CITY OF GOLETA

Agenda Item B.4
CONSENT CALENDAR
Meeting Date: August 19, 2008

TO: Mayor and Councilmembers

FROM: Steve Wagner, Community Services Director

CONTACT: Rosemarie Gaglione, Capital Improvement Program Manager

SUBJECT: Professional Services Agreement for the 101 Overpass Project Feasibility Study and Project Study Report

RECOMMENDATION:

A. Authorize the City Manager to execute a Professional Services Agreement with Drake Haglan and Associates for Project Feasibility Study and Project Study Report Services for the Goleta Overpass Improvement Project in an amount not to exceed $299,939.

B. Appropriate $306,939 from the Goleta Transportation Improvement Program (GTIP) fund account #220-5-9027-706.

BACKGROUND:

The Transportation Element of the City's adopted General Plan includes two (2) new overcrossings of Highway 101 to reduce congestion and improve connectivity between the northern and southern portions of the City. The updated Goleta Transportation Improvement Program (GTIP) will also include this project.

This Feasibility Study and Project Study Report will focus on one of the overcrossings which will be in the vicinity of the Camino Real Marketplace. The additional overcrossing would reduce congestion at the Storke/Hollister intersection. Reducing congestion at an intersection makes it more driver and pedestrian friendly. The Camino Real Marketplace is a vibrant retail square and reducing traffic congestion in the area can help it continue to thrive. As business centers become overly congested, some drivers will avoid them during certain hours, resulting in a loss of customers and revenue. Allowing the congestion to increase, thereby reducing the Intersection Level of Service would eventually harm business and reduce out residents quality of life.

DISCUSSION:

A request for qualifications (RFQ) for a project feasibility study and Project Study Report (PSR) was issued by the City on February 21, 2008. A Statement of Qualifications

(Attachment 2) was submitted by Drake Haglan, Penfield and Smith, and URS. Drake Haglan and Associates was selected as the firm that had the best combination of staff, skills and experience for this project.

ALTERNATIVES:

The Council may elect not to approve the proposed contract with Drake Haglan and not advance the project. The "no project" alternative would likely result in the loss of potential funds and the increase in congestion.

GOLETA STRATEGIC PLAN:

This action supports the goal in the Strategic Plan entitled **"**Implement City-Wide Capital Improvement Program."

FISCAL IMPACTS:

The Drake Haglan proposal will ultimately result in a Project Feasibility Analysis and an approved Project Study Report for this project. The total estimated cost to design and construct a new overcrossing can range from $20 million to $40 million dollars. A well prepared Project Study Report can be used to leverage outside funding sources. Without this document, this level of funding would not be available.

Moving forward with a design and environmental effort would require additional approvals by the Council. Staff has reviewed the proposed scope and costs associated with providing the Project Feasibility Analysis and Project Study Report in detail and recommend approval of the agreement.

This contract is not provided for in the adopted FY 2008-09 budget. Therefore, a budget adjustment of $306,939 is requested; $299,939 to cover the contract amount and $7,000 for staff time. This will come from the GTIP, which has adequate funds to cover this project.

Submitted By:	Reviewed By:	Approved By:
_____	_____	_____
Steve Wagner Community Services	Michelle Greene Administrative Services Director	Daniel Singer City Manager

ATTACHMENTS:

1. Goleta Overpass Improvement Project Scope of Services
2. Statement of Qualifications – Professional Engineering Services for the Goleta Overpass Improvement Project

ATTACHMENT 1

Goleta Overpass Improvement Project Scope of Services

GOLETA OVERPASS IMPROVEMENT PROJECT

SCOPE OF SERVICES

CONCEPT FEASIBILITY STUDIES

This scope of services provides for investigation of conceptual alignments for the Goleta Overpass Improvement Project. The goal of this project is to find feasible alignment alternatives for the Goleta Overpass Improvement project that can be used to begin the Project Study Report (PSR) process. The ultimate goal of the project is to provide a new north-south crossing of Highway 101 and the Union Pacific Railroad (UPRR) in the City of Goleta, between the Storke Road Interchange and the Hollister Avenue Interchange, so all concept alignments will be in this area.

Evaluation criteria will be designed to compare each alternative to a set of critical project features. The alignments will be compared for effectiveness in meeting project goals, such as alleviating traffic congestion, improving emergency response times and improving bicycle and pedestrian access across Highway 101. Project right-of-way and environmental impacts will also be identified and evaluated, including residential and business relocation impacts, visual impacts and natural environment impacts. The evaluation will be compiled and presented in a selection matrix.

The tasks needed to accomplish this includes preliminary research, project management, aerial surveys and topographic mapping, preliminary traffic analysis, evaluation of right-of-way impacts and an environmental constraints analysis. Also included in this phase of the project are Project Planning and Project Programming Services. DHA will provide assistance with funding program compliance, and with identification of additional funding sources for this project. The DHA team includes Gerald Comati of COM3 Consulting, who is very knowledgeable with SBCAG policies and procedures, to act as local programs liaison for regional components of the federal and state funding programs for this project.

Major funding for this project may come from the Santa Barbara County Measure A transportation program on the November 2008 ballot. Additional funding has been identified from City of Goleta development impact fees. The project sponsor and lead agency is the City of Goleta. Because this project will cross over and encroach onto Highway 101, Caltrans will be responsible for oversight and approval of the project within the State right-of-way. Santa Barbara Council of Governments (SBCAG) is the regional transportation planning agency, and will be responsible for programming the project into the Regional, State and Federal Transportation Improvement Plans. SBCAG will also be the lead agency for administration of any Measure A funds, and is the lead for many other revenue sources.

TASK 1 — PROJECT MANAGEMENT / PROJECT CONTROLS

1.1 PROJECT MANAGEMENT

Close contact will be maintained between the DHA Project Manager and the City Project Manager. Due to the relatively short project timeline, progress will be reported periodically through phone calls and e-mails with the City PM.

