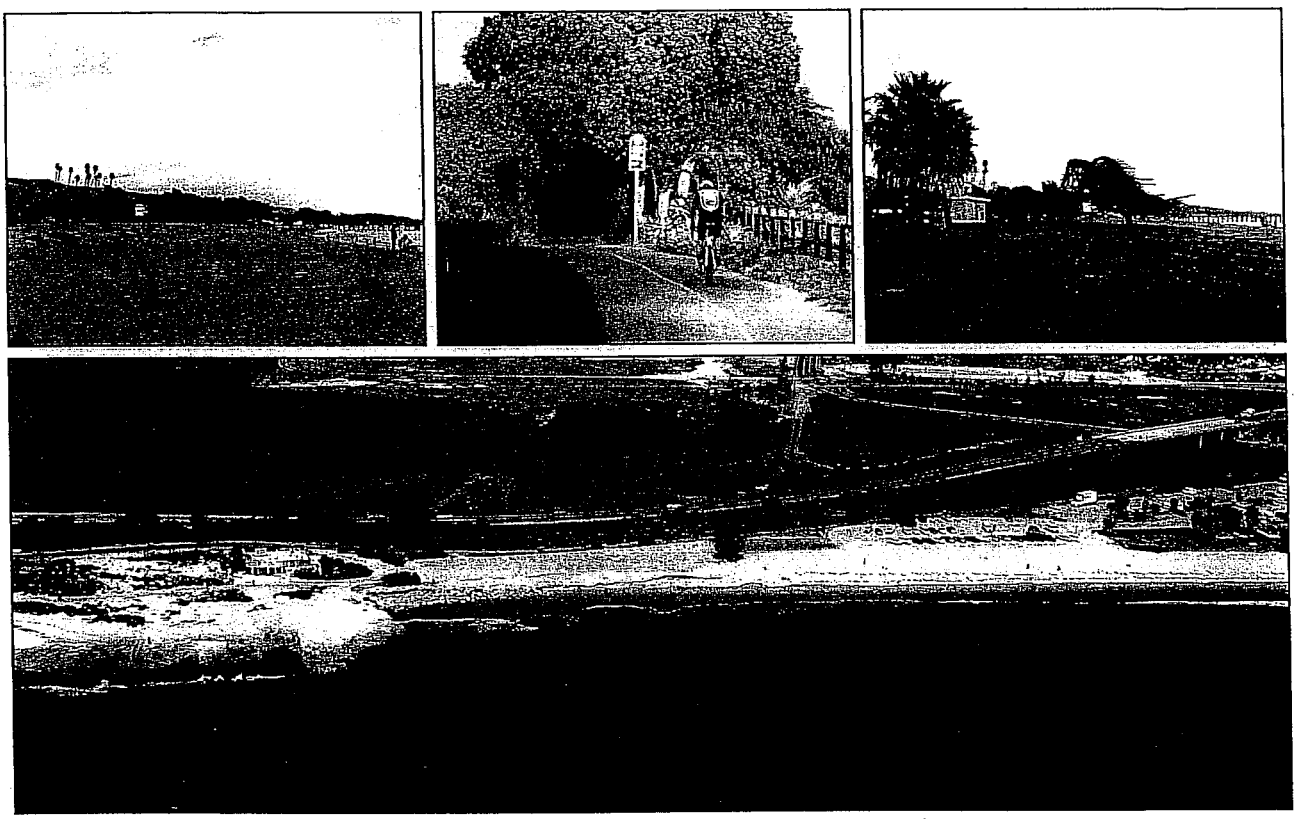
SCOPE OF SERVICES

PROPOSAL TO PREPARE AN ENVIRONMENTAL IMPACT REPORT FOR THE GOLETA BEACH COUNTY PARK MANAGED BEACH RETREAT PROJECT 2.0 AMEC ENVIRONMENT & INFRASTRUCTURE, INC.

Volume I – Technical Proposal to Prepare an

Environmental Impact Report Goleta Beach County Park Managed Beach Retreat Project 2.0

Case Numbers 11DVP-00000-00016 and 11CDP-00000-00069



Prepared by amec

AMEC Environment & Infrastructure, Inc.
Santa Barbara Office
104 West Anapamu Street, Suite 204A
Santa Barbara, California, 93101
(805) 962-0992 Fax (805) 966-1706

Prepared for
County of Santa Barbara
Planning and
Development Department

February 27, 2012

Goleta Beach County Park Managed Retreat Project 2.0 EIR
Best and Final Proposal Revisions – Summary Table

AMEC's Best and Final Proposal for the Goleta Beach County Park Managed Retreat Project 2.0 EIR responds to questions in the County Planning and Development Department letter dated February 17, 2012, and to discussions at our meeting with County staff on February 22, 2012. A summary of revisions to the original proposal is listed below to facilitate County review, with the County's numbered comments in the left column, changed proposal pages in the middle column and a summary of changes in the right column.

Volume I - *Technical Proposal Revisions*		
Comment #	**Changed page #, Section, Line or Table**	**Description of Revision**
N/A	Cover Letter, Par. 3	Brief introduction of process for changes to proposal
3, 5	Page 1, 2nd, 3rd and 6th bullets	Clarification of Project Manager/ Deputy Project Manager roles; addition of Storrer Environmental Services to project team.
1, 2	Page 12, Table 1, General Approach	Expand on *Prepare Written Summary of Public Hearing Comments* and *NOP* Tasks- presentation preparation, meeting attendance, and clarification of #s of responses (see also assumptions, Vol. 2).
3	Page 22, Pars. 1 & 2; Gira/ Henry Bios	Clarified the role and duties of AMEC Project Manager and Mike Henry, AMEC's Deputy Project Manager.
3	Page 29, Table 5	Clarified the role and duties and importance of Mike Henry, AMEC's Deputy Project Manager.
4	Page 40, Bullets 1 & 4	Clarify that $3,200 for summer parking surveys is not included in base scope (see also revised cost spreadsheet).
5	Pages 28-29, Tech. Staff Experience	Added brief qualifications for Storrer Environmental Services
5	Pages 30 & 31, Table 5	Added John Storrer to table with summary of expertise/ experience and role on project.
5	Page 43, Table 7	Added brief discussion of optional biological field surveys for Belding's savannah sparrow, raptors and herons/ egrets. Surveys for globose dune beetle are not recommended due to low quality habitat, low likelihood of occurrence and lack of significant associated with possible mortality of limited #s of individuals. Approach confirmed with Dr. Mike Catarino, S.B. Natural History Museum.

Volume 2 - *Cost Proposal Revisions*		
Comment #	**Changed Page #, Line, Section or Table**	**Description of Revision**
1	Page 1, bullet 6	Clarifies that AMEC's budget includes time to respond to 150 discrete unique comments. Duplicate comments would be addressed by cross referencing. Based on our discussion with County staff and the difficulty of identifying the scope and cost of unknown comments, we have not provided a cost estimate to respond to new unanticipated comments, but have clarified that AMEC would respond to up to 150 *discrete unique* comments within existing budget. Unanticipated comments that require preparation of new technical studies outside of EIR scope may require additional effort.
2	Attachment 1	AMEC has reduced staff hours for Task 2 by more than 10% from original proposal.
3.	Volume 1, pages 1, 22 and 29.	AMEC has clarified the importance of Mike Henry's roles in daily project coordination, internal team management, interface with County staff and comment assembly.

February 27, 2012

Mr. Kevin Drude, Supervising Planner
123 East Anapamu Street
Santa Barbara, CA 93101

Subject: Revised Proposal to Prepare an Environmental Impact Report for the Goleta Beach County Park Managed Beach Retreat Project 2.0

Dear Mr. Drude:

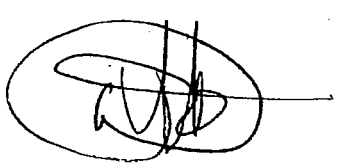
AMEC Environment & Infrastructure, Inc. (AMEC) is pleased to provide the attached revised proposal to prepare an Environmental Impact Report for the Goleta Beach County Park Managed Beach Retreat Project 2.0. AMEC is very excited about this potential opportunity and has brought together an outstanding team comprised of experienced environmental professionals and technical experts who have direct relevant experience for this type of project. The AMEC team has extensive experience working for the County of Santa Barbara as well as with each other on past and current projects.

AMEC is aware that the County has spent almost a decade and considerable amounts of funding to address coastal erosion and shoreline management issues at Goleta Beach Park. AMEC understands that the Goleta Beach 2.0 Project represents a compromise solution to addressing complex issues surrounding this project and that the County would like to expeditiously advance this proposal to the decision-makers. As a result, AMEC's proposed scope of work and budget maximize use of available materials such as the existing EIR, and focus time and budget on the set of issues that require additional analysis.

Our proposal responds to the preliminary scope of work and criteria outlined in the County's Request for Proposals, and includes revisions based on the County letter of February 17, 2012 and our discussion with you and Alice McCurdy on February 22, 2012 (see summary of revisions) . We have also included relevant information regarding our proposed project team and qualifications, relevant project experience, project understanding, a work plan, budget, and a proposed schedule. Please contact Dan Gira at (805) 962-0992 (daniel.gira@amec.com) if you have any immediate questions or comments on our proposal.

Sincerely,

AMEC Environment & Infrastructure, Inc.



Doug McFarling, Project Principal
Environmental Planning and Permitting Services

AMEC Environment & Infrastructure, Inc.
104 West Anapamu Street, Suite 204A
Santa Barbara, CA 93101
Tel: 805.962.0992
Fax: 805.966.1706 www.amec.com

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Exhibits

1 INTRODUCTION

- *Substantial experience with major coastal development/shoreline management projects*
- *Project Manager with 25+ years of experience with complex, high-profile projects in Santa Barbara County*
- *Recent experience working together on major projects*
- *Unique expertise in Santa Barbara County's Local Coastal Program and permit process*

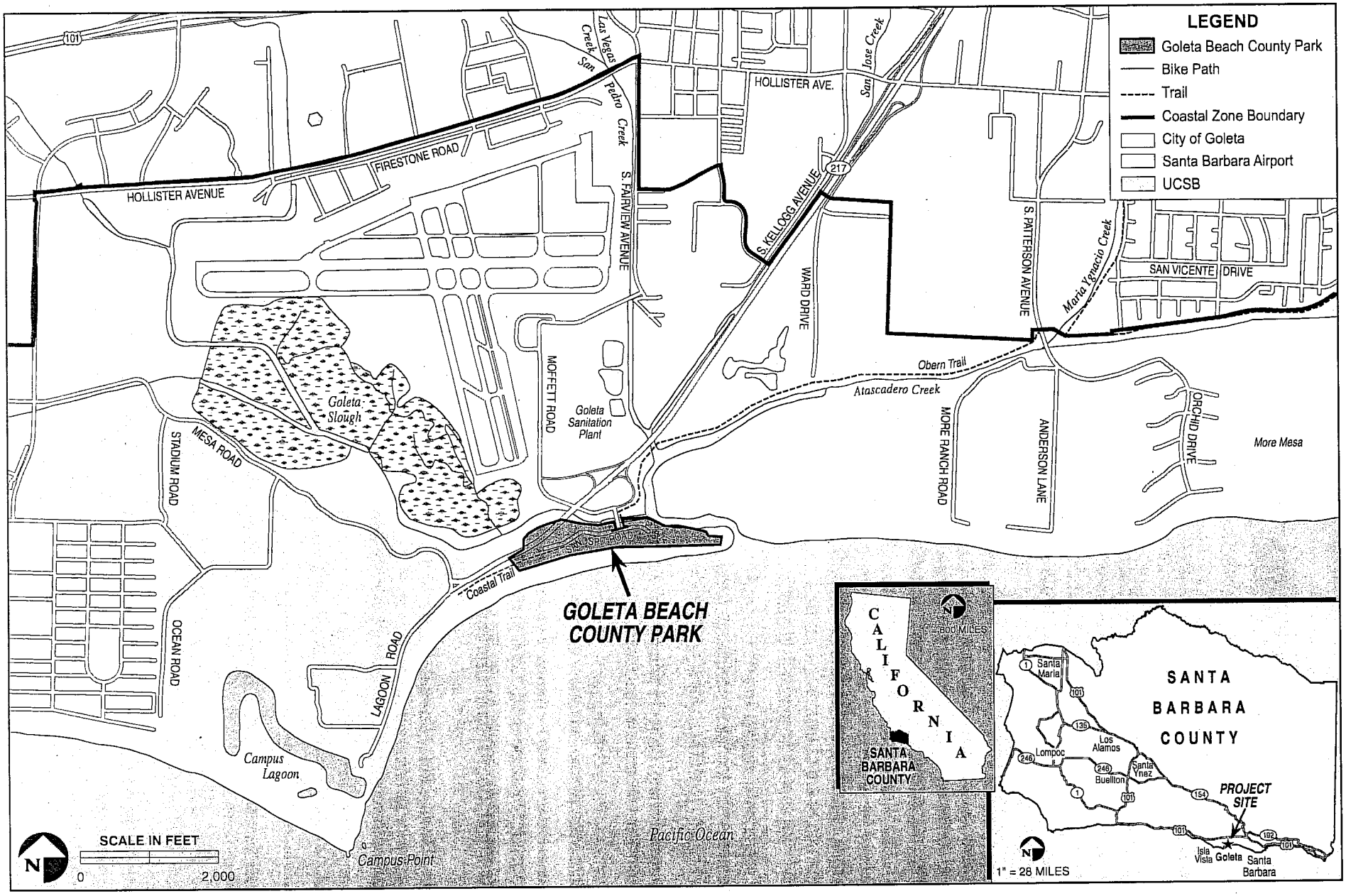
The team assembled by AMEC Environment & Infrastructure, Inc. (AMEC) for this project will be led by management staff based in our Santa Barbara office, one of AMEC's 14 California offices. Our office is situated two blocks from the Santa Barbara County Administration Building, permitting easy access for meeting attendance and facilitating close coordination with County staff. Our team is extremely familiar with the project site and shoreline management issues and understands the project's history and potential consequences. Our team has substantial experience with long-term beach and shoreline management, coastal protection, and surrounding regulatory and technical issues. Our Project Manager and Coastal Land Use Planner also have more than 40 years of experience working on complex planning issues for Santa Barbara County as well as substantial experience working with the California Coastal Commission (CCC) on a range of major projects.

AMEC's proposed project team comprises a balanced mix of experienced environmental professionals complemented by technical specialists familiar with the shoreline management and potential project issues (refer to Figure 1). AMEC's team consists of:

- **Doug McFarling, Project Principal** – Will be responsible for client service management, issues resolution, and commitment of corporate resources.
- **Dan Gira, Project Manager** – Responsible for high-level project management, CEQA technical adequacy, public presentations, and timely submission of high-quality deliverables.
- **Michael Henry, PhD., Deputy Project Manager** – Day-to-day project coordination, overseeing technical analysis for consistency with County standards, any project-specific style guidance, and adherence to timeline.
- **Rita Bright, Coastal Land Use Specialist** – Will address coastal land use policy and regulatory issues and assist County staff in addressing concerns raised by the CCC.
- **Hany Elwany, PhD., Coastal Environments** – Will peer review existing coastal process studies for accuracy and provide technical support for analysis in the Environmental Impact Report (EIR) to ensure that this document provides thorough impact analysis along with feasible coastal process mitigation measures as needed.
- **John Storrer, Storrer Environmental Services** – Available to conduct focused surveys for special status and raptor species, prepare an associated technical report and provide input to the biological resources analysis.
- **Ken Doud, Videoscapes** – Will provide photosimulations of future, post-project conditions at Goleta Beach.
- **Scott Schell, Associated Transportation Engineers** – Will provide analysis of parking, circulation, and transportation issues.

1.A Project Understanding

AMEC understands that the Goleta Beach County Park Managed Beach Retreat Project 2.0 is the result of an extended effort by Santa Barbara County, community organizations, concerned citizens, and interested agencies to resolve long-standing coastal protection issues at Goleta Beach County Park, located at 5986 Sandspit Road, in the community of Goleta at the mouth of the Goleta Slough (Figure 1). The proposed



amec

Project Location

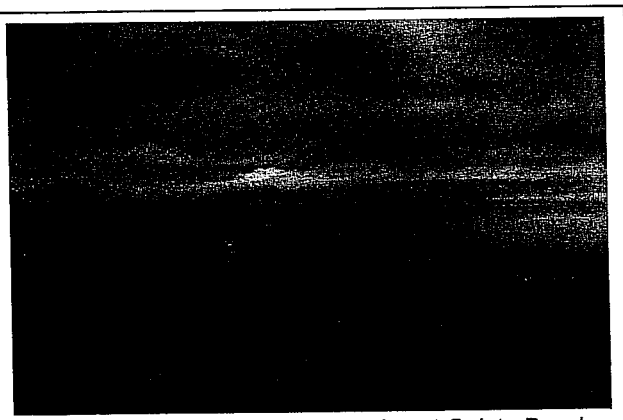
FIGURE 1

project is intended to appropriately balance protection of high-value recreational facilities and public utilities with adaptation of coastal processes in a manner consistent with goals and policies of the County's Local Coastal Program and State Coastal Act. AMEC also understands that the County has been studying this matter for over a decade and that this project represents a "compromise" proposal which attempts to address and balance the concerns of various interest groups consistent with direction provided by the CCC.

AMEC recognizes that a clear understanding of a proposed project is a key element in establishing an appropriate scope of work for EIR preparation as well as for preparing a complete and adequate document. In preparing this proposal, AMEC has reviewed the County's Request for Proposal, the Proposed Project Description (10/17/2011); Goleta Beach 2.0 30% Preliminary Design Report (10/11/2011); Environmental Analysis and Public Response, the Goleta Beach Park Coastal Access and Recreation Enhancement – Beach Sand Stabilization (Chambers Group, Inc., 4/22/2008); and a Coastal Commission Staff Report and attached studies (6/25/2009). Based on this review, AMEC understands that the proposed project is intended to reconfigure and protect key infrastructure and utilities at Goleta Beach Park in a manner that respects long-term shoreline equilibrium at the site. AMEC's understanding of the proposed project is set forth below:

Project Background: AMEC understands that the County is proposing to implement a managed retreat approach to address coastal erosion hazards at Goleta Beach County Park. The proposed Project's primary goals are to adapt Park facilities to long-term coastal processes while protecting critical utilities and maintaining heavily used public recreational facilities. These efforts are intended to restore a deep beach utilizing a combination of facility removal and relocation and limited, generally non-structural protection measures to protect existing facilities threatened by coastal erosion. This would avoid the need for "hard structures" such as revetments.

The Project was initiated in response to accelerated coastal erosion at Goleta Beach that began in the 1980s and which began to threaten existing facilities in the 1990s. In response, the County obtained emergency permits for installation of emergency revetments for a period of 30 months and commenced a multi-year park master planning exercise which culminated in a 2005 EIR which assessed both managed



The sandy beach is a major attraction at Goleta Beach Park. Although subject to increased erosion since the 1980s, the beach remains one of the widest beaches in the Goleta area and experiences the highest levels of public use.

Goleta Beach Park includes a large lawn area which supports individual and group picnic sites, a children's playground, and horseshoe pits fronted by a wide sandy beach.

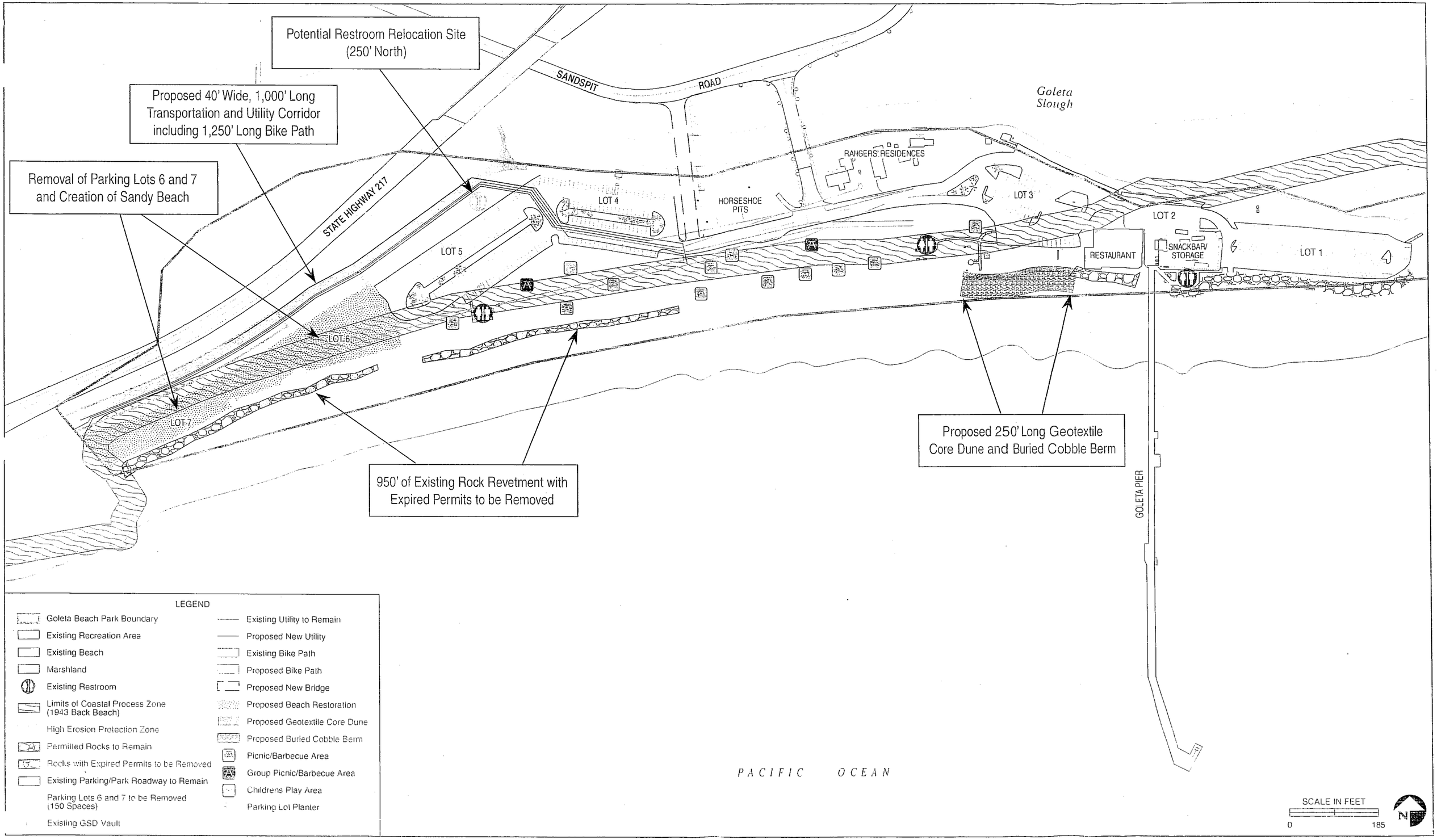
retreat and more structural and beach nourishment coastal protection options. This latter alternative was denied by the CCC in 2009. This led the County to address these shoreline management issues through formulation of the Goleta Beach County Park Managed Beach Retreat Project 2.0.

Environmental Setting: Goleta Beach Park occupies a 4,200-foot-long low-lying segment of shoreline located at the mouth of the Goleta Slough between the coastal bluffs at the University of California at Santa Barbara to the west and the More Mesa area to the east. This low-lying area was formerly a line of low dunes that separated the slough from the Pacific Ocean. Over approximately the last 60 years, this area has been raised in elevation by importation of artificial fill to permit construction of roads and Goleta Beach Park. Portions of the Park's ocean and slough frontages are now protected from wave action and erosion by rock revetments. The Park is bounded by low coastal bluffs on the west and the mouth of the Goleta Slough on the east, with the Goleta Slough, State Highway 217, and Sandspit Road to the north. Access to the vicinity is via State Highway 217, with direct Park access provided via a bridge from Sandspit Road across the main Goleta Slough channel.

Facilities at Goleta Beach Park consist of 2.4 acres of lawn, 3 public restrooms, 2 group picnic areas, a children's playground, horseshoe pits, and approximately 13 barbeque areas and benches scattered about the lawn (Figure 2). Additional important facilities include the Goleta Pier which extends more than 1,500 feet offshore, Beachside Restaurant, a snack bar, a bait and tackle shop, Park Ranger residences, and storage. Free parking is provided for approximately 594 cars in six different parking lots. Goleta Beach Park is one of the most heavily used parks along the South Coast of Santa Barbara County, with more than 1.5 million visitors annually. The Park and its facilities provide direct public coastal access to one of the widest sandy beaches in the Goleta Valley with excellent swimming conditions. Although coastal access is available at other locations (e.g., Bacara, Isla Vista), the Park is the only beachfront public park along more than 8 miles of urban area coastline west of Arroyo Burro Beach County Park.

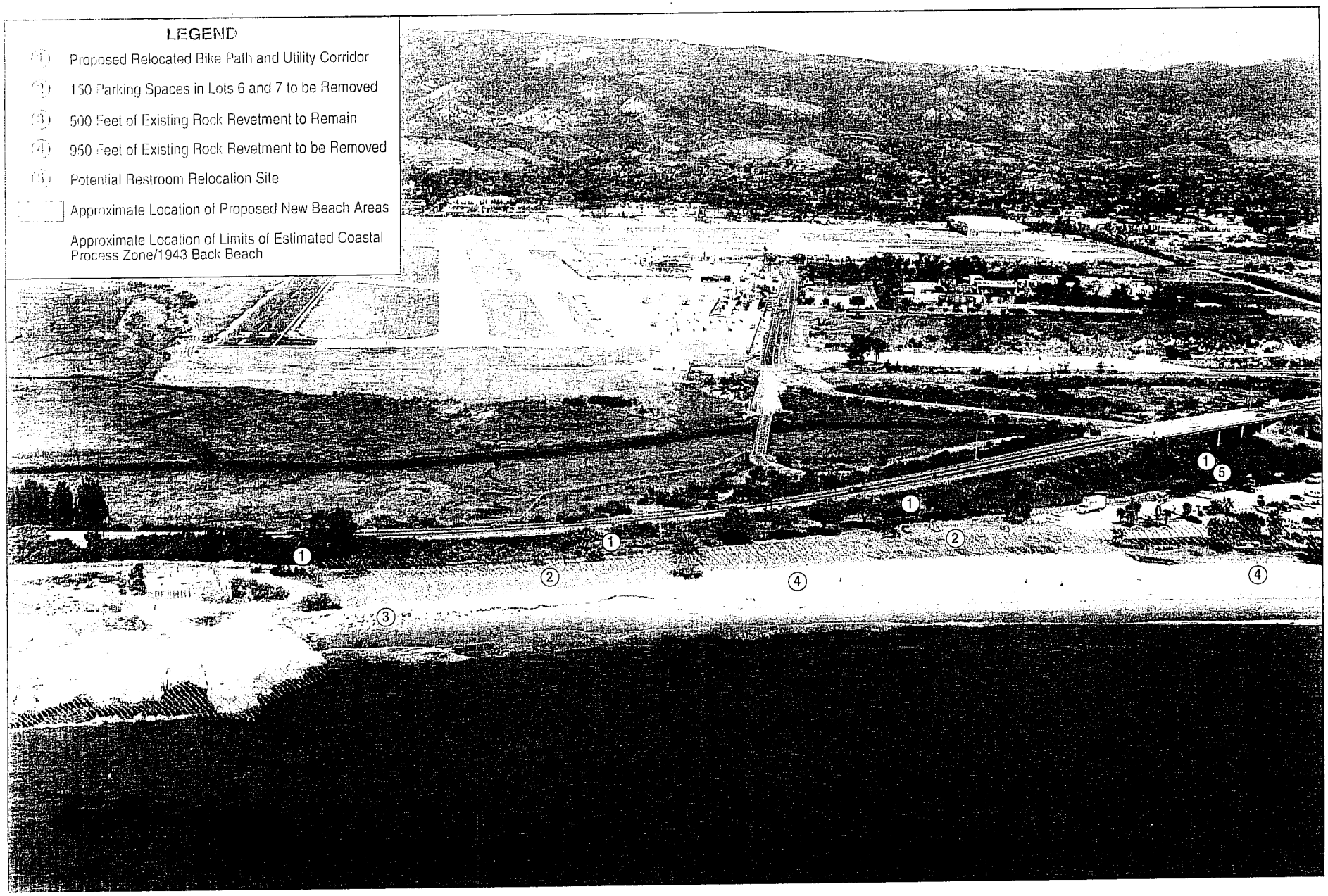
Goleta Beach is located within the Goleta Reach of Santa Barbara Littoral Cell which extends for 144 miles from the mouth of the Santa Maria River south to Mugu Submarine Canyon (Beach Erosion Authority for Clean Oceans and Nourishment, 1/2009). Beach sand within the central portion of this littoral cell along Santa Barbara County's South Coast is derived primarily from creeks within the Santa Ynez Mountains, with the watershed of the Goleta Slough being an important contributor. The width of Goleta Beach has fluctuated widely over the last 60-70 years, reaching a peak width of about 400 feet in 1975, and declining to an average width of 75 feet in 2000 after repeated El Nino events in the 1980s and 1990s (Chambers Group, Inc., 2008). Based on review of historic beach profiles, it would appear that much of Goleta Beach Park lies within an active Coastal Process Zone, where the beach and shoreline has the potential to retreat landward considerably from its current location (refer to Figure 3; Environmental Science Associates, Penfield & Smith, 10/11/2011)[1]. The fluctuating width of the beach and associated damage to park facilities has prompted installation of emergency revetments, shoreline management efforts, and the most recent Goleta Beach County Park Managed Beach Retreat Project 2.0.

[1] There is some uncertainty as to the exact location of the active Coastal Process Zone which represents the historic 1943 "back beach" in this area; as such, it has been depicted as a 26-foot corridor to provide for a margin of error and allow for conservative planning.



Project Site and Overall Plan

FIGURE 2



Project Elements

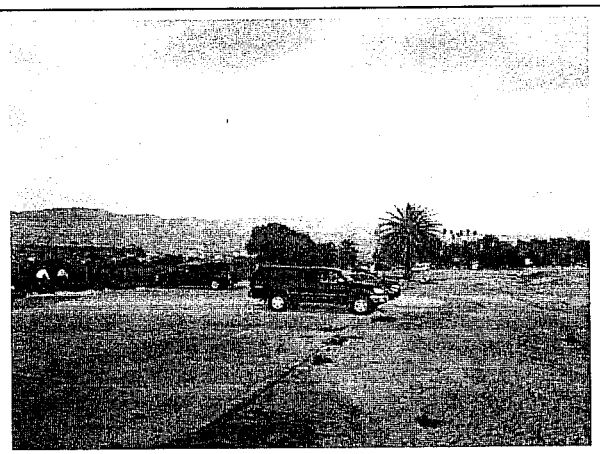
FIGURE 3

Project Details: The proposed project includes the goals of modifying existing utilities and Park facilities to recognize long-term shoreline fluctuations at Goleta Beach while protecting key facilities from damage (refer to Figure 2). This would involve a managed retreat approach whereby most of the threatened facilities at Goleta Beach Park, including utilities, a bike path, and parking lots are relocated landward generally outside of the active Coastal Process Zone, while other key facilities are protected in place either by existing approved revetments or less intrusive shoreline management techniques.

- **Remove Parking Lots 6 and 7 and Restore Sandy Beach:** Project implementation would result in removal of approximately 150 parking spaces and 43,100 square feet of paved surfaces, or approximately 25% of all parking spaces in Goleta Beach Park[2]. This area would be restored to sandy beach using an estimated 1,850 cubic yards of sand approximately 1 foot deep to cover underlying soil or sand. The area would provide a buffer between the proposed Transportation and Utility Corridor and the active beach.

- **Establish Transportation and Utility Corridor Outside Coastal Process Zone:** The proposed Project would involve relocation of the coastal bike trail and water, reclaimed water, sewer and gas lines to a new 40-foot wide Transportation and Utility Corridor located landward to the Coastal Process Zone. The bike trail would be reduced in length from 1,800 feet to approximately 1,200 feet with an associated reduction in impervious services. The western end of this corridor, which lies adjacent to and is overlapped in places by the Coastal Process Zone, would be protected by a new 500-foot-long compacted earth berm, as well approximately 250 feet of permitted rock revetment located seaward of this corridor which would remain in place.

The Project includes a proposed 40-foot-wide Transportation and Utility Corridor located between the existing coastal bike trail and Highway 217 on the generally landward side of the active Coastal Process Zone. The area is primarily vegetated with non-native



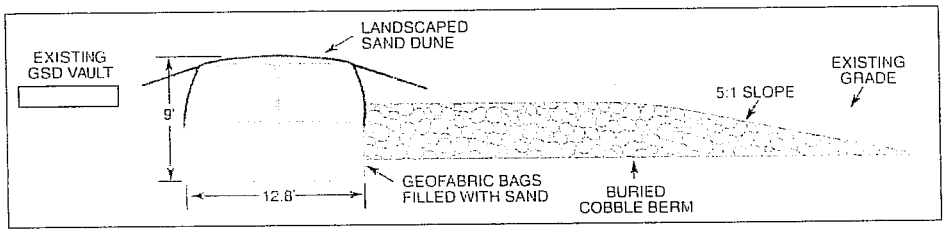
The Project would include removal of 150 parking spaces at the west end of Goleta Beach Park, approximately 25% of the Park's available parking. This area would be restored to almost one acre of sandy beach and provide a coastal process buffer for the proposed Transportation/ Utility corridor.

- **Remove Revetment with Expired Permits:** The proposed Project would include removal of two segments of approximately 950 of rock revetment installed under emergency permits which expired several years ago. This revetment protects portions of the western end of the Park, including a restroom, a group picnic area, children's playground, several individual picnic areas and benches, portions of Parking Lot 5 and almost one acre of lawn, all of which may lie within or adjacent to the active Coastal Process Zone or wave run-up area (refer to Figure 2). Existing fully permitted revetments at the Park's west end and fronting Beachside Restaurant, Snack Bar area, and Parking Lot 1 at the east end of Goleta Beach would remain in place (refer to Figure 2).

[2] Replacement of lost parking through provision of a satellite parking lot was previously considered but has been dropped from the current project.

- **Relocate Western Restroom:** The Park's western restroom may be relocated landward approximately 250 feet outside of the active Coastal Process Zone. No specific location has yet been identified.

- **Install Buried Geotextile Dune and Cobble Berm:** In order to protect the Goleta Sanitary District's main 36-inch sewer outfall line and associated sewer vault, up to 250 feet of buried geotextile dune fronted by a cobble sill or scour apron would be installed seaward of the sewer vault west of Beachside Restaurant (refer to Figure 2)[3]. This structure would consist of two layers of sand-filled geotextile bags approximately 9 feet high and almost 13 feet wide at its base, with the first layer installed below existing grade. This geotextile dune would be fronted on the seaward side by a buried cobble berm or erosion apron of up to 5 feet high and approximately 40 feet in width at its toe; cobble sizes do not appear to be specified (Figure 4). The entire structure would be buried with a newly constructed sand dune of approximately 4.5 feet above existing grade which may be planted with native dune species. This structure is intended to mimic natural coastal processes by combining beach cobble, which can accumulate at the base of some local coastal bluffs, with sand dunes which may have occurred historically along this stretch of beach. The cobble berm or apron would reduce or avoid potential for downward scour and would help protect the sand dune and geotextile bags from undercutting wave action; the dune or geotextile revetment could be relatively easily repaired if damaged.



The proposed Geotextile Core Dune and Cobble Berm would extend for approximately 250 feet along the seaward edge of the existing lawn at Goleta Beach, from adjacent to the Beachside Restaurant west past the existing shower facility. This entire structure would remain buried under the existing beach or new dunes unless exposed by long-term coastal processes or winter surf. Photo at right depicts a 6 foot high exposed geotextile sand revetment in Malibu.

Figure 4. Proposed Geotextile Dune and Cobble Berm

- **Additional Project Improvements and Details:** Construction of the proposed Transportation and Utility Corridor would involve removal of approximately 1.7 acres of existing vegetation primarily between the existing coastal bike path and Highway 217, including large areas of ice plant, scattered eucalyptus, and other non-native trees. Areas of native coyote brush scrub would also be removed, although the majority of this shrub cover is also underlain with ice plant. The total amount of bike parking at Goleta Beach Park would be increased from 60 to 120 spaces distributed around the Park. In addition to the loss of 150 parking spaces, approximately 60 spaces would be displaced for 1-2 months during project construction. Site grading would entail 3,690 cubic yards of cut and 3,670 cubic yards of fill within the transportation corridor, with 1,850 cubic yards of sand distributed over the newly restored beach area (e.g., former Lots 6 and 7). Although no new ornamental landscaping is proposed, it is unclear if the restored sand dune overlying the geotextile berm would be planted and if any such plantings would be irrigated. If native plants or habitat restoration are proposed, some form of access control (e.g., ropes) over or around these dunes to the beach may be required.

- **Project Phasing:** A project phasing plan has not been provided. However, it appears that utility and bike path relocation is recommended to occur prior to removal of any rock revetment. The timing of parking lot removal is

[3] There appears to be some disagreement between data in the RFP and the Goleta Beach 2.0 30% Preliminary Design Report. The RFP identifies the geotextile-cobble structure as being 175 feet in length while the Design Report cites 250 feet.

not discussed in the RFP or Project Description. Although the RFP notes that replacement parking is not part of the project, the Goleta Beach 2.0 30% Design Reports recommends delaying parking lot removal until after alternative replacement parking has been provided. This matter would need to be clarified. The phasing of other improvements including the proposed geotextile dune and cobble berm and the relocation of the western restroom would also require clarification.

- **Project Permitting:** Implementation of the Goleta Beach County Park Managed Beach Retreat Project 2.0 would require consideration and approval of a Development Plan and Coastal Development Permit by the County Planning Commission. Additional permits would likely include an encroachment permit by Caltrans. Project approval by the County Planning Commission could be potentially appealed to the County Board of Supervisors. Final County discretionary permit action could also be potentially appealed to the CCC.

- **Project Construction:** Details regarding the duration of project construction and the types and quantity of equipment and numbers of workers required have not yet been provided. However, project construction would entail the operation of heavy equipment such as bulldozers, backhoes, and rollers to remove existing Parking Lots 6 and 7 and to construct the new Transportation and Utility Corridor and raised earthen berm. In addition, it is likely that hundreds of heavy haul truck trips would be required to remove existing rock revetments and bring in cobble and potentially sand to construct the geotextile dune, cobble berm, and restored beach area. This new berm would require use of excavators or backhoes and bulldozers to trench for installation and similar heavy equipment for cobble placement. No destination for the rock removed from the existing revetments has been specified, but it may be stored at existing County facilities for use in future emergencies or sold to a willing contractor. The duration of project construction may be dependent upon funding availability and the phasing of individual components.

1.B General Approach

AMEC's approach to preparing the EIR would involve close coordination throughout the process with County staff and subconsultants to ensure preparation of a thorough, objective, and defensible EIR with appropriately detailed analyses and mitigation measures. This will be particularly important due to the high level of both public and agency interest in potential changes at Goleta Beach. AMEC understands that the County will be providing some additional details and refinements to the Project and that additional reports (e.g., geotechnical analysis) will be forthcoming. Past public and agency interest, complex coastal processes and associated Local Coastal Program Policy issues add a layer of complexity to the environmental analysis for this project. AMEC's management team is experienced with Coastal Zone projects, including those with complex coastal process and shoreline management issues.

General Approach to EIR Preparation

AMEC's technical approach to preparation of the EIR reflects the scope of services requested in the County's RFP, background research, and follow up communication with County staff. AMEC's general approach to preparing the EIR is summarized below in Table 1.

Table 1. General Approach - Goleta Beach County Park Managed Beach Retreat Project 2.0 – EIR

Project Kickoff. AMEC views the project initiation or kickoff process as critical to successful project completion. AMEC would perform additional review of existing available documents such as engineered site plans, past coastal process technical studies, the County's Local Coastal Program, the 2009 CCC Staff Report, and the previous EIR. AMEC's Project Manager, Deputy Project Manager, and key subconsultants (e.g., Coastal Environments) would attend the project kickoff meeting to refine the project scope, particularly key issues associated with peer review of past coastal process studies, potential recreation impacts, and issues likely to be of key concern to the public and decision-makers. AMEC recommends that the kickoff process also include a walking tour of the project site and vicinity with both Parks Department and Planning and Development staff. **Deliverables:** AMEC would prepare an initial list of questions/ data request for the County, identify any early issues or concerns, and provide a written summary of the meeting.
Notice of Preparation of EIR. AMEC understands that County staff will prepare and circulate the Notice of Preparation (NOP) for this project. The NOP will be particularly important to obtain formal comments on the scope of the EIR given past public and agency concerns. Obtaining early feedback from key stakeholders will minimize the potential for project delays and unforeseen issues arising late in the process. AMEC will include all comment letters received during the NOP process in an appendix to the EIR, provide brief responses to all comments received, and provide a matrix indicating where comments are incorporated and responded to in the Draft EIR (DEIR). This will assure reviewers that their comments have been responded to and streamline their review of the DEIR. If a scoping meeting is held, AMEC will attend the meeting and provide a Powerpoint presentation on the CEQA/EIR process for the project. **Deliverables:** AMEC will include all comments recorded at this scoping meeting in the response matrix.
Prepare Draft EIR Project Description, Environmental Setting, and Description of Project Alternatives. A complete project description is the foundation of an adequate EIR. AMEC will use information obtained from Project plans, the Goleta Beach 2.0 30% Design Report, staff reports, and technical studies. The project description will be refined in coordination with County staff to ensure accuracy and to allow consideration of methods to minimize potential adverse environmental impacts. AMEC will also prepare initial descriptions of project alternatives along with the project description and the general environmental setting section. **Deliverables:** AMEC will submit one reproducible unbound copy, six bound copies and six CDs within 10 working days of County authorization to proceed.
*Prepare **Administrative Draft EIR and Technical Studies.*** In order to maintain the project schedule, AMEC will coordinate with County staff throughout the preparation of the ADEIR to ensure the submitted document thoroughly addresses issues and concerns and closely adheres to County standards. AMEC suggests that several conference calls or meetings be held during preparation of the ADEIR to permit close coordination with County staff. The ADEIR will address direct and indirect impacts for all key issues as well as standard CEQA sections such as growth inducement, climate change, and consistency with adopted plans and policies in addition to an analysis of the impacts associated with project alternatives and their comparison with project impacts. The ADEIR will respond to issues raised during the scoping and public comment period. Key issues to be addressed in the ADEIR are summarized in Section 4, Study Methodology. **Deliverables:** AMEC will provide for two rounds of County review via email (MS Word). AMEC will submit one reproducible unbound copy, six bound copies and six CDs (with files divided into chapters) of the ADEIR and technical studies within 75 working days of County authorization to proceed.
Prepare Draft EIR. AMEC will prepare a DEIR which thoroughly addresses County questions and concerns and incorporates County comments. AMEC's goal would be to utilize up-front coordination during preparation of the ADEIR to minimize changes needed. **Deliverables:** Within 15 working days of receipt of County comments on the ADEIR, AMEC will publish and submit one reproducible unbound copy, thirty (30) bound hardcopies and thirty (30) CDs including technical appendices (PDF versions) and two CDs with files divided into chapters suitable for easy download from County's website. AMEC will also submit two master CDs with both MS Word and PDF versions and appendices (Word documents as available for appendices).
*Prepare **Written Summary of Public Hearing Comments.*** AMEC staff would attend the public hearing and provide a Powerpoint presentation within the existing scope if requested by County staff. An AMEC staff environmental analyst would prepare detailed notes of all comments received on the EIR. These would be cross checked against the tape of the hearing to ensure accuracy as it is AMEC's experience that oral public comment is often too briefly summarized in such minutes. AMEC's budget includes the time for an experienced environmental analyst to record meeting minutes and cross check hearing tapes. **Deliverables:** AMEC will submit one (1) reproducible unbound copy, six (6) bound copies and six (6) CDs within 10 working days of the public hearing.

Table 1. General Approach - Goleta Beach County Park Managed Beach Retreat Project 2.0 – EIR

Response to Comments on Draft EIR: AMEC would prepare appropriately detailed responses to both written and oral comments received on the DEIR. AMEC would incorporate substantiating technical details, CEQA references, and court cases as needed to support proposed responses. This submittal would also detail where AMEC anticipates making changes to the text of the EIR. **Deliverables:** AMEC will submit one reproducible unbound copy, six bound copies and six CDs within 15 working days of the close of the public comment period.
Prepare Administrative Final EIR. Consistent with County standards, the Administrative Final EIR (AFEIR) will include the DEIR in its entirety with changed pages in strikeout and underline to address changes, a detailed Responses to Comments, and a Draft Mitigation Measures and Reporting Program. In order to assist in maintaining project schedule, AMEC staff would attend a working meeting with County staff to review comments, proposed responses, and potential changes to EIR text. **Deliverables:** AMEC will submit one reproducible unbound copy, six bound copies and six CDs (MS word and PDF versions) within 15 working days of receipt of final County comments on the responses to comments on the DEIR.
Prepare Draft Final EIR. AMEC will incorporate any County staff edits into the AFEIR and prepare a Draft Final EIR with changed pages in strikeout and underline to address changes, detailed Responses to Comments, and a Final Draft Mitigation Measures and Reporting Program. **Deliverables:** Within 15 working days of receipt of County comments, AMEC will publish and submit one reproducible unbound copy, thirty (30) bound hardcopies and thirty (30) CDs including technical appendices (PDF versions) and two CDs with files divided into chapters suitable for easy download from County's website. AMEC will also submit two master CDs with both MS Word and PDF versions and appendices (Word documents as available for appendices).
Prepare Final EIR. AMEC will incorporate any changes into the EIR necessary to reflect decision-maker direction and potential changes necessitated by hearing input. **Deliverables:** Within 10 working days after final decision-maker hearing, AMEC will publish and submit one reproducible unbound copy, ten (10) bound hardcopies and ten (10) CDs including technical appendices (PDF versions) and two CDs with files divided into chapters suitable for easy download from County's website. AMEC will also submit two master CDs with both MS Word and PDF versions and appendices (Word documents as available for appendices).
Meetings and Hearings. AMEC's proposed budget assumes attendance at up to seventeen (17) meetings or hearings, including ten (10) staff level meetings, one (1) public workshop, and up to six (6) public meetings or hearings on the project, which could include an NOP public hearing, a public hearing on the Draft EIR, and hearings before the Planning Commission and Board of Supervisors. AMEC would prepare draft agendas and notes for staff level meetings upon request. AMEC's Project Manager would attend additional meetings, as necessary, at an additional cost of approximately $300 per meeting. AMEC's Santa Barbara office is ideally situated in close proximity to County offices, permitting easy impromptu meeting attendance.

2 QUALIFICATIONS

"The EIR prepared by AMEC Earth & Environmental, Inc. of Santa Barbara, and ultimately certified by the City Council of San Luis Obispo, was a critical tool in the decision-making process for the Council...Members of staff and the public who reviewed the report were impressed with its readability, superior graphics, and thorough discussion of key technical issues."

AMEC is well qualified to prepare the EIR for the proposed Goleta Beach County Park Managed Beach Retreat Project 2.0 as a result of our team's work on a range of challenging shoreline management projects, and our broad-based EIR experience. AMEC's Project Manager Mr. Dan Gira and Coastal Land Use and Policy Specialist Ms. Rita Bright have a unique level of experience working on major Coastal Zone projects in Santa Barbara County and have the ideal set of skills and experience to assist County staff in moving this important Project forward in the process. AMEC's management team is aware of key coastal process issues and concerns likely to be raised by agencies and the public during the EIR process. AMEC

is prepared to produce a thorough, objective, and legally defensible EIR that will withstand public and agency scrutiny and permit well informed decision-making on this project.

AMEC has a strong, integrated team that is currently working together on a similar major shoreline management project and has a wealth of cooperative team expertise to draw upon to address key issues such as the technical and academic adequacy of past coastal process studies, the stability of proposed adaptive management approaches and shoreline protection measures, impacts to recreational resources, and other issues. AMEC would provide strong management and oversight of technical experts and ensure incorporation of key data into environmental and policy analyses. Brief overviews of several projects executed by the AMEC team are provided below. References are listed in Section 6. AMEC's performance on these projects is reflected in commendation letters provided in Exhibit A. Below are representative projects performed by project team members.

EIR for PRC Lease 421 Re-commissioning Project

Santa Barbara County, California

California State Lands Commission
▪ Dan Gira, Project Manager ▪ Michael Henry, PhD, Deputy Project Manager ▪ Doug McFarling, Quality Control ▪ ATE

AMEC is preparing the Final EIR that addresses recommissioning of two surf zone wells in Goleta, offshore oil processing and the transport of produced oil via barge to Los Angeles. The project is located on an ephemeral beach and subject to high wave action, particularly during winter storms. The project would involve partial reconstruction of the oil piers, the installation of additional pipelines and oil processing equipment and potential repair of portions of an aging seawall. AMEC's team assessed structural stability of aging oil piers, caissons, and the seawall in relationship to wave run-up and storm action, tsunamis and seismic events. AMEC also assessed potential impacts to sensitive beach and coastal estuarine habitats from project construction and operation. Key environmental issues include construction related impacts to beach, bluff, and marine habitats; and coastal recreation and operational impacts to marine, beach, and estuarine environments. The EIR provides a detailed analysis of coastal and marine impacts associated with project construction, operational impacts to significant nearby coastal wetlands (e.g., Devereux Slough), grunion, a breeding colony of the western snowy plovers, marine mammals, water quality, recreational beach users, visual resources, and air quality. The EIR also addresses greenhouse gas emissions in detail as well as providing some analysis of emerging issues such as sea level rise and tsunami hazards. The EIR was prepared in coordination with a Joint Review Panel of local and state agencies, and required thorough responses to detailed comments from the CCC.

"Throughout this extended process, AMEC has remained committed and responsive to staff direction and generally provided high quality documents for use by State staff and detailed responses to comments from a range of state and local public agencies and community organizations."

Initial Study/Mitigated Negative Declaration for Tijuana River Sand Transport and Beach Nourishment Study

San Diego, California

California State Parks Department

- Dan Gira, Project Manager

AMEC prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for this project which included trucking of 60,000 cubic yards of sand removed from sediment basins through Border Field State Park for deposition along a half-mile-long segment of Silver Strand Beach south of the Tijuana River mouth. The project was implemented by California State Parks Department and overseen by a multi-agency task force, including US Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), the State Coastal Conservancy (SCC), and the CCC. The project involved a sediment fate and transport study to determine the potential use of fine-grained sediments for beach replenishment, the longevity of fine-grained sand in the surf zone, and related efficacy for beach nourishment. Key environmental issues included potential impacts to special status wildlife (e.g., western snowy plover, least tern, globose dune beetle), damage to salt marsh wetlands and sand dune habitats from an estimated 6,000 haul trucks carrying sand, impacts to fresh and marine water quality from sediment deposition, and beneficial and adverse effects to coastal recreation due to trail and beach closures and possible enhancement of beach width.

San Diego Regional Beach Sand Nourishment Project

San Diego County, California

San Diego Association of Governments

- Barry Snyder, Project Manager
- Coastal Environments

This project was the first of its kind on the West Coast. AMEC was the environmental and monitoring coordinator over a 5-year period for SANDAG's 2-million-cubic-yard regional beach nourishment program that deposited sand on 12 severely eroded beaches in San Diego County. The surveys included assessment of beach, near shore, and offshore marine environmental issues. As part of this effort, AMEC managed complex interagency coordination with state and federal regulatory agencies as well as technical report preparation. AMEC provided extensive field surveys including grunion and archaeological surveys, turbidity plume monitoring, side-scan sonar and magnetometer surveys, diver surveys of kelp and reef resources, bacteriological and water flow monitoring, long-term monitoring station placement, predator control, and submitted a monitoring plan. AMEC also conducted post-construction monitoring at 20 rocky reef stations to determine impacts of the sand transport from the replenishment operation on these sensitive marine environments. **Coastal Environments** was an important member of AMEC's team for this project.

"SANDAG is very pleased with the professionalism and dedication that ...Mr. Barry Snyder exhibited throughout the preparation of the monitoring reports."

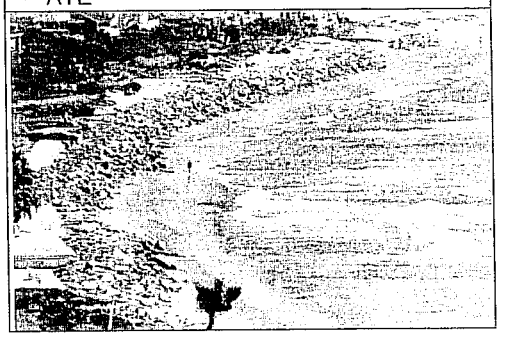
EIR for Broad Beach Restoration Project

Malibu, California

AMEC is preparing an EIR to address the importation of 600,000 cubic yards of sand to restore a wide sandy beach backed by a major line of constructed sand dunes along 6,000 feet of Broad Beach in Malibu. The project would also involve consideration of the permanent validation of a 3,900 foot-long emergency rock revetment that was installed to prevent damage to more than 100 homes and septic systems after the collapse of emergency geotextile sand bag revetments during severe winter surf. The revetment would be buried in the restored dune system and public coastal access would be provided on the new wider beach. Because of the revetment's "emergency" status, AMEC is working with concerned agencies to use an appropriate CEQA baseline (e.g., no revetment), while disclosing impacts of revetment construction or removal. In this way, the EIR can serve as a critical informational tool for all concerned parties and permit broad decision-making flexibility to lead and responsible agencies.

California State Lands Commission (CSLC)

- Dan Gira, Project Manager
- Michael Henry, PhD, Deputy Project Manager
- Doug McFarling, Quality Control
- Rita Bright, Coastal Policy Specialist
- Coastal Environments
- ATE



The project is located along a section of coastline that formerly supported a wide sandy beach that has been severely eroded over the last 3o years potentially due to changes in longshore transport and alternation in wave climate. AMEC's team, including **Coastal Environments** is assessing coastal processes, the structural stability of the emergency revetment and the long-term stability of the equilibrium beach and dune system in relationship to wave and storm action, tsunamis, and climate change induced sea level rise. AMEC is also assessing potential impacts to sensitive beach, coastal estuarine, marine habitats, and sensitive species from project construction and operation. The EIR will also address public access, visual resources, hazards, air quality, water quality, and safety. As a result of regulatory concerns, the EIR will provide an unusually broad and detailed analysis of project alternatives that would provide coastal protection while enhancing the beach and public access. AMEC is assisting CSLC staff in coordinating with CCC staff regarding alternatives and issues surrounding revetment validation.

Shoreline and Coastal Bluff Management Strategies Master EIR

Solana Beach, California

This EIR addressed coastal erosion and seacliff retreat and its effect on public and private property along 1.7 miles of the City's shoreline where many seawalls exist, structures have collapsed or are threatened by collapse, and the winter beach can be ephemeral. The City of Solana Beach's segment of coastline is perhaps most heavily affected by seacliff retreat in the region. This EIR assessed potential environmental impacts associated with alternative policies or programs for managing the City's coastline. AMEC employed GIS mapping of key features such as seawalls, threatened structures, sea caves, rocky intertidal habitats, existing public access points, and shoreline recreational uses. The EIR addressed impacts of alternative shoreline and bluff

City of Solana Beach

- Barry Snyder, Lead Coastal Management Analyst

AEP's San Diego Chapter Award of Merit

management strategies on seacliff retreat and bluff erosion, impacts and benefits of coastal armoring and seawalls on sand supply, beach width, beach erosion, and coastal protection. AMEC also assessed the impacts of various approaches on sensitive coastal bluff and marine habitats, possible changes to or loss of coastal recreation and public access and the aesthetic impacts of various strategies. This EIR was awarded the Association of Environmental Professionals (AEP) San Diego Chapter award of merit for outstanding environmental analysis.

Program EIR for City of Santa Barbara General Plan Update

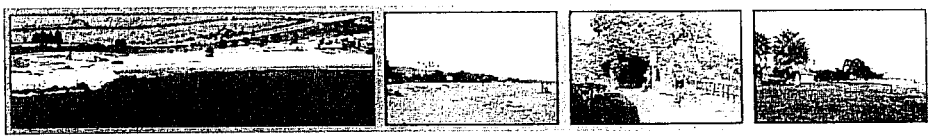
Santa Barbara, California

City of Santa Barbara

- Dan Gira, Project Manager
- Rita Bright, Deputy Project Manager
- Michael Henry, PhD, Lead Analyst
- Doug McFarling, Quality Control

AMEC recently completed this Program EIR for the City of Santa Barbara's 2030 General Plan Update. Key issues addressed included modeling of local and regional traffic congestion, water quality and wastewater disposal, visual resources, fire hazards, flooding, water supply, sensitive habitats, cultural resources and coastal erosion hazards. Further, to comply with state laws such as AB32 and SB375, AMEC also analyzed the full spectrum of climate change related laws and impacts. AMEC also identified the full suite of climate change impacts such as sea level rise, long-term water supply, water quality, fire hazards, human health risk, coastal flooding, and accelerated seacliff retreat. AMEC reviewed the numbers of bluff top homes along the City's 7-mile-long shoreline that could be damaged or destroyed by accelerated seacliff retreat and flooding of low-lying waterfront areas. AMEC identified mitigation measures including Local Coastal Plan seacliff retreat policy modifications and Adaptive Management Plan policies for comprehensive shoreline management, protection/restoration of sand supply, restoration of coastal sand dunes along the waterfront, coastal bluff revegetation, and structural relocation. AMEC worked with City staff to ensure that the EIR provided alternatives that addressed competing approaches to resolving key resource issues to reassure various interest groups that their concerns were addressed. AMEC also prepared detailed responses to over 100 letters of comment received from various state and local agencies, community organizations, and citizens. The EIR was certified by the Planning Commission and the General Plan adopted by the City Council.

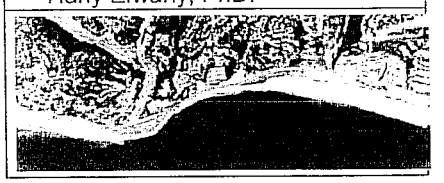
"I would like to acknowledge Mr. Gira's in depth knowledge of transportation planning issues and his ability to summarize these complex matters in a manner accessible to the public and City decision-makers…AMEC's team has worked closely with the City and commonly goes the extra mile."



Beach Erosion Analysis for Proposed Pacific Coast Highway Bikeway

Los Angeles, California

City of Los Angeles
▪ Coastal Environments Project – Hany Elwany, PhD.



Coastal Environments (CE) conducted a detailed analysis of the proposed Pacific Coast Highway Bikeway that will extend approximately two miles along the coast from Coastline Drive to Temescal Canyon in the City of Los Angeles. The bikeway is needed to separate bicycle and automobile traffic. Segments of the bikeway will be constructed on existing level ground, on the beach (in order to avoid existing structures), and on riprap or fill slopes. CE evaluated coastal processes to assess risks from waves and possible future erosion of the proposed bikeway to minimize the potential for structural damage and loss over the design-life of the bikeway (25 years). Wave-related damages to the bikeway were evaluated using historical wave records to determine the extreme waves in the design life of the bikeway and by computing the wave run-up for different wave storms at various segments of the proposed path. Geologic, geotechnical, and marine hazards were reviewed and quantified. Critical issues included flooding of the bike path by wave run-up, estimated scouring depth at the toe of the riprap, design of local fill slopes, and sizing of riprap stone.

History, Width and Stability of Harbor Beach

Oceanside, California

BRG Consulting/City of Oceanside
▪ Coastal Environments Project – Hany Elwany, PhD.

CE investigated the beach stability, and coastal processes at Harbor Beach located at the mouth of the San Luis Rey River in Oceanside, including the history of beach width from 1942 to 1998. Over this 56 year period, beach width has varied from a minimum of 300 feet to a maximum of 600 feet in the area. The observed beach-width changes included seasonal changes and long-term fluctuations from changes in coastal morphology, flooding, wave action, and major storms. During this same period, the coastal morphology and natural dynamics of the area have been altered by the construction of seawalls, groins and harbor facilities, altering the historic coastal processes, sand transport and beach profile. The San Luis Rey River, a major local sand source located downdrift from Harbor Beach is now separated from the beach by a groin. To assess these issues CE identified changes in historic beach profiles over this 56 year period, historic and existing coastal processes, longshore transport issues, and the likely equilibrium profile of Harbor Beach under current conditions. CE also conducted a geotechnical study to assess stability of underlying materials, and stability and safety of existing improvements. Impacts of the parking lot expansion and construction of the Pfleger Marine Institute and Interpretive Center on beach, shoreline, and recreational beach use were assessed. Protection measures for construction were recommended.

Coastal Process-Hazards Analysis, Proposed Doheny State Beach Lifeguard Headquarters
Dana Point, California

CE investigated the beach stability, and coastal processes along the 1.2 mile-long Doheny State Beach, located near the mouth of San Juan Creek in Dana Point. CE evaluated coastal processes to assess risks from waves and possible future erosion and damage to the proposed major new lifeguard headquarters. CE considered beach profiles and performed wave modeling analysis to estimate the design wave for various return periods, computation of wave run-up and overtopping, and computation of San Juan Creek mouth water levels for various flood return periods. CE reviewed 10- and 20-year design return period conditions that could cause some inundation but no serious damage to the proposed facility.

California Department of Parks and Recreation
▪ Coastal Environments Project – Hany Elwany, PhD.


3 PERSONNEL

AMEC's key staff members for the Goleta Beach County Park Managed Beach Retreat Project 2.0 EIR are identified in the Organizational Chart (Figure 5). Our team members were selected based on their experience managing EIRs for major coastal projects, understanding of coastal process issues, familiarity with the County's certified Local Coastal Program, proven experience conducting analyses of resource areas to be covered in this EIR, and their availability to dedicate their efforts to this important project. Our project management team has also demonstrated their ability to deliver high-quality EIRs on complex projects in a timely and efficient manner and is supported by a strong technical team, including staff and subconsultants expert in coastal processes; recreation; preparation of photosimulations; and parking, circulation and transportation. AMEC's management team and key resource specialists, including subcontractors, are introduced below.

3.A Key Staff Members

Project Management

Doug McFarling – Project Principal

Doug McFarling Specialized Expertise
▪ BA, Environmental Studies ▪ Over 22 years of professional experience ▪ Over 15 years Program and Client Service Management experience

Mr. McFarling has 22 years of professional experience and has served as a Project Principal, Program Manager, and Client Liaison for myriad entities nationwide. Mr. McFarling has a long history of ensuring projects are kept on schedule and within budget, and working with stakeholders (e.g., client, regulatory entities, and subcontractors) to ensure potentially challenging issues are addressed proactively and thoroughly. His attention to detail has been repeatedly lauded by clients and colleagues, and he is committed to ensuring the Goleta Beach County Park Managed Beach Retreat Project 2.0 EIR meets or exceeds the County's expectations.

Figure 5 Organizational Chart

Planning and Development Department

Alex Tuttle, Planner III

Project Principal
Doug McFarling

Coastal Policy Issues
Rita Bright

QA/QC
Aaron Goldschmidt

Project Manager
Dan Gira

Deputy Project Manager
Michael Henry, PhD

Key Issues and Personnel

Aesthetics
Ben Botkin

Recreation
Rita Bright
Ben Botkin

Utilities
Darin Miller
Ben Botkin

Air Quality
Steve Ochs, PE
Nick Meisinger

Coastal Processes
Mike Henry, PhD
Scott Kerwin

Noise
Brian Cook
Nick Meisinger

Land Use Planning
Rita Bright
Ben Botkin

Transportation Circulation and Parking
Ben Botkin

Water Quality
Barry Snyder

Cultural-Historic Resources
Andrea Bardsley, RPA

Biological Resources
Saudamini Sindhar

Hazardous Materials
Scott Kerwin
Nick Meisinger

Dan Gira – Project Manager

Client Accolade

"I would like to acknowledge and thank Mr. Daniel Gira and his staff for the outstanding quality of work they have provided to the Montecito Fire Protection District (MFPD) regarding the proposed construction of Fire Station # 3. Mr. Gira and his team have worked cooperatively with MFPD staff to advance this very important public infrastructure project forward through the process".

Kevin Wallace
Fire Chief
Montecito Fire Protection District

Mr. Gira has 27 years of public agency and consulting experience implementing local and state environmental and planning laws and regulations. Mr. Gira has prepared hundreds of CEQA documents for all manner of public and private developments, including large-scale complex and sometimes controversial projects. Mr. Gira has prepared more than 35 EIRs for community and specific plans, major residential and industrial projects, redevelopment projects, a landfill, and coastal and offshore oil development. Many of these projects had strong public interest in issues such as open space protection, provision of affordable housing, or changes in general plan or zoning designations. Mr. Gira's extensive experience spans major land use planning projects on tens of thousands of acres to detailed assessment of proposed multiple story buildings in downtown historic districts. Mr. Gira has worked on all manner of development projects within the coastal zone, including major land use plans, coastal access and trail planning, a landfill expansion, surf zone energy development, and beach nourishment and coastal protection structures.

In particular, Mr. Gira has substantial experience working on coastal erosion and protection issues, including beach nourishment, installation of revetments and seawalls, and addressing associated adverse or beneficial impacts to beach erosion (e.g., refraction) and changes to lateral and vertical access. Mr. Gira recently managed the environmental document for an experimental beach nourishment project to test the efficacy of trucking fine-grained sediments to Silver Strand Beach in Border Field State Park. As a former Santa Barbara County planner and manager, Mr. Gira worked on the original Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) plan for the region as well as on Goleta Beach parking management issues. Mr. Gira also coordinated with County Flood Control regarding use of a floating dredge in the Goleta Slough to transport sand to nearby eroding beaches and oversaw grant applications to strengthen Goleta Beach parking lots and access ramps to facilitate trucking in sand during emergency clearing of detention basins.

As a consultant, Mr. Gira recently assisted the City of Santa Barbara in the formulation of shoreline management and seacliff retreat policies and implementation strategies for inclusion in a revised Local Coastal Plan. This included short-term policy modifications as well as longer term strategies to address acceleration erosion and flooding from sea level rise. Mr. Gira also recently prepared the PRC 421 Recommissioning EIR for CSLC that assessed the impacts of significant surf zone construction activities and the structural stability of aging piers, caissons and a seawall in the high-energy shoreline environment.

Mr. Gira has worked on many projects that require coordination between multiple agencies in addressing their concerns. He has strong experience with budget and timeline management having formerly managed Santa Barbara County's long-range planning division with an annual budget of $2.1 million and a staff of 26 professionals. He is a certified AMEC Project Manager, having completed AMEC's intensive in-house project management program. As a consultant, he regularly manages projects with budgets of $200,000 to more than $1,000,000 and has excellent client references.

Mr. Gira has provided presentations at well over 400 public hearings. His 20 years of experience as public agency planner and division manager provides him with a clear understanding of agency staff needs and expectations. As Project Manager, he has overall responsibility for EIR quality, timeline, budget, and team coordination. He would act as the primary point of contact for County staff regarding CEQA and policy issues and would be available to make presentations at all public hearings.

Michael Henry, PhD - Deputy Project Manager

Dr. Henry has over 10 years of professional experience, including work as an environmental consultant, resource protection specialist with the National Oceanic and Atmospheric Administration (NOAA), and as a marine scientist at the UC Santa Barbara. Dr. Henry is expert in the ecology of benthic marine and estuarine invertebrates and the physiological effects of sediment contaminants and naturally occurring toxins such as hydrogen sulfide. He currently serves as Deputy Project Manager for the PRC 421 Recommissioning EIR for the CSLC and recently served as the Deputy Project Manager for the highly visible Ocean Way Secure Energy Liquefied Natural Gas (LNG) Deepwater Port Joint EIR/EIS project. This project involved detailed analysis of marine safety issues, sub-surface impacts to the benthic environment, global climate change, and surf zone and shoreline impacts associated with pipeline construction. Dr. Henry also recently completed a detailed analysis of climate change and GHG-related impacts for the City of Santa Barbara's General Plan EIR, and is currently conducting two project-level GHG analyses for the County of San Diego.

Michael Henry, PhD Specialized Expertise
▫ PhD, Ecology, Evolution and Marine Biology ▫ Over 10 years of professional experience ▫ Expert in marine environments, coastal issues, and related laws and policies ▫ Expert in team coordination and timeline management

Dr. Henry worked for NOAA in preparation of the EIS and Supplemental EIS for the Channel Islands National Marine Sanctuary. He is also a certified Project Manager for AMEC, having completed a variety of courses in project management required for such certification, and holds a Graduate Certificate in Management Practice. Dr. Henry is expert at internal team coordination and timeline management and has worked with Mr. Gira on a wide range of projects. Dr. Henry will act as day-to-day project coordinator and would be responsible for close internal team communication and frequent interaction with the County's Project Manager. He would also perform initial review of draft documents and be responsible for assembly of all submittals to the County after approval by AMEC's Project Manager.

Aaron Goldschmidt – Senior Quality Control Reviewer

Mr. Goldschmidt serves as a Program Lead for Conservation, Environmental Planning, and Natural Resources and remains an active program and project manager. With more than 20 years of research and consulting experience, Mr. Goldschmidt coordinates analyses of resource specialists, assures consistency within and across environmental programs, performs quality assurance and control, oversees document production (including graphics), as well as provides technical analyses. Further, as a liaison, he maintains close client interaction and provides support for presentation of study results in public forums. Mr. Goldschmidt has served as the lead QA/QC reviewer on hundreds of documents compliant with the CEQA and National Environmental Policy Act (NEPA). His

Aaron Goldschmidt Specialized Expertise
▫ MA, Geography ▫ BA, Geography ▫ 20 years of experience preparing and reviewing environmental documents ▫ Expert in rigorous QA/QC protocol

familiarity with the intent and procedures of environmental documentation ensure that his review goes beyond straightforward editing. It is his intent to ensure a clean document, as well as thorough issue coverage, technical excellence, and defensible conclusions.

Rita Bright – Coastal Land Use and Policy Specialist

Rita Bright Specialized Expertise
▪ BA, Business Economics and Environmental Studies ▪ 25 years experience in planning, with extensive Coastal Zone project experience ▪ Substantial experience with both standard and emergency permitting of revetments and associated Coastal Act and environmental issues

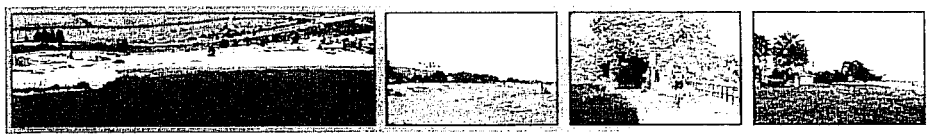
Rita Bright is an AMEC Senior Land Use Planner and Project Manager, with more than 25 years of public agency and consultant land use planning and CEQA experience. In her capacity as a public agency planner and manager, she worked on dozens of major and minor projects throughout the Coastal Zone. Ms. Bright managed the planning and environmental review for multiple projects involving issues such as revetment construction, provision of vertical access, and dedication or maintenance of lateral coastal access. Ms. Bright has been a planner or manager for key major coastal development projects such as the controversial Hyatt Hotel project, expansion of the Biltmore Hotel, demolition and reconstruction of the Miramar Hotel and associated coastal protection and access issues. She has experience with emergency permitting for revetments and follow-on permitting. She has also coordinated with building officials to phase out habitable structures perched on the Isla Vista sea bluffs that posed a significant danger to residents and the public. She has also prepared community plans and ordinances to address complex coastal zoning, planning, and environmental issues and is familiar with a broad range of coastal planning and permitting issues and procedures. In these roles, she has acquired substantial experience in coordinating with CCC staff, including preparation and submittal of multiple Local Coastal Program amendment packages, and working cooperatively with CCC staff to address issues and concerns.

Experience for Selected AMEC Technical Staff

Barry Snyder – Water Quality and Coastal Process Specialist

Barry Snyder Specialized Expertise
▪ MS, Marine Environmental Research ▪ BS, Marine Science ▪ 25 years of coastal marine environment experience ▪ Experience with beach nourishment and shoreline protection projects, including SANDAG beach nourishment ▪ Experience working with state regulatory agencies

Barry Snyder is the Manager of AMEC's Aquatic Sciences Group, and is an Aquatic Scientist with over 25 years' experience. He specializes in dredged material characterization studies and aquatic toxicology in conjunction with dredging projects. He was the lead AMEC technical planner for the San Diego County Association of Governments (SANDAG) 5-year beach nourishment project and has managed dredged material characterization projects for the U.S. Navy, the USACE, and several Port Districts. His experience includes all aspects of sediment testing programs, including pre- and post-dredge bathymetric surveys, regulatory agency liaison, and permitting. He has evaluated impacts from waterfront construction and dredging on the coastal marine environment, prepared CEQA documents, Coastal Consistency Determinations, and permit applications per CWA Sections 401 and 404.



Saudamini Sindhar – Senior Ecologist

Saudamini Sindhar Specialized Experience
▫ MA, Environmental Management ▫ MA, Environmental Botany ▫ Experience with coastal habitats and species

Ms. Saudamini Sindhar, a Senior Natural Resources Specialist in AMEC's Santa Barbara office, has more than 10 years of relevant experience in the design and implementation of plant and wildlife field studies, habitat restoration plans and preparation of related environmental documentation in support of public- and private-sector projects throughout Southern California.

Ms. Sindhar supervises, directs and conducts, reconnaissance surveys, habitat assessments, and surveys for listed, sensitive, and locally important plant and wildlife species in California and Nevada, and has extensive working knowledge of riparian, wetland, scrub, grassland and woodland plant communities. She has planned, conducted, and supervised construction and mitigation monitoring for special status species, including southern rubber boa, arroyo toad, steelhead trout, and California red-legged frog. She has also delineated areas potentially under the jurisdiction of the USACE pursuant to Section 404 of the Clean Water Act and the CDFG pursuant to Section 1602 of the California Fish and Game Code at multiple California locations. Ms. Sindhar would assist the team in developing habitat restoration proposals and review of permit and regulatory issues, and would also provide field support as needed during the project.

Scott Kerwin, RG, CEG – Coastal Engineering Specialist

Scott Kerwin Specialized Experience
▫ BS, Geology ▫ Extensive experience with coastal erosion issues and shoreline protection strategies

Mr. Kerwin has over 30 years of experience and has been responsible for geotechnical aspects of numerous civil and land development projects, encompassing evaluation, design, management, and construction. Mr. Kerwin specializes in coastal studies and is responsible for detailed evaluation of geologic conditions for a wide range of coastal projects and geotechnical problems. Geotechnical design evaluations have included piers, marinas, shoreline protection and other coastal developments and structures. Mr. Kerwin has worked on assessing the design and feasibility of multiple major coastal protection efforts, including area wide landslides, and a range of beachfront and shoreline construction issues.

Coastal Environments – Small Business Team Member

Coastal Environments (CE) is a small-business enterprise (SBE) formed in 1988 by Dr. Hany Elwany, a coastal engineer and oceanographer, to provide integrated environmental, engineering and oceanographic services. CE is a unique multidisciplinary oceanographic and engineering consulting firm with a wide range of coastal engineering experience, including assessing stability of coastal protection measures, analyzing long term shoreline trends and protection options, sand transport, managed retreat and coastal lagoon restoration. In particular, CE has substantial experience providing expert peer review of complex coastal process issues based on both the academic credentials and affiliations of its staff and hands on project level experience. CE's experienced independent professionals who work as a team and specialize in a variety of interrelated technical services. This approach increases flexibility and facilitates communication with clients, especially the rapid, close communications required for the timely and successful completion of work. The approach also improves quality and cost-effectiveness.

CE consists of more than 30 professional oceanographers, coastal engineers, marine geologists and biologists, environmental scientists and engineering geologists, all of whom are experts in their fields. Many have ties to universities, such as Scripps Institution of Oceanography at the UC San Diego, and all maintain a significant technical library of published and unpublished scientific literature. CE is expert in all manner of coastal process issues, including coastal erosion, shoreline protection, beach nourishment, and related marine and estuarine biological resource issues.

CE has conducted numerous projects involving Southern California beaches, lagoons, hydrology, habitat monitoring, marine and geophysics surveys, and inlet management. Examples of some of these studies are presented in Table 2.

Table 2. Selected Coastal Environments Project Experience

▪ Beach Erosion Analysis for the Proposed Pacific Coast Highway Bikeway, Los Angeles, CA	▪ History, Width, and Stability Study of Harbor Beach, Oceanside, CA
▪ Coastal Process-Stability Analysis of State Park Revetment East of Malibu Pier, Malibu, CA	▪ Beach and Nearshore Topography Changes Study, Huntington Beach, CA
▪ Storm/ Wave Damage Risk Analysis for the Cottages in Crystal Cove State Park Historic District, Orange County, CA	▪ Field Measurements and Numerical Modeling to Determine the Effects of Kelp Beds on Waves and Beaches in Southern California
▪ Coastal Sand Replenishment Study using Desert Sands	▪ Wave Damage and Subsidence Analysis at King Harbor, Redondo Beach, CA
▪ Storm Risk Assessment for the Construction of New Lifeguard Headquarters at Doheny State Beach, Dana Point, CA	▪ La Jolla Children's Pool Beach Management and Water Quality Improvement Project, La Jolla, CA
▪ Coastal and Oceanographic Conditions Study for the Manchester Resort Development, Oceanside, CA	▪ Predicting Bathymetry Changes Off Mandalay Beach, Oxnard, CA
▪ Relocation of the San Elijo Lagoon Inlet Study, San Diego County, CA	▪ Effects of San Onofre Nuclear Generating Station on Beaches and Bluffs, San Onofre, CA
▪ Restoration Alternatives for the Sunset Boulevard Groin, Los Angeles, CA	▪ Feasibility and Design of an Artificial Beach for the Trump Ocean Resort Coastal Development, Baja California, Mexico

CE will provide support for analyses related to coastal processes including wave action and sand supply and transport for this contract. Key staff from CE who would support this project are described below.

Hany Elwany, PhD – Coastal Engineering Specialist

Hany Elwany, PhD Specialized Expertise
▪ PhD, Engineering ▪ 30 years of experience with coastal processes ▪ Substantial experience reviewing long term shoreline dynamics and beach profiles ▪ Has authored several peer-reviewed articles regarding beach dynamics and sand supply

Dr. Elwany has over 30 years of experience with nearshore oceanography, coastal processes, coastal engineering, lagoons, and estuarine dynamics. He has conducted many oceanographic studies on the West Coast of the U.S. and in Mexico, South America, the United Kingdom, Egypt, and the Arabian Gulf. He was the principal investigator for the physical oceanographic program of one of the largest coastal environment and process studies ever conducted on the U.S. West Coast (at San Onofre, San Clemente, CA). His experience includes projects involving coastal engineering and processes, structural dynamic analysis, design of offshore structures, data analysis, simulation,

optimization, and numerical modeling. He has reviewed the long term profile and dynamics of multiple beaches on the west coast. As an educator at the University of Liverpool and at Alexandria University, he taught courses in dynamics, statistics, numerical analysis, computer applications, and maritime engineering. Dr. Elwany successfully engineered and managed the construction for two of the largest projects conducted in Southern California in the last few years, the Wheeler North Reef (174.2 acres), an artificial reef off the coast of San Clemente, and the restoration of San Dieguito Lagoon in Del Mar, California.

Scott Jenkins, PhD – Oceanographer

Scott Jenkins, PhD Specialized Expertise
▫ PhD, Oceanography ▫ Specialist in nearshore sediment transport

Dr. Jenkins is a senior engineer at Scripps Institute of Oceanography and has over 30 years of experience conducting nearshore processes and coastal studies. In particular, he has wide-ranging experience with nearshore sediment transport in Southern California and has conducted several hydraulic studies for Southern California wetlands. Dr. Jenkins has experience with field measurements, experimental design, and theoretical modeling, and has worked on a broad range of problems in coastal processes, including estuarine and littoral sediment transport, beach and shoreline erosion, wave/structure interaction, hydrodynamic and hydraulic modeling of estuarine and harbor circulation, pollution dispersion modeling, climate effects on watershed sediment yield, and the development of sedimentation control techniques. Dr. Jenkins has published 54 research and engineering papers. His professional career includes academic research, lecturing, consulting, and public service in oceanography and nearshore processes.