1.2 Funding Research and Federal/State Programs Management

DHA, in conjunction with COM3, will actively seek out funding opportunities for the Goleta Overpass Improvement Project, including consultation with Caltrans and SBCAG regarding funding programs available from federal, state and local sources for the project. DHA will provide grant applications as needed. DHA will consult with the regional offices of both U.S. Senators and the local offices of the U.S. Representative to investigate any additional sources of funding for the project.

DHA will coordinate project programming compliance, in accordance with the Caltrans Project Development Procedures for locally funded projects on the State Highway System. This will also include compliance with the most recent guidelines for any FHWA programs that may be used in the funding mix. This shall include preparation of documents required by Caltrans and FHWA, such as funding requests, Requests for Authorizations and finance letters.

1.3 Railroad/PUC Coordination

DHA will initiate coordination with the Union Pacific Railroad and with the California State Public Utilities Commission regarding issues with the crossing of the railroad corridor. The UPRR and the CPUC will need early involvement to ensure that alternatives are feasible and conform to all RR and PUC requirements. The focus of the communication will be to determine clearance envelopes over the railroad right of way.

1.4 Quality Control

DHA will provide internal quality control on products submitted to the City. A project specific Quality Control Plan will be developed before work begins and will include procedures and checklists for the functional units. DHA will provide an independent quality control review. Quality control will be accounted for and shown on the project schedule and the plan will be included in the project information binder.

Task 2 — Surveys and Topographic Mapping

2.1 Aerial Surveys

Aerial surveys made available to the DHA team from past studies will be supplemented to include the entire area of possible alignments. The level of detail of the aerial mapping will be the same as the existing. The existing property boundaries, including highway and railroad right-of-way information at each alternative location will be shown on the mapping. Record boundary and right-of-way information may be obtained from one or all of the following sources: Caltrans, Santa Barbara County and the City of Goleta. The property information will be developed from available GIS data. The right-of-way for Highway 101 will be shown, as well as major easements and right-of-ways such as Union Pacific Rail Road.

2.2 Field Surveys

Important features not visible for photogrammetric tasks, or in areas where the ground is obscured on the aerial imagery, will be surveyed using conventional and GPS methods.

Deliverables:

- Electronic files of the complete Digital Terrain Model generated from the topographic mapping, including survey points, breaklines, and triangulated surfaces.

Task 3 — Environmental Constraints Analysis

3.1 Environmental Constraints Analysis

DHA will have LSA prepare a memorandum describing the environmental features of the study area. The memo will be used to identify significant environmental concerns with any sites within the study area. The memo will describe biological and cultural resources present in the study area. The memo will also list other recent environmental studies that have been undertaken in the project vicinity.

Deliverable:

- Environmental Constraints Memorandum

Task 4— Preliminary Geotechnical Evaluation

DHA will have Kleinfelder prepare a preliminary geotechnical evaluation memorandum for the study area. Preparation of this memorandum will consist of the following subtasks.

4.1 Site Visit

Kleinfelder will visit the site and perform a reconnaissance of the existing ground conditions. They will observe the surface drainage conditions and soil exposed at the ground surface. No subsurface exploration will be performed.

4.2 Literature Review

Kleinfelder will review relevant published information regarding the project area. They will review their files for geotechnical data in the area. They will review geotechnical information collected by the project team for nearby developments as well as Caltrans projects and local geologic maps.

4.3 Preliminary Materials Report

Based on information collected during the site visit and literature review, Kleinfelder will prepare a Preliminary Materials Report, in a memorandum format, for the subject project alignments. The memorandum will summarize local geotechnical conditions relevant to the project roadways identify known geologic or geotechnical conditions that may be of concern to the proposed project alignments.

Previous Caltrans and City of Goleta projects may provide information that is useful in the development of the proposed report, including: slope ratios, erosion and foundation problems, availability of structural section materials, etc. The report will discuss structural section recommendations, Traffic Index and Design Designation as approved by the City, assumed R-Values or prior R-Value data taken in the project's vicinity, and will contain information used as the basis for preparing project pavement material quantity and cost estimates.

4.4 Preliminary Geotechnical Design Report

Based on information collected during the site visit and literature review, Kleinfelder will prepare a Preliminary Geotechnical Design Report, in a memorandum format, for the subject project alignments. The memorandum will summarize local geotechnical conditions relevant to the bridges and retaining walls and will identify known geologic or geotechnical conditions that may be of concern to the proposed project alignments, such as designs for cut slopes, embankments, earthwork, sound walls, groundwater studies, basin (drainage and treatment) and sub-excavations Recommended maximum cut and fill slopes, seismic parameters and liquefaction potential are key pieces of information that are provided by the Geotechnical Design Report.

Deliverable:

- Preliminary Materials Report
- Preliminary Geotechnical Design Report

Task 5 – Develop Concept Alternatives

5.1 Define Design Standards

The purpose and need statement for the project will be finalized so that appropriate alternatives are developed. DHA will prepare a technical memorandum to document the design standards to be applied to the overpass roadway design. The standards will be based on Caltrans standards for freeway encroachments, and City standards for the local roads. Any non-standard features proposed will be identified and justified in the technical memo.

5.2 Conceptual Alignment Alternatives

DHA will identify a range of reasonable alternatives. Alternatives will be considered to the extent necessary to minimize costs and adverse environmental impacts, and to maximize public benefits. For purposes of this scope, it is assumed that four basic crossing corridors will be studied, with design variations as needed to fully explore the possibilities of each crossing location. This includes looking at undercrossings where feasible. This scope assumes three variations for each crossing, resulting in 12 engineered and detailed concept alignments.

The conceptual roadway alignments will be drawn onto the aerial base mapping. The geometrics will show the project limits, existing details and the concept alignments. The concept layout drawing will delineate roadway edges of

pavement, sidewalks, lane lines, slope fills and cuts, and right-of-way required for each alternative.

5.3 Bridge Advanced Planning Studies

Bridge Advanced Planning Studies (APS) will be prepared for each alternative. The purpose of the APS will be to evaluate the feasible bridge types for each location and develop an estimate of cost for the bridges. Roadway alignment, right-of-way, and economic concerns will dictate the appropriate type of bridge structure at each alternative location.