Videoscapes

Ken Doud of Videoscapes has 15 years experience in the preparation of graphics for use in CEQA/NEPA compliant environmental visual analysis with emphasis on the preparation of photo simulations, including the selection of viewpoints and depictions of visual mitigation measures and assistance in the placement of those measures within the 3-D computer environment. He also has 12 years experience in conducting peer review of visual impact analysis, shadow studies, and graphics for EIR, including presentation of expert testimony in courtroom and governmental review settings. He has high level skills in CAD, photo editing, digital photography, and computer visualization software, including Autodesk 3Ds Max (the industry standard for photo simulation rendering, GIS based daylight and shadow simulation), ESRI compatible GIS software, Adobe PhotoShop, Illustrator, AutoCAD, and other related programs. He is expert at reading architectural, engineering and related planning documents and accurately migrating that information into the 3-d computer environment.

Mr. Doud has provided visual simulations and visual impacts mitigation efforts review for several proposed projects on the South Coast, including the Cabrillo Business Park at Hollister and Los Carneros, the St. Anasthasius Church on Hollister Avenue, and the Southern California Gas drilling rig east of Goleta Beach. He provided extensive visual simulations showing alternative build-out options for the Isla Vista Master Plan, and produced the widely published photo simulations of the Entrada de Santa Barbara. As a peer reviewer of visual impacts analysis, he presented evidence to the Santa Barbara County Board of Supervisors that the "Naples" project on the Gaviota Coast had failed to comply with CEQA and Coastal Zone standards in their DEIR Visual Impacts Analysis.

Videoscapes' local experience is listed in Table 3 below.

Table 3. Selected Videoscapes Project Experience

▪ El Capitan Ranch, U.S. Highway 101 oceanfront, Santa Barbara County	▪ Clearwater Port LNG Terminal, Platform Grace, Santa Barbara Channel
▪ City of Santa Barbara, Ocean and Mountain View Documentation	▪ Isla Vista Master Plan, Santa Barbara County
▪ Ortega Ridge Reservoir Cover, Montecito	▪ Foothill Triangle Building Project, Santa Barbara County
▪ Music Academy of the West, Montecito	▪ Positano Apartment Landscape Simulation, Goleta
▪ Housing Authority of Santa Barbara County	▪ Carpinteria Valley Water District Water Tank Installation, Carpinteria
▪ Cabrillo Business Park, Goleta	▪ Harris Grade Housing Project, Lompoc

Associated Traffic Engineers

Associated Transportation Engineers, Inc., (ATE) is a full-service engineering consulting firm specializing in traffic engineering, transportation planning, traffic signal design, parking and Caltrans processing. Established in 1978, ATE has completed a wide variety of projects for clients located throughout California. ATE has worked for both public and private sector clients, including city, county, state, and federal agencies; and environmental and planning consulting firms, architects, attorneys, engineers, private development interests, and major commercial corporations.

ATE provides a highly skilled group of transportation planning and traffic engineering staff that have extensive experience within the Santa Barbara area. ATE has completed numerous traffic engineering projects and transportation planning studies within Santa Barbara County, the City of Goleta, and UC Santa Barbara. ATE staff are well versed in the County's current policies and standards as they relate to transportation planning, traffic engineering and environmental impact assessment. ATE has earned a reputation for creative problem solving through a team-oriented, consensus building approach. ATE staff have developed solid working relationships with city, county, and agency staff throughout the state, and have worked extensively with personnel in the 12 Caltrans districts statewide. ATE has demonstrated the capability of developing innovative solutions and providing quality services at competitive costs. ATE has also established a solid record of completing projects on time and within budget.

Examples of ATE's project experience are presented in Table 4, and ATE staff members are included in Table 5.

Table 4. Selected ATE Project Experience

▫ Goleta Beach Bridge Project, Santa Barbara County	▫ Mariposa at Ellwood Shores Senior Housing Project - City of Goleta
▫ Westar Mixed-Use Village Project - City of Goleta	▫ Cabrillo Business Park - City of Goleta
▫ Willow Springs II Apartments Project - City of Goleta	▫ Santa Barbara Airport Master Plan - City of Santa Barbara (Goleta area)
▫ Camino Real Hotel Project - City of Goleta	▫ Ellwood/Devereaux Open Space Plan - City of Goleta
▫ Rincon Palms Hotel Project - City of Goleta	▫ Surfers Point Managed Shoreline Retreat Project - City of Ventura
▫ Foster Park Project, City of Ventura	▫ Santa Monica Mountains Conservancy Project - City of Malibu

Scott A. Schell, AICP - Principal Transportation Planner

Mr. Schell is a transportation planning specialist with a broad background in traffic operations, transportation planning theory and environmental regulations (CEQA, NEPA, etc.). Mr. Schell joined ATE as a Transportation Planner in 1983 and during his tenure with ATE, has been responsible for and participated in over 1,000 transportation planning studies, traffic impact reports, and parking studies for projects located throughout both northern and southern California. These projects include the Cabrillo Business Center Project, the Westar Mixed-Use Village Project, and the Willow Springs II Apartments Project, all of which are located in the City of Goleta. Mr. Schell has also prepared Circulation Element updates, traffic improvement fee programs, Sphere of Influence Annexation proposals, and EIRs for large scale residential, commercial, and institutional developments, as well as Redevelopment Agency projects. Mr. Schell serves as a project manager responsible for the preparation, review, and public presentation of the various traffic impact reports and transportation planning studies.

Dan Dawson - Supervising Transportation Planner

Mr. Dawson joined ATE as a Transportation Planner in 1989. Since that time, he has participated in over 600 transportation planning and parking studies throughout California, Nevada and Arizona. Mr. Dawson participated in the development of the traffic analyses for corridor studies and specific plans located throughout Santa Barbara County, including the Orcutt Specific Plan area. Additional work efforts completed by Mr. Dawson include analyses of urban and rural transportation facilities in conjunction with numerous circulation elements, general plans, redevelopment plans, specific plans, and environmental impact assessments for individual development projects. Prior to his employment at ATE, Mr. Dawson worked as a Transportation Planner for the City of Santa Barbara. At that position, Mr. Dawson was responsible for reviewing and preparing written summaries of traffic report, recommendations and informational reports on site plans, EIRs, traffic studies and development plan proposals.

Storrer Environmental Services

Storrer Environmental Services conducts endangered species investigations, habitat assessments, impact analyses, and mitigation feasibility studies for a variety of proposed development projects. Storrer Environmental Services provides multiple aspects of biological evaluation, including comprehensive field reconnaissance, focused field surveys, and technical report preparation. This includes participation with all phases of the process, from initial planning and environmental review, through implementation and long-

term mitigation monitoring. The majority of these projects were completed in conformity with CEQA and/or NEPA. Storrer Environmental Services has participated in more than 100 projects requiring CEQA and/or NEPA evaluation.

John Storrer - Biologist

John Storrer has 26 years of experience in biological resources evaluation, with specific emphasis in wildlife and terrestrial biology. He has a thorough background in field survey, impact analysis, and mitigation design for environmental assessments in Santa Barbara County, with unmatched experience in biological resources in the Goleta area. This experience includes surveys at Goleta Beach in 2008 for raptors and herons. Mr. Storrer has an extensive background in environmental analysis, mitigation design, endangered species investigations, habitat assessments, comprehensive field reconnaissance, focused field surveys, and technical report preparation, CEQA-compliant impact analyses, and mitigation feasibility studies.

3.B Staff Commitments and Availability

AMEC's key team members for this proposal are available to provide requested services to the County of Santa Barbara. AMEC's Project Manager Dan Gira, Deputy Project Manager Michael Henry, and Coastal Policy Specialist Rita Bright have recently completed a major commitment with the certification of the Program EIR for the City of Santa Barbara General Plan and Housing Element Update. Mr. Gira and Mr. Henry have also recently completed major work efforts on two EIRs for the City of San Luis Obispo.

Existing commitments for Mr. Gira include support for the Montecito Fire Protection District, the County of Santa Barbara, and the State Lands Commission. However, two of these projects are nearing completion and one is a mid-level effort, leaving substantial availability for Mr. Gira to provide support to the City of Malibu. Similarly, Mr. Henry has commitments to several mid-sized projects for the U.S. Army and Air National Guard, and the final stage of support for an EIR for the County of Santa Barbara, but also currently retains ample availability for this project. Ms. Bright is currently committed to a providing a moderate-level of support for the Montecito Fire Protection District, leaving her with substantial availability for this project. Additional information regarding key personnel and supporting staff estimated hours and percentage of total hours in included within Volume II – Cost Proposal.

3.C Staff Qualifications and Roles

The roles and responsibilities of key AMEC team staff are summarized in Table 5 below.

Table 5. AMEC Team Qualifications and Specializations

Name and Project Role	Experience & Expertise	Role on this Project
Doug McFarling *Project Principal*	▪ 22 years of experience ▪ 15 years experience as a Program Manager ▪ Expert client liaison ▪ Budget compliance specialist	▪ Will ensure commitment of AMEC resources ▪ Will assist with issue resolution, as needed ▪ Will ensure timely delivery of high quality, environmental analysis

Table 5. AMEC Team Qualifications and Specializations

Name and Project Role	Experience & Expertise	Role on this Project
Dan Gira *Project Manager*	27 years of CEQA experience, including 20 years with Santa Barbara County Experience with issues surrounding coastal processes and protection options Expert at public presentations, work with advisory committees	Will serve as the principal point of contact for County to ensure satisfaction with the AMEC team's performance Will coordinate with technical specialists and subcontractors to ensure all analyses are conducted accurately and on time Will provide high-level review of deliverables to ensure the presentation of analyses and findings is accessible and consistent Will attend and coordinate or provide presentations at working meetings and workshops
Michael Henry, PhD *Deputy Project Manager*	10 years of professional environmental experience Deputy Project Manager of multiple large-scale complex projects Expert at team organization, timeline management and budget tracking	Responsible for direct day-to-day project operation, frequent ongoing communication with County and internal AMEC team coordination Will assist Project Manager with monitoring project timelines, deliverables, and budget Will organize and assemble document and provide initial quality control for all technical specialist and subcontractor work products Will provide initial quality control review of AMEC products
Aaron Goldschmidt *Senior Planner / Technical Quality Control Specialist*	22 years of professional experience Program and Project Manager, as well as Technical Quality Control Specialist	Will provide final quality assurance and control Will provide high-level oversight of document production (including graphics) and technical analyses.
Rita Bright *Land Use/Policy specialist*	25 years experience; 20+ with Santa Barbara County Extremely familiar with County LCP Extensive Coastal Zone project permitting experience	Will assist project team and County staff with coastal policy/permit issues Will provide input to project description development to ensure consistency with LCP policies Will oversee preparation of the land use section
Barry Snyder *Water Resources Specialist*	25 years professional experience Experience with coastal process issues	Will oversee review of water quality issues Will assist with state and federal agency issues and comments Will provide another level of expert input into development of Coastal Processes section and supporting brief technical report
Saudamini Sindhar	10 years of professional biological resource experience Familiar with regulatory issues for special status species	Provide local biological services and reconnaissance level fieldwork Will coordinate with County biologists on sensitive species and habitat issues, as needed Will assist in responses to state and federal agency comments

Table 5. AMEC Team Qualifications and Specializations

Name and Project Role	Experience & Expertise	Role on this Project
Ben Botkin *Analyst*	▪ 3 years of experience ▪ Experienced performing multiple resource EIR analyses within Santa Barbara County	▪ Will perform research on issues such as regulatory and policy updates, water quality, land use, consistency with agency plans and general environmental resources ▪ Will research regional / local background information to validate-supplement Existing Conditions Report as needed
Darin Miller, PE *Utilities Engineer*	▪ 11 years utility engineering experience ▪ Oversight and design of utility systems, including installation of water and sewer lines	▪ Oversee preparation of the utilities section ▪ Coordinate directly as needed with utility engineers from concerned firms and agencies ▪ Provide expert input for response to comments regarding utility issues
Key Coastal Environments Team Members		
Dr. Hany Elwany, PhD, CE *Coastal Engineer*	▪ Registered Civil Engineer with 30 years of experience ▪ Experience long term shoreline position and management studies ▪ Expert in coastal process shoreline modeling	▪ Will perform expert peer review of coastal process studies and coastal protection recommendations ▪ Will oversee preparation of technical report setting forth methodologies used in peer review, conclusions on adequacy of existing studies, and recommendations ▪ Will assist in providing expert response to agency and public concerns and questions
Dr. Scott Jenkins, PhD *Oceanographer*	▪ Oceanographer with 30 years experience ▪ Experience with modeling coastal processes and shoreline protection issues	▪ Will assist in preparation of Coastal Process section of the EIR ▪ Will assist with technical responses to agency concerns
Key ATE Team Members		
Scott Schell *ATE Principal*	▪ 27 years of transportation consulting experience ▪ Substantial experience in Santa Barbara County	▪ Will assist with traffic impact analysis and preparation of the Traffic Impact section of the EIR, including addressing responses to public comments to the DEIR.
Dan Dawson *Supervising Transportation Manager*	▪ 21 years of experience ▪ Project Manager for multiple traffic studies the County	▪ Will assist with traffic impact analysis, including short-term traffic impacts ▪ Will assist with technical responses to agency concerns
Key Videoscapes Team Member		
Ken Doud *Visual Simulations*	▪ 15 years experience preparing CEQA-compliant visual resources analysis ▪ Photosimulation Specialist ▪ Highly skilled in CAD, computer visualization, Autodesk 3Ds Max, ESRI compatible GIS software	▪ Will prepare at least 2 photosimulations of future project changes based upon County selected key viewing site locations ▪ Will ensure photosimulations would be prepared to exacting standards to ensure accuracy Will peer review aesthetic resource-related issues and concerns related to the photosimulations and/ or key viewing sites

Table 5. AMEC Team Qualifications and Specializations

Name and Project Role	Experience & Expertise	Role on this Project
Key Storrer Environmental Services Team Member		
John Storrer *Biologist*	▫ Previously conducted surveys at Goleta Beach for raptors and herons. ▫ Extensive knowledge of the fauna of the project area and vicinity.	▫ Will be available to conduct surveys for occurrence for Belding's savannah sparrow, raptor and heron/ egret species and prepare an associated technical report. ▫ Will be available to conduct provide support to AMEC in preparation of the biological resources analysis in the EIR.

4 STUDY METHODOLOGY

AMEC understands that the County wishes the EIR to build upon the substantial amount of previous work performed on this project and focus effort and budget on those issues which have changed or which require substantial additional analysis to support consideration of project approval. These key issues appear to be Aesthetics, Coastal Processes, Hazardous Materials, Land Use Planning, Recreation, Transportation, Circulation and Parking, and Utilities. The EIR would also include more limited and focused updates to additional resource areas such as Air Quality (including Greenhouse Gas Emissions), Biological Resources, Cultural Resources, Noise, Transportation/Traffic, and Water Quality. Marine Biology would no longer be a major focus of the EIR due to changes in the proposed Project. As discussed below, AMEC also views update to the Project Alternatives section as central to ensuring preparation of an adequate EIR. AMEC also understands that the EIR would address proposed construction of the new Park access bridge under cumulative effects and that a proposed Mitigated Negative Declaration for that project should be available in spring of 2012.

AMEC's general approach to the format and content of the EIR is presented in Table 6 below. Each environmental resource area discussion will include the following subsections: *Existing Conditions* describes the physical and human environmental setting that forms the baseline for the analysis of the project's and alternatives' impacts. These sections will build upon previous work, updated only where needed. Local, and as appropriate, federal and state requirements for the resource areas are summarized in *Regulatory Setting*. The thresholds for determining impact significance and the impact analysis methodology will build upon the existing County Threshold Manuel and previous EIR and are included in *Environmental Impacts*. The *Proposed Project Impacts, Mitigation Measures, and Residual Impacts* will subsequently be identified. Each mitigation measure will include a stated condition, along with a mitigation monitoring component (*plan requirements, timing, and monitoring responsibility*). A statement regarding the impact of the project in conjunction with implementation of other past, present, and probable future projects will be presented in *Cumulative Impacts*.

Table 6. Content of EIR Sections - Goleta Beach County Park Managed Beach Retreat Project 2.0

Executive Summary: The EIR would include an Executive Summary with a brief project description, project history, and brief description of impacts found not to be significant, issues of known public controversy, a matrix summarizing impacts and mitigation measures, and discussion of project alternatives. As potentially the most utilized portion of an EIR, AMEC would prepare the Executive Summary in an easily accessible format.

Table 6. Content of EIR Sections - Goleta Beach County Park Managed Beach Retreat Project 2.0

Introduction: The Introduction sets the stage for overall project consideration, the EIR's role in decision-making, the project's overall purpose and need and a discussion of potential areas of controversy. This section would also provide a concise summary and timeline of the project's history, including past efforts to address erosion, (e.g., emergency revetments), the efforts of the Working Group, past co-equal project environmental review, County and Coastal Commission consideration of the project and the County's renewed focus in 2010 and 2011 on finding solutions for shoreline management issues at Goleta Beach park. AMEC will also work with County staff to develop a clear purpose and need statement for the project in support of clearly defined project objectives. This section also introduces the overall purpose of the EIR, summarize the public review and project approval process, and state standards for adequacy of the EIR, pursuant to CEQA Guidelines §15151.
Incorporation of Existing EIR and Technical Studies: AMEC's proposed scope of work recognizes that a detailed draft EIR along with extensive supporting studies have already been prepared for this project. AMEC's would utilize all available data to increase the efficiency of preparing the new EIR and to help focus budget and staff time on those issues which require update. As a first step and efficiency measure in EIR preparation, AMEC would review the old EIR and edit, update carry forward and all relevant text, information and analysis
Environmental Setting: The Environmental Setting will provide an overview of the existing physical setting with a focus on key features and known environmental issues. AMEC would incorporate, update and build upon the setting section from the previous EIR. AMEC utilizes photographs, maps, and diagrams to facilitate understanding of the area's environment, including a description of surrounding land uses along with regional vicinity, project location, and appropriate planning area maps. AMEC will coordinate with County staff to ensure that this baseline accurately reflects known information and conditions.
Project Description: The Project Description will contain the project proposal, project area maps to supplement environmental setting figures and provide a more detailed history or the revised Goleta Beach 2.0 Project. AMEC's Project Description will clearly identify project objectives as the foundation for potential project alternatives. AMEC recognizes that a clearly defined set of project objectives is central to supporting the alternatives analysis and is thus most important to the EIR's legal defensibility. This will include working with County staff to make sure that all elements of the project area clearly defined and any potential conflicts between existing documents resolved at the kickoff meeting or early in the process to permit maintenance of project schedule.
Environmental Analysis: The Environmental Analysis sections would describe the existing physical setting for each resource, with a particular focus on any surrounding sensitive receptors and potential effects on the surrounding neighborhood. Relevant federal, state, and local regulatory requirements will be summarized for each resource area in the Regulatory Setting, including the County's Local Coastal Program and State Coastal Act (as applicable). The County's Adopted Thresholds, the previous EIR and Appendix G of the CEQA Guidelines along other relevant material will be used in the EIR. AMEC will identify existing baseline conditions, proposed project impacts, mitigation measures, and subsequent residual impacts, including both direct and indirect impacts. Analysis will include local versus regional impacts and short-term versus long-term impacts.
Alternatives: Please see primary issue areas (below) for discussion of project alternatives.

Table 6. Content of EIR Sections - Goleta Beach County Park Managed Beach Retreat Project 2.0

Mitigation Measures: Mitigation measures will be developed in coordination with County staff and appropriate agencies for all significant (Class I and II) project-specific and cumulative impacts and for adverse but insignificant (Class III) project and cumulative impacts, as appropriate. AMEC will build such measures off of the County's standard mitigation and condition of approval list as well as the existing local Coastal Program. Residual impacts after mitigation will also be identified.
Other CEQA Sections: Other CEQA Sections including the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity, and growth-inducing impacts will be provided in the EIR.

Primary Issue Areas

AMEC's overview of the anticipated issues and technical approach for each resource area is presented below. These resource areas are based on those identified by the County RFP and account for AMEC's review of available background documents. AMEC proposes to focus staff time and budget on these primary issues, building upon data and analysis contained in the existing EIR:

Aesthetics: Goleta Beach Park is a valued community recreational resource visited by over 1.5 million people annually. The Park occupies a beachfront location and contains scenic elements such as beachfront lawn mature trees, a large sandy beach. The Park and beach provide visitors with sweeping views to the west toward UCSB and Campus Point, offshore to the Santa Barbara Channel and the Channel Islands as well as east downcoast toward the More Mesa area. The proposed project would replace some relatively non-scenic elements such as a parking lot with sandy beach, but would permit managed retreat damaging potentially scenic park elements such as lawn and trees. Transportation and Utility Corridor construction would also lead to some tree removal. Further, the proposed geotextile dune and cobble berm has some potential to become exposed due to high winter surf or continued shoreline oscillation/ retreat, periodically intruding a potentially visually incongruous large cobble berm and deteriorating geotextile bags into the public view shed. AMEC would build upon and refine the analysis contained in the previous EIR's managed retreat alternative to address potential aesthetic impacts as follows:

Previous Environmental Review: For the Managed Retreat Alternative, the previous EIR identified significant and unavoidable (Class I) construction related impacts to aesthetics due to an extended construction horizon (2 years) as well as a beneficial aesthetic impact due to provision of a wider beach.

- Build upon the existing EIR to characterize the existing physical setting in terms of visual amenities (e.g., lawn, trees, and beach), existing public views, and existing levels of use and key views documented with recent photographs.
- Describe the existing local and State regulatory framework with regard to Aesthetics, with particular attention to the County of Santa Barbara's Local Coastal Program, State Coastal Act and Goleta Community Plan.
- Describe changes to the visual character of the site associated with project improvements and changes such as Transportation and Utility Corridor construction and tree removal, parking lot replacement with beach and geotextile dune and cobble berm installation.
- Coordinate with Videoscapes to provide at least 2 photosimulations of future project changes. AMEC's team would work with County staff to finalize key viewing site locations which may include views south from existing

Parking #5 or from Goleta Pier looking northwest. Photosimulations would be prepared to exacting standards to ensure accuracy (refer to Exhibit D).

- AMEC would also coordinate with the County to determine which issues to focus on in the photosimulations which would include new sandy beach at former Lots 6 and 7, periodically exposed geotextile dune/ cobble berm or potentially of erosion of Park lawn areas. Additional photosimulations can be provided upon request for approximately $450 each.
- Using the photosimulations and project construction plans, AMEC would describe both short term construction and long-term changes to the Parks visual characteristics. Short term impacts would include disruption of Park facilities for several months by construction activity, but may be less severe than previous identified due to the more limited nature of the proposed project. Long term impacts could be both beneficial (conversion of parking lot to beach) and adverse due to loss of trees and potential for periodic exposure of geotextile dune and cobble berm. Based on initial review of project maps and the back beach line, indirect impacts may include loss of approximately 2.5 acres of lawn, trees and Park facilities (e.g., group picnic area) due to coastal erosion.
- Identify mitigation measures such as construction timing outside peak summer months, tree protection or replacement and planting of the proposed dune with native vegetation to reduce wind and water erosion and help keep the geotextile bags and cobble berm covered. No mitigation would appear to be available for loss of scenic lawn and trees, if this is identified as a significant impact.

AMEC's Coastal Policy Specialist, Rita Bright, would oversee this effort assisted by Videoscapes for photosimulations. Mr. Ken Doud would peer also review this EIR section for accuracy.

Coastal Processes: Coastal processes, shoreline position and potential management options and protection strategies at Goleta Beach Park have been subject to extensive study. The Park's location along a low lying former sand spit between the Pacific Ocean and the Goleta Slough leaves the Park facilities exposed to damage from wave run-up and winter storms. Based on past research, the potential for shoreline erosion and associated damage appears particularly acute at the Park's west end during times of shoreline movement and oscillating beach width. These long term cycles of beach accretion and erosion may be governed by cyclic climatic factors that affect wave direction, storms runoff and sediment input (ESA/PWA/P&S; 10/2011). Sediment input into the system (and availability of beach sand) can also be affected by coastal armoring, dams, agricultural and urban development, detention basins, creek channelization and fires.

These coastal processes can lead to extended periods 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 (Chambers Group, Inc., 4/2008)[1]. Alternately, potential cyclic climate induced changes in these coastal processes can lead to shoreline retreat and beach erosion as occurred during the 1940s where the average Goleta Beach width was less than 150 feet.

However, this historic trend toward accretion appears to have shifted with the onset of the 1982-1983 El Nino, 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. This led to issuance of emergency revetment permits and the commencement of an extended County process to address this issue (refer to Section 1.A Project Understanding). More recently, studies may indicate that the trend is

[1] A peak as opposed to average beach width in 1975 of 400 feet is also noted.

shifting back toward one of accretion (ESA/PWA/ P&S; 10/2011); however, whether this shift toward accretion is fully underway and if so, for how long it would continue is undetermined.

The managed retreat approach of the proposed project is designed to recognize the potential for this section of coast to retreat based on changes in coastal processes. As depicted on Figures 2 and 3 the proposed project is designed to recognize the potential for Goleta Beach to retreat to the historically narrow "back beach" conditions identified for 1943, regardless if sediment accretion trend may be reversing again. In this way, project design would minimize the need for coastal armoring and expensive major beach nourishment, both key elements of previous projects.

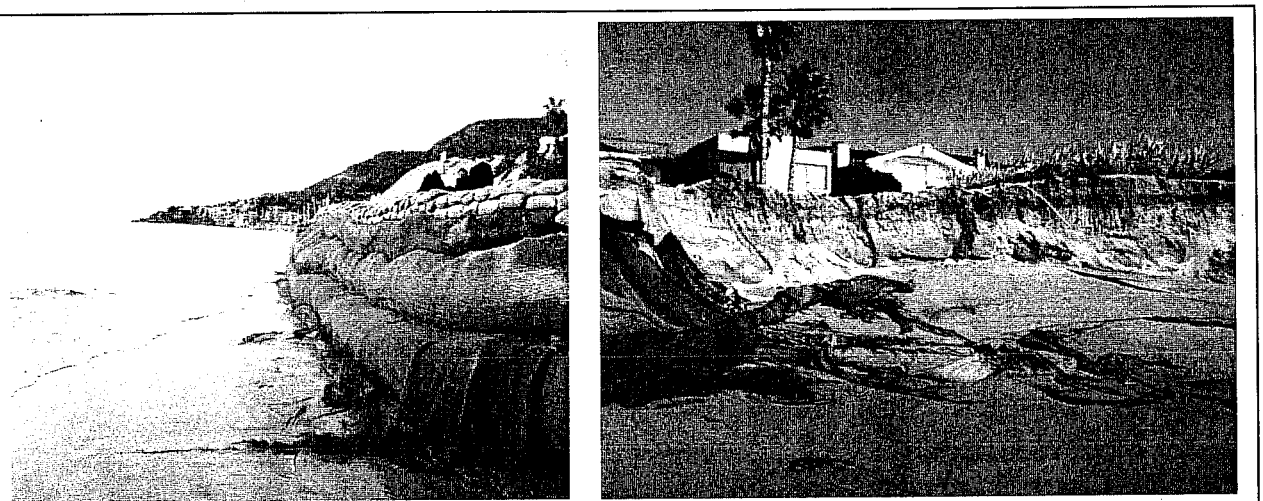
Previous Environmental Review: The previous EIR identified potentially significant coastal process impacts (Class II) due to offshore sand excavation and increased closure frequency of the Goleta Slough mouth due to beach nourishment- these impacts would not apply to the proposed project. Several adverse, but not significant impacts (Class III) were identified regarding limited changes in coastal processes.

In order to address potential coastal process issues, AMEC's team would:

- Peer review the multiple past historic shoreline position, coastal process and morphology and beach profile modeling studies (e.g., Goleta Beach County Park Reconfiguration Alternative, Philip Williams & Associates; November 24, 2008; Goleta Beach Modeling Review, Philip Williams & Associates; April 15, 2009; Final Draft Report and Addendum Shoreline Morphology Study for Goleta Beach County Park Long-Term Plan (Moffatt & Nichol; July 8, 2009).
- AMEC's team of coastal process experts would identify data gaps, the adequacy analysis and methodologies provided in existing studies and provide a brief technical report which concisely summarizes the findings and methodologies and conclusions of these studies and identify changes and recommendation to address coastal process issues as well as need for any further analysis further recommendation conclusions. AMEC's coastal process scientists are familiar with staff at ESA/PWA and would coordinate with the County's experts on information request and this targeted analysis.
- Update the previous EIR's coastal process setting to reflect newly available data, including the BEACON Coastal Regional Sediment Management Plan and EIR, the 2009 Coastal Commission Staff Report and appendices, the new technical report prepared by AMEC and other relevant sources. Provide a description of the County's ongoing opportunistic beach nourishment program and the scale and efficacy of past nourishment efforts.
- Describe the existing local, State, and federal regulatory framework with regard to Coastal Processes and Coastal Erosion, with particular attention to the County of Santa Barbara's Local Coastal Program, State Coastal Act provisions that govern coastal protection, new BEACON recommendations, etc.
- Evaluate the proposed project for potential impacts related to changes in coastal processes, including long-term stability of Goleta Beach, changes sediment budget and downcoast impacts in light of existing wave frequency, height and run up patterns, longshore transport, and ongoing erosion rates. Independently review conclusions of the past EIR and studies regarding project stability and effects on coastal processes.
- Identify coastal process, erosion and geotechnical issues related to the stability of the existing revetments, the compacted earth berm and geotextile dune and proposed cobble berm/ apron.
- Discuss long-term operation and maintenance issues including frequency of needed maintenance of the proposed geotextile dune and cobble berm and the stability of the proposed project over the long term given.

- Provide a general discussion of project stability given state accepted rates of sea level rise and potential long term effects on the proposed project. AMEC recognizes that recent court cases (e.g., Ballona Wetlands Land Trust, et al. v. City of Los Angeles (2009) may affect this issues, but would recommend disclosure and discussion, even if formal impacts are not identified. AMEC would coordinate with County staff on this matter.

- Propose mitigation measures as needed to reduce impacts associated with coastal processes and erosion, including identification of possible inspection and maintenance routines for the proposed sand dune, geotextile dune and cobble berm, compacted earth berm and approaches to managing impacted Park facilities in the case of ongoing erosion (i.e., temporary protection measures, debris removal), potential mechanisms to formalize and fund the County's opportunistic beach nourishment program and longer term monitoring of beach width.



An important element of the proposed project includes creation of 250 feet of Geotextile Core Dune and Cobble Berm to protect the Goleta Sanitary District's 36 inch outfall line and sewer vault. AMEC is aware that this creative approach has provided adequate coastal protection in other communities. However, AMEC is also aware that when subject to direct wave action, geotextile fabric sand bags can fail. This occurred at Broad Beach in Malibu where major geotextile "revetments", unreinforced by a cobble berm or protected by dunes, failed under strong winter surf. AMEC's coastal process experts would review the adequacy of the proposed design in order to identify potential impacts to public facilities associated with this approach.

AMEC's Deputy Project Manager Mike Henry would prepare this section based on past studies and the technical report prepare by the Oceanographers and Coastal Engineers at Coastal Environments (CE). CE would per review and provide feedback on the EIR section along with Scott Kerwin, AMEC's Senior Coastal Engineer and Registered Engineering Geologist.

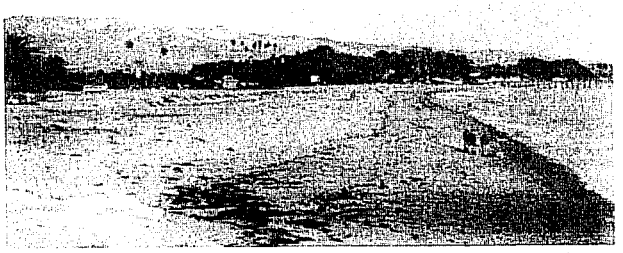
Hazardous Materials: Goleta Beach Park is constructed on artificial fill placed on a historic sand spit and areas of the Goleta Slough. This area began to be filled in the 1940s and the composition of the fill is unknown. The County has commissioned a geotechnical report, including use of a GeoProbe survey and ground penetrating radar to help define the character of the soils underlying the western portion of the park (e.g., Parking Lots 6 and 7). This report will provide initial information on the presence or absence of hydrocarbons or other hazardous materials.

Previous Environmental Review: The previous EIR addressed solid waste generation due to demolition activities but not Hazardous Materialst.

In order to address potential Hazardous Materials issues, AMEC's team would:

- Identify site condition and the potential for the occurrence of hazardous materials based on the County's geotechnical report and other available data (e.g., geotracker website).
- Describe the existing local, State, and federal regulatory framework with regard to Coastal Processes and Coastal Erosion, with particular attention to the County Fire Department standards and regulations.
- Identify the type and extent of existing contamination (if any) and address any potential impacts associated with such hazardous materials
- Identify potential mitigation measures including containment removal and proper disposal, soil remediation, etc.

Recreation: Goleta Beach is the most heavily used park in the County's entire park system. The Park provides a range of recreational facilities including picnic areas, volleyball, horseshoe pits, a playground, and approximately 4.5 acres of lawn in a scenic beachfront setting. Additional facilities include the Goleta Pier, Beachside Restaurant, snack bar, bait and tackle shop, and supporting facilities including restrooms, showers, rangers' residences and approximately 600 parking spaces. The Park also provides easy public access to a relatively wide clean sandy beach. Although coastal access is available at Bacara, Ellwood and in Isla Vista, Goleta Beach Park is the only beachfront public park in the Goleta Valley. The Park serves not only residents of the Goleta Valley by those throughout the South Coast as well as visitors.



Goleta Beach Park is the only beach front public park in the Goleta Valley and provides easy public coastal access to a relatively wide sandy beach.

Previous Environmental Review: The previous EIR identified two Unavoidable and Significant Impacts (Class I) to Recreation associated with managed retreat: a "short-term" disruption of recreation during a 2-year-long construction window and a long-term impact due to loss of an estimated 1.3 acres of lawn area. An additional Potentially Significant Impact (Class II) was associated with public safety during heavy construction activities.

In order to address potential Recreation issues, AMEC's team would:

- Update the Recreation Environmental Setting of the previous EIR to reflect current facilities and visitation. contacting County Parks Department staff and Rangers to obtain and confirm updated data.
- Describe the existing local, State, and federal regulatory framework with regard to Recreation, in particular the County's LCP, State Coastal Act, and Goleta Community Plan
- Update the analysis within the previous EIR to identify potential impacts to park facilities based on proposed project and any new coastal process information. Potential impacts may include the possible loss of approximately 2.5 acres of lawn over the long-term, danger to or loss of restroom(s), group and individual picnic

areas and the playground accounting for current estimated limits of Coastal Process Zone/ 1943 back beach and wave run-up. Include discussion of possible trend toward a negative Pacific Decadal Oscillation and possible current apparent trend of sand accretion.

- Identify effects of loss of 150 spaces of parking on recreation and coastal access (parking may be addressed in both Transportation and Recreation sections).
- Identify beneficial impacts associated with increased beach area replacing Parking Lots 6 and 7.
- Identify mitigation measures, potentially including study of options for and eventual replacement of lost parking, phased relocation of threatened facilities such as restroom(s) and picnic areas, possible interim measures to protect threatened facilities along edge of coastal process zone (e.g., playground).

Rita Bright, AMEC's Senior Coastal Policy Specialist would oversee this effort.

Land Use: Goleta Beach Park is located within the Coastal Zone of Santa Barbara County within the boundaries of the 1993 Goleta Community Plan. The Goleta Community Plan is currently undergoing a major update which will not likely be completed until after completion of Goleta Beach 2.0. The Park is also located in relatively close proximately to UCSB, the City of Goleta, and Santa Barbara Municipal Airport.

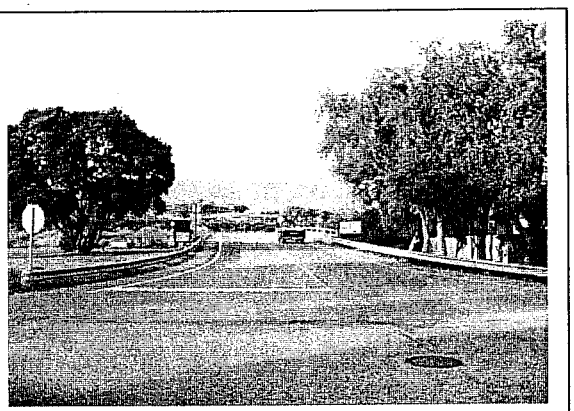
Previous Environmental Review: The previous EIR identified a significant and unavoidable impact (Class I) to Land Use associated with loss of parkland/ lawn area and potentially adverse, but not significant impacts (Class III) associated with disruption and inconvenience to park users.

In order to address potential Land Use Impacts, AMEC's team would:

- Update the previous EIR's environmental setting section to discuss the Goleta Community Plan and identify key pending changes, the County's LCP and any pending changes, and provide a brief discussion of the Long Range Development Plan for UC Santa Barbara and the City of Goleta's General Plan.
- Identify potential "secondary" Land Use impacts associated with loss of parkland/ lawn area and public parking.
- Identify potential mitigation measures based on analysis in Recreation and other sections.

Rita Bright, AMEC's Senior Coastal Policy Specialist would oversee this effort.

Traffic, Circulation, and Parking: Access to Goleta Beach Park is available off of Sandspit Road via a bridge across the main channel of the Goleta Slough. This bridge connects to the internal circulation network within the Park with the eastern leg of the system linking to Parking Lots providing access to Beachside Restaurant, Goleta Pier, snack bar and Parking Lots 1-3 and the western leg providing access to the majority of the Parks lawn and Picnic areas served by Paring Lots 4-7. The project site receives heavy public use with up



Vehicular and bike access to Goleta Beach Park is provided via a bridge across the main channel of the Goleta Slough. This bridge is proposed for replacement.

to 72,000 vehicles counted leaving the Park on a single day in July (Chambers Group, Inc. 2008). The large majority of these trips likely utilize Highway 217 and the uncongested Sandspit Road on and offramps, limiting surface street congestion associated with Park traffic. The heavily used Obern Bike Trail which traverses the eastern Goleta Valley along Atascadero Creek links up in the Park with the Coastal Trail which provides access to UC Santa Barbara and Isla Vista. The Park currently provides parking for approximately 600 vehicles, with sufficient parking available on all but the 4-5 most popular days per year (e.g., Independence Day). Although the demand for parking rarely exceeds supply at Goleta Beach Park, There is a long history of potential concerns regarding parking adequacy and coastal access related to parking demand from Beachside Restaurant as well as due to UC Santa Barbara students parking in the western lots.

Previous Environmental Review: For the Managed Retreat Alternative, the previous EIR identified two Potentially Significant (Class II) construction-related impacts due to user safety and heavy construction traffic and a significant and unavoidable impact (Class I) due to loss of parking over a 2-year construction window. Long term impacts for loss of parking and increased traffic were identified as adverse, but not significant (Class III).

In order to assess initial and project impacts, AMEC's team would:

- Update the previous EIR's environmental setting section through an inventory of existing traffic, circulation, and parking conditions in the study area. This scope includes spring surveys to verify the number of public parking spaces available and review of the vehicular, pedestrian and bicycle access system serving Goleta Beach.

- Analyze potential Project construction related construction impacts associated with the loss of parking, increased traffic, and diminished beach access during the construction period. The EIR will quantify construction traffic, particularly heavy haul trucks needed for removal of existing revetments and asphalt and concrete exported from parking lots 6 and 7. The analysis will review the number of parking spaces that will be lost during the construction phase of the project and the affects of construction activities on vehicular access to the beach area.

- Discuss construction impacts to pedestrian and bicycle travel in the area along with a general analysis of the effects of heavy haul trucks on local roads. Revetment boulders may potentially be shipped to County Flood Control storage areas at Hospital Creek or the Calle Real Campus or potentially sold to developers. Asphalt and concrete would be shipped to recycling facilities such as those operated by Marborg or Granite Construction in Santa Barbara.

- Analyze potential long-term impacts related to the loss of 150 parking spaces in the Goleta Beach parking lots. The parking analysis will be based on historical parking occupancy data that is on-file with the County as well as new parking counts that will be conducted during the Spring break period in April when recreational beach use increases. This scope includes peak Spring counts conducted on a Saturday and a Sunday. An optional task of conducting new Summer parking surveys for $3,200 has been identified, but is not included in basic proposal.

- Analyze potential impacts related to vehicular, pedestrian, and bicycle access and circulation within the park that would result from the internal modifications proposed as part of the project.

- Recommend mitigation measures to reduce potential short-term construction impacts, as needed. These would include such measures as scheduling construction activities outside of peak summer periods, identification of off-site parking areas for construction workers, implementation of public education programs about the construction activities and schedules, etc. Additional measures will be identified which could be implemented to enhance both vehicular and non-vehicular access to the area during construction of the project, including construction

management techniques to avoid or minimize traffic impacts, provision of adequate pedestrian and bicycle facilities within and adjacent to the construction zones, etc.

- Recommend mitigation measures to reduce the long-term effects of the project, including provision of on or offsite additional parking spaces, implementation of parking management plans to increase parking during peak parking periods, modifications to the pedestrian and bicycle facilities in the area, etc.

Strategic team member ATE would oversee this effort.

Utilities: Goleta Beach Park includes a number of internal utility lines as well as regional lines such as the Goleta Sanitary District sewer outfall line, Goleta Water District 18-inch Reclaimed Water Lines and a Sempra Energy/ Southern California Gas Company 8-inch High-Pressure Gas Line pass through Goleta Beach Park. A key element of the Project is relocating several internal and regional lines landward to a new Transportation and Utility Corridor outside of the Coastal Process Zone and installing a geotextile core dune and cobble berm to protect the sewer outfall line.

Previous Environmental Review: For the Managed Retreat Alternative, the previous EIR identified a potentially significant impact (Class II) regarding solid waste disposal and two less than significant impacts (Class III) associated with disruption of restroom services and utility demand.

In order to address potential Utilities Impacts, AMEC's team would:

- Update the previous EIR's Utility setting section to describe existing utility location and service in the Park.
- Describe the existing local and state regulatory setting as it applies to utilities.
- Based on the revised and updated analysis in the Coastal Processes Section, identify potential adverse and beneficial impacts to utilities associated with potential for coastal process related damage (or lack thereof) to the relocated utilities as well as those protected in place.
- Identify potential mitigation measures based on analysis in Recreation and other sections.

Darin Miller, AMEC's licensed engineer/ utilities specialist would oversee this analysis. .

Alternatives: AMEC recognizes that the County has spent a decade and substantial amounts of funding considering a range of alternatives to protect Goleta Beach and after this exhaustive process has identified the proposed project as a compromise solution. However, a thorough alternatives analysis will remain a critical component of both the utility and legal adequacy of this EIR. AMEC will work closely with County staff to craft alternatives for the proposed project, building upon the previous EIR, past studies and our team's experience with coastal process and shoreline management. AMEC would consider input from the Notice of Preparation regarding alternatives and would also recommend that the County coordinate with interested agencies (e.g., BEACON, Coastal Commission) regarding alternatives. The Alternatives analysis will be important to provide County decision-makers with a legally defensible document as well as allowing a final review of the comparative impacts of possible optional approaches to meeting project objectives. The complex regulatory environment surrounding this project and the high level of public interest in this project also merit careful attention to alternatives.

AMEC will coordinate carefully with both County staff and our team of subconsultants on the scoping of alternatives, particularly those required to address key issues such as coastal processes and recreation. Although Goleta Beach is not directly addressed in the recent BEACON EIR, the alternatives section should acknowledge beach nourishment and sand retention concepts (e.g., artificial reefs) from that document, even if such alternatives are considered and discarded. Further, the previous Goleta Beach EIR contained three "hard" structural and difficult to permit alternatives (offshore breakwater, fully reveted beach, permeable groin) as well as a full retreat alternative. AMEC would work with County staff to consider if such alternatives should be carried forward in this EIR for full analysis or be considered but discarded. Such alternatives may not provide decision-makers with a fully suitable range of options to address project impacts while still meeting key objectives.

AMEC will ensure the alternatives analysis is clearly linked to and supported by the identified project objectives and that a reasonable range of alternatives is provided for consideration. AMEC will clearly set forth the requirements of CEQA Section 15126.6 which governs the type and range of alternatives that should be considered and factors which affect the feasibility of such alternatives (e.g., economic viability, site suitability, regulatory feasibility of alternatives, etc.). AMEC's goal will be to present the alternatives in a manner that permits easy comparison of impacts, especially between various approaches to wastewater disposal. Key issues addressed will include:

- **Alternatives Considered and Discarded:** A key component of the Alternatives section in this EIR will be to briefly describe the alternatives that were considered for analysis in the EIR but discarded due to infeasibility, lack of effectiveness at reducing environmental effects, potential regulatory barriers or other reasons. This will be particularly important given this project's history and the project's potential for unavoidable and significant effects. AMEC's team of coastal process scientists and coastal land use and permit specialists would clearly identify the scientific underpinning, technical feasibility and regulatory or permit issues for such alternatives to provide a complete record to support the alternatives that are analyzed in the EIR and provide an appropriately detailed discussion of those that are discarded from further review. AMEC would coordinate closely with County staff to determine if alternatives from the previous EIR should now be moved to this category or continue to be fully assessed in the EIR.

- **No Project:** This analysis would describe the impacts and potential benefits of no Goleta Beach County Park Managed Beach Retreat Project 2.0. These might include eventual impacts and damage to utilities and long term loss of parking. Potential benefits such as avoidance of construction impacts on biological resources, noise and air quality, and loss of parking over the short to mid-term would also be described. AMEC would discuss issues associated with removal of the existing revetments with expired permits as this would appear to be a regulatory requirement that would be carried forward under this alternative.

- **Alternative Coastal Protection Approaches:** Given potential project impacts, the County may wish to include alternative approaches to coastal protection in the EIR. AMEC anticipates that several options could be considered by the County to ensure provision of a defensible EIR, to maintain decision-maker flexibility and provide options for consideration as the project proceeds through the process. Because of potential regulatory concerns, these could focus on non-structural or less intrusive methods to protect recreational facilities at Goleta Beach which could either supplement or replace the two more structural approaches reviewed in the previous EIR (full revetment; offshore breakwater). Alternatives that may warrant consideration for inclusion in the EIR could include the dewatering concept set forth in the 2011 ESA/PWA/P&S study, recognition and analysis of the County's ongoing opportunistic nourishment program or potentially using information from the previous EIR to include a major nourishment program. Although problematic from a regulatory perspective, one or more of the

structural concepts from previous EIR could also be included to provide a full range of options and a legally defensible analysis.

Additional Issues

AMEC will also update the previous EIR to analyze potential impacts associated with issue areas where the previous EIR requires only focused changes, updates, and deletion of dated text and analyses. Many of these issue areas are important to the community (e.g., biological resources, water quality) but require a low or moderate level of analysis to disclose impacts, such as GHG emissions. AMEC would review, edit, update and carry forward the analysis from the previous EIR for these sections, as appropriate. AMEC's approach to these additional issues is discussed in Table 7 below.

Table 7. Additional Issues

Noise: Goleta Beach Park generally experiences low noise levels (less than 60 dBA). The Project's primary noise concern may be exposure of Park users to short-term construction noise. AMEC would update the exhaustive noise section of the previous EIR to reflect the decreased scale of the proposed Project and the shorter duration of construction, and would update/ identify appropriate mitigation measures, as needed. This analysis would be overseen by AMEC's senior Noise Specialist, Brian Cook.
Hydrology/Water Quality: Goleta Beach is constructed along a historic sandspit between the Pacific Ocean and the Goleta Slough. To address this issue, AMEC would update the analysis if the previous EIR to describe the existing setting for ground and surface water quality. AMEC would update the analysis to reflect the decreased scale of the proposed project and the decrease in impervious surfaces associated with bike path reconstruction and removal of Parking Lots 6 and 7 and update/ identify potentially required mitigation measures. This analysis would be overseen by AMEC's Senior Water Quality Specialist, Barry Snyder.
Air Quality: The Air Quality Section would document existing conditions and regulatory standards, and describe attainment/non-attainment pollutants for the South Coast. In addition, although not anticipated to be significant due to relatively low construction traffic and truck volumes, AMEC would quantify emissions for all construction traffic, updating the analysis within the previous EIR. AMEC would identify potential project impacts and quantify emissions including Greenhouse Gas Emissions using URBEMIS (2007) and EMFAC (2007) models to identify project emissions as needed. Mr. Steven Ochs, AMEC Senior Air Quality Specialist would conduct this analysis.
Biological Resources: The previous EIR provides an exhaustive analysis of both terrestrial and marine biological resources. AMEC would update this section to refocus and shorten discussion of marine biological resources needed to reflect the revised project and to support an analysis needed for potential project alternatives. AMEC would adjust the analysis of impacts to terrestrial biological resources to reflect changes in the project and a general reduction in the extent of potential impacts. As an optional task, this analysis could be supported by updated surveys for Belding's savannah sparrow, raptor species, herons and egrets and an associated technical report prepared by Storrer Enviromental Services. The overall analysis would be overseen by AMEC Santa Barbara's Senior Ecologist, Saudamini Sindhar.
Cultural Resources: Goleta Beach is constructed on artificial fill overlying a historic ephemeral sandspit and marsh areas. Two potential cultural resource sites identified within the park are thought to consist of redeposit remains in fill. AMEC would update this section to discuss potential impacts, focusing upon the Transportation and Utilities Corridor (apparently located on fill associated with Highway 217), the removal of parking Lots 6 and 7 and other improvements with ground disturbance. As no impacts were identified for the former larger scale Managed Retreat Alternative, the potential for new or unanticipated impacts appear to be low; however, AMEC would review all available materials to ensure that this issue is adequately addressed. This analysis would be conducted by AMEC Santa Barbara's Cultural Resources Specialist, Andrea Bardsley, RPA.
Insignificant Issues: In order to provide a complete record for the EIR, AMEC would provide a brief discussion of issues anticipated to be insignificant including agriculture, mineral resources etc.

Table 7. Additional Issues

Cumulative Impacts: This section will describe cumulative impacts in a manner consistent with CEQA Guidelines §15130, and based on a list of projects provided by the County. As stated in the Guidelines, the nature of each environmental resource being evaluated and the type and location of the project affect whether it is included in the cumulative analysis.
Mitigation Monitoring and Reporting Program (MMRP): AMEC would create an updated useable MMRP in table format for easy tracking, along with clearly crafted mitigation measures (responsible party, required timing, monitoring milestones, etc.). These would be accompanied by clear and realistic goals for implementation, timing, and identification of potential funding sources.
References: This section will list source documents, references, and agencies and individuals consulted for the EIR.
Technical Appendices: Technical studies will be included as appendices in the EIR.

5 PROPOSED SCHEDULE

AMEC has prepared a schedule to allow the County to complete this project expeditiously, within the first quarter of 2013 (Figure 6). AMEC is committed to meet the County's scheduling needs and to work with staff to ensure that these goals are met.

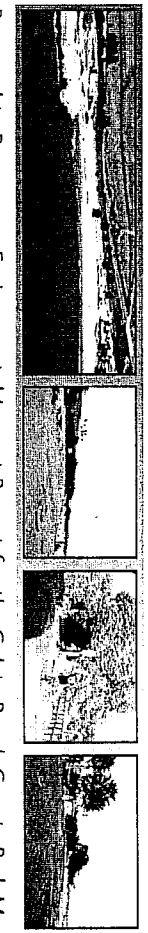
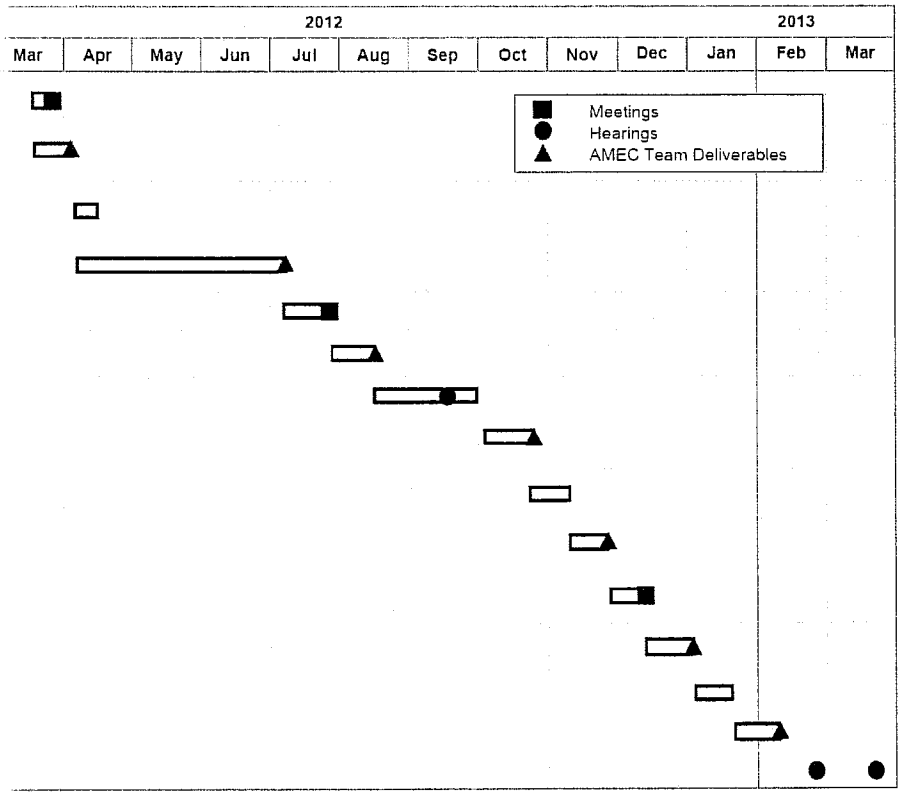


Figure 6. Preliminary Schedule for Goleta Beach County Park Managed Beach Retreat Project 2.0 EIR

Task Description	Start Date	End Date
1. Project Initiation and Kickoff Process	3/21/2012	3/27/2012
2. AMEC prepares Admin Draft Introduction, Project Description, and Alternatives	3/21/2012	4/5/2012
3. City review of Admin Draft Introduction, Project Description, and Alternatives	4/5/2012	4/12/2012
4. AMEC prepares Admin Draft EIR	4/5/2012	7/5/2012
5. City review of Admin Draft EIR	7/5/2012	7/26/2012
6. AMEC prepares and prints Draft EIR and MMP	7/26/2012	8/17/2012
7. Public Review Period (45 days) and Public Hearing	8/17/2012	9/31/2012
8. AMEC prepares Responses to Comments	10/4/2012	10/24/2012
9. City review of Response to Comments	10/24/2012	11/9/2012
10. AMEC prepares Admin Final EIR and MMP	11/9/2012	11/29/2012
11. City review of Admin Final EIR	11/29/2012	12/12/2012
12. AMEC prepares Draft Final EIR	12/12/2012	1/5/2013
13. Decision maker review of Draft Final EIR	1/5/2013	1/21/2013
14. AMEC prepares and prints Final EIR	1/21/2012	2/8/2013
15. Planning Commission and Board Hearings	February – March 2013	



6 REFERENCES

Program EIR for *Plan Santa Barbara* General Plan Update, City of Santa Barbara
John Ledbetter, Program Manager
City of Santa Barbara
Community Development Department
630 Garden Street
Santa Barbara, CA 93101
(805) 564-5470
Performance/Completion Dates: 2008-2011
AMEC Project Manager: Dan Gira
AMEC Deputy Project Manager: Rita Bright

Chinatown Project EIR, City of San Luis Obispo
Pam Ricci, Project Manager
City of San Luis Obispo
Community Development Department
919 Palm Street
San Luis Obispo, CA 93401
(805) 781-7168
Performance/Completion Dates: 2006-2009
AMEC Project Manager: Dan Gira
AMEC Analysts Mike Henry, Steve Ochs, Ben Botkin

PRC Lease 421 Re-commissioning and Broad Beach Restoration Project EIRs
Eric Gillies, Project Manager
California State Lands Commission
100 Howe Street, Suite 100 – South
Sacramento, CA 95825
(916) 574-1897
Performance/Completion Dates: 2006-2012 (PRC 421); Broad Beach (2011-2012)
AMEC Project Manager: Dan Gira
AMEC Deputy Project Manager: Michael Henry, PhD
AMEC QA/QC: Doug McFarling

Prefumo Creek Commons Project EIR, City of San Luis Obispo
Phil Dunsmore, Project Manager
City of San Luis Obispo
Community Development Department
919 Palm Street
San Luis Obispo, CA 93401
(805) 781-7522
Performance/Completion Dates: 2007-2009
AMEC Project Manager: Dan Gira

Exhibit A
Letters of Commendation

CALIFORNIA STATE LANDS COMMISSION
'00 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
Relay Service From TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: (916) 574-1897
Contact FAX: (916) 574-1885

February 9, 2010

Ms. Laura M. Laurence, R.E.H.S.
Planning Services Manager
Resource Management Agency-Planning Department
168 West Alisal Street, 2nd Floor
Salinas CA 93901

Re: AMEC Earth & Environmental (AMEC) Performance; PRC-421 Recommissioning Project EIR

Dear Ms. Laurence,

AMEC recently completed the administrative final EIR on the re-commissioning of a surf zone oil production facility on State Tidelands Lease PRC-421, located adjacent to the City of Goleta in Santa Barbara County. The proposed project would entail reconstruction/ rehabilitation of two piers and wells, and construction of supporting pipelines and other infrastructure to permit resumption of nearshore oil production at this facility. A perennial creek, coastal wetlands, sand dunes, rocky intertidal habitats and kelp forests near the site are designated as environmentally sensitive habitats.

Significant issues evaluated in the EIR include the structural integrity of these aging oil piers, pipeline and tankering hazards and the associated potential for oil spills and impacts to sensitive beaches and coastal habitats, including the Devereux Slough within Coal Oil Point Natural Reserve. AMEC also assessed impacts to recreational beach users and visual resources, provided air quality impact analysis and prepared an assessment of greenhouse gas emissions and climate change impacts, in coordination with the State Attorney General's Office. AMEC also prepared the findings and overriding considerations for this project.

Major challenges associated with this project included coordination with a Joint Review Panel consisting of State and local agencies with sometimes differing policies and viewpoints, and the general high level of public and agency interest in offshore oil development in the Santa Barbara Channel. In addition, complex legal issues surrounding potential project vested rights and tracking and incorporating information from nearby proposed offshore oil development required careful analysis and document revisions over time. Finally, due to a variety of issues, the project schedule was repeatedly delayed, which required ongoing changes to the EIR over a four-year period. The State is currently considering recirculation of the EIR to add a new alternative to address evolving regulatory and public concerns.

Throughout this extended process, AMEC has remained committed and responsive to staff direction and provided generally high quality documents for use by State staff and detailed response to comments from a range of State and local public agencies and community organizations. Although project scheduling, complex technical issues and interagency concerns required adjustments in schedule and budget, State Land's Commission's staff has been satisfied with AMEC's performance on these project management issues.

Overall, given the various challenges facing this project, State Lands Commission staff has been satisfied with AMEC's performance on this EIR and would recommend them for work with Monterey County.

Sincerely,

Eric Gillies, Project Manager
Division of Environmental Planning and Management

MONTECITO FIRE PROTECTION DISTRICT

595 San Ysidro Road • Santa Barbara, California 93108 • (805) 969-7762 • FAX (805) 969-3598

January 4, 2012

Mr. Aaron Goldschmidt
Vice President, Environmental Planning Programs
AMEC Environment & infrastructure, Inc.
104 West Anapamu Street, Suite 204A
Santa Barbara, CA. 93101

RE: Recognition of AMEC Earth & Environmental (AMEC) Performance

Dear Mr. Goldschmidt,

I would like to acknowledge and thank Mr. Daniel Gira and his staff for the outstanding quality of work they have provided to the Montecito Fire Protection District (MFPD) regarding the proposed construction of Fire Station # 3. AMEC has been assisting the MFPD through a multi-year process that has involved preparation of the detailed yet accessible Station 3 Siting Study, further analysis of acquisition issues for a specific property and now with preparation of an Environmental Impact Report and related assistance with the County of Santa Barbara's permit process.

As you are aware, residents of Montecito expect a high level of planning and environmental analysis for any project in the community. I am pleased to acknowledge that throughout this process. Mr. Gira and his team have met or exceeded community expectations for preparation of detailed yet accessible studies. Mr. Gira and his team have worked cooperatively with MFPD staff to advance this very important public infrastructure project forward through the process. Mr. Gira's detailed knowledge of environment issues and community concerns as well as his familiarity with the County's adopted plans and policies have been a key factor in project success to date. Mr. Gira's participation during public meetings was extremely effective in addressing many of the community's questions and concerns.

Mr. Gira and his team have been able to grasp and understand our District's goals and objectives and have been highly responsive in addressing the wide range of requirements we must meet to proceed with site specific development. Their ability to understand and help articulate a public agency's goals while still providing objective analysis has been extremely helpful. The AMEC team has proven their ability to respond and assist us in providing our vital services to our citizens, with expeditious and accurate environmental and planning assistance involving our public health and safety mandates.

Please feel free to use me as a reference and testimony of your team's exemplary work.

Sincerely,

Kevin Wallace

Kevin Wallace, Fire Chief
Montecito Fire Protection District

Peoples' Self-Help Housing Corporation

July 17, 2007

Mr. Steve Crane, Operations Manager
AMEC Earth & Environmental
104 West Anapamu Street, Suite 204A
Santa Barbara, Ca 93101

Re: Land Use-Environmental Planning Assistance

Dear Mr Crane,

I would like to acknowledge the efforts of Dan Gira of your staff as part of AMEC's work on the Casas De Las Flores and Rosemary Farms agricultural workforce housing projects. As I'm sure you are aware, provision of affordable housing in the coastal areas of California is always a challenge and the permitting of farmworker housing can be even more difficult. AMEC has been especially helpful in assisting Peoples Self Help Housing (Peoples') in advancing these two major farm workforce housing projects in the planning process. In particular, Mr. Gira has:

- Worked closely and cooperatively with staff from the cities of Carpinteria and Santa Maria, Santa Barbara County and the State Coastal Commission to coordinate project review.
- Prepared detailed high quality agricultural resource and policy analyses which have addressed exacting standards of these agencies for analysis of agricultural resource protection issues.
- Created a draft agricultural residential zone district to meet initial concerns raised by both City of Carpinteria and Coastal Commission staff.
- Provided prompt responses and flexible approaches to address evolving agency concerns while keeping these projects moving forward.

Mr. Gira's knowledge of State, County and City plans and polices has been an important factor in ushering these two projects forward in the planning process. Mr. Gira's knowledge of planning and environmental issues and understanding of the importance of providing affordable housing has allowed him to be an effective project advocate, while still objectively addressing concerns raised by agency staff.

We appreciate the assistance provided by AMEC to date and look forward to working with you and your staff in the future.

Sincerely,

Jeanette Duncan
Executive Director

3533 Empleo Street
San Luis Obispo, CA 93401
Tel: (805) 781-5088
Fax: (805) 781-1701
E-mail: admin@peoplesself.org
www.peoplesself.org

United Way Agency

2x East Victoria Street
Santa Barbara, CA 93101
Tel: (805) 962-5152
Fax: (805) 962-5153
E-mail: sbo@peoplesself.org
www.peoplesself.org

City of Santa Barbara
Public Works Department
www.SantaBarbaraCA.gov

Main Office
630 Garden Street
P.O. Box 1990
Santa Barbara, CA
93102-1990

Administration
Tel: 805.564.5377
Fax: 805.897.2613

Engineering
Tel: 805.564.5363
Fax: 805.564.5467

Facilities
Tel: 805.564.5415
Fax: 805.897.2577

Street Maintenance
Tel: 805.564.5413
Fax: 805.897.1991

Transportation
Tel: 805.564.5385
Fax: 805.564.5467

Water Resources
Tel: 805.564.5387
Fax: 805.897.2613

March 19, 2010

Mr. Aaron Goldschmidt,
Vice President, Environmental Planning Program
AMEC Earth & Environmental (AMEC)
104 West Anapamu Street, Suite 204 A
Santa Barbara, CA 93101

Re: AMEC Earth & Environmental (AMEC) Performance: Plan Santa Barbara General Plan EIR

Dear Mr. Goldschmidt,

AMEC recently completed the draft Environmental Impact Report (EIR) for the Plan Santa Barbara General Plan which addresses the impacts of buildout of the City through the year 2030. Plan Santa Barbara focuses on sustainable mixed use infill development and includes policies that promote and encourage creation of walkable pedestrian friendly development in and around the City's Downtown.

This process includes a transportation planning effort that teamed AMEC with Fehr and Peers and included creation of a state of the art travel demand model capable of addressing the effectiveness of both land use policy initiatives and travel demand management measures in reducing both vehicle miles traveled and new vehicle trip generation.

In particular, I would like to acknowledge Mr. Gira's in depth knowledge of transportation planning issues and his ability to summarize these complex matters in a manner accessible to the public and City decision-makers. Mr. Gira and his staff, in conjunction with Fehr and Peers, have provided critical assistance to the City on developing innovative transportation mobility oriented solutions to the transportation planning issues arising from continued development within the City.

AMEC's team has worked closely with City and commonly goes the extra mile. Please feel free to use me as a reference and testimony of your team's good work.

Sincerely,

Rob Dayton
Principal Transportation Planner

CITY OF SAN LUIS OBISPO

Community Development Department • 919 Palm Street, San Luis Obispo, CA 93401-3218

May 30, 2007

Mr. Steve Crane, Operations Manager
AMEC Earth & Environmental
1107 Ninth Street, Suite 210
Sacramento, CA 95814.

Re: Copelands and Chinatown Projects EIRs

Dear Mr. Crane,

The purpose of this letter is to acknowledge the efforts of your staff as part of AMEC's work on the Copelands and Chinatown Projects EIRs for the City of San Luis Obispo. In particular, I wish to draw to your attention the following:

- AMEC's team of Dan Gira and Linn Zukor have worked very closely and cooperatively with City staff on addressing the impacts of major redevelopment projects in downtown San Luis Obispo.
- AMEC has shown the ability to present complex issues, for example, in transportation, aesthetics, cultural resources, in a manner which is accessible and well organized.
- AMEC has provided creative mitigation approaches to address project impacts.

I wanted to reinforce how well the Copelands Project Environmental Impact Report (EIR) was received by the community. I got positive public and decision-maker input on the EIR's thorough analysis of salient environmental impacts, clear graphics, logical flow, and easy to read format. The City was especially pleased when the EIR was awarded the "outstanding environmental document award for jurisdictions over 30,000 population" from the Association of Environmental Professionals (AEP). Most of the credit for the City receiving this award was due directly to your staff.

I have worked for the City for 23 years and have worked with several consultant teams. I can honestly say that the staff at AMEC has consistently performed at exceptionally high levels by producing quality products consistent with City direction and within prescribed timeframes, which has not always been my experience with other consultants. The staff, especially Dan and Linn, are extremely professional and responsive to our requests. They have always been friendly and polite in all my dealings with them and are seasoned pros in terms of dealing with the onslaught of questions that have come up during the public hearing process.

If you have any questions or need further information, please do not hesitate to contact me at (805) 781-7168.

Sincerely,

Pamela Ricci

Pamela Ricci, AICP
Senior Planner

CITY OF VENTURA

24 April 2009

Mr. Aaron Goldschmidt, Vice President
AMEC Earth & Environmental, Inc.
104 W. Anapamu St., Suite 204A
Santa Barbara, CA 93101

Re: Victoria Avenue Corridor Plan

Dear Mr. Goldschmidt,

I would like to acknowledge the efforts of your staff as part of AMEC's work on the Victoria Avenue Corridor Plan Mitigated Negative Declaration (MND) for the City of Ventura. Although AMEC was initially retained to conduct a full Environmental Impact Report (EIR) for this 250-acre corridor plan and development code, the City eventually supported preparation of an MND. Throughout this evolving process, AMEC was extremely responsive to changing City needs to complete Victoria Avenue Corridor Plan. In addition, I'd like to draw your attention to the following:

- AMEC's team of Dan Gira and Jessica Rosen worked closely and cooperatively with City staff addressing the impacts of the proposed redevelopment plan.
- AMEC and the City developed the corridor plan and MND concurrently, through an iterative process, allowing modifications to the plan to address emerging concerns.
- AMEC was extremely responsive to requests from City staff and provided rapid turn-around of the MND in response to City requests for an expedited timeline.
- AMEC demonstrated a strong knowledge of the State CEQA Guidelines and legal issues and prepared high quality response to comments to several detailed letters submitted by attorneys representing Wal-Mart and area property owners.

I want to reiterate how smoothly the Victoria Avenue Corridor Plan environmental review process operated, resulting in the City's adoption of the MND on 23 February 2009. AMEC produced high quality work products with excellent graphics and analysis consistent with City direction and within prescribed timeframes. Mr. Gira's knowledge of planning and environmental issues and experience conducting environmental review on major projects was an important factor in the successful completion of this MND.

We appreciate the assistance and expertise provided by AMEC to date and look forward to working with you and your staff in the future.

Lilly Okamura, AICP, Associate Planner
City of Ventura Community Development Department

Exhibit B
Insurance Certificate

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 12/23/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
Aon Risk Services Northeast, Inc. Parsippany NJ Office 10 Lanidex Center West P.O. Box 608 Parsippany NJ 07054-0608 USA	PHONE (A/C. No. Ext): (866) 283-7122	FAX (A/C. No.): (847) 953-5390
	E-MAIL ADDRESS:	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
AMEC Environment & Infrastructure, Inc. 104 West Anapamu Street Suite 204A Santa Barbara CA 93101 USA	INSURER A: American Zurich Ins Co	40142
	INSURER B: Zurich American Ins Co	16535
	INSURER C:	
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 570044796687 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. **Limits shown are as requested**

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	GENERAL LIABILITY			GL0337359910	05/01/2011	05/01/2012	EACH OCCURRENCE	$1,000,000
	[X] COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$100,000
	[ ] CLAIMS-MADE [X] OCCUR						MED EXP (Any one person)	$5,000
							PERSONAL & ADV INJURY	$1,000,000
							GENERAL AGGREGATE	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$1,000,000
	[ ] POLICY [X] PRO-JECT [X] LOC							
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	
	[ ] ANY AUTO						BODILY INJURY (Per person)	
	[ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS						BODILY INJURY (Per accident)	
	[ ] HIRED AUTOS [ ] NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	
	[ ] UMBRELLA LIAB [ ] OCCUR						EACH OCCURRENCE	
	[ ] EXCESS LIAB [ ] CLAIMS-MADE						AGGREGATE	
	[ ] DED [ ] RETENTION							
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N			WC350486610	05/01/2011	05/01/2012	[X] WC STATU-TORY LIMITS [ ] OTH-ER	
	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? [N] N/A						E.L. EACH ACCIDENT	$1,000,000
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-EA EMPLOYEE	$1,000,000
							E.L. DISEASE-POLICY LIMIT	$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project Start Date: Approx 2/2012, Project End Date: Approx 3/2013, Estimated Contract Price: $200,000.00. Where required by written contract, County of Santa Barbara Planning and Development Department, County officers, agents and employees are included as additional insured as respect To General Liability Policy.

CERTIFICATE HOLDER

County of Santa Barbara
Planning and Development Department
Attn: Kevin Drude
Supervising Planner
123 East Anapamu Street
Santa Barbara CA 93101 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Services Northeast Inc

Holder Identifier :

Certificate No : 570044796687

Exhibit C
Resumes

Program Manager

Professional Summary

Mr. Gira has more than 26 years of experience developing general and coastal plans, conceiving, authoring, and interpreting land use and coastal zone policies and zoning ordinances, drafting Environmental Impact Reports (EIRs), and overseeing implementation of all phases of municipal planning processes. This has included oversight and management of public outreach and review processes, including management of multiple citizen advisory bodies and stakeholders groups; extensive media interface and press relations; and speaking at hundreds of public hearings. Mr. Gira's EIR experience includes project specific EIRs on coastal zone specific plans, residential and commercial industrial projects, and Program EIRs on urban redevelopment and community plans. Mr. Gira has extensive experience in circulation planning, coordinating with traffic engineers on the preparation of community wide and area specific traffic models, and in devising innovative techniques to foster use of alternative transportation. Mr. Gira has direct experience in the formation of a redevelopment project area and preparation of a detailed redevelopment plan and associated EIR. Mr. Gira has overseen or participated in the preparation of 7 community plans and associated EIR's, including those involving "Brownfield" sites and abandoned oil industry facilities. Mr. Gira has prepared trails management plans 80 miles of trails on more than 70,000 acres of urban and rural lands in 4 communities. Mr. Gira has also managed the preparation of a series of community-specific and countywide newsletters which address issues related to growth and development in 4 specific communities and forecasting countywide growth and open space protection issues through the year 2030.

Environmental Studies, University of California at Santa Barbara (UCSB), 1982

California Native Plant Society
Association of Environmental Professionals

Santa Barbara, California (CA)

Environmental Planning - CEQA

Mr. Gira has managed preparation of over 35 EIR's and hundreds of other environmental documents on projects including community, growth management and specific plans, tract maps, and development plans for major commercial and industrial facilities. These projects included EIRs on major coastal zone community and specific plans, a coastal zone landfill and several coastal zone development projects. He has also provided general oversight of or substantial contributions to dozens of additional EIRs. Mr. Gira's served as Santa Barbara County's LAFCO environmental officer for over 5 years and managed preparation of EIRs on annexations and major sphere of influence studies.

Community Planning
Mr Gira participated in or managed 7 community plans in Santa Barbara County, including project management and/or supervision of the Goleta and Orcutt community plans which addressed over 50,000 acres of urban and agricultural land with a combined population of over 100,000 residents. Mr. Gira's work on each of these community plans included interface with or management of a citizen's General Plan Advisory Committee and attending dozens of such committee meetings. Mr. Gira has worked on 4 community plans with major coastal zone components and issues, including sensitive habitat protection, coastal access, and coastal zone boundary adjustments.

Coastal Zone Planning
Mr. Gira has participated in planning of the majority of the most significant undeveloped rural and urban Coastal Zone properties in Santa Barbara County. Mr. Gira has extensive experience in the interpretation and implementation of coastal zone polices and ordinances, and in drafting new plans, polices, and ordinances to implement new coastal zone initiatives or amend existing plans, including those affecting protection of key sensitive coastal resources and the provision of public access.

Redevelopment Planning
Mr. Gira managed the preparation of the Goleta Old Town Redevelopment Plan and EIR. This project area was designated as a federal brownfields pilot program site and the County was awarded a $100,000 federal grant in recognition of its creative efforts in pursuing redevelopment of this Old Town area.

Public Outreach
Mr. Gira has extensive experience with managing citizen participation in the planning process, overseeing the production of documents which are accessible to the public, and in interfacing with the media on major planning and environmental issues. Mr. Gira has spoken at well over 300 public hearings and workshops and is expert in addressing concerns and questions raised by citizens, decision-makers, and public advocacy groups.

Urban Area Resource Protection Planning
Mr. Gira was a joint author of Goleta Environmentally Sensitive Habitat and Orcutt Open Space Overlays designed to protect creeks and other sensitive habitats, including planning for protection and restoration of riparian areas along many of these communities' major streams.

Rural Resource Protection Planning
Mr. Gira managed countywide planning efforts for potential creation of zoning overlays and ordinances to protect oak woodlands and sensitive habitats on 700,000 acres of agriculturally zoned land.

Transportation/Circulation Planning
Mr. Gira has managed the preparation of Circulation Elements for the communities of Goleta and Orcutt and co-authored the Santa Barbara County Thresholds of Significance for traffic impact analyses. Mr. Gira served as Lead Coordinator for planning department review of traffic studies for 5 years, as well as Lead planner for creation of the multi-modal Goleta and Orcutt Transportation Improvement Plans.

Recreation/Trails Planning
Mr. Gira supervised the preparation of the Goleta Trails Study and Trails Plans for the communities of Summerland, Orcutt and Toro Canyon for creation of more than 80 miles of hiking and biking trails,

including designing the trails system in the 600 acres of Coastal Zone open space on the Ellwood Mesa and around the Devereux Slough.

Fiscal Planning/Development Impact Fees
Mr. Gira directed the initiation and adoption of the Goleta and Orcutt development impact fee program to offset the impacts of new development on area circulation, parks, and other public services. This program included designing and adopting special service districts in the community of Orcutt to fund long-term maintenance.

Employment history
2005: Present: Program Manager, AMEC Earth & Environmental, Inc., Santa Barbara, CA
2002-2004: Extended Family Leave, worldwide
1996-2001: Deputy Director, Santa Barbara County Division of Comprehensive Planning, Santa Barbara, CA
1991-1996: Supervising Planner, Santa Barbara County Division of Comprehensive Planning, Santa Barbara, CA
1982-2001: Environmental Planer, Santa Barbara County Division of Environmental Review

Representative projects

Planning-Environmental Planning - CEQA

California State Lands Commission, Broad Beach Restoration Project EIR, Malibu, CA: Mr. Gira is serving as the Project Manager for preparation of an EIR for a major beach restoration project along Broad Beach in the City of Malibu. Coastal erosion has substantially reduced the width of this beach, leading to installation of an emergency rock revetment and a proposal to import 600,000 cubic yards of sand to reestablish a wide sandy beach backed by a dune system. Key issues being addressed in this EIR include marine and terrestrial biological resources and water quality, impacts from marine vessel and truck traffic, air quality, hazards, coastal processes and longshore transport, land use, recreation and public access. Project alternatives, including different sand sources and alternative coastal protection approaches are a key issue to be addressed in this EIR.

Montecito Fire Protection District, Fire Station 3 Site Acquisition and Construction, EIR, Montecito, CA: Mr. Gira is serving as the Project Manager for preparation of an EIR for property acquisition and construction of a new fire station in the semi rural estate community of Montecito. Key issues include agricultural resources, pesticide drift, noise, aesthetics, biological resources, air quality, hazardous materials, potential effects of the fire station on property values and project alternatives. This EIR expands upon previous work performed by AMEC for the Montecito Fire Protection District regarding options for siting of Station 3 and follow on planning and environmental analysis in support of property appraisals.

County of San Diego, Public Works Department, East Otay Mesa Recycling Collection Center **and New Landfill EIR, San Diego County, CA:** Mr. Gira is Project Manager for this EIR which will address potential impacts of a new landfill and recycling collection center in south San Diego County near the international border. This EIR will include air quality modeling and greenhouse gas analysis, assessment of surface and groundwater water quality, leachate disposal, human health risk, environmental justice, threatened and endangered species and sensitive habitats, cultural resources, traffic, visual resources, hazardous materials and geotechnical concerns. The project site is located within and adjacent to designated critical habitat for a number of species and may support vernal

pools and other wetland habitats. In addition, portions of the site drain south across the international border, requiring careful assessment of both surface and groundwater transport. The proximity of Bureau of Land Management Wilderness Areas and locally planned habitat conservation and open space areas will require consideration of potential impacts to these resources. Substantial grading and site re-contouring will require geotechnical analysis to determine slope stability and effects on groundwater movement. Air Quality concerns, particularly consistency with the adopted Clean Air Plan will require detailed modeling and interagency coordination.

City of Santa Barbara, Plan Santa Barbara General Plan Update Program EIR, Santa Barbara, CA: Mr. Gira served as the Project Manager for this Program EIR which evaluated the impacts of long term urban infill focused development/ redevelopment. Key issues include traffic congestion and effective implementation of alternative transportation, long-term water supply, groundwater overdraft and seawater intrusion, the impacts of construction of downtown multiple story mixed use development, changes in community character, green building and sustainable development, protection of sensitive habitats, regional jobs-housing balance issues, air quality and the effects of global climate change. The EIR compares and contrast the different environmental effects of various policy options to permit selection of the optimum policy mix to accomplish city-goals of promoting maximum urban infill while protecting city character.

Alta Planning + Design, City of Oxnard Santa Clara River Trail, Initial Study and Mitigated Negative Declaration, City of Oxnard, CA: Mr. Gira is the Project Manager for this Initial Study and Mitigated negative Declaration which assesses the impacts of constructing 4.87 miles of new multi use trail primarily along the banks of the Santa Clara River. Key issues include potential impacts to special status species such as the least Bell's vireo and riparian woodland, water quality, safety, transportation and air quality.

Peoples Self Help Housing Corporation, Dahlia Court State and Federal Permit Assistance, Carpinteria, CA: Mr. Gira is managing state and federal permitting efforts for this affordable housing project, including coordination with the Regional Water Quality Control Board and Army Corps of Engineers for analysis of permit requirements under Section 401 and Section 404 of the Clean Water Act and for submitting permit applications to California Department of Fish and Game under Section 1602.