The APS will include the following for each alternative:

- Feasible alternative bridge and foundation types, span arrangements and construction methods. If aesthetic treatments are desired, there will be an allowance factored in at this time.
- Concept drawings defining each alternative, which will include plans, elevations, and section views as required, illustrating each of the proposed alternatives.
- A description of the advantages and disadvantages so that each alternative can be judged on its own merits.
- An "Engineer's Opinion of Probable Construction Cost" for each alternative.
- A recommendation as to which of the alternatives is the most appropriate for the site.

Deliverable:

- Draft Concept Plans at 1"=50" scale
- One copy of each APS.

Task 6 — Traffic Analysis

The approach DHA proposes to follow in preparing the traffic analysis for this project includes the steps outlined below. Traffic modeling and analysis will be performed by Dowling Associates for DHA.

6.1 Project Initiation & Data Collection

Dowling Associates will perform a site visit to identify the travel characteristics of the existing local intersections and the nearest interchanges to the west and east. Data collection will include presence of turn pockets and center left-turn lanes, traffic control devices, on-street parking, pedestrian/bicycle facilities, posted speed limits, truck restrictions and adjacent land uses.

Dowling Associates will also obtain various recent traffic reports for development projects along the study area corridor limits from the City, County, SBCAG and Caltrans District 5 as appropriate. To the extent possible, existing traffic counts will be used and factored using an agreed upon annual growth factor to reflect existing conditions. Dowling Associates is cognizant of several recent data

collection efforts that have occurred within the study area since February 2008. Hence, the need for new data collections is anticipated to be small.

Dowling Associates will collect new intersection counts wherever existing counts are antiquated or not available. Dowling will be responsible to analyze up to 15 study intersections and 10 local roadway segments. Once the data is collected in the study area, data will be compared to historical data and adjustments will be made to reflect seasonal variation.

Dowling Associates will examine the last three (3) years of collision records from Traffic Accident Surveillance and Analysis Systems (TASAS) and SWITRS data. The available accident data will be analyzed to determine the average accident rate for key study area roadway segments and individual intersections, high accident locations, common accident types and collision severity.

6.2 Existing Conditions Analysis – Current and Forecast (No Build) Model

Dowling Associates has extensive experience with the City of Goleta's travel demand model and has the current version of the General Plan and the recently updated Cumulative Model in-house. Consistent with City policy, the traffic analysis will be based on the Cumulative Model. To the extent possible, network model files developed as part of previous analyses of the freeway crossings will be incorporated into this modeling effort.

The City of Goleta's travel model is PM peak hour model that employs a 2005 base year and a 2030 forecast year. Dowling Associates will compare model estimates of 2005 traffic volumes with actual traffic counts. In consultation with the City of Goleta and Caltrans District-5, the model will be adjusted if needed to improve validation to current traffic counts within the immediate study area.

Consistent with Caltrans Traffic Impact Study guidelines, projects will only be included in the future baseline network if any project phase (e.g., PS&E, environmental, construction etc) is currently programmed – i.e., has a formal funding commitment. This includes the City of Goleta's traffic impact fee projects as well as other projects earmarked for developer fee funding. The list of 2030 Baseline projects will be reviewed and approved by the City of Goleta, SBCAG and Caltrans District 5 staff prior to executing the forecast model runs.

DHA will ensure that ample traffic forecast and operations information is generated to facilitate with the development of the purpose and need statement.

6.3 Model Runs for Preliminary Evaluation/Screening of Alternatives

DHA and Dowling Associates will work with the City of Goleta to develop evaluation criteria for traffic operations and forecast information. These evaluation criteria will be compared for each of the four basic crossing corridors plus the no build alternative.

Model volumes will be adjusted as needed to correct for validation errors. All traffic volumes will be checked for reasonableness with adjustments made off-model based on NCHRP-255 principles. Annual growth rates as produced by the Goleta model will be used to extrapolate 2030 forecast volumes to 2035 if necessary.

Dowling Associates will prepare travel forecasts using the Goleta travel model to generate traffic performance information for each alternative (e.g., area-wide VMT, VHT, vehicle delay, and link specific V/C, volumes, and vehicle delay).

Dowling Associates will assist in the alternatives screening process by summarizing the travel forecast information to allow a comparison of traffic performance information for each alternative (e.g., LOS, VMT, VHT, vehicle delay, and link specific V/C, volumes, and vehicle delay).

DELIVERABLES:

- Working Paper-1: Existing Conditions Report.
- Working Paper-2: Traffic Forecast Report.

TASK 7 — PLANNING COST ESTIMATES

A Planning Level Estimate of cost will be prepared for each alternative alignment. The construction cost estimates will be compiled using the standard Caltrans Project Development Cost Estimate forms found in Appendix aa of the Project Development Procedures Manual. The cost estimate breakdown includes roadway and structure construction estimates, as well as right-of-way costs associated with each alignment.

7.1 ROADWAY ITEMS COST ESTIMATE

The roadway estimate will include items relate to earthwork, pavement structural section, drainage, specialty items and traffic items. Allowances for minor items, additives and mobilization are made based on the magnitude of the project costs.

7.2 STRUCTURES COST ESTIMATE

The bridge cost estimates developed with the bridge Advance Planning Studies will be incorporated into the planning estimate. Also, any retaining walls and large culverts will be estimated and included in the planning estimate. Any railroad costs associated with the alignment alternative, (shooflys, track relocation, etc.) will be entered with the structures estimate.

7.3 RIGHT OF WAY COST ESTIMATE

DHA will prepare a right of way cost estimate following the guidelines in Chapter 4 of the Caltrans Right of Way Manual. A Right of Way data sheet will be prepared for each feasible alignment alternative, complete with right of way estimate sheets with parcel information. These are planning level estimates that will be based on relative square foot costs for the type of parcels affected. Relocation costs are also estimated at this stage, as well as any utility relocation

DELIVERABLES:

- Preliminary Project Cost Estimate Summary for each alternative.