County of Santa Barbara, Paradiso del Mare EIR, Santa Barbara, CA:
Mr. Gira managed this EIR for a residential estate development project on a 143-acre project site along the visually and environmentally sensitive Gaviota Coast. A key issue included siting of over one mile of the California Coastal Trail and a major coastal access point. The EIR addressed visual resources and impacts to public views from scenic U.S. Highway 101, past oil field contamination and hazards, land use and growth inducement, home design, traffic safety, siting and design of one mile of the California Coastal Trail, impacts to special status species and sensitive habitats, cultural resources and impacts to agriculture. The EIR employs photosimulations to assess potential effects on important view corridors. Extensive cultural resource and biological surveys were also performed as well as wetland delineations.

City of San Luis Obispo, Garden Street Terraces EIR, San Luis Obispo, CA: Mr. Gira served as Project Manager for this EIR which evaluated the proposed development of a five-story, 1.2 acre, mixed-use retail, residential, and 95 room hotel project in the Downtown Historic District of the City of San Luis Obispo. Key issue areas being examined in the EIR include consistency with recent General Plan amendments and proposed development standards for downtown mixed use

development, aesthetics, global climate change, green building-sustainable development, cultural resources (demolition of historic structures), transportation, and land use policy consistency.

Montecito Fire Protection District, Property Acquisition Support Studies, Montecito, CA: Mr. Gira managed this study which evaluated environmental and planning constraints on a large undeveloped property, a portion of which is under consideration for acquisition by the District. Key issues examined in this study included, access line of sight studies, site configuration and suitability, environmental constraints and consistency with adopted County Comprehensive General Plan policies, aesthetics, cultural resources and transportation. The study is a key supporting document for to support valuation of the site by an appraiser.

California State Lands Commission, PRC 421 Surf Zone Oil Lease Reactivation EIR, Goleta, CA: Mr. Gira is currently serving as Project Manager for this EIR which evaluates the proposed reactivation of the last two surf zone oil platforms in California. Key issue areas being examined in the EIR include consistency with local and state coastal policies, facility safety and potential for oil spills, impacts to sensitive coastal resources and marine mammals, air pollution, and global warming. Mr. Gira is working with a Joint Review panel consisting of state and local agencies.

City of Ventura, Victoria Avenue Corridor Plan Initial Study/ Mitigated Negative Declaration, Ventura, CA: Mr. Gira served as Project Manager for this IS/MND which addressed impacts associated with adoption of the Victoria Avenue Corridor Plan. Main goals of the plan, which include a form-based zoning code, Master Plans for key opportunity sites within the 286-acre corridor, and a Streetscape Plan, are to avoid urban sprawl and protect agricultural land and open space, in accordance with the City's General Plan. The MND focused on impacts associated with potential future private and public developments which could arise from new policies, actions, and standards contained within the proposed plan.

City of San Luis Obispo, Chinatown Mixed Use Development Project EIR, San Luis Obispo, CA: Mr. Gira managed this EIR that evaluated the impacts of development of a six-story, 2.12-acre, mixed-use development, including a new boutique hotel in downtown San Luis Obispo. Project implementation involved consolidation of existing private and public parcels. Key issues included the design of a major system of public plazas walkways, sidewalk and streetscape design, transportation and traffic congestion, changes in community character, preservation of historic structures, land use policy analysis and project consistency with concurrent general plan and ordinance amendments. Mr. Gira guided alternatives development which eventually formed the basis for project redesign. The EIR employed extensive visual simulations to depict building height, bulk, scale and design in the visually sensitive area adjacent to the City's Mission.

Peoples Self Help Housing Corporation, Dahlia Court Environmental Assessment, Carpinteria, CA: Mr. Gira managed preparation of an EA for development of 34 units of affordable housing in the Coastal Zone. Important issues included protection of onsite wetlands, noise from US hwy 101, visual resources, air quality and community compatibility.

Montecito Fire Protection District, Fire Station 3 Alternative Sites Study and Emergency Response Time Analysis, Montecito, CA: Mr. Gira managed this study which evaluated fire service response times and 13 potential sites which could accommodate a new fire station on up to 1.5 acres. Key issues examined in this study included emergency response times, site suitability, environmental constraints and consistency with adopted County Comprehensive General Plan policies, aesthetics, cultural resources and transportation.

City of San Luis Obispo, Prefumo Creek Regional Shopping Center EIR, San Luis Obispo, CA: Mr. Gira managed preparation of this EIR which addressed the impacts of a general plan amendment, rezone and annexation to permit construction of a regional shopping center and dedication of a n easement for a regional bikeway. Key issues included visual resources, transportation, traffic and required road and alternative transportation improvements, land use policy analysis, flooding, protection of sensitive species and habitat, loss of agricultural land, airport land use conflicts and exploration of site design alternatives. This EIR included use of extensive photo-simulations to identify changes to view corridors.

Peoples Self Help Housing Corporation, Permit Assistance and Environmental Analysis, Carpinteria California: Mr. Gira assisted Peoples Self Help Housing in development of a major affordable coastal zone agricultural industry workforce housing project. The proposal consisted of construction of 110 units on the edge of the City of Carpinteria, 80 of which would be affordable to low-income agricultural sector employees. Major issues included coastal land use policy analysis, agricultural viability, development of a new agricultural residential development zone district, and helping address project-related environmental and policy related issues.

California State Parks, Tijuana Estuary Sediment Fate and Transport Study Initial Study/ Mitigated Negative Declaration (MND), Imperial Beach, CA: Mr. Gira served as the Project Manager for this MND which evaluated the impacts of transporting 60,000 cubic yards of sediment to silver stand beach within Border Field State Park and the City of Imperial Beach. The project included a scientific study to track fine grained sediments in the littoral zone to assess suitability for beach nourishment. Key issues included impacts to sensitive species (e.g. western snowy plover), disruption and realignment of existing trails an dloss of recreational opportunities, hazardous waste and water quality, transportation and traffic, etc.

More Mesa Preservation Coalition, More Mesa Handbook, Santa Barbara, CA: Mr. Gira managed preparation of a "handbook" for that details ecological, recreational and visual resource, and land use planning issues associated with 330 acres of undeveloped coastal land in Santa Barbara County. More Mesa contains sensitive wetlands, oak woodlands, and grasslands that support raptor species, including a noted population of roosting and nesting white-tailed kites. More Mesa also supports an extensive trail system and a large sandy beach, and provides coastal and mountain views. The handbook provides design recommendations for the trail system to enhance access while minimizing user impacts. The More Mesa Handbook was recognized with the American Planning Association Award of Excellence.

Peoples Self Help Housing Corporation, Rosemary Farms Permit Assistance and Environmental Analysis, Santa Maria California: Mr. Gira assisted Peoples Self Help Housing in planning for development of a major affordable agricultural industry workforce housing project. The proposal consisted of construction of 132 farm employee units outside the City of Santa Maria, all of which would be affordable to low-income agricultural sector employees. Major tasks included preparation of an initial land use policy analysis examining potential policy issues and permit options, including development of a new agricultural residential development zone district and helping coordinate project review by multiple agencies.

San Joaquin Delta Community College District, EIR on Campus Master Plan: Stockton, California: Mr. Gira served as the Project Manager for this recently certified EIR on a new campus Master Plan for approximately 500,000 square feet of new construction and demolition of 200,000 square feet of aging buildings. Major issues include hazardous waste, traffic, tree removal, protection (shade-heat islands), and construction related impacts.

City of Victorville, Mojave River Trail EIR and Environmental Assessment, Victorville, California: Mr. Gira managed preliminary work for an EIR and Environmental Assessment analyzing the impacts of developing a 7.5-mile "trail on rail" bike path which would run along the Mojave River within the City of Victorville. Responsibilities include oversight of staff, coordination with Caltrans, US Fish and Wildlife Service, US Army Corps of Engineers, California Department of Fish and Game, and other agencies.

Santa Barbara County, Joint Proposal for Ellwood Devereux Coast, Goleta, CA: Mr. Gira prepared a Coastal Zone area specific plan equivalent document which proposed comprehensive amendments to the Santa Barbara County and City of Goleta Local Coastal Plans and University Long Range Development Plan. Mr. Gira's duties included writing the administrative draft of this document and managing an oversight committee made up of University and County officials. The Joint Proposal set forth direction and restrictions for development of over 600 units and the management, restoration, and enhancement of habitat and siting and design of over 10 miles of public trails and other recreational uses on 44 properties totaling 840 acres under City, County, and University jurisdiction on the Ellwood Mesa and surrounding the Devereux Slough. The proposal protected 600 acres of coastal open space and habitat by shifting over 200 approved units away from sensitive coastal areas to the edge of existing urban development. The Joint Proposal also recommended expanding and enhancing recreational activities and coastal access in the planning area. The Joint Proposal provided the foundation for subsequent detailed planning efforts which have received final development and open space management approvals from the City, County, and the Regents of the University of California and has been recognized by American Planning Association (APA) with a national award.

Santa Barbara County, Isla Vista Master Plan, Isla Vista, CA: Mr. Gira provided initial direction, issues review, and frequent public outreach for the early stages of development of a master plan for this densely populated coastal zone community of 20,000 residents. The initial stages of this project involved substantial community outreach and involvement, including holding a multiple-day design charette to garner community input. Major issues included commercial and residential redevelopment potential, provision of student housing, maintaining community character, and protection of sensitive coastal habitats such as vernal pools and native grasslands and interface with the University of California. Mr. Gira's duties included overseeing and providing direction to County staff, and managing a County, University, and citizen stakeholders group.

Santa Barbara County, Gaviota Coast Planning and Resource Inventory, Gaviota, CA: Mr. Gira provided overall direction, issues review, and public outreach for this planning effort for the 30-mile-long rural Gaviota Coast, then under consideration for designation as a National Seashore by the Nation Park Service (NPS). Key issues included identification of sensitive habitats, view corridors, recreation opportunities, including 20 miles of the California Coastal Trail. The report also addresses agricultural resources along with the opportunities and constraints for protection of such resources, including consideration of the use of transfer of development credits in resource protection. The project included periodic coordination with NPS personnel and affected property owners.

Santa Barbara County, Toro Canyon Community Plan and Program EIR, Toro Canyon, CA: Mr. Gira provided overall direction, issues review, and public outreach for this community plan and EIR which included thousands of acres of Coastal Zone land. Major issues address in this community plan included protection of agricultural land and sensitive habitats, coastal access, fire protection, provision of more than 10 miles of new rural foothills trails, watershed management and erosion

control, and visual resources. Mr. Gira also participated in a stakeholders group with the District County Supervisor.

Santa Barbara County, Carpinteria Valley Greenhouse Ordinance and Program EIR, Carpinteria Valley, CA: Mr. Gira provided overall direction for the preparation of coastal zone policy and ordinance amendments and an accompanying EIR for this contentious program which addressed the impacts of burgeoning greenhouse development on ground and surface water quality, hazards associated with pesticide usage adjacent to residential areas, and impacts to visual resources/community character. Mr. Gira conducted numerous meetings with concerned stakeholders including agricultural land owners and growers, the City of Carpinteria, and environmental groups.

Santa Barbara County, Goleta Multimodal Transportation Improvement Plan, Goleta, CA Mr. Gira managed the preparation of this detailed Multimodal Transportation Capital Improvement Plan for this community of 70,000 residents. This multimodal TIP provided preliminary engineering design for a wide range of road, transit, pedestrian and bicycle improvements along with identification of preliminary cost estimates and funding sources for these improvements. The plan included sidewalk and bike trail improvements, consideration of major roadway reconstruction projects, new bicycle overpasses across US 101 and construction of an urban bypass roadway.

Santa Barbara County, Rice Ranch Specific Plan EIR, Orcutt, CA: Mr. Gira provided management direction for this EIR which addressed clustered development of more than 700 new residences on 620 foothill acres in the Solomon Hills, including extensive oak woodlands and the headwaters of Solomon Creek. New residences were eventually clustered on less than 30% of the site and almost 450 acres were protected as permanent open space dedicated to Santa Barbara County, including several new public parks and 8 miles of new public trails. This Specific Plan implemented community plan policies and development standards for clustering, open space preservation and provision of parks designed by Mr. Gira as part of his work on the Orcutt Community Plan.

Santa Barbara County, Community Newsletter Program: Mr. Gira provided project management, overall direction, issues review, and public outreach for the preparation of four newsletters related to pending or past community plans which addressed growth, development, and planning issues in four unincorporated communities totaling about 135,000 in population. Each publication included carefully researched data on development trends and associated issues, and used simple graphics and tables to convey complex information in a manner accessible to the general public. This program received an APA award for journalism.

Santa Barbara County, Countywide 2030 Growth and Development Newsletter Series: Mr. Gira conceived of and managed the preparation of two newsletters in this program; the first which addressed long-term population and housing trends and the availability of urban land countywide, including all land in the City of Santa Barbara, to accommodate such growth, and the second, the Open Lands, which detailed open space and agricultural land protection issues and identified important open and agricultural land countywide, including the Las Positas Valley and portions of the City's north side, which could be impacted by projected growth. This program received an APA award for journalism.

Santa Barbara County, Goleta Old Town Redevelopment Plan and Program EIR, Goleta, CA: Mr. Gira provided project management and direction for the establishment of a redevelopment project area, preparation of a redevelopment plan, and associated EIR for this several hundred acre planning area, including sensitive coastal zone lands along the margins of the Goleta Slough. Major issues included review of development options, including two new hotels and a multiplex theater.

Environmental concerns included traffic and circulation planning, provision of affordable housing, commercial, and industrial redevelopment; clean up of brownfields sites, use of eminent domain and protection of sensitive creek and wetland areas, particularly within the coastal zone. Mr. Gira worked with two stakeholders groups including an initial citizen's advisory committee and a formal elected redevelopment project area committee. This project was recognized as Pilot Project under the US EPA's Brownfield Program and received a $100,000 grant in recognition of excellence. The Redevelopment Plan also received an APA award.

Santa Barbara County, Orcutt Community Plan and Program EIR, Orcutt, CA: Mr. Gira provided overall management and direction, issues review, and frequent public outreach for development of this community plan and EIR which addressed long-range growth and development on 13,000 acres for this community of 35,000. Major issues included identification of locations for clustered development, protection of open space and provision of a comprehensive public trails system, agricultural and biological resources, provision of affordable housing, circulation planning, old town redevelopment, fire hazards, oil field contamination, and fiscal issues such as establishment of service districts and enactment of development impact fees. Mr. Gira managed the citizen's General Plan Advisory Committee and attended and spoke at dozens of public hearings. This EIR received an APA award for outstanding focused planning.

Santa Barbara County, Goleta Trails Implementation Study, Goleta Valley, CA: Mr. Gira provided overall direction, issues review, and public outreach for the development of a trails master plan for dozens of miles of coastal zone and foothill trails. Major issues included coastal access, protection of sensitive resources, and balancing access with protection of agricultural land. Mr. Gira managed the citizen's advisory committee made up of varying interest groups ranging from trails advocates to agricultural landowners and environmentalist. This study received an APA award for excellence.

Santa Barbara County, Goleta Community Plan and Program EIR, Goleta Valley, CA: Mr. Gira provided project management, issues review and frequent public outreach for development of this community plan and EIR which addressed coastal and inland area growth and development on 40,000 acres for this community of 70,000. Major issues included identification of locations for clustered development and protection of major coastal open spaces and resources, including native grassland, vernal pools, and coastal estuaries, agricultural land preservation, coastal access and a community wide trail system, biological resources protection, provision of affordable housing, circulation planning, Old Town redevelopment, growth management, and fire hazards. Mr. Gira managed the citizen's General Plan Advisory Committee and attended and spoke at dozens of public hearings. Mr. Gira was recognized as a "local hero" by the local weekly paper for his work on this plan, particularly in helping the Board of Supervisors reach consensus on this contentious project.

Santa Barbara County, Summerland Community Plan and Program EIR, Summerland, CA: Mr. Gira provided overall direction, issues review, and frequent public outreach for development of this Coastal Zone community plan and EIR which addressed long-range growth and development for this community of 3,000. Major issues included protection of sensitive coastal biological resources, creation of a comprehesnvie community wide trails system, provision of affordable housing, circulation planning, Old Town redevelopment, and protection of coastal view corridors. Mr. Gira managed the citizen's General Plan Advisory Committee and attended and spoke at dozens of public hearings.

Santa Barbara County Local Agency Formation Commission, City of Santa Maria Sphere of Influence and Concurrent Annexation Program EIR, Santa Maria Valley, CA: Mr. Gira participated in the Joint Review Panel which managed preparation of this EIR which addressed the

impacts of growth and development of thousands of acres north, east and west of the City of Santa Maria, including the preparation of 8 specific plans required to guide this development.

Santa Barbara County, Santa Barbara Shores-Ellwood Beach Specific Plan EIR, Goleta, CA: This EIR addressed proposals for development of a resort hotel, major recreational and sports complex and over 163 units of luxury housing on almost 260 acres of bluff top land on the Ellwood Mesa. Major issues addressed included fragmentation and loss of environmentally sensitive habitat, impacts to significant coastal view corridors, disruption of public recreation, traffic congestion, changes in water quality, remediation of historic oil production facilities, and marine impacts associated with the construction and operation of a desalinization plant. The EIR addressed the location and design of almost 2 miles of the California Coastal Trail, along with 4 miles of additional trail linkages. Mr. Gira acted as the Project Manager for the County of Santa Barbara and was responsible for identifying the environmentally superior alternative of transfer of development and improved sub-regional planning which became the basis for the proposals embodied in the Joint Proposal for the Ellwood-Devereux Coast a decade later.

Santa Barbara County, Countywide Circulation Element EIR, Santa Barbara County, CA: Mr. Gira managed preparation of this EIR which addressed the impacts of adoption of new roadway designations and Circulation Element standards countywide.

Santa Barbara County, Ennisbrook Project EIR, Montecito, CA: Mr. Gira provided direction on project design and clustering to protect biological resources for development of residential estates and clustered housing proposed for a historic 300-acre wooded ranch in the community of Montecito. Key issues addressed in this EIR included oak woodland preservation, provision of a property wide trail system, protection of historic ranch buildings and loss of agricultural land. The clustered residential estates and attached housing also included dedication of open space to the Land Trust for Santa Barbara County which encompasses the site's primary oak woodlands and riparian corridor.

Santa Barbara County, Goleta Growth Management Plan Program EIR, Goleta, CA: Mr. Gira managed preparation of this EIR which addressed the impacts of three major rates of residential and commercial-industrial growth over a 10 year planning horizon for development affecting this 40,000 acre planning area with 70,000 residents.

Santa Barbara County, Goleta Master Environmental Assessment (MEA), Goleta, CA: Mr. Gira managed Preparation of this MEA which addressed environmental constraints of the 40,000 acre Goleta planning area, including Hope Ranch, the Las Positas Valley and portions of the City of Santa Barbara's north side planning area.

Santa Barbara County, Montecito Community Plan EIR, Montecito, CA: Mr. Gira contributed to the preparation of this EIR which addressed the impacts of up to 15 years of development in the community of Montecito. Mr. Gira oversaw preparation of the biological resources and transportation sections of the EIR.

Santa Barbara County Local Agency Formation Commission, Mission Hills Community Services District (MHCSD) Sphere of Influence Program EIR, Lompoc Valley, CA: Mr. Gira managed preparation of this EIR which addressed the impacts of growth and development alternatives for thousands of acres north of the Santa Ynez River for possible future annexation by the MHCSD and/or the City of Lompoc.

Santa Barbara County, Los Alamos Community Plan Program EIR, Los Alamos, CA: Mr. Gira contributed to the preparation of this EIR which addressed the impacts of up to 15 years of development in the community of Los Alamos. Mr. Gira oversaw preparation of the biological resources and transportation sections of the EIR.

Santa Barbara County, Tajiguas Landfill Expansion EIR, Gaviota, CA: Mr. Gira was the County's Project Manager for this EIR on a Coastal Zone landfill which assessed impacts to biology, groundwater, surface water quality, slope stability, traffic, and the adequacy of proposed groundwater protection systems and other technical landfill issues associated with the expansion of this Gaviota area landfill which serves 200,000 residents of the South Coast of Santa Barbara County.

amec

Michael Henry, PhD

Project Manager/Biologist

Professional summary

Dr. Henry has 9 years of professional experience involving management and analysis for a variety of NEPA and CEQA analyses, as well as biological research projects. Dr. Henry typically serves as project manager and deputy project manager for efforts with major biological components. He is also currently serving as a project manager or deputy project manager for environmental documents for several federal and municipal projects, including a massive land acquisition and airspace establishment for a Marine Corps base in the Mojave Desert, a Biological Hazard Abatement Plan for work at Moffett Federal Airfield, and an oil and gas development project in Santa Barbara County. He also provides quality control and quality assurance many of the National Guard documents that AMEC prepares. He has published his biological research in international peer-reviewed journals and presented findings at international conferences.

Education

PhD, Ecology, Evolution and Marine Biology, University of California, Santa Barbara, 2008
Certificate, Graduate Program in Management Practice, University of California, Santa Barbara, 2007
B.S., Aquatic Biology, University of California, Santa Barbara, 2001

Employment history

AMEC Earth & Environmental, Inc., Project Manager/Biologist, 2008 – Present
Channel Islands National Marine Sanctuary, Resource Protection and Policy Specialist, 2006 – 2008
University of California, Santa Barbara, Researcher and Teaching Assistant, 2001 – 2008

Major experience highlights

Marine Corps Air Ground Combat Center (MCAGCC) Twentynine Palms, CA – EIS and BA for Land Acquisition/Airspace Establishment. Deputy Project Manager for Biological Resources. Major EIS and Biological Assessment for acquisition of several hundred thousand acres of public lands adjacent to the existing Twentynine Palms Marine Corps installation, and substantial new airspace establishment. Site is adjacent to critical habitat for the desert tortoise and hosts several other special-status species, as well as highly-used recreational area (the Johnson Valley Off Highway Recreation Area). Analysis included potential updates to the INRMP to extend protections to acquired lands.

PRC 421 Surf Zone Oil Lease Reactivation EIR, California State Lands Commission, Goleta, CA Deputy Project Manager. Managing preparation of this EIR which evaluates the proposed reactivation of the last two surf zone oil platforms in California. Includes investigation of marine vessel traffic impacts from barge shipping of produced oil. Other key issue areas being examined in the EIR include consistency with local and state coastal policies, facility safety and potential for oil spills, impacts to sensitive coastal resources and marine mammals, air pollution, and global warming. Project includes a Joint Review panel consisting of multiple state and local agencies.

Bob Hope Airport Wildlife Hazard Assessment, Burbank, CA – . Project Manager. Managing field surveys and assessment of potential bird and wildlife strike hazards to commercial and general aviation aircraft at Bob Hope Airport, in compliance with FAA Part 139 requirements.

City of Los Angeles, US Coast Guard, & MARAD – OceanWay Secure Energy Project. Deputy Project Manager. This joint NEPA/CEQA EIR/EIS, currently on hold due to Applicant's withdrawal of the permit application, assesses the existing setting and impacts of a proposed offshore deep water LNG import terminal. Serving as Deputy Project Manager, coordinated authors and managed preparation and completion of document as a whole. Directed analysis of potential impacts to marine vessel traffic, including service vessel transit of highly congested Southern California shipping lanes. Also prepared Purpose and Need and Alternatives section that addressed renewable energy, sources of natural gas and LNG, deepwater port concepts, subsea and subsurface pipeline installation.

US Air Force, Environmental Assessment for a JP-8 Pipeline and Receiving Facility at Travis AFB, California. Quality Control/Quality Assurance. Reviewed all documents submitted related to this Environmental Assessment, including biological resource reports, wetland delineations, and environmental documents.

San Diego Air Force Space Surveillance Station, Integrated Natural Resources Management Plan, San Diego, CA. Primary Analyst. Prepared revised INRMP for USAF surveillance station which is located on a site containing host plants for the special status species Quino checkerspot butterfly, as well as potential occurrences of other special status species such as burrowing owls. Incorporated surveys and special studies in order to ensure management principles reflected the conditions on the site.

Fort MacArthur, Los Angeles Air Force Base, San Pedro, CA – Natural Resources Summary Report. Project Manager/Lead Biologist. Conducted site inspection, records search and prepared document summarizing natural resource constraints on a property proposed for slope stabilization.

County of Santa Barbara – Paradiso del Mare Ocean and Inland Estates. Santa Barbara, CA. Primary Analyst. Prepared the Project Description, Alternatives, several resource area descriptions and impact analyses for an EIR assessing the effects of residential development on vacant coastal parcels formerly used for oil and gas exploration and production. Key issues included historical recreational use which could be lost upon project completion, extensive Native American archaeological sites and several sensitive biological species including the California red-legged frog, tidewater goby and white-tailed kite. Conducted QA/QC on the Public Draft.

City of Santa Barbara – Plan Santa Barbara. Santa Barbara, CA. Primary Analyst. Prepared existing settings and provided QA/QC for several resource areas, and developed a protocol for estimating historic GHG emission levels in a Program EIR for Santa Barbara's General Plan update. Resource areas include Transportation, Geology, Climate Change, and Energy. The General Plan update process includes a review and update of City policies that address transportation, housing, sustainable development, environmental protection, and community character and design. The Program EIR for this update assesses the impacts of different growth scenarios and alternative policy options for comparative environmental effects throughout the City. The Program EIR also evaluate cumulative effects within the City and the region. The Program EIR has been developed in close cooperation with City staff in an iterative process concurrent with the development of Plan Santa Barbara itself, and has been certified by the Santa Barbara City Council.

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Aaron Goldschmidt

Environmental Planning/ Natural Resources Programs Manager

Professional summary

Mr. Goldschmidt serves as a Program Lead and Vice President for Conservation, Environmental Planning, and Natural Resources. In this capacity, he works with corporate leadership, national-level managers, and regional and local staff across the company to commit all resources necessary to provide consistency and quality to all efforts related to these programs and services. In addition, Mr. Goldschmidt remains an active program and project manager, leading AMEC's NEPA-compliant and Conservation-related documentation efforts. With more than 20 years of research and consulting experience, his program and project experience encompasses evaluation of nearly the entire suite of potential actions on the land, in the sea, and in the air – including but not limited to energy infrastructure, commercial development, coastal infrastructure, training exercises, mission changes and realignments, antiterrorism force protection, military construction, land and facilities acquisition, and base realignment and closure actions.

In addition to managing overarching environmental programs and component projects requiring NEPA- and CEQA-compliant and other regulatory-driven documentation, he has served directly as task order manager for EISs, EAs, EBSs, and other related environmental planning and natural and cultural resources studies nationwide and overseas for multiple Federal agencies. His planning and analyses experience for environmental, economic, and socioeconomic studies encompasses all aspects and resource areas related to planning in the natural and human environment, including geological resources, soil science, agriculture, biological resources, public services and infrastructure, land use, environmental noise, environmental justice, and transportation. In these project management roles, Mr. Goldschmidt coordinates analyses of resource specialists, assures consistency within and across environmental programs, performs quality assurance and control, oversees document production (including graphics), as well as provides technical analyses. Further, as a liaison, he maintains close client interaction and provides support for presentation of study results in public forums.

Education

M.A., Geography, University of California, Santa Barbara, March 1987
B.A. with High Honors, Geography, University of California, Santa Barbara, June 1984

Representative projects

Environmental Planning, Conservation, Natural Resources, Cultural Resources, and Environmental Compliance Services – Air Force Center for Engineering and the Environment. Under this contract, he oversees the execution of Task Orders providing NEPA-compliance for proposed actions including facilities demolition and construction; aircraft beddown, robust, and drawdown; unit relocation; and transportation system reconfiguration. Further, he provides senior technical review and serves as Task Order manager for projects related to natural resources management, cultural resources management, environmental compliance, and related services at Air Force installations.

Environmental Planning Services – The Border Environment Cooperation Commission. Ciudad Juárez, Mexico and US Environmental Protection Agency, Regions 6 (Dallas) and 9 (San Francisco). Client Service and Project Manager for environmental planning and natural resources services for this bi-national agency. In this role, oversees the execution of NEPA-compliant documentation and related studies in support of proposed water distribution and wastewater conveyance and treatment projects in the United States/Mexico international border region as

funded by the US Environmental Protection Agency. Projects performed include environmental assessments (in both the US and Mexico) of wastewater collection and treatment systems, potable water disinfection and distribution systems, and preliminary engineering reports for infrastructure development at more than 12 locations from Tecate in Baja California to Reynosa in Tamaulipas, including locations in Imperial County, California.

EIS/EIR for Off-shore Liquefied Natural Gas Deepwater Port and On-shore Pipeline, Southern California – US Coast Guard and City of Los Angeles. Served as Principal-in-Charge for this highly visible proposal to develop offshore LNG receiving facilities and an associated undersea and urban pipeline conveyance system. Execution of the project compliant with the Deepwater Port Act required extensive interagency coordination – at the Federal, state, and local levels – as well as oversight of technical specialists performing environmental analyses in deep-sea, littoral, and urban/upland ecosystems. The political and socioeconomic climate resulted in high levels of controversy and corresponding need for proactive community outreach and involvement.

On-call Biological Services and Archaeological Services – Southern California Edison (SCE). Principal for on-call services contracts supporting operations and maintenance activities and facilities/infrastructure expansion across SCE's infrastructural footprint responsible for program execution, QA/QC, and staffing. Under the biological services contract, AMEC provides full-scope natural resources management, including threatened/endangered species surveys, habitat assessments, wetland delineations, and related studies for proposed transmission corridors, substations locations, and renewable energy projects throughout Southern California and eastward to Nevada and Arizona. Under the archaeological services contract, AMEC performs database searches, literature reviews, agency coordination, pre-construction surveys, and construction-period monitoring.

Point Mugu Sea Range EIS/Overseas EIS and Ancillary Studies – Navy Air Warfare Center Weapons, Point Mugu. Program Manager for multiple planning services for NAWCWPNS, including a comprehensive, broad-scope EIS/Overseas EIS in compliance with NEPA and Executive Order 12114, Environmental Effects Abroad of Major Federal Actions. Documentation prepared under this contract analyses test, evaluation, and training operations at NAS Point Mugu and within the Navy's Sea Range, a 36,000-square-mile area located off the coast of Southern California. Ancillary reports—including a comprehensive Marine Mammal Technical Report, Historical and Archaeological Resource Plans, Underwater Archaeological Studies, a Shipwreck Study, Biological Assessments, Integrated Natural Resource Management Plans, and Natural Resource Summary Reports—are also prepared under this program. Intensive public participation efforts associated with this highly visible program include public scoping meetings, public hearings, and widespread distribution of fact sheets and program updates. Further, this program has required ongoing agency coordination with—but not limited to—the U.S. Fish and Wildlife Service, National Marine Fisheries Service, National Park Service, and the California Coastal Commission. This effort is considered a precedent-setting project for the Navy because it employs front-end, proactive environmental planning for developing and implementing range management objectives.

Oil and Gas Development EIRs/EISs – Santa Barbara County and California State Lands Commission. Established baseline inventories and evaluated potential impacts to socioeconomics, land use, visual resources, and recreation for EISs/EIRs addressing oil development and abandonment activities in CA. Served as senior scientist for the evaluation of the socioeconomics, land use, noise, and transportation systems of coastal Santa Barbara County for an EIR/EIS addressing subsea well abandonment and associated onshore flowline abandonment and removal program proposed by a consortium of six oil and gas companies proposing to abandon 18 subsea wells in the Santa Barbara Channel.

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Doug McFarling

Senior Program Manager

Professional Summary

As a Senior Program Manager in AMEC's Santa Barbara office, Mr. McFarling has contributed to environmental documentation efforts in compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). Mr. McFarling's experience includes development of Descriptions of Proposed Actions and Alternatives (DOPAAs) and assessment of land use compatibility, noise and vibration issues, public services provision, biological resources, solid and hazardous waste management, socioeconomics, visual resources, transportation and circulation, and safety. He has also developed and implemented several public participation programs for complex, high-profile environmental documentation efforts.

Education

B.A., Environmental Studies, University of California, Santa Barbara, 1991

Memberships/Affiliations

Association of Environmental Professionals
American Planning Association

Employment History

AMEC Earth & Environmental, Inc., Senior Program Manager, Santa Barbara, CA, 2000 to present
Ogden Environmental and Energy Services, Senior Project Manager, 1992 to 2000
National Fund for Public Interest, Project Manager, 1991 to 1992
California Public Interest Research Group, Project Coordinator, 1987 to 1991

Summary of Core Skills

Quality Assurance (QA)

Tasked with overall QA review responsibilities, Mr. McFarling has been managing environmental documentation efforts since 1992 and has served as the lead QA reviewer on more than 200 NEPA- and CEQA-compliant documents since 1997. As a result of his commitment to excellence, Mr. McFarling has been tasked with reviewing NEPA documents prepared not only in the Santa Barbara office but throughout the US under AMEC's nationwide contract with the National Guard Bureau (NGB) – supporting Project Managers throughout the country. Mr. McFarling's familiarity with the intent and procedures of NEPA, CEQA, Air Force Instructions (AFIs) and myriad other Department of Defense (DOD) regulations ensure that his review goes beyond straightforward editing. It is his intent to ensure a clean document as well as thorough issue coverage, technical excellence, and legally defensible conclusions.

California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) Compliance

Since 1992, Mr. McFarling has focused much of his efforts on ensuring clients' compliance with CEQA and NEPA. He has managed more than 100 successful CEQA- and NEPA-compliant documentation efforts for the City and County of Santa Barbara, US Coast Guard, US Navy, US Air Force, the Air National Guard, the Army National Guard, and other Federal entities. These documentation efforts have resulted in the issuance of Findings of No Significant Impacts (FONSIs) and Records of Decision (RODs), allowing completion of actions as proposed. Where necessary, Mr. McFarling has developed and overseen the implementation of mitigation programs. Proposed actions assessed include airspace modifications, aircraft inventory increase/decrease, roadway construction and realignment, unit relocation, and overarching construction. Representative projects

Selected Project Experience

Construction of the El Rancho Road Missile Transport Bridge – Vandenberg Air Force Base (AFB). Mr. McFarling served as the Environmental Quality Assurance Manager on this fast-track, mission-critical program at Vandenberg AFB in 2003. Construction of the bridge was necessary to ensure vehicle access during high rain events that periodically made the road crossing at San Antonio Creek impassable. Mr. McFarling was responsible for ensuring that all environmental programs were being implemented successfully (e.g., Storm Water Pollution Prevention Plan [SWPPP] compliance, natural resources monitoring, hazardous materials management, etc.) and that all team members maintained open lines of communication to guarantee bridge construction stayed on schedule without compromising environmental standards. Complex challenges included the presence of sensitive species, high volumes of fuel transport/use, and the involvement of as many as eight project subcontractors on any given day. In addition, a subcontractor's crane overturned into a wetland on a holiday weekend, forcing round-the-clock emergency response and environmental monitoring work. Even with such a potentially catastrophic mishap, the bridge was completed ahead of schedule.

Mission Change EA (Point Mugu, California) – California ANG. Mr. McFarling served as Project Manager for the production of this EA addressing a proposed mission change for the California Air National Guard at Channel Islands ANGB in Ventura County. Initially a Classified action, the proposed mission change affected not only the unit at the base (collocated with a large Navy base at Point Mugu) but at remote training ranges in several locations throughout the southwestern US.

EA for Proposed Readiness Center and Field Maintenance Shop – California Army National Guard (ARNG). Mr. McFarling served as the Program Manager for an EA addressing the construction and operation of a new Readiness Center and Field Maintenance Shop at the former Sacramento Army Depot (which had been closed in a previous round of BRAC activities. This EA required ancillary studies, including a wetland delineation, sensitive species surveys (e.g., for the giant garter snake and burrowing owl). Mr. McFarling's project team applied front-end proactive coordination with agencies (e.g., US Fish and Wildlife Service, US Army Corps of Engineers, and California Department of Fish and Game) to ensure all key issues were appropriately addressed from inception of the EA process. Notably, USFWS personnel invited to participate in the initial site visit agreed while on site to approve a letter of concurrence/no concern with regard to sensitive fauna thought to occur in the project's vicinity.

EIR for Proposed Downtown Revitalization Project – Copelands, Inc., San Luis Obispo, California. Mr. McFarling served as the lead QA reviewer for this EIR addressing the proposed development of a new shopping mall, office complex, and three-story parking structure located in the historic district of downtown San Luis Obispo, California. Primary issues addressed included visual resources (including shading), land use, historic architecture, traffic flow, air quality, and hazardous materials and wastes (one parcel involved had previously been used as a gas station and leaking underground tanks were thought to have been abandoned in place). This controversial project was ultimately approved and is now a popular development in San Luis Obispo. The EIR prepared for this program was selected in 2003 by the statewide Association of Environmental Professionals (AEP) as their "*California's Environmental Document of the Year for Large Jurisdictions*."

EBS for Existing Well Sites at Vandenberg AFB – Torch Operating Company/Nuevo Energy Company. Served as Project Manager for preparation of an EBS for a commercial petroleum products company to support lease renewal for sites on which they were operating. Affected areas were located within the Coastal Zone on Vandenberg AFB so compliance with Air Force Instruction (AFI) 32-7066 was required. Conducted extensive coordination with personnel from Torch, Vandenberg AFB, and California Division of Oil and Gas.

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Rita Bright

Human Environment Task Leader

Professional summary

Ms. Rita Bright, an AMEC Project Manager, has been extensively involved in CEQA, Subdivision Map Act and land use litigation with over 20 years of experience with the County of Santa Barbara. Ms. Bright managed community plan updates and the preparation of numerous program and project EIRs. Ms. Bright served as a key department representative in litigation and development of settlement agreements for the most controversial cases including: the Agricultural and Housing Element updates, the rural-based Substandard Size Lots program, the Agricultural Clustered Development and Residential Agricultural Unit Program. As manager of the current planning division, Ms. Bright was often the principal negotiator for numerous project level litigations including Naples, a high profile residential proposal on coastal ranchland. Beyond CEQA, Ms. Bright's specializations include ordinance and other legislative updates, agricultural, rural-urban interface and Subdivision Map Act issues.

Education

B.A., Business Economics and Environmental Studies, University of California, Santa Barbara

Employment history

AMEC Earth & Environmental, CEQA Program Manager, Santa Barbara, CA, 2008 to present
County of Santa Barbara Planning & Development, Planning Division Manager, 1985 to 2008
County of San Diego Department of Planning and Land Use, Associate Planner, 1984 to 1985

Core skills

Environmental Planning – CEQA. Ms. Bright managed the preparation of over 20 program and project EIRs and hundreds of environmental documents. Preparation included both in-house EIR production of major community planning efforts as well as contract administration of consultant prepared EIRs. Ms. Bright served as an Environmental Hearing Officer at public comment hearings. Ms. Bright prepared and administered CEQA trainings for county staff and was extensively involved in revisions to the County CEQA review procedures.

Long Range Planning. Ms. Bright supervised numerous and diverse community, regional and general plan elements and updates. Programs included: the Santa Ynez and Los Alamos Community Plans, Housing Element, Toro Canyon Regional Plan, Carpinteria Valley Greenhouse Study. Ms. Bright also provided implementation guidance to the Orcutt, Goleta and Montecito Community Plans. As part of these programs, Ms. Bright attended numerous planning advisory meetings, public workshops, community outreach sessions, and lengthy public hearings. Ms. Bright also served as the environmental hearing officer presiding over the CEQA public hearings.

Agricultural and Rural Lands Analysis. Ms. Bright has unique and extensive experience with agricultural and rural land issues, from a planning policy, ordinance development, CEQA and Subdivision Map Act (SMA) perspective. As the Program Manager of the Agricultural Element Update and Implementation Program, Ms. Bright supervised the planning and environmental processes for agricultural viability and preservations studies. These processes included initiation and development of the Agricultural Clustered Development, Transfer of Development Credit and Residential Agricultural Unit programs. Ms. Bright managed the county wide Rural Lands Update. Ms. Bright also served on the County Agricultural Preserve Advisory Committee that served to ensure county wide consistency with the Williamson Act. Ms. Bright also closely monitored changes

in SMA legislation and litigation that affected agricultural subdivisions of land. One outcome of the *Morehart v. Santa Barbara County* decision was the recognition of antiquated subdivisions as legal lots. At the Board of Supervisors direction, Ms. Bright managed the Substandard Size Lots Ordinance that analyzed development potential and related impacts, and amended zoning and subdivision regulations to address primarily rural lands.
Ms. Bright's extensive work in agriculture resulted in developing strong working relationships with the State Department of Conservation, the Vintner's and Cattlemen's Association and Farm Bureau. Ms. Bright's public outreach included numerous site meetings with owners and operators of local wineries and vineyards, as well as farmers and ranchers to understand the challenges of agricultural preservation.

Representative projects

Paradiso del Mare Environmental Impact Report, County of Santa Barbara, CA
Ms. Bright is serving as the quality control manager for this EIR evaluating residential estate development on a 143-acre parcel located along the environmentally sensitive Gaviota Coast in Santa Barbara County. Key issues include abandoned oil facilities and hazardous materials, impacts to public views from scenic U.S. Highway 101, land use and growth inducement on the Gaviota Coast, traffic safety, biology, cultural resources and impacts to agriculture.

Environmental Impact Report, Prefumo Creek Regional Shopping Center, City of San Luis Obispo, CA
Ms. Bright served as the quality control manager for this EIR which evaluated the impacts of a general plan amendment, rezone and annexation to permit construction of a regional shopping center on the southwest edge of the City of San Luis Obispo. Key issues include loss of agricultural land, transportation and traffic, protection of sensitive species habitat and riparian areas, airport land use conflicts, and site design alternatives.

More Mesa Handbook Project, More Mesa Preservation Coalition, Santa Barbara, CA
Ms. Bright served as the quality control manager and land use policy analyst for preparation of a "handbook" for that details ecological, recreational and visual resource, and land use planning issues associated with 330 acres of undeveloped coastal land in Santa Barbara County. More Mesa contains sensitive wetlands, oak woodlands, and grasslands that support raptor species, including a noted population of roosting and nesting white-tailed kites. This handbook was honored with awards of excellence by the American Planning Association Central Coast and State of California Chapters.

Toro Canyon Community Plan and Environmental Impact Report, Santa Barbara County, CA
Ms. Bright managed preparation of community plan and EIR which addressed land use on thousands of acres of Coastal Zone land. Major issues addressed in this community plan included protection of agricultural land and sensitive habitats, coastal access, fire protection, watershed management and erosion control, and visual resources. Ms. Bright also participated in multiple public hearing sand citizen outreach efforts as part of this community plan

Carpinteria Valley Greenhouse Ordinance and Environmental Impact Report, Santa Barbara County, CA
Ms. Bright managed the preparation of coastal zone policy and ordinance amendments and an accompanying EIR for this contentious program which addressed the impacts of construction of industrial scale greenhouses on ground and surface water quality, hazards associated with pesticide usage adjacent to residential areas, and impacts to visual resources/community character. Ms. Bright conducted numerous meetings with concerned stakeholders including agricultural land owners and growers, the City of Carpinteria, and environmental groups.

Coastal Engineer

Professional summary

Mr. Kerwin over thirty years of experience and has been responsible for geotechnical aspects of numerous civil and land development projects, encompassing evaluation, design, management, and construction. Projects have included both existing and proposed residential tracts, pipelines, roads, coastal structures, impoundments, landfills, tanks, hospitals, and various commercial structures. Mr. Kerwin specializes in engineering geologic evaluation of landslide terrain in the coastal/shoreline environment. Existing and/or intended land use in many instances has required development and implementation of innovative geotechnical designs for ground stabilization that were tailored to address specific site conditions and constraints, and also included development of site-specific construction review and monitoring programs.

Fault and seismic evaluations
Mr. Kerwin has been responsible for numerous fault studies and seismic evaluations for projects in southern and central California. Seismic considerations addressed include: historic seismicity, location and activity of nearby faults, estimates of maximum probable and maximum credible earthquake magnitudes and bedrock accelerations, potential for surface rupture along faults, liquefaction potential, seismically-induced landslides or flooding, delineation of high seismic risk areas, and development of appropriate recommendations.

Harbors, piers and coastal studies
Mr. Kerwin specializes in coastal studies and is responsible for detailed evaluation of geologic conditions for a wide range of coastal projects and geotechnical problems. Geotechnical design evaluations have included piers, marinas, shoreline protection and other coastal developments and structures.

Hydrogeological assessment
Mr. Kerwin performs hydrogeologic site assessments primarily with regard to seismic response and slope stability evaluation of projects. Mr. Kerwin's evaluations have also included hydrogeologic assessment of environmental concerns with regard to site selection, containment and monitoring facilities for hazardous waste sites.

Professional qualifications/registration(s)

Professional Geologist, No. 3980, 1985
Certified Engineering Geologist, No. 1267, 1985

Education

B.S., Geology, University of California, Los Angeles, 1971

Memberships/affiliations

Association of Engineering Geologists
American Society of Civil Engineers, Affiliate Member

Employment history

AMEC Earth & Environmental, Inc. (formerly Moore & Taber), Newport Beach, CA, Associate Engineering Geologist, 1979 to present
Edwards Building Services, Queensland, Australia, 1976 to1978
Moore & Taber, 1975 to 1976
Main Roads Department, Queensland, Australia, 1973 to 1974

Representative projects

Harbors, piers and coastal Studies

Huntington Beach Pier, Huntington Beach, CA
Geologic conditions in the vicinity of the landmark Huntington Beach Pier had a significant impact on design and construction of the new pier that replaced the original 1914 structure. Very dense Pleistocene sediments that occur at a shallow depth in the pier area presented a significant geotechnical constraint to the installation of driven piles. The geotechnical design approach was to optimize the traditional jetting and driving installation techniques and to adopt geotechnical design criteria consistent with the unpredictable character of the jetted zone. Composite "stinger" piles consisting of six-foot long steel H-pile section cast into the tip of the prestressed concrete section were utilized at all batter pile locations to optimize the uplift capacity of the piles. The Huntington Beach Pier was recognized with outstanding project awards from ASCE and the California Geotechnical Engineers Association.

King Harbor Marina, Redondo Beach, CA
Liquefaction failure investigation and remedial reconstruction of the Mole B earthquake damage area was undertaken shortly after the Northridge earthquake. Subsurface exploration and review of original construction conditions indicated that the Mole B liquefaction failure area resulted from a combination of several local ground conditions. Recommended remedial construction methods included vibro-replacement stone columns and compaction grouting techniques. The Mole B project was recognized by an outstanding project award from the California Geotechnical Engineers Association.

Dana Point Harbor, Dana Point, CA
Problems with displacement and local failure of the concrete revetment panels that surround the east and west marina basins were evaluated for the County of Orange Engineering Design Section. Geotechnical evaluation included a comprehensive survey of the distressed panel conditions and construction history. Subsequent investigation included coring the panels and sampling underlying soils in the intertidal zone, and also submarine observations of panel footing conditions. Remedial repair recommendations included preparation of plans and specifications, and also periodic construction review of the repair work.

Montage Resort Community, Laguna Beach, CA
The Montage Resort project is located along the ocean shoreline in southern Laguna Beach at the site of the former Treasure Island Mobile Home Park. Proposed development includes a 275-room hotel complex, including detached bungalow accommodations and a bluff-top restaurant, seventeen custom residential lots, two residential condominium structures, and a public bluff-top park with beach access ramps. Geotechnical evaluations and recommendations included bluff stability/setbacks and deep foundation support for both the hotel structures and also for one of the beach access ramps.

Dana Point Headlands/Dana Strand, Headlands Reserve, LLC, Dana Point, CA
The Dana Point Headlands project area encompasses 122 acres along the southern Orange County coastline, including the landmark promontory from which the City and the project take their name. Proposed development includes 125 custom residential lots, a 100-room spa hotel, a small commercial area and extensive parkland and other public facilities that focus on the central highland and bluff-top areas. Principal geotechnical constraints include an approximately 35 acre ancient landslide complex within the proposed residential area along the shoreline north of the headland, and also steep sea cliffs that rim the headland with heights up to 220 feet. Remedial grading designs were evaluated and developed for the landslide area and appropriate bluff-top setbacks were recommended on the basis of stability analyses of the sea cliffs. Evaluations of the extent of ancient landsliding and also the extent of existing rip-rap shoreline protection were aided by the use of

several ground penetrating radar (GPR) surveys.

Redondo Beach Pier, Redondo Beach, CA
Value engineering analyses of the 50 percent design for the new Redondo Beach Pier resulted in a change from the previously proposed wooden pile support to a concrete pile and deck structure. Up to 70 to 80 feet of beach deposits had accumulated in the pier area since the early 1900's and the proximity of the Redondo Submarine Canyon suggested these sediment thicknesses could vary considerably. The length of the pile foundations were therefore dictated by the depth to dense Pleistocene sands present beneath the beach deposits. Potential variability in the foundation conditions were evaluated by an indicator pile program and subsequent pile load testing.

Bluff Drive (J00P02) Storm Drain And Beach Access, Laguna Beach, CA
The Bluff Drive storm drain alignment is located along a narrow existing easement from Pacific Coast Highway to ocean shoreline. Primary geotechnical constraints to construction of the 48-inch diameter storm drain were the proximity/stability of adjoining residential improvements, the stability of the bluff slope and the configuration of the buried bedrock surface in the foundation areas on the beach. The constructed storm drain includes an approximately 35-foot high drop structure on the bluff face that derives primary lateral support from several rock anchors. A concrete beach accessway consisting of terraced stairs and landings was constructed over the storm drain, including a curving, column supported stairway structure from the top of the drop structure to the beach below. The Bluff Drive Storm Drain and Beach Access project was honored with an award from the California Council of Engineers.

Cove Road Landslide, Orange County, CA
Geotechnical consultation/evaluation of the Cove Road Landslide was performed on behalf of the County of Orange. Failure of the sea cliff overlooking Dana Point Harbor threatened to undermine an adjoining restaurant and buried a portion of Cove Road below, which is the only access from the westerly end of the harbor. Geotechnical evaluation included subsurface exploration using specialized limited access drilling equipment that could be lifted and supported on the landslide slope face by a crane. The slope restoration design was required to include both support of the restaurant as it continued operations and also reconstruction of Cove Road. Design and construction for the project included a rock anchor restraining structure below the restaurant and a large crib-type retaining wall with wall heights up to 45 feet in the area below to allow reconstruction of Cove Road. Successful completion of the project was recognized by several engineering awards, including Project of the Year by the Orange County Branch of ASCE.

"Liquefaction Failure and Remediation: King Harbor, Redondo Beach, California." S.T. Kerwin and J.J. Stone. *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, v. 123, n. 8. August 1997.

"Liquefaction Failure and Remediation: King Harbor, Redondo Beach, California." S.T. Kerwin and J.J. Stone. ASCE National Convention, San Diego, CA. October, 1995.

"Geotechnical Constraints: Reconstruction of the Huntington Beach Pier." S.T. Kerwin. *Engineering Geology Field Trips: Orange County, Santa Monica Mountains and Malibu – Guidebook and Volume: 35th Annual Meeting of the Association of Engineering Geologists, Long Beach, CA.* 1992.

"Sea Cliff Stabilization Using Long Rock Anchors - A Case History." S.T. Kerwin. *Rock Mechanics: Proceedings of the 28th U.S. Symposium, University of Arizona, Tucson.* 1987.

"Restoration of the Cove Road Landslide, Dana Point, California." S.T. Kerwin, D.W. Clark, and J.T. Eagen. *Ground Failure, National Research Council, Committee on Ground Failure Hazards*, n. 1, Winter, 1984-85.

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Senior Air Quality Specialist

Professional summary

Mr. Ochs is a Chemical Engineer specializing in Air Quality Engineering with over 19 years professional experience including over nine years of environmental consulting experience and over 14 years of air quality modeling experience. He has successfully managed both major and minor projects, producing deliverables on time and on budget. Mr. Ochs has excellent problem solving skills, finding solutions to complex issues. He is experienced in:

- Project Management;
- Preparation of emission inventories for industrial and governmental clients, including the use of the Tanks, Speciate, Water9, URBEMIS and Mobile6 emission estimating models;
- Application of Calpuff, AERMOD, ISC, SCREEN3, and CAL3QHC dispersion models in support of air quality permit applications;
- Preparation of Title V, Synthetic Minor, and non-Title V air permit applications;
- Regional air quality modeling utilizing, CMAQ/Models3, CAMx, and UAM models. Emission inventory preparation using Mobile6, BEIS, nonroad, and aviation emission models;
- Risk assessment studies from exposure to chemical emissions or releases.

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Professional Engineer, Chemical, Arizona,40200, 2003

Education

MS, Chemical Engineering, Arizona State University, Tempe, AZ, 1994
BA, Physics, University of California, Santa Cruz, CA, 1986

Representative projects

Conformity Analysis, DMJM Harris, Tacoma, Washington. Mr. Ochs served as Air Quality Engineer performing conformity air quality analysis in support of the I-5 and 196th street ramp design project in Washington State. Reviewed the traffic impacts from each scenario and determined a conformity analysis was not required.

Environmental Assessment and Air Quality Study, GSA, Seattle, Washington. Mr. Ochs served as Air Quality Engineer for air quality analysis for a NEPA Environmental Assessment (EA) to analyze the impacts of redeveloping a 341,000-sf federal warehouse located along the Duwamish River. The project proposed to reconstruct all or a portion of the building, converting it to a 150,000-GSF office for federal agencies. Major tasks under air quality included an estimate of project emissions, preparing the air analysis for the draft EA and FONSI, and responding to public comments to finalize the air analysis for the EA. As a follow on task, Mr. Ochs directed an air quality study of National Ambient Air Quality Standard (NAAQS) pollutants and air toxic pollutants in the Seattle area to compare the air quality in the project area to other Seattle metropolitan locations. The study was based on existing monitoring data and also provided an estimate of pollutant levels for use in the buildings HVAC design.

Environmental Assessment, Tinker Air Force Base, Midwest City, Oklahoma. Mr. Ochs served as Air Quality Engineer for conformity applicability and analysis for the Consolidated Wing

Headquarters. This EA addressed any increases in aircraft, equipment, new personnel assigned, and construction activities

Environmental Assessment, Department of Homeland Security, Yuma, Arizona. Mr. Ochs is the air quality engineer for an EA to address the Department of Homeland Security Air and Marine Section's construction of new facilities and operations at the Yuma International Airport. The proposed action includes construction of facilities needed to fly and maintain helicopters, fixed wing aircraft, and unmanned predators and the operation of that aircraft for border security activities.

Environmental Assessment, City of El Paso, El Paso, Texas. Mr. Ochs served as Air Quality Engineer preparing air quality emission calculations for a proposed bus transit maintenance station in El Paso, TX. Emissions were negligible and traffic increases did not affect the level of service (LOS) at nearby intersections. The facility was located on airport property requiring compliance with FCC regulations and guidelines.

Calpuff Air Quality Modeling, KNOC Blackgold, Alberta, Canada. Mr. Ochs served as Air Quality Modeler performing Calpuff air dispersion modeling for primary pollutants (NOx, SO_2, CO, and $PM_{2.5}$) for the KNOC Blackgold oil sands project. Runs included baseline, project and cumulative scenarios for a 5-year period.

Calpuff Air Quality Modeling, Syncrude, Alberta, Canada. Mr. Ochs served as Air Quality Modeler performing Calpuff air dispersion modeling for a pond expansion project. Regulators required that impacts from the baseline, project, and cumulative cases be analyzed. Emissions were developed for VOC, PAH, and RSC evaporation of the pond, bitumen slick, and dry sands areas of the project. Emissions of wind blown dust were also estimated using newly published algorithms provided by the Western Regional Air Partnership (WRAP).

Accidental Release Air Dispersion Modeling, Petro-Canada, Alberta, Canada. Mr. Ochs served as Air Quality Modeler performing SLAB and ALOHA dispersion modeling to analyze two potential release scenarios from a propoane pipeline at a Petro-Canada refinery near Edmonton, Alberta. The focus of analysis was on propane risk of flammability around the release site using the EUB's Emergency Preparedness and Response Requirements for the Upstream Petroleum Industry (formerly Guide 71).

Dust Control Assessment and Permitting, BNSF Railway, Phoenix, Arizona. Mr. Ochs served as Air Quality Engineer surveying and identifying BNSF railway property for dust control issues. Prepared a Maricopa County dust block permit for all BNSF properties located the PM_{10} non-attainment area and performed evaluations of dust suppressants.

amec

Barry J. Snyder

Aquatic Sciences Program Manager

Professional summary

Mr. Snyder has over 25 years of experience in the field of aquatic sciences and currently manages AMEC's San Diego Office and California's Aquatic Sciences Group. His primary areas of technical expertise are include water and sediment quality investigations, dredged material characterization according to Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE) (i.e., Green Book and Inland Testing Manual) guidance, dredged material permitting, wetland soil reuse studies, and marine resources evaluations. Mr. Snyder manages projects for local and state government, commercial, and federal clients. His clients include the Ports of Long Beach, Los Angeles, and San Diego, the U.S. Navy, the California Coastal Conservancy, other consulting firms, and commercial and industrial waterfront operations.

He specializes in preparing studies plans, assembling field teams, interfacing with analytical laboratories, analyzing test results, project quality control/quality assurance, and preparing study reports for complex sediment and water quality investigations required by Clean Water Act and Marine Protection, Research, and Sanctuaries Act regulations. He also prepares water and sediment quality sections for NEPA and CEQA documents. Mr. Snyder also has experience managing a full on plants, invertebrates, and fish. He has overseen studies conducted on sediments, water samples, chemicals, and hazardous wastes for state (e.g., Title 22, BPTCP) and federal (e.g., NPDES, Ocean Dumping Law) regulatory programs.

Mr. Snyder oversees projects that involve the monitoring and assessment of sensitive aquatic resources. Projects he has managed have dealt with impacts of waterfront construction on invertebrate and fish communities, impacts of beach nourishment on marine resources, mitigation and construction monitoring, and the use of vegetative erosion control to replace hard structures.

Education

M.S., Marine Environmental Research, State University of New York, Stony Brook, 1985
B.S., Marine Science, Richard Stockton State College, Galloway Township, NJ, 1981

Memberships/Affiliations

American Association of Port Authorities
Consolidated Slip Restoration Task Force
SANDAG Shoreline Preservation Working Group
Southern California Academy of Sciences
Western Dredging Association
Society of Environmental Toxicology and Chemistry, Southern California Chapter (Co-founder, past President and current Vice President)

Professional Experience

AMEC Earth & Environmental, Inc., Aquatic Sciences Group Manager, 1999 to present
Ogden Environmental and Energy Services, Bioassay Laboratory Manager, 1988 to 1999
Cosper Environmental Services, Bioassay Laboratory Manager, 1985 to 1988

San Diego Regional Beach Sand Project, San Diego Association of Governments (SANDAG), San Diego, CA
323550000, $950,000, 2001 to 2005. Project manager for SANDAG's Regional Beach Sand Project.

AMEC is serving as the environmental coordinator for SANDAG's 2-million-cubic-yard regional beach nourishment program that is providing sand to 12 severely eroded beaches in San Diego County. The program involved:

- Monitoring plan preparation
- Agency coordination
- Bacteriological monitoring
- Grunion surveys
- Archaeological surveys
- Water flow monitoring
- Turbidity plume monitoring
- Side-scan sonar and magnetometer surveys
- Report preparation
- Diver surveys of kelp and reef resources
- Long-term monitoring station placement
- Predator control

Beach Replenishment Surveys, CVN Homeporting Project, U.S. Navy Southwest Division and the San Diego Association of Governments (SANDAG), San Diego County, CA
323550000, $956,146, 2001 to 2005. Project manager for natural resource surveys of nearshore areas from Oceanside to Imperial Beach, California, to identify suitable sites for beach replenishment as part of a plan to use dredged sediments from San Diego Bay to augment local beach sand. Sites were characterized from the intertidal zone to 30 feet subtidally, and substrata (e.g., high relief reef, sand, etc.) and biota (e.g., Egregia, Phyllospadix) were documented. As part of the CVN aircraft carrier homeporting project, managed the task requiring analysis of numerous potential beach sites for sand replenishment. The project required collection of sand samples to determine their compatibility with the proposed replenishment material. Diving transects were also conducted to identify sensitive resources in the vicinity of the proposed replenishment site.

Ormond Beach Wetland Restoration Project, Aspen Environmental Group and the California Coastal Conservancy, Oxnard, Ventura County, CA
4151001200, $110,088, 2004 to 2006. Project manager responsible for review of all reports pertaining to soil/sediment quality within the proposed 500 acre Ormond Beach wetland restoration site. This included review of Phase I and II Environmental Site Assessments, RI/FS studies from Point Mugu Naval Air Weapons Station, subsurface geotechnical investigations, agricultural/industrial drain assessments, and master's thesis work from UCSB. The results were complied into tables and GIS maps. A report was prepared that compared the soil/sediment quality within the restoration area to available benchmarks. Based on the data reviewed, AMEC provided a general assessment of the sediment quality within the restoration area, identified data gaps, and made recommendations on additional studies needed to develop definitive restoration plans. The data review component of this project led into a site specific soil/sediment/site water characterization study of the proposed wetland restoration area. The site characterization involved collection of 30 soil borings and 10 surface waters samples. The samples were analyzed for physical properties and chemical contaminants levels. The test results were used to further evaluate disposal options.

Beach Nourishment, Ocean Disposal, and Upland Disposal Testing at Piers 2 and 3, U.S. Navy, Naval Station San Diego, CA
211131000, $500,000, 1993 to 1996. Project manager for this dredging project required for the relocation of deep-draft power-intensive (DDPI) ships from Naval Station Long Beach to Naval Station San Diego. The project included chemical, bioassay, and physical analyses on sediment proposed for dredging. AMEC evaluated the dredged materials for beach nourishment, ocean disposal, and upland disposal. Additional tasks included: 1) a pathways analysis for upland disposal of dredged material, 2)

sub-bottom profiling to identify native versus contaminated sediments, and 3) preparation of a Coastal Consistency Determination (CCD) for the California Coastal Commission and a Report of Waste Discharge for the Water Quality Control Board. Received an "excellent" project rating from the Navy.

Tijuana Estuary Tidal Restoration Program, Soil/Sediment Reuse Evaluation, Tierra Environmental, Inc. for the Southwest Wetland Interpretive Association and the California Coastal Conservancy, San Diego County, CA
3151000800, $105,023, 2004. Program manager for a soil/sediment reuse evaluation conducted as part of the Tijuana Estuary Tidal Restoration Program's (TETRP) feasibility study. The TETRP is a large multi-phased wetland restoration program involving up to 500 acres of restoration. Its primary objective is to restore habitat values that have been lost and to increase the exchange of water in a tidal cycle. This will enhance flushing, improve water quality and control sedimentation. Establishing the existing conditions of soils and sediments (chemically and physically) in the proposed restoration footprint, and potential reuse options for any excavated materials, is an essential component of the feasibility study. Mr. Snyder oversaw the preparation of a Sampling and Analysis Plan (SAP) that was submitted for agency review, and the collection of soil/sediment samples within the project footprint using hand auger, rig mounted hollow stem auger, and backhoe excavation techniques. Samples were analyzed for chemical contamination and grain size properties. A report was prepared that discussed the existing quality of the soil/sediments in the proposed restoration area, as well as potential beneficial reuse scenarios based on soil/sediments properties.

Hazardous Materials Management, Professional Certificate, University of California at San Diego, 1993

"Testing 7 Million Cubic Yards of Sediment for Beach Nourishment – the CVN Homeporting Project in San Diego Bay." B. Snyder. Dredged Material Assessment and Management Seminar, Baltimore, MD, Sponsored by the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency.

"Toxicity Testing Required Under the National Pollutant Discharge Elimination System (NPDES) Program." B. Snyder. Environmental Engineers in the Food Processing Industry Conference, Santa Barbara, CA.

"San Diego Regional Beach Nourishment Project Monitoring Requirements." B. Snyder. Western Dredging Association Pacific Chapter Conference, San Diego, CA.

"Monitoring of the San Diego Regional Beach Sand Project: Lessons for Future Beach Sand Nourishment Projects." B. Snyder. California Shore and Beach Preservation Association and California Coastal Coalition Conference, "Restoring the Beach – Science, Policy and Funding," San Diego, CA.

Senior Ecologist

Ms. Saudamini Sindhar, a senior natural resources specialist, has more than 10 years of relevant experience in the design and implementation of plant and wildlife field studies, habitat restoration plans and preparation of related environmental documentation in support of public- and private-sector projects throughout Southern California. Ms. Sindhar supervises, directs and conducts, reconnaissance surveys, habitat assessments, and surveys for listed, sensitive, and locally important plant and wildlife species in California and Nevada, and has extensive working knowledge of riparian, scrub, grassland, woodland, and desert plant communities. She has planned, conducted and supervised, construction and mitigation monitoring for desert tortoise and other special status species, including southern rubber boa (*Charina umbratica*), arroyo toad (*Bufo californicus*), steelhead trout *(Oncorhynchus mykiss)*, California red-legged frog (*Rana draytonii*,) and coast horned lizard (*Phrynosoma coronatum blainvillii*) and delineated areas potentially under the jurisdiction of the US Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act and the California Department of Fish and Game (CDFG) pursuant to Section 1602 of the California Fish and Game Code at multiple California locations.

As a project manager, Ms. Sindhar identifies and assigns project staff, develops project implementation, leads field teams, ensures QA/QC of survey design, reports and coordinates with agencies per client approval and maintains proactive and regular client communication.

Ms. Sindhar's skills, experience, and relevant permits include:

- *Identification, mapping and directed surveys of federal and state-designated sensitive species and plant communities including*
- *Expertise with flora and fauna of the western Mojave desert*
- *Wetland delineation, certification and experience*
- *Construction and mitigation monitoring for natural resources*
- *Habitat restoration planning and monitoring*
- *Resource management planning, impact analysis, and mitigation*
- *Construction monitoring of desert tortoise, southern rubber boa, arroyo toad, steelhead trout, coast horned lizard, and California red-legged frog*
- *Protocol and clearance surveys for desert tortoise*
- *Sensitive plant surveys including slender-horned spineflower (Dodecahema leptoceras), San Fernando valley spineflower (Chorizanthe parryi* var. *fernandina), Lompoc Yerba Santa (Eriodictyon capitatum)*, La Graciosa thistle (*Cirsium loncholepis*) *and Bakersfield cactus (Opuntia basilaris* var. *treleasei)*
- *NEPA- and CEQA-compliant documentation and agency consultation*

Education

Masters of Environmental Management, Duke University, Durham, North Carolina. 2003.
Masters in Environmental Botany, Hamdard University, New Delhi, India. June 1999
Bachelor of Science, Delhi University, New Delhi, India. June 1997

Representative Projects

Pacific Wind Energy Project, Kern County, CA.
Avalon Renewable Energy Project, Kern County, CA
Ms. Sindhar lead teams in conducting geographic information system (GIS)-based plant community mapping, habitat assessments and protocol surveys for special status plant species, desert tortoise surveys and conducted small mammal trapping, fatal flaw analysis and jurisdictional delineations in support of the Biological Resources Technical Report (BRTR) for large scale renewable energy projects (Pacific Wind and Avalon). The BRTR served to support the environmental review process for project entitlement. During this process, Ms, Sindhar consulted with agencies, wrote impact analysis and mitigation sections and successfully responded to comments during the review process.

Manzana Wind Energy Project, Kern County, CA
Ms. Sindhar was involved in various stages of implementation of the Manzana (former approved PDV) Wind Energy Project. Ms. Sindhar was the primary author of desert native grassland, Joshua tree, and riparian restoration plans. These plans were drafted in compliance with the pre-construction conditions of approval (CUPs) in support of Manzana issued by Kern County.

Sacramento Mountain Wind Energy Project, San Bernardino County, CA
Ms. Sindhar served as Project Manager for the Sacramento Mountain Wind Energy Project. Ms. Sindhar consulted with agencies and local experts for regulatory compliance, conducted desert tortoise and sensitive plant surveys and prepared technical reports.

Caltrans, On Call Environmental Services, Division of Environmental Planning, District 7 (Los Angeles and Ventura Counties), CA.
Ms. Sindhar was the Project Manager and team leader for the District 7 on call environmental services contract for Caltrans, where she won, negotiated and managed several task orders.

Hazard Tree Removal Project, Southern California Edison, San Bernardino and San Gabriel Mountains CA.
From 2004 to 2006, Ms. Sindhar served the Project Manager for Southern California Edison's 'Hazard Tree Removal Project' in the San Bernardino and San Gabriel Mountains. Ms. Sindhar conducted and supervised biological surveys and monitoring for sensitive plant and animal species as well as wrote technical reports summarizing biological findings.

On Call Services, Southern California Edison, CA.
Ms. Sindhar conducted and supervised, Consultant Work Assignments (CWAs) at various locations in Southern California. Ms. Sindhar conducted site reconnaissance of pole locations, access roads, trails and potential helicopter pad sites and prepared biological assessment reports for deteriorated pole and transmission line replacement projects on private and public land.

Angeles National Golf Club, Tujunga Wash, Los Angeles County, CA
Ms. Sindhar managed and conducted directed surveys for the state-listed slender horned spineflower

and coastal cactus wren (*Campylorhynchus brunneicapillus*) within alluvial fan sage scrub, pursuant to the Long-term Habitat Management Plan for the Angeles National Golf Club.

Coastal Sage Scrub Habitat Restoration, Dean Dana Friendship Community Regional Park, Los Angeles County Department of Parks and Recreation, Los Angeles County, CA
Ms. Sindhar managed and conducted coastal sage scrub habitat restoration, maintenance and monitoring at Dean Dana Friendship Community Regional Park in support of a Safe Harbors Agreement between the U.S. Fish and Wildlife Service (USFWS) and the Los Angeles County Department of Parks and Recreation for the federally endangered Palos Verdes Blue butterfly.

Sensitive Plant Surveys, Entrada and Valencia Commerce Center, Newhall Land and Farming, Counties of Los Angeles and Ventura Counties, CA
In 2006 and 2007, Ms. Sindhar conducted vegetation mapping, wetlands delineation and focused surveys for the state-listed endangered, San Fernando Valley spineflower as well as other special status plants.

BLM Land Exchange, Bureau of Land Management, Henderson, NV
In 2003 and 2004, Ms. Sindhar conducted protocol, preconstruction surveys and construction monitoring for desert tortoise in support of a Bureau of Land Management land swap project. Ms. Sindhar also conducted surveys for the special status plant, bearpaw poppy (*Arctomecon merriamii*) and several sensitive species of buckwheat (*Eriogonum* sp.)

Southwest Re-Gap Project, Environmental Protection Agency, Ely, NV
In 2003, Ms. Sindhar, conducted site delineation, plant identification and GIS/vegetation mapping for the Southwest Re-Gap project in Nevada. During this project, Ms. Sindhar gained proficiency in identification of flora of the Great Basin, Mojave and Sonoran Deserts and the mountain ranges of Nevada.

INRMP for NAVOPSPTCEN, Sacramento, California. Ms. Sindhar serves as Lead Biologist and Principal Author for the Integrated Natural Resources Management Plan (INRMP) for the Navy Operational Support Center located in Sacramento, California. Species of interest are the California giant garter snake (*Thamnophis gigas*) and western burrowing owl (*Athene cunicularia*). Other important considerations included the proximate occurrence of a drainage ditch that demonstrated characteristics of wetland habitat. The Navy had recently assumed ownership of this property and no INRMP had been prepared previously, requiring development of a "ground-up" Plan addressing all known and potential management concerns.

Environmental Constraints Analysis for Proposed Western Region Operational Control Center, Vandenberg Air Force Base (AFB), Lompoc, California.
Ms. Sindhar is serving as the lead Natural Resources Specialist for the performance of an environmental constraints analysis in support of proposed construction of new Headquarters facilities for the WROCC at Vandenberg AFB in Lompoc, California. Vandenberg AFB is known to support dozens of federally protected species and myriad sensitive habitat types and plant communities. Ms. Sindhar will assess existing conditions and consult with the Air Force to ensure that sensitive natural resources are avoided to the maximum extent practicable during project design and implementation.

Westridge Native Grassland Restoration, Newhall Land and Farming, Los Angeles County, CA
Ms. Sindhar conducted quantitative data collection and analysis in the Westridge Native Grasslands Restoration Area to monitor the success of ongoing native grass restoration.

Biological Resources Evaluation, Malibu Parks Public Access Enhancement Plan, Santa Monica Mountains Conservancy, Malibu, CA
Ms. Sindhar, conducted biological resources evaluation and impact analysis within the proposed trails for the Malibu Parks Public Access Enhancement Plan (Plan).

Affiliations

California Native Plant Society
Western Wildlife Society

Languages

English, Hindi, Basic German

Certifications and Training

2004 Southwestern Willow Flycatcher Workshop
2004 Desert Tortoise Handling Workshop
2005 Wetlands and Wildlife-Making a connection workshop: vernal pools and California Tiger Salamander
2005 Mohave Ground Squirrel Workshop
2006 Wetlands Delineation Workshop (WTI, San Diego, CA)
2006 CEQA Workshop (AEP, fall 2006)
2006 California Plant Families Workshop (Santa Barbara Botanic Garden)
2009 CNPS, *Exploring the clandestine flora of early fall in the eastern Mojave Desert* (UC Riverside, the Jack and Marilyn Sweeney Granite Mountains Desert Research Center)
2009 Western Wildlife Society Annual Conference, Monterey, CA
2010 Society for Ecological Restoration- California Annual Conference, Mammoth Mountain, CA
2010 BLM workshop: Measuring and Monitoring Plant Populations, Tahoe City, CA

amec

Andrea Bardsley, RPA

Environmental Analyst/Cultural Resources Specialist

Professional summary

Ms. Bardsley has more than three years of experience in California archaeology, including two years professionally practicing cultural resources management and performing environmental impact analysis. She contributes environmental and cultural impact analyses and performs coordination with relevant agencies (including the California State Historic Preservation Officer [SHPO]) for documentation compliant with the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). Her professional cultural resource experience includes monitoring culturally sensitive sites, mitigating and managing impacts to sites for large-scale linear infrastructure and engineering projects, and performing field surveys and related investigations. Ms. Bardsley specializes in California archaeology, with a focus on prehistoric ceramic analysis associated with resources in the Mojave Desert.

Education

MA, Anthropology, Archaeology focus, California State University (CSU) Long Beach, 2009
BA, Anthropology, summa cum laude, University of California Santa Barbara, 2006

Memberships/Affiliations

Register of Professional Archaeologists. Member since 2010, ID#1252250.
Society for American Archaeologists

Employment history

AMEC Earth & Environmental Inc., Cultural Resources Specialist, Santa Barbara, 2009 –Present
Cogstone Resource Management, Inc., Field and Laboratory Technician, 2008 -2009
CSU Long Beach Anthropology Department, Graduate Research Assistant, 2007 -2009
Central Coast Information Center, UC Santa Barbara, GIS Technician, 2005 -2006

Representative projects

NEPA and CEQA Compliance for Dahlia Court Apartment Expansion Project, County of Santa Barbara, CA
Ms. Bardsley facilitated the permitting process of a proposed apartment expansion in the City of Carpinteria, CA. She coordinated the proper notification of local public and governmental organizations and drafted documents to obtain necessary approvals from the SHPO and other state agencies in accordance with CEQA and NEPA regulations.

Environmental Assessment of Veterans Affairs Medical Center, Loma Linda, CA
Ms. Bardsley assisted in the analysis of potential impacts to cultural resources resulting from the construction of a combined heat and power system at the Loma Linda Veterans Affairs Medical Center in California. She consulted with local governmental planning departments to determine the probability of encountering cultural resources and integrated information from relevant state and local governmental sources in assessing these potential impacts.

Environmental Assessment of California Air National Guard Station Closure, National Guard Bureau, Hayward, CA
Ms. Bardsley is currently assisting in all aspects of the production of an Environmental Assessment regarding the closure of the California Air National Guard (ANG) Station at Hayward, CA. She is providing analyses concerning potential impacts to cultural, biological, geological and visual resources, as well as effects on air and water quality, land use, noise and safety resulting from the ANG closure. She is integrating data and information from a wide range of local, state and national governmental sources to adequately assess the environmental impacts in compliance with NEPA and CEQA regulations.

Phase I Cultural Resources Survey, Deteriorating Pole Replacement Projects, Southern California Edison, Los Angeles and Santa Barbara Counties
Ms. Bardsley is currently assisting in cultural resource surveys in an ongoing Southern California Edison Company (SCE) project to replace and upgrade deteriorating utility poles. She completes archival research at relevant California Historic Resources Information System (CHRIS) locations to obtain information concerning potential resources in the vicinity of affected utility poles. Also, she conducts pedestrian surveys of areas potentially affected by SCE crew removal activities and co-authors final report documents.

Phase I Archaeological Investigation, Montecito Fire Protection District, Fire Station No. 3, Near 2500 East Valley Road, Montecito, CA
Ms. Bardsley completed a cultural resources survey of a 2.9 acre area under consideration for the construction of a fire station under the Montecito Fire Protection District. She conducted archival research and completed a pedestrian survey of the area, and co-authored the official findings report.

Tehachapi Renewable Transmission Project, SCE, Kern and Los Angeles Counties, CA
Ms. Bardsley served as field technician performing archaeological surveys and provided monitoring for both culturally and paleontologically sensitive resources in support of this 175-mile linear electrical transmission intended to provide a substantial amount of renewable energy to California. In this capacity, Ms. Bardsley coordinated closely with California Public Utilities Commission (CPUC) field staff to plan site-specific mitigation measures. She received cross-training in basic paleontological identification and mitigation techniques in order to properly serve as paleontological monitor on this project. Her duties also included providing support for planning and mitigation by creating maps for field and report use, as well as aiding in collection management.

Map Digitizing Project and Archaeological Repository Collection Management, Central Coast Information Center and University of California Santa Barbara Archaeological Repository
In her capacity as an intern, Ms. Bardsley used ArcGIS to create digital maps of archaeological sites across central California. Organized and interpreted site reports in digital formats as part of an ongoing project to update and digitize site records at the CCIC. She identified and catalogued archaeological artifacts for proper storage at the UCSB Repository.

Publications and presentations

"Luminescence Dating and the California Desert," Bardsley, Andrea and Lipo, Carl P. Poster presented at the 74th Annual Meeting of the Society for American Archaeology. Atlanta, GA. 2009.

Brian D. Cook

Senior Noise Specialist

Professional summary

Mr. Cook has substantial experience in the environmental planning field. Mr. Cook has experience assessing noise impacts for NEPA- and CEQA-compliant documents, which includes modeling aircraft, munitions, construction equipment, and vehicles. Mr. Cook has a diverse background in environmental documentation, including NEPA-compliant Environmental Impact Statements (EISs), Environmental Assessments (EAs) and Environmental Baseline Surveys (EBSs) for Air National Guard installations nationwide and CEQA-compliant Environmental Impact Reports (EIRs) and Initial Studies (ISs) for local county agencies. His analytical experience includes assessing project-related impacts in the following resource areas: noise, land use, airspace, transportation and circulation, biological resources, air quality, aesthetics, geological resources, and water resources.

Education

University of California, Santa Barbara, B.A. Biology, 1994

Training

Army Corps of Engineers Wetland Delineation and Management Training, 2001

Air Force Center for Environmental Excellence NOISEMAP 7.0 Training, 2003

Representative projects

Construction and Vehicle Noise

City of San Luis Obispo, Garden Street Project, San Luis Obispo, California: Mr. Cook evaluated noise impacts associated with the proposed 1.2-acre mixed-use development in the Garden Street Downtown Core and Historic districts. Tasks include taking baseline and proposed vehicle traffic counts and determining sound levels to adjacent areas and quantifying noise levels along roadway segments using Federal Highway Administration (FHWA) Traffic Noise Model (TNM) Version 2.5 Look-Up Tables. Mitigation measures to reduce sound levels associated with vehicle traffic to existing and proposed residential units were also provided.

City of San Luis Obispo, China Town Project, San Luis Obispo, California: Mr. Cook evaluated noise impacts associated with the proposed 2.12-acre mixed-use development in the China Town/Downtown Historic Districts. Tasks include taking baseline and proposed vehicle traffic counts and determining sound levels to adjacent areas and quantifying noise levels along roadway segments using FHWA TNM Version 2.5 Look-Up Tables. Mitigation measures to reduce sound levels associated with vehicle traffic to existing and proposed residential units were also provided.