TASK 8 ALTERNATIVES ANALYSIS AND REPORT

DHA will assemble the information generated from the alignment studies and perform a cost/benefit analysis of each alternative. The alternatives will then be

compared against a set of selection criteria as approved by the City of Goleta. The results of these analysis and ranking will be presented in a feasibility study report, and presented to the City of Goleta for final selection of the alternative(s) to be taken into the project development process.

8.1 Draft Feasibility Analysis Report

DHA will develop a set of selection criteria for approval by the City of Goleta. The various alignment alternatives will be graded on how well they satisfy each criterion. The results will be presented in tabular format for ease of comparison. The draft report will be submitted for review by the City.

8.2 Final Feasibility Analysis Report

DHA will incorporate comments from the City into a final Feasibility Analysis Report, which will include recommended alignments for the Goleta Overpass.

Deliverables:

- Goleta Overpass Improvement Project: Draft Feasibility Analysis Report
- Goleta Overpass Improvement Project: Final Feasibility Analysis Report

DRAKE HAGLAN & ASSOCIATES
FEE PROPOSAL
GOLETA OVERPASS IMPROVEMENT PROJECT

Project: Goleta Overpass Improvement Project
Phase: 1 Concept Studies
Drake Haglan & Associates

Task #			Task	Name	Drake	Haglan	Ross	Staff	Staff	Staff	Staff	Bautista	Labor Totals	
				Project Assignment	Project Manager	QA/QC	Project Engineer	Bridge Design	Civil Design	CAD	CAD	Admin		
				Project Classification	Principal Engineer	Senior Specialist	Senior Bridge Engr. Range C	Bridge Engr. Range A	Civil Engr. Range B	CAD Manager	CAD, Range A	Project Admin	Task Hours	Task Amount
1			Project Management / Project Controls											
1	1		Project Management		112								112	$ 22,400.00
1	3		Funding Research and Federal/State Programs Management		8	8							16	$ 3,000.00
1	4		Railroad/PUC Coordination		8		8						16	$ 2,960.00
1	5		Quality Control		8	16	8						32	$ 5,760.00
2			Surveys and Topographic Mapping											
2	1		Aerial Surveys						4				4	$ 480.00
2	2		Field Surveys						4				4	$ 480.00
3			Environmental Constraints Analysis											
3	1		Environmental Constraints Analysis		4								4	$ 800.00
4			Preliminary Geotechnical Evaluations											
4	1		Site Visit										0	$ -
4	2		Literature Review										0	$ -
4	3		Preliminary Materials Report		2				4				6	$ 880.00
4	4		Preliminary Geotechnical Design Report		2		4						6	$ 1,080.00
5			Develop Concept Alternatives											
5	1		Define Design Standards		2		8						10	$ 1,760.00
5	2		Conceptual Alignment Alternatives		8		60		40				108	$ 16,600.00
5	3		Bridge Advanced Planning Studies		8		60	40		40	120		268	$ 32,600.00
6			Traffic Analysis											
6	1		Project Initiation & Data Collection		4								4	$ 800.00
6	2		Existing Conditions Analysis - Current and Forecast (No Build) Model						6				6	$ 720.00
6	3		Model Runs for Preliminary Evaluation/Screening of Alternatives						6				6	$ 720.00
7			Planning Cost Estimates											
7	1		Roadway Items Cost Estimates		6				40				46	$ 6,000.00
7	2		Structures Cost Estimates		6		16	40					62	$ 8,720.00
7	3		Right of Way Cost Estimates		6				24				30	$ 4,080.00
8			Alternatives Analysis and Report											
8	1		Draft Feasibility Analysis Report		40	8					40		88	$ 13,000.00
8	2		Final Feasibility Analysis Report		16	4							20	$ 3,900.00
													848	$ 126,740.00
				Total Hours:	240	36	164	80	128	40	160	0	848	Total Hours
				Rate:	$ 200.00	$ 175.00	$ 170.00	$ 120.00	$ 120.00	$ 130.00	$ 90.00	$ 60.00	$ 149.46	Average Rate This Phase
				Subtotal - Labor:	$ 48,000.00	$ 6,300.00	$ 27,880.00	$ 9,600.00	$ 15,360.00	$ 5,200.00	$ 14,400.00	$ -	$ 126,740.00	Labor Fee This Phase

DRAKE HAGLAN & ASSOCIATES
FEE PROPOSAL
GOLETA OVERPASS IMPROVEMENT PROJECT

Project: Goleta Overpass Improvement Project
Phase: 1 Concept Studies
Other Direct Costs

REIMBURSABLE EXPENSES			
Percent of Direct Labor	3.0%	$ 3,802.20	
Total REIMBURSABLE EXPENSES			$ 3,802.20
SUBCONSULTANT SERVICES			
Rick Engineering		$ 60,000.00	
LSA Associates		$ 19,630.00	
Dowling Associates		$ 60,000.00	
Kleinfelder		$ 7,700.00	
Cardenas		$ 10,000.00	
COM3		$ 4,000.00	
Subtotal - SUBCONSULTANT SERVICES		$ 161,330.00	
Subconsultant Markup	5%	$ 8,066.50	
Total - SUBCONSULTANT SERVICES			$ 169,396.50
		Total Other Direct Costs	**$ 173,198.70**