Port of Redwood City, Redwood City, California: Mr. Cook evaluated noise impacts associated with barge and off-loading aggregate operations, in addition to vehicle and machine operations used in the delivery and removal of aggregate for the Port of Redwood City. Tasks include mapping sensitive receptors, quantifying noise levels along roadway segments, and quantifying noise levels associated with off-loading equipment.

Ventura County Resource Conservation District, Somas, California: Mr. Cook conducted data collection to evaluate noise impacts associated with vehicle and machine operations used in the

removal of *Arundo donax*. Tasks include measuring ambient noise environment at the site and adjacent areas, mapping sensitive receptors, quantifying noise levels along roadway segments servicing the sites using the FHWA TNM Version 2.5 Look-Up Tables, quantifying noise levels associated with vegetation removal equipment, and developing mitigation to reduce the significance of impacts.

Virginia Air National Guard, Richmond, Virginia: Mr. Cook served as a noise analyst for a NEPA-compliant environmental assessment evaluating short-term construction projects associated with a parcel acquisition at the Richmond International Airport. Within the scope of this project, baseline environmental conditions at this military installation were established through the identification and evaluation of existing noise conditions. Proposed development (including parcel acquisition, facilities construction, demolition, and road relocation) is assessed for potential impacts on the baseline noise environment.

Massachusetts Air National Guard, Cape Cod, Massachusetts: Mr. Cook served as an analyst for a NEPA-compliant environmental assessment evaluation short-term construction projects at the Massachusetts Military Reservation. Mr. Cook evaluated baseline environmental conditions associated with noise and biological resource areas. Proposed development (including parcel acquisition, facilities construction, and demolition) was assessed for potential impacts on the baseline conditions.

Environmental Planning

Bureau of Land Management, Surprise Canyon, California: Mr. Cook served as an analyst for an affected environmental technical report to be used in preparing a NEPA-compliant EIS evaluating off-road vehicle use in a designated scenic area. Within the scope of the project, baseline conditions and potential impacts to visual resources were evaluated.

County of Santa Barbara, Santa Barbara, California: Mr. Cook served as the principal analyst for numerous CEQA-compliant initial studies evaluating cell site locations. Within the scope of these projects, baseline environmental conditions were established through the identification and evaluation of existing biology, land use, aesthetics, and other resource areas. Proposed development was assessed for potential impacts on the baseline resource conditions.

U.S. Navy, San Nicolas Island, California: Mr. Cook served as the principal analyst for a NEPA-compliant environmental assessment evaluating pier construction on San Nicolas Island. Within the scope of this project, baseline environmental conditions at this military installation were established through the identification and evaluation of existing biology, land use, air quality, and other resource areas. Proposed development (including facilities construction, demolition, and road improvements and relocation) is assessed for potential impacts on the baseline resource conditions.

Texas Air National Guard, Dallas, Texas: Mr. Cook assisted in the preparation of a NEPA-compliant environmental assessment evaluating a base relocation, facilities construction and demolition, and infrastructure improvements in Dallas, Texas. Mr. Cook evaluated base line conditions and assessed impacts associated with noise, transportation, socioeconomics and cultural resources.

Utilities and Service Systems Engineer

Professional summary

Mr. Miller has 11 years experience in several different aspects of civil engineering including municipal, environmental and geotechnical. His responsibilities have included project management, client coordination, interdisciplinary coordination, sub consultant contract administration and coordination and team leadership. Mr. Miller's experience includes storm water conveyance systems including culvert design and improvements, hydraulic modelling, sanitary relief sewers, sanitary sewer collection systems, water supply and distribution systems, sewer rehabilitation, sanitary, reuse and water pump/booster station design, utility coordination and force main design. His computer software experience includes MicroStation Version J, AutoCAD Civil 3D, ERSI ArcMap, InfoWorks, HydroCad, Win TR-55, Delorme 3-D TopoQuads, Geosystems and Microsoft Office. He completed the OSHA 40-Hour General Hazardous Waste Site and Confined Space Entry certification programs. Mr. Miller has gained valuable work experience with the Milwaukee Metropolitan Sewerage District, through the University of Wisconsin Milwaukee's co-op program. His technological, creative and organizational talents are complemented by his strong communication, leadership and customer service skills. His most valuable asset is the ability to efficiently absorb new information and apply its full range of capabilities.

Professional registrations

Professional Engineer, Arizona No. 48990, 2008

Education

BS, Civil Engineering, University of Wisconsin-Milwaukee, Wisconsin, 1999

Professional affiliations

American Society of Civil Engineers

Languages

English

Employment record

AMEC Earth & Environmental, Design Lead, Lake Havasu City, Arizona, 2006 to present
Kapur & Associates, Project Engineer/Project Manager, Milwaukee, Wisconsin, 2000 to 2006

Relevant experience

Wastewater/AMEC

Preliminary Engineering Report (PER) & Wastewater System Replacement. Town of Miami. Miami. Arizona

Project Number: 1520103004. Project Value: $2.1M. Project Engineer/Designer for the upgrades to the Town of Miami's existing wastewater collection system. The Town's existing system dates back to the 1920s and is in very poor condition. AMEC was contracted to provide funding assistance, develop a PER in accordance with USDA-RUS Bulletin 1780-3, provide outreach support, and

design a replacement wastewater collection system for this mining community of approximately 2,000 residents. Design includes replacement of nearly 80,000 linear feet of sewer, replacement of an existing grit separator, and replacement of pumps at the Town's lift station. This project also includes coordination with USDA's State Engineer and local Project Manager, ADEQ, Gila County, the Town of Miami, and Arizona Water Company, CableOne, Southwest Gas, Freeport McMoRan, Inc. (FMI), and various other stake holders. A WIFA design loan was secured to provide funding for design. Additional funding will be provided through various sources such as USDA and Colonia grants. It is anticipated that this project will be funded through ARRA monies.

Tintown Preliminary Engineering Report (PER) & Wastewater System Expansion, Bisbee Border Environment Cooperation Commission (BECC), Bisbee, Arizona
Project Number: 1520103005. Project Value: $159,043. Project Engineer/Designer for the design of a new sewer system to serve approximately 73 residents in this early 1900's mining community within Bisbee, Arizona. The existing residents discharge their wastewater to cesspools or septic tanks. Due to rocky terrain, AMEC is considering various alternatives for final design. AMEC will be preparing a new PPER for the project. The original PER was funded by BECC and the construction will be funded through a USDA grant. The design includes preparing plans and specifications compliant with BECC, USDA, EPA, the City of Bisbee, and ADEQ. The Rural Water Association of Arizona is also providing technical assistance for the project.

Preliminary Engineering Report for Wastewater Collection System, BECC, Palo Verde, California
Project Number: 1055110002. Project Value: $113,783. Project Engineer/Designer for preparation of a wastewater collection system PER for the Community of Palo Verde, under contract with BECC. The PER was developed in accordance USDA United States Department of Agriculture (USDA) Rural Utilities Services Bulletin 1780-3. The proposed upgrades consist of constructing new wastewater infrastructure to serve approximately 168 households currently discharging to septic tanks and cesspools. This project includes analysis of both collection and treatment alternative available to the community. The PER includes collection of background data, calculating population projections, evaluating alternatives for the project, identifying a recommended alternative, and preparing a cost estimate.

Preliminary Engineering Report for Wastewater Collection Pipeline, BECC, Holtville, California
Project Number: 9551440000. Project Value: $98,835. Project Engineer/Designer for preparation of a wastewater collection system PER for the City of Holtville, under contract with the BECC. The PER was developed in accordance USDA United States Department of Agriculture (USDA) Rural Utilities Services Bulletin 1780-3. The proposed upgrades consist of replacing two 4-inch-diameter pipes, each 600 feet long, with 8-inch-diameter pipes and associated manholes and household connections. The work included collection of background data, calculating population projections, evaluating alternatives for the project, identifying a recommended alternative, and preparing a cost estimate.

Wastewater Sewer Expansion Project, Lake Havasu City, Arizona
Project Number: 072008006 / 072009001. Project Value: $3,833,000 / $945,000. Design Lead for the City's $463M Wastewater System Expansion Program, assisting in the initial development the 10-year construction plan to convert 25,000 septic tanks to a conventional gravity sewer system. The City's WWSE, 22,000 residential septic tanks are being decommissioned and replaced with an expanded central sewer system.

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Andrew Meisinger

Environmental Analyst

Professional Summary

As an environmental science professional, Mr. Meisinger serves a diverse range of clients, working on projects for government, academic, and private sectors. This work has included coordination between these entities for the purposes of permitting and regulatory compliance. He has participated as analyst on Phase I Site Assessments (PSAs), Environmental Assessments (EAs), Environmental Baseline Surveys (EBSs), Environmental Impact Reports (EIRs) and Integrated Natural Resource Management Plans (INRMPs). He is an experienced field biologist, having conducted biological surveys for protected and special status species in environments ranging from desert to freshwater habitats. His complimentary analytical skill set includes experience in the fields of biostatistical analysis and geographical information systems (GIS). He successfully integrates these skills to efficiently complete projects in a manner that satisfies client and company goals.

Education

Bachelor of Science, Environmental Science, University of California, Santa Barbara, CA 2011
Minor, Spatial Science, University of California, Santa Barbara, CA 2011

Memberships

National Collegiate Honors Society
California Association of Environmental Professionals
National Military Fish & Wildlife Association

Continuing Certification Training Courses

AEP CEQA Basics & Refresher Workshop Series

Employment History

AMEC Environment & Infrastructure, Inc. *Environmental Analyst* (9/11-Present)
United States Geological Survey, *Biological Science Technician* (6/11-9/11)
Oregon State University, *Biological Science Technician* (6/10-9/10)
University of California, Santa Barbara, *Research Assistant* (9/09-6/11)
Coal Oil Point Reserve, *Habitat Restorationist* (9/09-6/10)
United States Forest Service, *Biological Science Technician* (6/09-9/09)
Cheadle Center for Biodiversity & Ecological Restoration, *Habitat Restorationist* (9/08-6/09)
Berry Petroleum, *Environmental Health & Safety Regulatory Compliance Associate* (6/08-9/08)

Representative Projects

Environmental Documentation

Channel Islands Air National Guard Station Integrated Natural Resources Management Plan, California Air National Guard, Oxnard, CA
11/2011 - Present. This Integrated Natural Resource Management Plan will serve as an aid in managing critical habitat on the Channel Islands Air Guard Station.

- Participated in stake holder meetings involving USFWS, CDFG, and environmental personnel from both the 146 AW and NBVC Point Mugu
- Compiled a list of threatened and endangered species with the potential to exist on the installation
- Documented current environmental conditions at the installation and assisted in planning future projects to manage and improve critical habitat

Broad Beach Environmental Impact Report, Trancas Property Owners Association, Malibu, CA
10/2011-Present. This environmental impact report will assess the impact of the applicant's proposed beach nourishment project which aims to restore eroded coastline and includes a plan to restore native

dune communities.

Synthesized existing dune vegetation surveys conducted by WRA Inc., a consultant contracted by the applicants

Conducted database surveys to identify sensitive vertebrate and invertebrate species potentially existing within the Project Area

Compliance and Reporting

NPDES Permit Compliance Plan, Berry Petroleum, Bakersfield, CA
6/2008-9/2008. Analyzed the NPDES permit for a company lease and developed a plan to ensure future compliance.

Detailed the allowable discharge concentrations for all regulated point source pollutants

Developed a schedule for water quality testing to ensure compliance with permit regulations

Collected water samples for baseline analysis and regular water quality testing

Biological Surveys

Coho Salmon (Oncorhynchus kisutch) Habitat Restoration & Monitoring, United States Forest Service, Florence, OR
6/2009-9/2009. Conducted stream restoration and monitoring activities aimed at restoring Coho salmon habitat degraded by historical logging operations.

Conducted snorkel surveys in degraded and restored streams to assess the presence and abundance of Coho Salmon, Rainbow Trout, and Cutthroat Trout

Gathered water quality data including water temperature, turbidity, and flow rate

Designed plans for the re-introduction of large woody debris into degraded streams

Trask Watershed Study, Oregon State University, Corvallis, OR
6/2010-9/2010. Assisted in gathering biological data for fish and amphibian communities in order to assess the effects of clear cut timber harvest practices on the headwater stream ecosystem

Used a mark-recapture design to estimate the population size and movement of Coho Salmon, Rainbow Trout, Cutthroat Trout, Reticulate Scuplin, and Prickly Sculpin

Collected headwater stream environmental variables such as water temperature, channel width, and substrate size

Habitat Restoration

Campus Lagoon Water Quality Assessment, University of California, Santa Barbara, CA
9/2008-6/2009. Assisted the site management and monitoring lead in assessing the Campus Lagoon water quality

Collected water samples in accordance with a standardized water quality management protocol

Using a variety of instruments, analyzed water samples in terms of temperature, dissolved oxygen, salinity, turbidity and nitrate concentration

Deveroux Slough Restoration, Coal Oil Point Reserve, Santa Barbara, CA
9/2009-6/2010. Assisted in the restoration and management of Deveroux Slough.

Assessed progress in achieving restoration goals using transect counts and percent area coverage estimates

Assisted in seed collection and cultivation of sensitive plant species

Coordinated volunteer work and educational outreach emphasizing invasive species management as well as native species seed collection and planting

Honors and Awards

Undergraduate Research and Creative Arts Grant ($700)
Award for Outstanding Academic Achievement in Environmental Science
Summa Cum Laude, University of California, Santa Barbara

amec

Benjamin Botkin

Staff Analyst

Professional summary

Mr. Benjamin Botkin is an Environmental Planner with a diverse background in environmental planning, consulting, and marine policy. Mr. Botkin received his B.A. from the University of California, Santa Barbara with Honors and Distinction, where he focused his studies on marine environmental issues, coastal policy, and the impacts of climate change. Mr. Botkin supports environmental planning and environmental impact analysis, including the preparation of Environmental Assessments (EAs), Baseline Assessments/ Natural Resource Management (BANRI) documents, in accordance with the National Environmental Policy Act (NEPA)Environmental Impact Reports (EIRs) and Mitigated Negative Declarations (MNDs) in accordance with the California Environmental Quality Act (CEQA) regulations and. He has authored, edited, and reviewed existing resources and impacts sections for a variety of environmental documents, including EIS', EIRs, EAs, MNDs, project proposals, and Natural Infrastructure Assessments (NIAs). Mr. Botkin was also instrumental in writing, compiling, and reviewing the APA and AEP award winning More Mesa Handbook.

Education

B.A. Environmental Studies, *Ecology, Evolution, and Marine Biology* focus, University of California, Santa Barbara, 2008

Employment history

AMEC Earth & Environmental, Environmental Planner, Santa Barbara, CA (2008 to present)
Monterey Bay Aquarium, Independent Consultant, Monterey, CA, (2009 to present)

Representative projects

Environmental Impact Report
Prefumo Creek Commons. City of San Luis Obispo, San Luis Obispo, CA.
Mr. Botkin was author of the Biology and Utilities sections of an Environmental Impact Report (EIR) which evaluated the proposed annexation and development of 33 acres of agricultural land. The project included 19 acres to be zoned for Commercial-Retail, 12.5 acres to be zoned for open space, development of approximately 163,139 square feet of commercial space, on-site parking spaces, roadway extension, creek widening, and future bridge construction. Key issue areas examined in the EIR included sensitive species/habitat restoration, water quality, transportation/traffic, land use consistency, scenic views, and alternatives site designs. The project site includes a perennial stream that is a known migration corridor for the Steelhead trout, and impacts on this species are important to the construction and approval of this project.

Plan Santa Barbara General Plan Update EIR. City of Santa Barbara, Santa Barbara, CA.
Prepared existing settings and performed impact analysis for the following resource areas: Biology, Geology, Population/Jobs-Housing, Hazards, Public Services, Public Utilities, and Open Space and Visual Resources. The General Plan update process includes a review and update of City policies that address transportation, housing, sustainable development, environmental protection, and community character and design. The Program EIR for this update will assess the impacts of different growth scenarios and alternative policy options for comparative environmental effects

throughout the City. The Program EIR will also evaluate cumulative effects within the City and the region. The Program EIR was developed in close cooperation with City staff in an iterative process concurrent with the development of *Plan Santa Barbara* itself.

Paradiso del Mare- Coastal Residential Development. Santa Barbara County, Gaviota Coast, CA.
Mr. Botkin authored several resource sections for this EIR which evaluates development of two large single-family homes on two vacant coastal bluff parcels totaling almost 143 acres on the Gaviota Coast. Supporting infrastructure includes construction of roads and driveways, potable and reclaimed water line, onsite disposal of sewage by septic systems, limited agricultural development and dedications of over 1 mile of easement for the De Anza Coastal Trail.

Initial Study/ Mitigated Negative Declaration
Victoria Avenue Corridor Plan. City of Ventura, Ventura, CA.
Mr. Botkin authored several sections for this corridor redevelopment plan and was responsible for responding to public and agency comments. The proposed project involved build-out of several "opportunity sites" along the corridor in accordance with the City's General Plan and Form-Based Code.

Santa Clara River Trail Class I Multi-Use Path. City of Oxnard, Oxnard, CA.
Mr. Botkin authored an IS/MND for a proposed Class I multi-use path adjacent to the Santa Clara River to encourage multi-modal transportation and recreation choices. The multi-use path provides a key alternative transportation link to commercial and city centers (e.g. schools, libraries, parks, and other destinations), in addition to recreational opportunities. Sensitive environmental issues considered include biological resources, safety, air quality, watershed and water quality planning, and hazardous materials management. The project required coordination between multiple jurisdictions including the City of Oxnard, Ventura County Watershed Protection District, and CalTrans.

Residential Wastewater Collection Pipeline System and Water Distribution System Expansion. City of Holtville, Holtville, CA.
Mr. Botkin is currently serving as Lead Analyst supporting the Border Environment Cooperation Commission, EPA, and the City of Holtville with development of an Environmental Information Document (EID) to assist with compliance with the NEPA and an IS, compliant with the CEQA. The project consists of the proposed expansion and associated construction of a residential wastewater collection pipeline system and potable water distribution system within both the City of Holtville and adjacent unincorporated portions of Imperial County, California. The EID and IS address potential direct, indirect, and cumulative environmental impacts associated with implementation of the preferred and other identified alternatives for this action. Principal resources potentially affected by the alternatives under consideration include short-term air emissions (e.g., fugitive dust), noise, and transportation and circulation as well as long-term beneficial impacts related to public health (namely water quality and quantity).

DAN L. DAWSON
Supervising Transportation Planner

EXPERIENCE:

Mr. Dawson joined ATE as Transportation Planner in 1989. Since that time he has participated in over 1,000 Transportation Planning/Traffic Engineering/ and/or Parking Studies throughout California, Nevada and Arizona. This work includes analyses of urban and rural transportation facilities in conjunction with circulation elements, general plans, redevelopment plans, specific plans, project study reports, and traffic impact assessments for individual development projects. Mr. Dawson has also participated in several traffic modeling studies using TMODEL2, including the City of Santa Maria Circulation Element and Traffic Fee Program, the City of Santa Maria Sphere of Influence Study, U.S. Highway 101 Widening Study in Montecito and Carpinteria, the Orcutt Community Plan and the Goleta Transportation Improvement Plan.

Prior to his employment with ATE, Mr. Dawson worked as a Transportation Planner for the City of Santa Barbara. In that position he was responsible for reviewing and preparing written summaries of traffic reports, recommendations and informational reports on site plans, EIR's, traffic studies and development plan proposals. He also examined development plans for compliance with City design standards. Mr. Dawson was a Transportation Staff member assigned to the SBCAG Transportation Technical Advisory Committee (TTAC) and also the City's Development Review Committee (DRC).

EDUCATION:

B.A Economics, California State University at Chico, 1983.

Continuing Education: University of California Institute of Transportation Studies, Fundamentals of Traffic Engineering and Traffic Congestion, TMODEL2 Traffic Modeling Workshop. CELSOC Future Leader Program.

PROFESSIONAL AFFILIATIONS:

Institute of Transportation Engineers, Member

SCOTT A. SCHELL, AICP

Principal Transportation Planner

CERTIFICATION: American Institute of Certified Planners

EXPERIENCE: Mr. Schell is a transportation planning specialist with a broad background in traffic operations, transportation planning theory and environmental regulations (CEQA, NEPA, etc.). Mr. Schell joined ATE as a Transportation Planner in 1983 and became a partner in the firm in 1992. During his tenure with ATE, he has been responsible for and participated in over 600 transportation planning studies, traffic impact reports, and parking studies for projects located throughout both northern and southern California. These projects include Circulation Element updates, Sphere of Influence Annexation proposals, and Environmental Impact Reports/Statements for large scale residential, commercial, and institutional developments, as well as Redevelopment Agency projects. Mr. Schell serves as a project manager responsible for the preparation, review, and public presentation of the various traffic impact reports and transportation planning studies.

Mr. Schell also participated in the California Energy Commission FETSIM (Fuel Efficient Traffic Signal Management) programs for the cities of Santa Barbara, Santa Maria, and Ventura and the community of Goleta, thus gaining a working knowledge of the traffic signal timing optimization programs TRANSYT and PASSER II, as well as a solid background in traffic signal operations. Mr. Schell also has extensive knowledge of the TMODEL transportation modeling software program.

EDUCATION: B.A. Environmental Studies and Economics, University of California, Santa Barbara, High Honors, 1982

Continuing Education: University of California, Institute of Transportation Studies, Fundamentals of Traffic Engineering, Traffic Engineering Operations, Traffic Engineering Planning, and Traffic Engineering Modeling

PROFESSIONAL AFFILIATIONS: Institute of Transportation Engineers, Member
American Planning Association, Member
University of California, Santa Barbara, Guest Lecturer

M. HANY S. ELWANY, Ph.D.
Oceanographer & Coastal Engineer

EDUCATION

Ph.D., Engineering, 1977, University of Dundee, United Kingdom
B.S., Mathematics and Statistics, 1980, Alexandria University, Egypt
B.S., Engineering (Honors), 1971, Alexandria University, Egypt

SCIENTIFIC EXPERTISE

Coastal Engineering and Oceanography – Dr. Elwany has extensive experience with nearshore oceanography, coastal processes, coastal engineering, lagoons, and estuarine dynamics. He has conducted many oceanographic studies on the West Coast of the U.S. and in Mexico, South America, the United Kingdom, Egypt, and the Arabian Gulf. He was the principal investigator for the physical oceanographic program of one of the largest environmental studies ever conducted on the U.S. West Coast (at San Onofre, San Clemente, CA). Dr. Elwany had prepared a Master Shoreline Protection Plan for the Nile Delta, Egypt during a project supported by USAID. His experience includes projects involving coastal engineering and processes, structural dynamic analysis, design of offshore structures, data analysis, simulation, optimization, and numerical modeling. As an educator at the University of Liverpool and at Alexandria University, he taught courses in dynamics, statistics, numerical analysis, computer applications, and maritime engineering.

PROFESSIONAL HISTORY

President, Coastal Environments, 1988–present
President, Delta H Engineers; 1999–present
President, EcoSystems Management Associates, Inc., 2000–present
Professor of Engineering, Department of Mathematics and Physics, Faculty of Engineering, Alexandria University, Egypt, 1990–present
Research Associate, UCSD, Scripps Institution of Oceanography, Center for Coastal Studies, La Jolla, CA, 1989–present
Senior Scientist and Oceanographer, EcoSystems Management Associates, Inc., Encinitas, CA, 1986–1988
Visiting Scientist, UCSD, Scripps Institution of Oceanography, Center for Coastal Studies, La Jolla, CA, 1984–1986
Associate Professor, Department of Mathematics and Physics, Faculty of Engineering, Alexandria University, Egypt, 1984–1986
Lecturer, Department of Mathematics and Physics, Faculty of Engineering, Alexandria University, Egypt, 1983–1984
Lecturer, Civil Engineering Department, University of Liverpool, United Kingdom, 1980–1983
Lecturer, Department of Mathematics and Physics, Faculty of Engineering, Alexandria University, Egypt, 1978–1980
Senior Research Associate, Civil Engineering Department, University of Liverpool, United Kingdom, 1977–1978
Scholar, University of Dundee, United Kingdom, studied under Professor A.D.S. Barr, 1973–1977
Demonstrator, Department of Mathematics and Physics, Faculty of Engineering, Alexandria University, Egypt, 1971–1973

PROFESSIONAL RECOGNITION

Professional Affiliations	Society of Professional Engineers, Egypt Society of Underwater Technology, London, England American Society of Civil Engineering American Geophysical Union American Shore and Beach Preservation Association
Languages	Arabic, English

PUBLICATIONS

Published Works

Elwany, M.H.S., 2011. Characteristics, Restoration, and Enhancement of Southern California Lagoons. *Journal of Coastal Research*, Special Issue No. 59, 9 pp.

Elwany, M.H.S., C. Eaker, R.S. Grove, and J. Peeler, 2011. Construction of Wheeler North Reef at San Clemente, California. *Journal of Coastal Research*, Special Issue No. 59, 9 pp.

Flick, R., J.R. Wanetick, M.H.S. Elwany, R.S. Grove, and W. Waldorf, 2010. Beach Changes from Construction of San Onofre Nuclear Generating Station, 1964-1989. *Shore & Beach* 78 (4): 12–25.

Elwany, M.H.S., 2010. Tsunami Risks in Northern California and City of Pacifica: A Probabilistic Approach. Under Preparation.

Elwany, M.H.S., T. Norall, N. Marshall, and R. Grove, 2007. Using Sonar Surveys for Designing the Wheeler North Reef at San Clemente, California. *Shore & Beach* 75 (2): 44–51.

Elwany, M.H.S., 2006. Alternative Designs for the Relocation of the San Elijo Lagoon Inlet. *Proceedings of 30th International Conference on Coastal Engineering, ICCE 2006*, San Diego, CA, 2–8 September 2006.

Elwany, M.H.S., R. Dill, J. Johnson, and N. Marshall, 2006. Subsidence of King Harbor Breakwater at Redondo Beach. *Proceedings of 30th International Conference on Coastal Engineering, ICCE 2006,* San Diego, CA, 2–8 September 2006.

Elwany, M.H.S., and R. Flick, 2006. A Comparison of Bardawil Lagoon and Venice Lagoon. *Shore & Beach* 74 (4): 1–2.

Elwany, M.H.S., R.E. Flick, and M.M. Hamilton, 2003. Effect of Small Southern California Lagoon Entrance on Adjacent Beach. *Estuaries* 26 (3): 700–708.

Elwany, M.H.S., R.E. Flick, R.S. Grove, and M.M. Hamilton, 2003. Impacts of Short- and Long-Term Weather Events on Southern California Coastal Environments. *Proceedings of California and the World Ocean '02 Conference,* Santa Barbara, California, October 27–30, 2002.

Elwany, M.H.S., and R. Mahr, Jr., 2003. Deep water directional wave measurements from pressure, wave velocities, and a three-axis accelerometer. *Proceedings of the IEEE Seventh Working Conference on Current Measurement*, March 13–15, 2003.

Elwany, M.H.S., and J.A. Nichols, 2002. Desert Sand: A Viable Resource for Beach Nourishment. *Shore & Beach*, v. 70, no. 3 (July), p. 21–24.

Elwany, M.H.S., and R.E. Flick, 2001. Beach Response to Sand Nourishment Along Southern California Coastline. *Proceedings of California Shore and Beach Preservation Association and California Coastal Coalition 2001 Annual Conference*, San Diego, California, November 2001, SIO Ref. Series No. 01-13, pp. 13–14.

Elwany, M.H.S., 2001. Environmental Monitoring Programs for Southern California Lagoons. *Proceedings of California Shore and Beach Preservation Association and California Coastal Coalition 2001 Annual Conference*, San Diego, California, November 2001, SIO Ref. Series No. 01-13, p. 59.

Elwany, M.H.S., R. Flick, and S. Aijaz, 1998. Opening and Closure of Marginal Southern California Lagoon Inlet. *Estuarine, Jour. of the Estuarine Research Federation*, 21(2).

Flick, R.E., and M.H.S. Elwany, 1997. Managing San Diego California's Beaches: The Science and Politics of Sand Supply. *Proceedings of Bordomer 97, Coastal Environment Management and Conservation*, Bourdeaux, France, 27–29 October 1997.

Elwany, M.H.S., A.M.A. Allankany, and N.A. Younan, 1997. Coastal Lagoons along Coast of Egypt with emphasis on Bardawil Lagoon. *Proceedings of EOEI 97 Conference, International Conference on Earth Observation and Environmental Information*, October 13–16, 1997, Alexandria, Egypt.

Elwany, M.H.S., and J. Reitzel, 1997. Dye Studies of Dilution and Flow near a Multiport Difusser. *Applied Ocean Research,* 19 (2), p. 83–99.

Elwany, M.H.S., A. Thum, S. Aijaz, and R. Flick, 1997. A Strategy to Maintain Tidal Flushing in Small Coastal Lagoons. *Proceedings of California and the World Ocean '97*, March 24–27, 1997, San Diego, California, p. 1265–1277.

Flick, R.E., and M.H.S. Elwany, 1997. Tide and Beach Fluctuations and the Mean High Water Line *Proceedings of California and the World Ocean 97*, March 24–27 1997, San Diego, California, p. 943–949.

Inman, D.L., M.H.S. Elwany, and S.A. Jenkins, 1996. Wave Climate Cycles and Coastal Engineering Practice. *Coastal Eng., 1996, Proceedings of 25th International Conference, American Society of Civil Engineering*, Orlando, Florida, p. 314–327.

Elwany, M.H.S., and R. Flick, 1996. On the Relationship between Kelp Beds and Beach Width in Southern California. *Jour. of Waterway, Port, Coastal, and Ocean Engineering*, 122 (1), p. 34–37.

Reitzel, J., M.H.S. Elwany, and J.D. Callahan, 1995. Statistical Analysis of the Effects of a Coastal Power Plant Cooling System on Underwater Irradiance. *Applied Ocean Research*, 16(6), p. 373–379.

Elwany, M.H.S., W.C. O'Reilly, R.T. Guza, and R.E. Flick, 1995. "Effects of Southern California Kelp Beds on Waves. *Jour. of Waterway, Port, Coastal, and Ocean Engineering*, 121 (2), p. 143–150.

Elwany, H., J. Reitzel, and R. Flick. 1993. Dilution and Impacts of Ocean Discharges at Abu Soma. Submitted to Noell, Inc., Long Beach California. Tech. Report 93-9, 7 pp.

Inman, D.L., M.H.S. Elwany, and S.A. Jenkins, 1993. Shorerise and Bar-berm Profiles on Ocean Beaches, *Jour. Geophys. Res.*, v. 98, n. C10, pp. 18. 181–18.199.

Sharaki, M.A., M.A. Shama, and M.H.S. Elwany, 1992. Wave forces on space frame structures. *The Bulletin of the Faculty of Engineering*, 29, Alexandria University, 1–21.

Sharaki, M.A., M.A. Shama, and M.H.S. Elwany, 1992. Response of Space Frame Structures due to Wave Forces. *The Bulletin of the Faculty of Engineering*, 30, Alexandria University, pp. 1–25.

Inman, D.L., M.H.S. Elwany, A.A. Khafagy, and A. Golik, 1992. Nile Delta Profiles and Migrating Sand Blankets. *Proceedings of the 23rd International Conf.*, Venice, pp. 3273–3284.

Elwany, M.H.S., F.K. Zabloudil, and R. Lowe, 1990. The Performance of Electromagnetic Current Meters at Low Water Velocity (0–15 cm/sec). *Proceedings of Marine Instrumentation '90*, February 27 to March 1, 1990, San Diego, California, USA.

Elwany, M.H.S., J. Reitzel, and M.R. Erdman, 1990. Modification of Coastal Currents by Powerplants Intake and Thermal Discharge Systems. *Coastal Engineering*, v. 14, pp. 359–383.

Trageser, J.H., and M.H.S. Elwany, 1990. The S4DW An Integrated Solution to Directional Wave Measurements. *Proceedings of IEEE Working Conference on Current Measurement*, April 3–5, 1990, Maryland, USA.

Elwany, M.H.S., A.A. Khafagy, and D.L. Inman, 1989. Prediction of Wave Climate along the Coast of Egypt. *Proceedings of International Seminar on Climatic Fluctuations and Water Management'89* Cairo, Egypt.

Inman, D.L., A.A. Khafagy, and M.H.S. Elwany, 1989. Shoreline Changes as Function of Sea Level Rise. *Proceedings of International Seminar on Climatic Fluctuations and Water Management '89*, Cairo, Egypt.

Fanos, A.M., A.A. Khafagy, and M.H.S. Elwany, 1989. Numerical Model for El Bardawill Tidal Inlets. *Proceedings of Conference on Estuarine and Coastal Modeling*, held at Sheraton Islander, Newport, R.I. on November 15–17, 1989.

Elwany, M.H.S., A.A. Khafagy, and D.L. Inman, 1988. Analysis of Waves from Arrays at Abu Quir and Ras El Bar, Egypt. *Proceedings of Oceanology International '88*, Brighton, United Kingdom.

Elwany, M.H.S., 1985. Probabilistic Analysis of the Orbital Velocity of Sea Waves. *The Bulletin of the Faculty of Engineering, Alexandria University*, v. 25, pp. 1–16.

Elwany, M.H.S., 1984. On the Estimation of Morrison Coefficients in Irregular Waves. *The Bulletin of the Faculty of Engineering, Alexandria University*, v. 23, pp. 1–19.

Elwany, M.H.S., 1984. Two Computational Approaches for the Kinematics of Irregular Water Field. *The Bulletin of the Faculty of Engineering, Alexandria University*, v. 23, pp. 20–35.

Elwany, M.H.S., and A.D.S. Barr, 1983. Optimal Design of Beams under Flexural Vibration. *Journal of Sound and Vibration*, v. 88, no. 2, pp. 175–195.

Elwany, M.H.S., and A.D.S. Barr, 1983. Optimal Design of Beams in Torsion under Periodic Loading. *Journal of Sound and Vibration*, v. 59, no. 3, pp. 375–388.

Elwany, M.H.S., R.G. Tickell, and P. Holmes, 1983. The Probabilistic Analysis of Waves at Christchurch Bay Tower. Department of Energy through the Offshore Energy Technology Board Reports Centre, No OTR-8116.

Elwany, M.H.S., 1983. Short Term Probabilistic Analysis of Waves. *The Bulletin of the Faculty of Engineering, Alexandria University*, v. 21, pp. 217–238.

Elwany, M.H.S., 1983. Directional Spectrum of Sea Waves Based on Surface Elevation and Velocity Measurements. *The Bulletin of the Faculty of Engineering, Alexandria University*, v. 21, pp. 48–60.

Tickell, R.G., H. Elwany, and P. Holmes, 1982. Christchurch Bay Tower, Probabilistic Analysis of Data Recorded during September, 1976. Department of Energy through the Offshore Energy Technology Board Reports Centre, OTR-8114, v. 1 and 2.

Elwany, M.H.S., and A.D.S. Barr, 1979. Minimum Weight Design of Beams in Torsional Vibration with Several Frequency Constraints. *Journal of Sound and Vibration*, v. 62, no. 3, pp. 411–425.

Tickell, R.G., and M.H.S. Elwany, 1979. A Probabilistic Description of Forces on a Member in a Short Crested Random Sea. *Mechanics of Wave-Induced Forces on Cylinders,* ed. by T.L. Shaw, Pitman, London.

Elwany, M.H.S., and A.D.S. Barr, 1978. Some Optimization Problems in Torsional Vibration. *Journal of Sound and Vibration*, v. 57, no. 1, pp. 1–33.

SCOTT ALAN JENKINS, PH.D.
Oceanographer and Hydrodynamic Numerical Modeler

Education:

Yale University, B. S., Chemistry, 1972
UCSD, Scripps Institution of Oceanography, Ph.D., Physical Oceanography, 1980

Academic Honors:

* Yale National Scholar, 1972
* Howard Douglas Moore Prize, Yale University, 1972
* Andrew Mellon Foundation Fellow, 1981-1983
* Inventor of the Year, 1985, San Diego Patent Law Association
* American Council of Consulting Engineers, GRAND AWARD, 1988, Best Special Project for Grays Harbor Jet Array, Co-recipient HNTB Engineering
* 1995 Lincoln Award, American Council of Consulting Engineers

Patents:

U. S. Patent No. 4,560,304, "Apparatus for impeding fine sediment deposition in harbors and navigation channels"
U. S. Patent No. 4,661,013, "Improved apparatus for impeding sediment deposition in marine berths"
U. S. Patent No. 4,957,392, "Method and apparatus for active prevention of sedimentation in harbors"
U. S. Patent No. 5,558,460, "Apparatus for enhancing wave height in ocean waves"

Professional Experience:

- Thirty years experience in coastal processes, hydrodynamics, aerodynamics and hydraulics of harbors and estuaries.
- Designer of numerical models for sediment dispersion in coastal waters, flux of watershed sediments and legacy pesticides, shoreline evolution and mine burial.
- Developer of innovative sediment control devices and management systems.
- Clean ocean activist, providing expert witness testimony in Clean Water Act cases (Surfrider vs. Louisiana Pacific; Surfrider vs. City of Honolulu, et al).

Environmental and Professional Activities:

- National Research Council Committee on Sedimentation Control in Strategic Harbors and Waterways
- Scripps Institution of Oceanography Long-Range Planning Committee
- American Geophysical Union
- San Diego Clean Water Program
- Surfrider Foundation, Environmental Director, 1990-1993
- Technical Advisory Committee, San Diego Regional Water Quality Control Board, 1995 to present

Television:

- ESPN, "Surfer Magazine Show," Host of "Surf-Science Segment," 1988-1992
- CBS, "Eye on the Earth," Interview with Dan Rather, 1992
- Discovery Channel, "Hidden Treasures," Host, 1994
- BBC, "Walking on Water," Opening Host, 1994

Biographical Sketch:

Dr. Scott A. Jenkins is a senior engineer at Scripps Institution of Oceanography. He has conducted research in nearshore physical oceanography and coastal engineering with experience in field measurements, experimental design, and theoretical modeling. Dr. Jenkins has worked on a broad range of problems in coastal processes, including estuarine and littoral sediment transport, beach and shoreline erosion, wave/structure interaction, hydrodynamic and hydraulic modeling of estuarine and harbor circulation, pollution dispersion modeling, climate effects on watershed sediment yield, and the development of sedimentation control techniques. He has also taught graduate level courses in Coastal Processes and the Physics of Sediment Transport. He developed a number of novel approaches for controlling sedimentation which have earned four United States patents, the 1985 Inventor of the Year Award from the Patent Law Association, and the 1988 Best Special Projects Award from the American Council of Consulting Engineers. Dr. Jenkins has published 54 research and engineering papers. Dr. Jenkins has provided consulting services in coastal processes, and hydrodynamic modeling in cooperation with Dr. Hany Elwany through Coastal Environments, LA Jolla, CA.

Selected Publications:

Aijaz, S., and S. A. Jenkins, 1993. Dynamics of shearing in flocculating fine sediment suspension. *Makromol. Chem.*, v. 76, p. 89-93.

Aijaz, S., and S. A. Jenkins, 1994. On the electrokinetics of the dynamic shear stress in fluid mud suspensions. *Jour. Geophys. Res.*, v. 99, n. C6, p. 12,697-12,706.

Heinz, R. A., J. A. Bailard, and S. A. Jenkins, 1989. Water jets fight silt. *Civil Engineering,* v. 59, n. 1, p. 54-58.

Inman, D. L., and S. A. Jenkins, 1989. Wave overtopping at San Malo seawall. *Shore & Beach*, v. 57, n. 3, p. 19-25.

Inman, D. L., M.H.S. Elwany, and S. A. Jenkins, 1993. Shoreline and bar-berm profiles on ocean beaches. *Jour. Geophys. Res.,* v. 98, n. C10, p. 18,181-18,199.

Inman, D. L., and S. A. Jenkins, 1999. Climate change and the episodicity of sediment flux of small California rivers. *Jour. Geology,* v. 107, p. 251-270.

Jenkins, S. A., and D. L. Inman, 1985. On a submerged sphere in a viscous fluid excited by small-amplitude motions. *Jour. Fluid Mech.*, v. 157, p. 199-224.

Jenkins, S. A., and J. A. Bailard, 1989. Anti-sedimentation system for harbors. *World Wide Shipping*, v. 52, n. 1, p. 70-75.

Jenkins, S. A., and J. Wasyl, 1990. Resuspension of estuarial sediments by tethered wings. *Jour. Coastal Res.,* v. 6, n. 4, p. 961-980.

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RESUME

Kenneth C. Doud,
Principal: www.Videoscapes.net
PO Box 696, 2671 Stow St.
Los Olivos, California 93441

805-693-1599 voice
Ken@videoscapes.net

EDUCATION

Masters Degree, Fine Arts/ Mass Media *University of California, Santa Barbara*
Bachelors Degree *University of California, Santa Barbara*

SKILLS

- **15 years experience** in the preparation of graphics for use in CEQA/NEPA compliant environmental visual analysis with emphasis on the preparation of photo simulations, including the selection of viewpoints and depictions of visual mitigation measures and assistance in the placement of those measures within the 3-d computer environment
- **12 years experience** in conducting peer review of visual impact analysis, shadow studies, and graphics for EIR, including presentation of expert testimony in courtroom and governmental review settings.
- **High Level skills** in CAD, photo editing, digital photography, and computer visualization software, including Autodesk 3ds Max (the industry standard for photo simulation rendering, GIS based daylight and shadow simulation), ESRI compatible GIS software, Adobe photoshop, Illustrator, AutoCAD and other related programs
- **Ability to read Architectural, Engineering and related Planning Documents** and accurately migrate that information into the 3-d computer environment

QUALIFICATIONS

- 2011: Worked with SAIC to peer review the Aesthetics and Shadow Flicker analysis in the EIR for the 3200 acre Rising Tree Wind Farm in Kern County. The study examined the consistency and adherence of the EIR findings to CEQA, NEPA (part of the project was on BLM land), and Kern County guidelines.
- 2010: As Visual impacts consultant for Element Power, Portland, Oregon, modeled the nine square mile California combined Solar and Wind project using USGS and privately acquired LIDAR data, GIS location data, CAD and SolidWorks models, and Daylight simulation (shadow spread and flicker).
- 2010: Worked with SAIC to peer review applicant provided shadow casting studies for the Hunter's Point development project. Determined validity of applicant findings and compliance with City of San Francisco open space sunlight access code.
- 2008: Worked with Padre Associates on the Ocean View Plaza shadow fall study requested by the Monterey Bay Aquarium to determine the impacts of shadows caused by proposed construction on the Monterey Bay Ocean Preserve.
- 2008: Worked with AMEC on the Paradiseo Ranch project as a consultant for the preparation of visual impact studies for proposed construction on the highly sensitive Gaviota Coast, Santa Barbara County, Ca.
- 2008: Worked with Santa Barbara Environmental Defense Center to determine the addequacy of visual impact analysis provided for the Naples development project on the highly sensitive Gaviota Coast. Presented findings to Santa Barbara County Board of Supervisors

PORTFOLIO and ADDITIONAL QUALIFICATIONS

May be found at: www.videoscapes.net

COMMUNITY AFFILIATIONS

- California Association of Environmental Professionals (CAEP)
- President, Santa Ynez Valley Natural History Society

Exhibit D
Subcontractor Scopes of Work

Videoscapes
Scope of Work
Goleta Beach 2.0

1) **Description:**
   a) Videoscapes shall provide illustrations of the proposed construction in the form of photo simulations.
      i) Base photos shall be acquired by Videoscapes at the site location using GPS enabled digital camera.
         (1) Two (2) photo simulations from locations to be determined, for example:
            (a) Looking South from parking lot
            (b) Looking Northwest from Goleta Beach Pier
         (2) The photo simulations shall be generated using a dimensionally accurate computer model of the proposed construction.
            (a) Typical landscaping shall be depicted.
      ii) Additional photos from other viewpoints shall be acquired during the site visit to provide alternative or additional photo simulations.
   b) A diagram showing the camera locations and directions of view shall be provided as a part of this proposal.

2) **Method:**
   a) Base photographs shall be acquired by Videoscapes.
      i) Latitude, longitude, elevation, tilt, roll, and bearing data shall be recorded with each digital photograph.
   b) The computer model shall be built in Autodesk 3ds Max software, which is widely accepted in the industry.
      i) Site model and placement of objects shall be based on drawings or digital files supplied by others.
         (1) Objects proposed for removal shall be eliminated from the photo simulation.
      ii) The virtual camera used to view the model shall be positioned relative to the computer model according to location data collected during the acquisition of the base photos in the field so that the proposed construction appears properly oriented and scaled.
         (1) The computer rendered model shall be composited into the photograph of the existing condition using Adobe photoshop software.
      iii) Sun and atmospheric conditions shall be replicated as closely as possible within the photo simulation rendering software.
   c) Draft photo simulations shall be submitted for review
   d) A planview ("KOP") diagram indicating the position and direction of the simulated views shall be provided as a part of this proposal.

3) **Required Materials:**
   a) Plan and elevation drawings of the proposed construction and demolition
      i) List and/or plan showing landscaping elements and plant species to be added
      ii) Plan view showing landscaping elements and plant species to be removed

4) **Deliverables:**
      i) Two (2) digital image files of the composited photo simulations.
      ii) Two (2) Existing condition (base photos) digital image.
   b) One Key Observation Point locations and directions diagram in PDF format.

STORRER
ENVIRONMENTAL
SERVICES

2565 Puesta Del Sol Road #3
Santa Barbara, CA 93105
(805) 682-2065
storrer.john@verizon.net

Daniel Gira
AMEC Earth & Environmental
104 W Anapamu St # 204A
Santa Barbara, CA 93101

February 23, 2012

Re: Biological Consultation in Support of Goleta Beach County Park Shoreline Revetment Removal Project Environmental Impact Report (EIR)

Dear Mr. Gira:

Per your request, I have prepared a scope of work and cost estimate for the referenced project. My understanding of the services you require is based on your e-mail transmittals the past two days.

Work Program

The work program tasks are as follows:

Task 1: Conduct avian surveys within 500-radius of the project site to determine current use by raptors, herons, egrets, cormorants, Belding's savannah sparrow, and other potential nesting species. Three surveys would be conducted, one each in March, April, and May. A summary report will be prepared, describing the results of the field surveys. I have budgeted four hours per survey and four hours for report preparation.

Task 2: Review draft sections of the EIR.

Task 3: Provide general consultation regarding biological resource issues, as requested.

Anticipated Level of Effort

Task	Task No.	Hours
Avian Surveys	1	16.0
Document Review	2	4.0
General Consultation	3	4.0
Total		24.0

Cost Proposal

Billing Rate

An hourly billing rate of $110.00 will be charged for all services. Mileage reimbursement will be charged at $.50 per mile. Charges will be billed on a time-and-materials basis.

Cost Breakdown

Labor: 24 hours @ $100.00	$2,640.00
Mileage: 60 miles @ $.50	30.00
Total Not-to-Exceed	**$2,670.00**

I hope that the supplemental work program and associated costs are in keeping with your expectations. Please call me if you have any questions concerning my proposal

Sincerely,

John Storrer
Storrer Environmental Services

Volume II – Cost Proposal to Prepare an

Environmental Impact Report Goleta Beach County Park Managed Beach Retreat Project 2.0

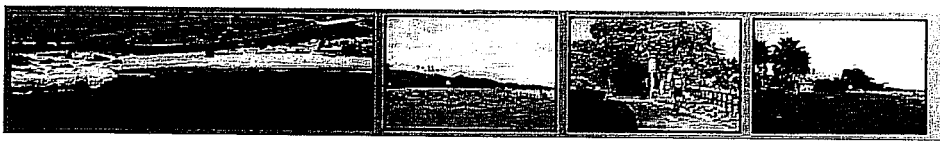
Case Numbers 11DVP-00000-00016 and 11CDP-00000-00069

Prepared by amec

AMEC Environment & Infrastructure, Inc.
Santa Barbara Office
104 West Anapamu Street, Suite 204A
Santa Barbara, California, 93101
(805) 962-0992 Fax (805) 966-1706

Prepared for
County of Santa Barbara
Planning and
Development Department

February 27, 2012



Cost Proposal

TABLE OF CONTENTS

Attachments

1 ASSUMPTIONS

AMEC has prepared a cost estimate to complete the Scope of Work addressed in the Request for Proposal and presented by AMEC in Volume 1 (Technical Proposal). Attachment 1 contains AMEC's cost estimate to implement the scope of work, using the cost template requested by the County which provides cost for each major Task identified in the RFP and a more detailed cost breakdown for the administrative draft EIR. Attachment 1 includes the overall cost estimate and detail, percentage of the total hours used by each AMEC staff member, cost estimate to conduct two Optional Tasks – summer parking demand counts and a additional photosimulations.

This cost, and the related scope of work, remain effective for not less than 60 days from February 27, 2012.

Cost Assumptions for Tasks 1 through 9, as described in Volume 1

AMEC used the following assumptions about the technical scope of work, described in more detail in Volume 1:

1. The County will provide electronic versions of all background studies, the previous draft EIR and responses to comments upon the notice to proceed.
2. The Project Description does not significantly change from the description finalized as part of Task 2.
3. AMEC assumes that the project will be completed consistent with the proposed schedule. Delays of greater than 3 months for any particular phase or milestone may lead to a change in costs. AMEC also reserves the right to partially bill for partially completed work where unanticipated delays of greater than 3 months occur due to no fault of AMEC's team.
4. Analysis of the proposed Project and no more than three Alternatives (in addition to the No Project Alternative).
5. Because there is a readily-accessible inventory of applicable and appropriate data and studies, we assume that, beyond parking counts, we will not undertake new technical studies, field work beyond standard reconnaissance level or conduct sampling. Our evaluations will be based on review and application of existing materials, and field reconnaissance to confirm and augment existing materials. However, the AMEC team would identify any data gaps and would be able to provide any necessary additional technical studies on a time and materials basis.
6. AMEC budget for the Written Summary of Public Comments Task includes preparation of a Powerpoint presentation that AMEC would present at the EIR hearing. Analyst time for attendance and recordation of comments made at this hearing is also included in AMEC's budget.
7. AMEC budget for Notice of Preparation (NOP) support would include preparation of a Powerpoint presentation which AMEC would be available to present at any scoping hearing. AMEC would address all comments received on the NOP. If comments on the NOP raise legitimate wholly new and unanticipated issues beyond the currently programmed scope of the EIR, AMEC would strive to respond to such issues within the existing EIR budget. However, if the County and AMEC determine

that such responses require preparation of new technical studies not included in the current EIR scope, AMEC would work with County staff to identify a focused approach to completion of such studies in support of needed responses

8. AMEC's team will attend meetings as follows: Principal in Charge - up to 4 meetings with County staff; Project Manager - up to 10 meetings with County and 6 public hearings; Deputy Project Manger - up to 4 meetings with staff and one public hearing; Environmental Analyst – 1 public meeting. Coastal Environment's Principal would attend two meetings or hearings. AMEC's Project Manager would attend additional meetings or hearings for a unit cost of $350.

9. We applied unit costs in this estimate, as follows:

    - Mileage will be charged at $0.55 per mile
    - Printed and bound copies (30 copies for the Draft EIR and 30 copies for the Final EIR) will cost $100 per copy
    - Compact disks (CDs) cost $5 per copy

10. Other assumptions applied in this cost estimate:

    - A 10% fee is applied to Subcontractor costs.
    - A 10% fee is applied to other direct charges (ODCs).
    - Approximately 150 discrete unique issue area comments will be addressed as part of the Response to Comments, and no new technical analysis will be required as a result of the comments received on the Public Draft EIR. AMEC anticipates that preparation of up to 150 discrete responses would be adequate as many comments will be duplicative and can be cross referenced.
    - If comments on the draft EIR raise legitimate wholly new and unanticipated issues beyond the currently programmed scope of the EIR, AMEC would strive to respond to such issues within the existing budget, consistent with the bullet above. However, if the County and AMEC determine that such responses require preparation of new technical studies not included in the original EIR scope, AMEC would work with County staff to identify a focused approach to complete such studies in support of needed responses.
    - In order to minimize or avoid conflicting comments and direction, the County's Project Manager will provide a single set of Departmental comments to AMEC for incorporation into the Draft EIR.

AMEC guarantees the labor rates and unit costs used in this estimate through December 31, 2012. After this date, an escalator of 4% will apply to cover annual salary increases.

Cost Assumptions Applied for Optional Tasks

Optional Task 1 – Summer Parking Demand Counts

AMEC used the following assumptions in developing the cost estimate for this optional task:

11. The costs for the optional Summer parking surveys and supplemental parking analysis is $3,200.00. It is anticipated that the optional summer survey could result in a minor delay in the EIR public release schedule.

Optional Task 2 – Additional Photosimulations

AMEC used the following assumptions in developing the cost estimate for this optional task:

12. Additional photosimulations can be provided for $450 each.

Optional Task 3 – Biological Surveys

13. The costs for the optional set of three (s) field surveys, brief letter reports and associated support for EIR preparation would be $2,937. This would include three surveys within 500 feet of the project site conducted, one each in March, April, and May, with a brief report which describes the results of the surveys and feedback and support for the EIR's biological resources section.

2 CONFLICT OF INTEREST STATEMENT

No member of AMEC has a financial gain or an interest in the final outcome of the project. AMEC hereby certifies that AMEC has the capacity to submit neutral and unbiased environmental evaluations of the relevant issue areas.

3 AUTHORIZATION

Mr. Aaron Goldschmidt is an authorized representative for AMEC with the authority to provide this estimate for the County's consideration and negotiate contract terms:

Mr. Aaron Goldschmidt, Vice President
AMEC Environment & Infrastructure, Inc.
104 West Anapamu Street, Suite 204A
Santa Barbara, CA 93101

Tel: (805) 962-0992
Fax: (805) 966-1706
E-mail: aaron.goldschmidt@amec.com

Attachment 1
Costing Spreadsheets

FEE ITEMIZATION SHEET-TIME AND MATERIALS, NTE

AMEC Environment & Infrastructure, Inc.

DATE OF ESTIMATE: 3/1/12

PROJECT: Goleta Beach County Park Managed Beach Retreat Project 2.0
CLIENT: County of Santa Babara
CONTACT: Kevin Drude, Supervising Planner, Development Review Divison
PREPARED BY: Dan Gira

			TASK 1 (0001) Project Kick Off		TASK 2 (0002) P.D, Environmental Setting & Project Alternatives		TASK 3 (0003) Administrative Draft EIR & Technical Studies		TASK 4 (0004) Draft EIR & Technical Appendices		TASK 5 (0005) Written Summary of Comments at the Public Hearing on Draft EIR		TASK 6 (0006) Responses to Comments Draft EIR		TASK 7 (0007) Administrative Final EIR		TASK 8 (0008) Draft Final EIR		TASK 9 (0009) Final EIR		TASK 10 (0010) Meetings		Project Total	
PART I, DIRECT LABOR																								
FUNCTION	STAFF	HOURLY RATE	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST	HRS	COST
Principal in Charge	Doug McFarling	$160.00	4	$ 640	2	$ 320	4	$ 640	2	$ 320		$ -	1	$ 160	1	$ 160	0	$ -	0	$ -	6	$ 960	20	$ 3,200
Project Manager	Dan Gira	$155.00	8	$ 1,240	5	$ 775	30	$ 4,650	10	$ 1,550	1	$ 155	15	$ 2,325	10	$ 1,550	6	$ 930	5	$ 775	40	$ 6,200	130	$ 20,150
Deputy Project Manager	Dr. Mike Henry	$110.00	8	$ 880	26	$ 2,860	100	$ 11,000	42	$ 4,620	4	$ 440	34	$ 3,740	38	$ 4,180	28	$ 3,080	16	$ 1,760	10	$ 1,100	306	$ 33,660
QA/QC	Aaron Goldschmidt	$180.00	0	$ -	2	$ 360	6	$ 1,080	4	$ 720	1	$ 180	2	$ 360	2	$ 360	2	$ 360	1	$ 180	0	$ -	20	$ 3,600
Sr. Land Use Planner	Rita Bright	$135.00	0	$ -	4	$ 540	36	$ 4,860	8	$ 1,080		$ -	4	$ 540	2	$ 270	1	$ 135	1	$ 135	0	$ -	56	$ 7,560
Air Quality Specialist	Steve Ochs	$130.00	0	$ -	0	$ -	6	$ 780	1	$ 130		$ -	2	$ 260	1	$ 130	0	$ -	0	$ -	0	$ -	10	$ 1,300
Noise Specialist	Brian Cook	$120.00	0	$ -	0	$ -	6	$ 720	1	$ 120	0	$ -	1	$ 120	1	$ 120	0	$ -	0	$ -	0	$ -	9	$ 1,080
Lead Environmental Analyst	Ben Botkin	$85.00	2	$ 170	36	$ 3,060	180	$ 15,300	28	$ 2,380	8	$ 680	16	$ 1,360	18	$ 1,530	24	$ 2,040	0	$ -	4	$ 340	316	$ 26,860
Environmental Analyst	Nick Meisinger	$80.00	2	$ 160	0	$ -	110	$ 8,800	12	$ 960	0	$ -	12	$ 960	6	$ 480	8	$ 640	0	$ -	0	$ -	150	$ 12,000
Senior Ecologist	Saudamini Sindhar	$130.00	0	$ -	0	$ -	12	$ 1,560	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	12	$ 1,560
Coastal Engineering Geologist	Kerwin, Scott	$180.00	0	$ -	0	$ -	6	$ 1,080	1	$ 180	0	$ -	1	$ 180	1	$ 180	1	$ 180	0	$ -	0	$ -	10	$ 1,800
Utilities Engineer	Miller, Darin	$155.00	0	$ -	0	$ -	6	$ 930	1	$ 155	0	$ -	1	$ 155	1	$ 155	0	$ -	0	$ -	0	$ -	9	$ 1,395
Coastal- Water Quality Scientist	Snyder, Barry	$140.00	0	$ -	0	$ -	5	$ 700	1	$ 140	0	$ -	1	$ 140	1	$ 140	0	$ -	0	$ -	0	$ -	8	$ 1,120
Cultural Resource Specialist	Bardsley, Andrea	$90.00	0	$ -	0	$ -	12	$ 1,080	4	$ 360	0	$ -	1	$ 90	1	$ 90	1	$ 90	0	$ -	0	$ -	19	$ 1,710
Project Administrator	Rosann Malloch	$90.00	4	$ 360		$ -	1	$ 90	2	$ 180	1	$ 90	1	$ 90	1	$ 90	2	$ 180	1	$ 90	0	$ -	13	$ 1,170
Administrative Assistant	Rita Samaniego	$65.00	1	$ 65	1	$ 65	6	$ 390	6	$ 390		$ -	1	$ 65	4	$ 260	4	$ 260	2	$ 130	0	$ -	25	$ 1,625
Word Processing	Janice Depew	$70.00	0	$ -	3	$ 210	18	$ 1,260	8	$ 560		$ -	8	$ 560	8	$ 560	6	$ 420	2	$ 140	0	$ -	53	$ 3,710
TOTAL LABOR			29	$ 3,515	79	$ 8,190	544	$ 54,920	131	$ 13,845	15	$ 1,545	101	$ 11,105	96	$ 10,255	83	$ 8,315	28	$ 3,210	60	$ 8,600	1166	$ 123,500
PART II, OTHER DIRECT COSTS (ODCs)		RATE	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST	AMT	COST
Subcontractor-Coastal Processes	Coastal Environments Inc.		0	$ -	0	$ -	0	$ 8,400	0	$ 1,000	0	$ -	0	$ 1,400	0	$ -	0	$ -	0	$ -	0	$ 3,600	0	$ 14,400
Subcontractor-Transportation	Associated Transportation Engineers Inc.		0	$ -	0	$ -	0	$ 11,700	0	$ 500	0	$ -	0	$ 1,000	0	$ 250	0	$ -	0	$ -	0	$ -	0	$ 13,450
Subcontractor-Aesthetics	Videoscapes.net		0	$ -	0	$ -	0	$ 3,240	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ 3,240
Subcontractor - Biological Resources	Storrer Environmental Services	$ 110.00																						
	Avian Surveys			$ -		$ -	16	$ 1,760		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ 1,760
	EIR Review and Consultation			$ -		$ -	8	$ 880		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ 880
	Mileage			$ -		$ -		$ 30		$ -		$ -		$ -		$ -		$ -		$ -		$ -		$ 30
Graphics Consultant	Deirdre Stites	$ 68.00	0	$ -	16	$ 1,088	12	$ 816	4	$ 272	0	$ -	0	$ -	4	$ 272	1	$ 68	1	$ 68	0	$ -	38	$ 2,584
Mileage		$ 0.55	40	$ 22	0	$ -	22	$ 12	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	22	$ 12	84	$ 46
Production	Cost per document	$ 100.00	0	$ -	2	$ 200	8	$ 800	32	$ 3,200	1	$ 100	2	$ 200	7	$ 700	32	$ 3,200	11	$ 1,100	0	$ -	95	$ 9,500
SUBTOTAL ODCs				$ 22		$ 1,288		$ 27,638		$ 4,972		$ 100		$ 2,600		$ 1,222		$ 3,268		$ 1,168		$ 3,612	0	$ 45,890
MARKUP ON ODCs		10%		$ 2		$ 129		$ 2,764		$ 497		$ 10		$ 260		$ 122		$ 327		$ 117		$ 361	0	$ 4,589
TOTAL ODCs				$ 24		$ 1,417		$ 30,402		$ 5,469		$ 110		$ 2,860		$ 1,344		$ 3,595		$ 1,285		$ 3,973	0	$ 50,479
Administrative Fee (phone, fax, etc. 2% of labor)		2%		$ 70		$ 164		$ 1,098		$ 277		$ 31		$ 222		$ 205		$ 166		$ 64		$ 172		$ 2,470
TOTAL FEE				$ 3,610		$ 9,771		$ 86,420		$ 19,591		$ 1,686		$ 14,187		$ 11,804		$ 12,076		$ 4,559		$ 12,745		$176,449
10% CONTINGENCY		10%		$ 361		$ 977		$ 8,642		$ 1,959		$ 169		$ 1,419		$ 1,180		$ 1,208		$ 456		$ 1,275		$17,645
GRAND TOTAL FEE				$ 3,970		$ 10,748		$ 95,062		$ 21,550		$ 1,854		$ 15,606		$ 12,985		$ 13,284		$ 5,015		$ 14,020		$194,094

Task: *PROJECT: Goleta Beach County Park Managed Beach Retreat Project 2.0*

Date of Estimate: *February 27, 2012*

			TASK 1 Project Description		TASK 2 Aesthetics		TASK 3 Air Quality		TASK 4 Biology		TASK 5 Coastal Processes		TASK 6 Cultural Resources		TASK 7 Hazardous Materials		TASK 8 Land Use/ Plans & Policies		TASK 9 Noise		TASK 10 Recreation		TASK 11 Transportation		TASK 12 Utilities		TASK 13 Water Quality		TASK 14 Other CEQA		TASK 15 Alternatives		TOTAL PROGRAM	
FUNCTION	STAFF	HOURLY RATE	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT	HOURS	AMOUNT
Principal in Charge	Doug McFarling	$160.00	0	$0	0	$0	0	$0	0	$0	1	$160	0	$0	0	$0	0	$0	0	$0	1	$160	0	$0	0	$0	0	$0	0	$0	2	$320	4	$640
Project Manager	Dan Gira	$155.00	1	$155	2	$310	1	$155	1	$155	4	$620	1	$155	1	$155	2	$310	1	$155	2	$310	3	$465	1	$155	1	$155	1	$155	8	$1,240	30	$4,650
Deputy Project Manager	Dr. Mike Henry	$110.00	2	$220	4	$440	2	$220	2	$220	40	$4,400	2	$220	4	$440	2	$220	2	$220	4	$440	6	$660	2	$220	2	$220	2	$220	24	$2,640	100	$11,000
QA/QC	Aaron Goldschmidt	$180.00	0	$0	1	$180	0	$0	0	$0	0	$0	0	$0	1	$180	0	$0	0	$0	1	$180	1	$180	1	$180	0	$0	0	$0	1	$180	6	$1,080
Sr. Land Use Planner	Rita Bright	$135.00	0	$0	6	$810	0	$0	0	$0	0	$0	0	$0	0	$0	24	$3,240	0	$0	6	$810	0	$0	0	$0	0	$0	0	$0	36	$4,860	36	$4,860
Air Quality Specialist	Steve Ochs	$130.00	0	$0	0	$0	6	$780	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	6	$780
Noise Specialist	Brian Cook	$120.00	0	$0	0	$0		$0	0	$0	0	$0	0	$0	0	$0	0	$0	6	$720	0	$0	0	$0	0	$0	0	$0	0	$0	6	$720	6	$720
Lead Environmental Analyst	Ben Botkin	$85.00	10	$850	32	$2,720		$0		$0	0	$0		$0		$0	18	$1,530	0	$0	32	$2,720	24	$2,040	24	$2,040	0	$0	0	$0	40	$3,400	180	$15,300
Environmental Analyst	Nick Meisinger	$80.00	0	$0	0	$0	16	$1,280	16	$1,280	0	$0	8	$640	28	$2,240	0	$0	16	$1,280	0	$0	0	$0	0	$0	14	$1,120	12	$960	0	$0	110	$8,800
Senior Ecologist	Saudamini Sindhar	$130.00	0	$0	0	$0	0	$0	12	$1,560	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	12	$1,560
Coastal Engineering Geologist	Kerwin, Scott	$180.00	0	$0	0	$0	0	$0	0	$0	6	$1,080	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	6	$1,080
Utilities Engineer	Miller, Darin	$155.00	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	6	$930	0	$0	0	$0	0	$0	6	$930
Coastal- Water Quality Scientist	Snyder, Barry	$140.00	0	$0	0	$0	0	$0	0	$0	2	$280	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	3	$420	0	$0	0	$0	5	$700
Cultural Resource Specialist	Bardsley, Andrea	$90.00	0	$0	0	$0	0	$0	0	$0	0	$0	12	$1,080	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	0	$0	12	$1,080	12	$1,080
	TOTAL DIRECT LABOR		13	$1,225	45	$4,460	25	$2,435	31	$3,215	53	$6,540	23	$2,095	34	$3,015	46	$5,300	25	$2,375	46	$4,620	34	$3,345	34	$3,525	20	$1,915	15	$1,335	75	$7,780	519	$53,180
SUBCONTRACTORS:																																		
Coastal Environments Inc.				$0		$0		$0		$0		$8,400		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$8,400
Associated Transportation Engineers Inc.				$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$11,700		$0		$0		$0		$0		$11,700
Videoscapes.net				$0		$3,240		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$0		$3,240
Subcontractor - Biological Resources	Storrer Environmental Services	$110.00																																
	Avian Surveys								16	$ 1,760																								$1,760
	EIR Review and Consultation								8	$ 880																								$880
	Mileage									$ 30																								$30
Deirdre Stites				$68		$68		$0		$68		$272		$0		$0		$0		$0		$68		$68		$0		$0		$0		$204		$816
Subtotal Subcontractors				$68		$3,308		$0		$2,738		$8,672		$0		$0		$0		$0		$68		$11,768		$0		$0		$0		$204		$26,826
Subcontractor Markup	10%			$7		$331		$0		$274		$867		$0		$0		$0		$0		$7		$1,177		$0		$0		$0		$20		$2,683
	TOTAL SUBCONTRACTORS			$75		$3,639		$0		$3,012		$9,539		$0		$0		$0		$0		$75		$12,945		$0		$0		$0		$224		$29,509
Miscellaneous Expenses	2% of Labor Only	2%		$25		$89		$49		$64		$131		$42		$60		$106		$48		$92		$67		$71		$38		$27		$156		$1,065
(phones, office equipment, office supplies)																																		
	TOTAL PROJECT ESTIMATE		13	$1,325	45	$8,188	25	$2,484	31	$6,291	53	$16,210	23	$2,137	34	$3,075	46	$5,406	25	$2,423	46	$4,787	34	$16,357	34	$3,596	20	$1,953	15	$1,362	75	$8,160	519	$83,754

Percent Breakdown in AMEC Staff Hours for the Project

Role	Staff Name	Hours	Percent of Total
Principal in Charge	Doug McFarling	20	2%
Project Manager	Dan Gira	130	11%
Deputy Project Manager	Dr. Mike Henry	306	26%
QA/QC	Aaron Goldschmidt	20	2%
Sr. Land Use Planner	Rita Bright	56	5%
Air Quality Specialist	Steve Ochs	10	1%
Noise Specialist	Brian Cook	9	1%
Lead Environmental Analyst	Ben Botkin	316	27%
Environmental Analyst	Nick Meisinger	150	13%
Senior Ecologist	Saudamini Sindhar	12	1%
Coastal Engineering Geologist	Scott Kerwin	10	1%
Utilities Engineer	Darin Miller	9	1%
Coastal- Water Quality Scientist	Barry Snyder	8	1%
Cultural Resource Specialist	Andrea Bardsley	19	2%
Project Administrator	Rosann Malloch	13	1%
Administrative Assistant	Rita Samaniego	25	2%
Word Processing	Janice Depew	53	5%
	Total Hours	*1166*	100%

EXHIBIT B

PAYMENT ARRANGEMENTS

A. For CONTRACTOR services to be rendered under this contract, CONTRACTOR shall be paid on a time and material basis. Total contract amount, including cost reimbursements, shall not exceed $176,449.00. An additional 10 percent contingency up to $17,645.00 may be authorized by the Director of Planning and Development for additional work not included in the original scope of work. The maximum amount chargeable of total contract amount per each contract milestone is shown below.

Maximum Amount Chargeable of Total Contract Amount	Milestone Description
$88,224.00	1. Prepare Administrative Draft EIR (AMEC Tasks 1,2 and 3)
$35,290.00	2. Prepare Public Draft EIR and Technical Appendices (AMEC Task 4)
$35.290.00	3. Prepare Administrative Final EIR/Responses to Comments (AMEC Tasks 5, 6, 7 and 8)
$17,645.00	4. Prepare Final EIR (AMEC Task 9)

B. Payment for services and reimbursement of costs shall be made upon CONTRACTOR'S satisfactory performance, based upon the scope and methodology contained in **EXHIBIT A** as determined by COUNTY.

C. CONTRACTOR shall submit to the COUNTY DESIGNATED REPRESENTATIVE an invoice or certified claim on the County Treasury each month for the service performed in accomplishing each milestone. These invoices or certified claims must cite the assigned Board Contract Number and shall provide a detailed itemization of costs in relation to services performed. COUNTY DESIGNATED REPRESENTITIVE shall initiate payment processing upon determination of satisfactory performance. COUNTY shall pay invoices or claims for services within 30 days of presentation, provided that COUNTY shall withhold 30 percent of the amount of each invoice pending satisfactory completion of the milestone for which the invoice applies. COUNTY shall pay any such withheld amounts within 30 days following satisfactory and timely completion of the milestone. CONTRACTOR shall not commence work unless and until COUNTY issues a Notice to Proceed.

D. COUNTY'S failure to discover or object to any unsatisfactory work or billings prior to payment will not constitute a waiver of COUNTY'S right to require CONTRACTOR to correct such work or billings or seek any other legal remedy.

EXHIBIT C

STANDARD INDEMNIFICATION AND INSURANCE PROVISIONS

INDEMNIFICATION

Indemnification pertaining to other than Professional Services:

CONTRACTOR shall defend, indemnify and save harmless the COUNTY, its officers, agents and employees from any and all claims, demands, damages, costs, expenses (including attorney's fees), judgments or liabilities arising out of this Agreement or occasioned by the performance or attempted performance of the provisions hereof; including, but not limited to, any act or omission to act on the part of the CONTRACTOR or his agents or employees or other independent contractors directly responsible to him; except those claims, demands, damages, costs, expenses (including attorney's fees), judgments or liabilities resulting from the sole negligence or willful misconduct of the COUNTY.

CONTRACTOR shall notify the COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement.

Indemnification pertaining to Professional Services:

CONTRACTOR shall indemnify and save harmless the COUNTY, its officers, agents and employees from any and all claims, demands, damages, costs, expenses (including attorney's fees), judgments or liabilities arising out of the negligent performance or attempted performance of the provisions hereof; including any willful or negligent act or omission to act on the part of the CONTRACTOR or his agents or employees or other independent contractors directly responsible to him to the fullest extent allowable by law.

CONTRACTOR shall notify the COUNTY immediately in the event of any accident or injury arising out of or in connection with this Agreement.

Without limiting the CONTRACTOR'S indemnification of the COUNTY, CONTRACTOR shall procure the following required insurance coverages at its sole cost and expense. All insurance coverage is to be placed with insurers which (1) have a Best's rating of no less than A: VII, and (2) are admitted insurance companies in the State of California. All other insurers require the prior approval of the COUNTY. Such insurance coverage shall be maintained during the term of this Agreement. Failure to comply with the insurance requirements shall place CONTRACTOR in default. Upon request by the COUNTY, CONTRACTOR shall provide a certified copy of any insurance policy to the COUNTY within ten (10) working days.

1. Workers' Compensation Insurance: Statutory Workers' Compensation and Employers Liability Insurance shall cover all CONTRACTOR's staff while performing any work incidental to the performance of this Agreement. The policy shall provide that no cancellation, or expiration or reduction of coverage shall be effective or occur until at least thirty (30) days after receipt of such notice by the COUNTY. In the event CONTRACTOR is self-insured, it shall furnish a copy of Certificate of Consent to Self-Insure issued by the Department of Industrial Relations for the State of California. This provision does not apply if CONTRACTOR has no employees as defined in Labor Code Section 3350 et seq. during the entire period of this Agreement and CONTRACTOR submits a written statement to the COUNTY stating that fact.

General and Automobile Liability Insurance: The general liability insurance shall include bodily injury, property damage and personal injury liability coverage, shall afford coverage for all premises, operations, products and

completed operations of CONTRACTOR and shall include contractual liability coverage sufficiently broad so as to include the insurable liability assumed by the CONTRACTOR in the indemnity and hold harmless provisions of the Indemnification Section of this Agreement between COUNTY and CONTRACTOR. The automobile liability insurance shall cover all owned, non-owned and hired motor vehicles that are operated on behalf of CONTRACTOR pursuant to CONTRACTOR's activities hereunder. CONTRACTORS shall require all subcontractors to be included under its policies or furnish separate certificates and endorsements to meet the standards of these provisions by each subcontractor. COUNTY, its officers, agents, and employees shall be Additional Insured status on any policy. A cross liability clause, or equivalent wording, stating that coverage will apply separately to each named or additional insured as if separate policies had been issued to each shall be included in the policies. A copy of the endorsement evidencing that the policy has been changed to reflect the Additional Insured status must be attached to the certificate of insurance. The limit of liability of said policy or policies for general and automobile liability insurance shall not be less than $1,000,000 per occurrence and $2,000,000 in the aggregate. Any deductible or Self-Insured Retention (SIR) over $10,000 requires approval by the COUNTY.

Said policy or policies shall include a severability of interest or cross liability clause or equivalent wording. Said policy or policies shall contain a provision of the following form:

"Such insurance as is afforded by this policy shall be primary and non-contributory to the full limits stated in the declarations, and if the COUNTY has other valid and collectible insurance for a loss covered by this policy, that other insurance shall be excess only."

If the policy providing liability coverage is on a 'claims-made' form, the CONTRACTOR is required to maintain such coverage for a minimum of three years following completion of the performance or attempted performance of the provisions of this agreement. Said policy or policies shall provide that the COUNTY shall be given thirty (30) days written notice prior to cancellation or expiration of the policy or reduction in coverage.

3. Professional Liability Insurance. Professional liability insurance shall include coverage for the activities of CONTRACTOR's professional staff with a combined single limit of not less than $1,000,000 per occurrence or claim and $2,000,000 in the aggregate. Said policy or policies shall provide that COUNTY shall be given thirty (30) days written notice prior to cancellation, expiration of the policy, or reduction in coverage. If the policy providing professional liability coverage is an on 'claims-made' form, the CONTRACTOR is required to maintain such coverage for a minimum of three (3) years (ten years [10] for Construction Defect Claims) following completion of the performance or attempted performance of the provisions of this agreement.

CONTRACTOR shall submit to the office of the designated COUNTY representative certificate(s) of insurance documenting the required insurance as specified above prior to this Agreement becoming effective. COUNTY shall maintain current certificate(s) of insurance at all times in the office of the designated County representative as a condition precedent to any payment under this Agreement. Approval of insurance by COUNTY or acceptance of the certificate of insurance by COUNTY shall not relieve or decrease the extent to which the CONTRACTOR may be held responsible for payment of damages resulting from CONTRACTOR'S services of operation pursuant to the contract, nor shall it be deemed a waiver of COUNTY'S rights to insurance coverage hereunder.

In the event the CONTRACTOR is not able to comply with the COUNTY'S insurance requirements, COUNTY may, at their sole discretion and at the CONTRACTOR'S expense, provide compliant coverage.

The above insurance requirements are subject to periodic review by the COUNTY. The COUNTY's Risk Manager is authorized to change the above insurance requirements, with the concurrence of County Counsel, to include additional types of insurance coverage or higher coverage limits, provided that such change is reasonable based on changed risk of loss or in light of past claims against the COUNTY or inflation. This option may be exercised during any amendment of this Agreement that results in an increase in the nature of COUNTY's risk and such

change of provisions will be in effect for the term of the amended Agreement. Such change pertaining to types of insurance coverage or higher coverage limits must be made by written amendment to this Agreement. CONTRACTOR agrees to execute any such amendment within thirty (30) days of acceptance of the amendment or modification.

Contract Summary Form Contract Number: BC12 - 128 - ____ - ____

D1. Fiscal Year ..... : 2012 – 2013 FY
D2. Budget Unit ..... : 053 (Department Number)
D3. Requisition Number ..... : N/A
D4. Department Name ..... : Planning and Development
D5. Contact Person ..... : Kevin Drude
D6. Phone ..... : (805) 568-2519

K1. Contract Type *(check one)*: [X] Personal Service [ ] Capital Project/Construction
K2. Brief Summary of Contract Description/Purpose : Goleta Beach County Park Managed Beach Retreat EIR
K3. Original Contract Amount ..... : $176,449 (excluding 10% contingency of $17,645)
K4. Contract Begin Date ..... : May 1, 2012
K5. Original Contract End Date ..... : September 1, 2013
K6. Amendment History *(leave blank if no prior amendments)*:

Seq#	*EffectiveDate*	*ThisAmndtAmt*	*CumAmndtToDate*	*NewTotalAmt*	*NewEndDate*	*Purpose (2-4 words)*
		$	$	$		

K7. Department Project Number ..... :

B1. Is this a Board Contract? *(Yes/No)* ..... : Yes
B2. Number of Workers Displaced *(if any)* ..... : None
B3. Number of Competitive Bids *(if any)* ..... : Five
B4. Lowest Bid Amount *(if bid)* ..... : $153,521 (excluding 10% contingency of $15,352)
B5. If Board waived bids, show Agenda Date ..... : N/A
B6. ... and Agenda Item Number ..... : N/A
B7. Boilerplate Contract Text Unaffected? *(Yes)*

F1. Encumbrance Transaction Code ..... : 1701
F2. Current Year Encumbrance Amount ..... : $0
F3. Fund Number ..... : 0001
F4. Department Number ..... : 053
F5. Division Number *(if applicable)* ..... : 2000
F6. Account Number ..... : 7510
F7. Cost Center number *(if applicable)* ..... : N/A
F8. Payment Terms ..... : Net 30

V1. Vendor Numbers *(A=uditor; P=urchasing)* ..... : N/A
V2. Payee/Contractor Name ..... : AMEC Environment & Infrastructure, Inc.
V3. Mailing Address ..... : 104 West Anapamu Street, Suite 204A
V4. City State Zip ..... : Santa Barbara, CA 93101
V5. Telephone Number ..... : (805) 962-0992
V6. Contractor's Federal Tax ID Number *(EIN or SSN)*: 91-1641772
V7. Contact Person ..... : Aaron Goldschmidt
V8. Workers Comp Insurance Expiration Date ..... : May 1, 2012
V9. Liability Insurance Expiration Date[s] *(G=enl; P=rofl)*: May 1, 2012 (*G and P*)
V10. Professional License Number ..... : N/A
V11. Verified by *(name of County staff)* ..... : Kevin Drude, Development Review, P&D
V12. Company Type *(Check one)*: [ ] Individual [ ] Sole Proprietorship [ ] Partnership [X] Corporation

I certify: information complete and accurate; designated funds available; required concurrences evidenced on signature page.

Authorized Signature: _____ Date: 4/25/12