PHASE TOTALS

LABOR FEE	$ 126,740.00
OTHER DIRECT COSTS	$ 173,198.70
TOTAL THIS PHASE	**$ 299,938.70**

ATTACHMENT 2

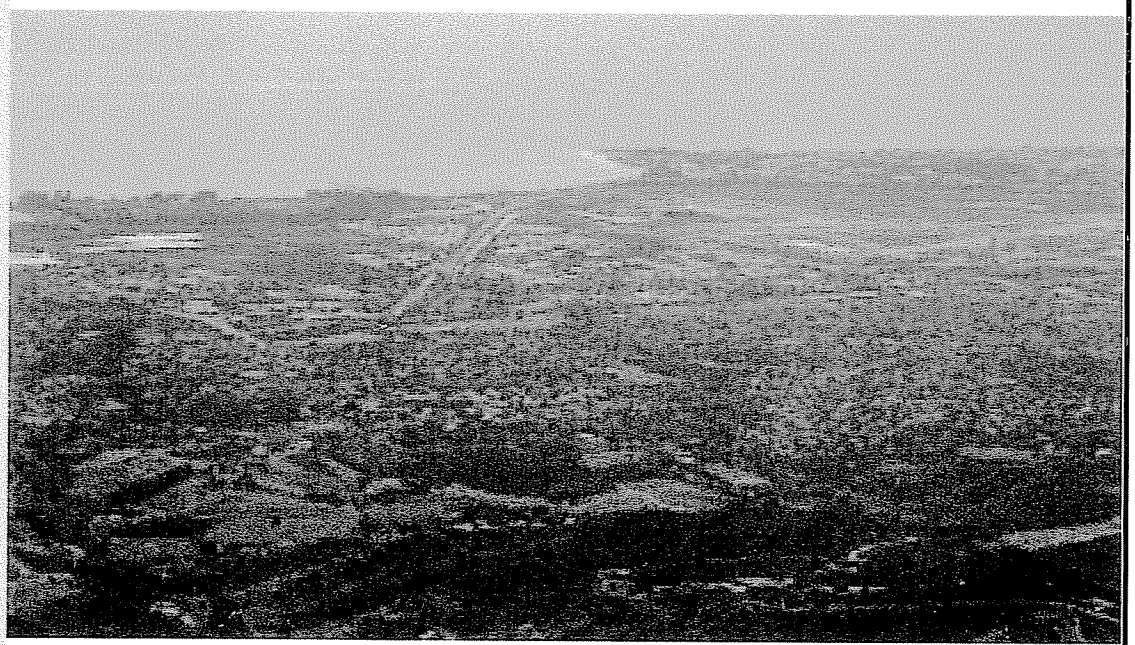
Statement of Qualifications
Professional Engineering Services for the Goleta Overpass Improvement Project

Statement of Qualifications

Professional Engineering Services for the Goleta Overpass Improvement Project

SUBMITTED TO

City of Goleta



SUBMITTED BY

drake haglan AND ASSOCIATES

March 17, 2008

drake haglan
AND ASSOCIATES

March 17, 2008

City of Goleta
130 Cremona Drive, Suite B
Goleta, CA 93117

Attention: Rosemarie Gaglione

SUBJECT: STATEMENT OF QUALIFICATIONS FOR PROFESSIONAL ENGINEERING SERVICES FOR THE GOLETA OVERPASS IMPROVEMENT PROJECT

Dear Ms. Gaglione,

Drake Haglan & Associates, Inc. (DHA) is pleased to submit our qualifications for Professional Engineering Services for the Goleta Overpass Improvement Project to the City of Goleta.

At DHA, the client comes first, and you will find our approach to be very proactive. Our philosophy is to take ownership of the project as if we were City staff, where the success or failure of the project is a direct reflection on our reputation. In order to offer this high level of service, DHA Project Managers have the proven wide range of experience needed to recognize and address potential issues with this type of project. An intimate knowledge of transportation funding sources and familiarity with Caltrans oversight regulations are essential to the success of this project. DHA has the experience and the team needed to provide a successful result for the City of Goleta.

DHA is a new small business California corporation, founded in 2007 by two experienced engineers with a solid reputation for quality transportation planning, engineering and project management. Dennis Haglan and I, Craig Drake, have recently opened DHA to best serve local agency clients in northern California. Dennis and I are well known in the region as knowledgeable and responsive project managers, especially for federal-aid transportation projects.

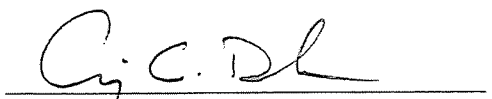
As you review our Statement of Qualifications you will see that our team has a very diverse and unique background that will provide the City with the necessary knowledge of transportation planning and Caltrans Project Development Procedures. Also, our team is familiar with the local agency and Caltrans oversight personnel, which will help to facilitate coordination efforts. We have assembled a team of professionals, most of whom we have worked with successfully in the past. We have sought out firms that have special knowledge of this project, and with the City of Goleta. Gerald Comati of COM3 Consulting will be a key resource for the DHA team, with extensive knowledge of local transportation programs and agencies in Santa Barbara County. We have also secured the services of Jim Damkowitch of Dowling Associates, who has developed the regional traffic model for the City of Goleta General Plan Circulation Element. Cardenas and Associates is on the team to provide continuity with the previous surveying and mapping work for the Goleta Overpass Improvement Project.

Civil Engineering services will be performed by Rick Engineering Company from their San Luis Obispo office. Rick Engineering will work closely with DHA in developing alternative alignments. They also have a solid relationship with the Caltrans process from their highway project experience in Southern California. LSA Associates will be providing environmental constraints analysis for the project. They have a long history of working on Caltrans planning and design projects, and will be providing services from their San Luis Obispo office. Geotechnical analysis will be provided by Kleinfelder, with extensive experience with Caltrans Districts 5 and 6.

We look forward to further discussions with you regarding this project and we encourage you to contact our references, since they are the best measure of our success on prior projects. If you have any questions or comments, please call me at your earliest convenience.

Sincerely,

Drake Haglan & Associates



Craig C. Drake, P.E.
Project Manager

Contact Information:

Drake Haglan & Associates
10423 Old Placerville Road
Suite 200
Sacramento, CA 95827

Phone (916) 363-4210
Fax: (916) 363-4230
E-mail cdrake@drakehaglan.com

Engineering Services for the Goleta Overpass Improvement Project

Organization Chart

City of Goleta

Drake Haglan & Associates
Craig Drake, PE
Project Manager

Drake Haglan & Associates
Kevin Ross, PE
Project Engineer

Drake Haglan & Associates
Dennis Haglan, PE
Project Planning
Funding Research
Quality Control

SUBCONSULTANTS

Kleinfelder *Geotechnical Engineering*	COM 3 Consulting *Strategic Planning Local Liaison Public Outreach*	Cardenas & Associates *Surveying*	LSA Associates *Environmental/ Permitting*	Dowling Associates *Traffic Studies*	Rick Engineering *Civil Engineering Drainage Landscape Design*
David Pearson,PE,GE Nathan Dahlen, PE	**Gerald Comati**	**Jose Cardenas, PLS** John Keating	**Jill O'Connor** Pam Reading Wendy Fisher Ivan Strudwich	**Jim Damkowitch** Richard Dowling, PE	Donald Druse, PE Thomas Martin, PE Kai Ramer, PE, TE Edgar Camerino, PE Dennis Bowling, PE James Kuhlken, RLA

Responsibilities Matrix

TASK	Jose Cardenas	David Pearson, GE	Kevin Ross, PE	Dennis Haglan, PE	Craig Drake, PE	Gerald Comati	Jill O'Connor	Donald Druse, PE	Jim Damkowitch	LEAD FIRM
Project Management					○					Drake Haglan & Assoc.
Agency Coordination				△	○	△				Drake Haglan & Assoc.
Project Development Team				△	○	△	△	△		Drake Haglan & Assoc.
Project Mapping	○				△			△		Cardenas & Assoc.
Alternative Alignments			△		△	△		○		Rick Engineering
Environmental Constriants Analysis					△		○	△		LSA Assoc.
Traffic Analysis					△			△	○	Dowling Assoc.
Public Outreach			△	△	○	△	△	△		Drake Haglan & Assoc.
Right-of-Way Impacts Analysis	△				△			○		Rick Engineering
Geotechnical Analysis		○	△		△			△		Kleinfelder
Utility Impacts Analysis	△		△		△			○		Rick Engineering
Bridge Advance Planning Studies			○		△					Drake Haglan & Assoc.
Funding Analysis				○	△	△				Drake Haglan & Assoc.
Project Cost Estimates			△	△	○	△		△		Drake Haglan & Assoc.
Project Schedule			△	△	○	△		△		Drake Haglan & Assoc.
Report Preparation	△	△	△	△	○	△	△	△	△	Drake Haglan & Assoc.

○ Primary Responsibility △ Secondary Responsibility

drake haglan AND ASSOCIATES

Professional Transportation Engineering Services Offered

- Project Management
- Program Management
- Project Feasibility Studies
- Federal-Aid Program Assistance
- Project Initiation / Approval Documents
- Environmental Study Technical Support
- Bridge Design Services
- Bridge Inspections
- Bridge Rehabilitation Design
- Bridge Maintenance Repair Design
- Roadway / Highway Design

Firm Background/Organization

Drake Haglan & Associates, Inc. (DHA) is a transportation engineering services firm that specializes in local agency federal-aid transportation projects, with a focus on bridge, highway and roadway engineering. DHA provides project initiation assistance, project development services such as bridge and roadway design, bridge maintenance inspection and design, and construction engineering services. DHA specializes in projects that are funded through the federal Highway Bridge Program and other federal, state and local transportation funding programs. The company principals, Craig Drake, Dennis Haglan and Kevin Ross have over 60 years combined experience designing and managing bridge, highway and roadway projects in California.

DHA is an emerging small business enterprise formed in 2007 to provide transportation and bridge consulting services to local agency clients. The company is founded on the principle that project success is determined by client satisfaction with a quality product. This is achieved through strong Project Management and Project Delivery services provided by each Principal of the firm.

DHA is currently growing to keep ahead of client assignments. This means that DHA is adding professional engineers and technical staff before the current staff becomes overloaded with work. This aggressive growth philosophy keeps each project fully staffed, with an excess of engineering and technical capacity at all times. The management of DHA is committed to ensuring that all projects and all clients are given ample resources and a high level of personal service.

Planning Studies and Planning Services

The staff at DHA has a long history of working on transportation planning projects, both on the state highway system and for local streets and roads. The principals of DHA have worked at Caltrans, and understand the project development process, especially from a funding and project initiation perspective. The key to success with planning projects is to initiate and maintain communication with the appropriate decision makers at the oversight and funding agencies. From their offices in Sacramento, DHA maintains regular contact with critical decision makers at the Caltrans headquarters offices.

Bridge Design & Related Services

DHA offers a full range of services tailored to bridge projects. The staff at DHA has extensive experience with bridge projects, with over 60 years of combined bridge planning and design experience among the principal engineers. Their expertise has been gained through a variety of projects on local and state highways. The engineering staff at DHA can provide bridge design and associated project engineering and management for any phase of the project, from planning to development of the plans, specifications and estimate, to construction support and management.

Bridge Design Services

- Final design, plans, specifications and estimates (PS&E)
- Advance planning and feasibility studies
- Railroad grade separations
- Earth retaining structures
- Seismic retrofitting
- Strengthening and rehabilitation
- Load rating and value analysis
- Structure inspection/assessment

Program Management/ Federally Funded Project Assistance

DHA provides Highway Bridge Program Management for local agencies in northern California. This expertise is available through well qualified staff with direct experience in managing the HBRR Program for Caltrans. Craig Drake and Dennis Haglan are former Caltrans Structures Local Assistance Engineers that know how to prepare and process the federal-aid paperwork.

Experienced in Securing Federal Funds and Federal Project Application/Form Preparation:

- Field Review Form
- Requests for Authorization
- Right-of-way Certification
- Exhibits 6A, 6B, 6D, etc…
- Finance Letter and Detail Estimate
- Project Closeout Records

Roadway Design Services

The DHA principals are experienced at managing large and small roadway design projects. The types of roadway and highway projects managed include:

- Project Study Reports, Project Reports
- Local Roadways
- Feasibility/Alignment Studies
- Drainage
- Final Design, Plans, Specifications and Estimates (PS&E)
- Interchange Design
- Utility Relocations Coordination
- Electrical/Traffic Signal Design

A check of the relevant projects shown in the references section gives an indication of the variety of projects that DHA staff has managed successfully in the past.

Familiarity with Local Programs Compliance/Caltrans Oversight Procedures

The members of the DHA team have managed several projects subject to Caltrans review for local agencies. The table below gives a partial listing of the projects that this team has worked on together over just the past three years.

DHA Team HBP Projects – Prior Four Year Period		
Project	**Client**	**Date or % complete**
San Luis Bay Drive / San Luis Creek	San Luis Obispo County	2006
Millbrae POC over Highway 101	City of Millbrae	2006
Borregas / 101 and Borregas 237	City of Sunnyvale	2007
Vineyard Overcrossing Hwy 101	San Luis Obispo County	2007
Main Street 101	San Luis Obispo County	2007
Bass Lake Road Interchange	El Dorado County	5%
Jellys Ferry Bridge / Sacramento River	Tehama County	30%
Cypress Bridge / Sacramento River	City of Redding	2006
Somersville Bridge	City of Antioch	2007
First Street Bridge / Napa River	City of Napa	100%
11th Street OH	City of Tracy	30%
Orwood Bridge / Sacramento Delta	Contra Costa Co.	35%
Fremont & Portland	City of Los Altos	25%
Carbondale Bridge	Amador County	2005
Broadway Bridge	City of Jackson	2005
Pleasants Valley	Solano Co.	2004
Bethany Bridge	San Joaquin Co.	2005
Picachio Road Bridge / Cayucos Creek	San Luis Obispo County	2007
Moonstone Beach Bridge	San Luis Obispo County	100%

Subconsultants

To supplement our in-house expertise for the City of Goleta Overpass Project, we have assembled a team of qualified subconsultants to provide key support services required for this project. They include:

com3 consulting

COM3 Consulting was established in 1998. The company offers comprehensive project and program management services, strategic planning for infrastructure programs and individual projects, construction oversight and claims analysis. Mr. Gerald Comati, is President of COM3, and has twenty-five years of infrastructure project management experience.

Prior to forming COM3 Consulting, Mr. Comati worked for ten years with Bechtel Corporation in Northern California and six years with Fluor Daniel Inc, under contract to the Santa Barbara County Association of Governments (SBCAG). Mr. Comati led the Fluor Daniel team providing comprehensive program management services for implementation of the $140M Measure D Regional Highway Improvement Program.

Since 1998, COM3 Consulting has provided specific project and program management services to an array of government Clients primarily located in Santa Barbara County. Clients include the County of Santa Barbara, the Santa Barbara County Association of Government (SBCAG), the cities of Santa Barbara, Carpinteria and Goleta, and the Beach Erosion Authority for Clean Oceans and Beaches (BEACON).

The office of COM3 Consulting is located in downtown Santa Barbara, California.

RICK
ENGINEERING COMPANY
Transportation Division

Rick Engineering Company provides comprehensive civil engineering, urban design and planning, transportation and traffic engineering, water resources, surveying, mapping, redevelopment, landscape architecture, construction management, aerial photogrammetry, litigation support, and specialized computer services to clients throughout the entire Southwest.

We are a privately owned corporation with more than 50 years of experience. Each year we prepare designs for millions of dollars worth of construction. Since its founding in 1955, our Company has successfully completed thousands of projects.

Our expert staff provides a broad and impressive range of skills. Rick Engineering Company is comprised of more than 425 professionals, including civil, transportation, traffic, water resource and redevelopment engineers, hydrologists, and designers, planning and urban designers, photogrammetrists, surveyors, and landscape architects who are prepared to respond to our clients' needs.

Our clients come from both the public and private sectors, and include city, state, and federal agencies, development companies, investment groups, individual landowners, banks, hospitals, insurance companies, and non-profit institutions.

Rick Engineering Company provides truly comprehensive services and utilizes state-of-the-art resources and equipment. We are typically involved in survey and mapping, site planning, street, highway and freeway design, drainage, water and sewer systems, flood control programs, and the processing of development applications. Our work includes residential, resort, and recreation developments, offices and industrial parks, retail shopping centers, mixed-use development projects, and academic and research institutions. We provide complete topographic mapping services including analytical triangulation, digital terrain modeling, aerial photography, ground photography, ground control surveys, and satellite-based Global Positioning System (GPS) surveys. We also maintain an engineering, planning, and environmental library with current, timely information. Extensive CADD, graphic, photographic, word processing, and report reproduction facilities are all available in-house.

Our comprehensive services are provided by staff with a broad range of experience who are familiar with local practice and agency requirements. In addition, we utilize state-of-the-art computer equipment and software for efficient plan production and study results. A partial list includes Highway Capacity Manual Software (HCS), PASSER, MicroStation, and AutoCAD.

We are acutely aware of the value and importance of providing close, individual attention to each project and to working within the constraints of time and budget. To assure optimum coordination and responsiveness, new projects are assigned to a team directed by a Principal of the firm. A Project Engineer is then directly responsible for the project from preliminary design through final construction.

We understand complexity and invest in competence. After 50 years, we also know that the success of the firm rests clearly on the management, competence, and expertise of our professional staff. That's why Rick Engineering Company provides, in-house, the broad combination of skills and services necessary for today's complex projects.

Rick Engineering Company has a proven history of "Engineering Today for Tomorrow" SM -this is the vision that has served our clients and us for the past fifty years, and the promise that we make for the future.

Dowling Associates, Inc.
Transportation Engineering • Planning • Research • Education

Dowling Associates, Inc. is a traffic engineering and transportation planning consulting firm with offices in Oakland, Sacramento, and Ripon, California. Our firm has been in business for 20 years (founded in 1986 and incorporated in 1997) and we currently employ over thirty-five full-time professional and support staff. Our clients include the Federal Highway Administration, the National Academy of Sciences, Caltrans, Florida State Department of Transportation, the University of California, plus numerous cities, counties, and metropolitan planning organizations.

Our specialties include traffic engineering traffic operations analysis, micro-simulation modeling, traffic impact analysis, travel demand modeling, research, bicycle and pedestrian planning, and transportation circulation element planning. We pride ourselves on leading with the most advanced techniques and technology in transportation engineering and planning. Our principals take active management and work task roles in the project's we undertake. Their experience ensures reliable, professional work products and a consistent level of quality assurance.

Dowling Associates has performed circulation analyses for a number of Project Study Reports and General Plan EIR's for cities and counties throughout California. Our specialty is the development, operation, and maintenance of traffic models in most any software (Cube, TP+Viper, MINUTP, TransCAD, Emme2, VISUM) to develop travel forecasts for traffic studies. We are equally proficient in modeling facility level of service using the latest traffic operations and simulation software (HCS, TRAFFIX, SYNCHRO-6, VISIM, PARAMIX, CORSIM). We have a long history of experience with the City of Goleta, the Santa Barbara County Association of Governments and Caltrans District-5.

The Dowling Associates project team will be led by Dr. Richard Dowling, PE, a licensed Civil and Traffic Engineer in the State of California. He has over 25 years of experience. Rick will be assisted by Mr. Jim Damkowitch, who will be responsible for developing the modeling and traffic operations analysis for this project. Jim has managed the City of Goleta General Plan Circulation Element (Approved September 2006), the Ekwill-Fowler Extension and Hollister Redesign Traffic Analyses, the City of Goleta Travel Modeling On-Call Services (2006-present) and the Caltrans District-5 Modeling On-Call Services 2008-2011. He is an experienced planner which includes over 15 years of public planning experience.

Since August 2005, Dowling Associates has been performing traffic demand modeling for the City of Goleta using the VISUM Goleta Traffic Model developed by PTV America. The projects that the City has procured modeling services from Dowling Associates include: Ekwill/Fowler Extension Project, Hollister Redesign Project, Cabrillo Business Park Development Traffic Impact Study, Village at Los Carneros Village Traffic Analysis, the City of Goleta General Plan 2030 Forecast Report and EIR Traffic Circulation analysis, the City of Goleta Capital Improvement Program AB1600 Nexus Study and supplementary modeling tasks on an as-needed basis. Dowling Associates has provided the City Goleta traffic on-call traffic modeling services from 2006 to present. As such, Dowling Associates, Inc. is uniquely poised to deliver additional travel demand and traffic operations modeling products for this project in an expedited fashion as needed by the City of Goleta. This continuity of staff resources, knowledge base and effort provides greater opportunity for an expedited schedule of deliverables.

CARDENAS AND ASSOCIATES SURVEYING, INC.

Cardenas and Associates Surveying Inc. offers a wide range of Surveying and Mapping services with an emphasis on providing professional services specifically tailored to meet the clients' needs.

We specialize in boundary and topographic mapping, land subdivision, tentative/final maps and construction staking. Our professional and technical staff has extensive individual and collective experience to address diverse land surveying challenges.

Our firm blends skills from several disciplines, including those of math, law, expert measurement, and translation. By interpreting legal descriptions and applying the science of measurement, the surveyor translates legal descriptions or engineering design into tangible positions on the ground. These positions are used as a basis for construction or monumentation of a particular location, for delineation of ownership or to document changes over time.

As a full service firm, our staff interacts with property owners, design professionals, project inspectors, and construction personnel to see that our services are properly implemented. We utilize computer systems for all phases of surveying computations, analysis and drafting. Field crews utilize survey instruments capable of high speed and precise collection. Collected survey information is then reduced in our office to produce the requested documents such as topographic mapping or survey plats.

We strive to provide a quality service to our clients and to do that we:

- Perform thorough research to develop a clear understanding of project scope
- Take the time and care to prepare accurate maps that are concise and
- meet the project objectives
- Have developed specific procedures to maintain quality, and
- Perform independent in-house checking of the work product

At Cardenas and Associates Surveying we are proud of our achievements and our dedication to sustaining ethical and professional standards in the work we perform. The results of our approach and quality assurance program are reflected in consistently meeting our client's expectations, using the professional standard of care and meeting established project schedules and budgets.

LSA ASSOCIATES, INC.

LSA Associates, Inc. (LSA) is a diversified environmental, transportation, and community planning firm that evolved from a small consulting firm formed by Larry Seeman in 1976, then called Larry Seeman Associates. The firm was designed to meet the need for environmental evaluation as a result of the passage of the California Environmental Quality Act (CEQA).

Since our founding 31 years ago, LSA has grown into a full-service corporation that continues to grow in terms of markets we serve and services we provide. Our clients select LSA because we provide them with:

- Expertise and experience
- Integrity and trust
- Service and responsiveness

The foundation of LSA's success lies in our ownership; we are 100 percent owned by our employees. Each employee owner has a personal as well as professional stake in the success of each project. We realize clients do not hire companies; they hire people. Our people are a diverse group of highly skilled professionals, many of whom are recognized experts in the following fields:

- Environmental Analysis
- Transportation
- Biology and Wetlands
- Habitat Restoration
- Resource Planning and Management
- Cultural and Paleontological Resources
- Urban Design
- Community and Land Use Planning

- Noise Analysis
- Air Quality
- Geographic Information Systems (GIS)
- Water Quality

LSA has ten offices in California, including Berkeley, Carlsbad, Colma, Fresno, Irvine, Palm Springs, Pt. Richmond, Riverside, Rocklin, and San Luis Obispo, , and one in Ft. Collins, Colorado, with a staff of over 250 employees capable of fulfilling any project assignment.

During its 31 years in the environmental consulting field, LSA has managed a large volume of transportation projects in California, including many locally funded projects that require review and approval by Caltrans and the Federal Highway Administration (FHWA). This experience has fostered an excellent understanding of Caltrans' project development procedures and environmental review requirements, enabling LSA to work effectively in following Caltrans' project development process. This has also resulted in the development of outstanding professional working relationships with all levels of Caltrans personnel.

LSA has prepared environmental documents (EIR/EIS, IS/EAs, CE/CEs), various environmental technical reports and feasibility studies in support of Project Study Reports and Project Reports for State highway projects requiring Caltrans' approval throughout the State. LSA also works cooperatively with Caltrans' Office of Local Assistance and our local agency clients to deliver various federally funded transportation projects. LSA's working relationship with Caltrans' Environmental Planning Branch extends over 20 years and has included work on some of Caltrans' most high profile projects, including the I-5 Widening (SR-22 to SR-91), San Joaquin Hills Transportation Corridor (SR-73), I-5/I-405 Confluence, and Laguna Canyon Road (SR-73 to I-405). LSA's recent project work with Caltrans District 5 includes: Willow Road Extension/US 101 Interchange, San Luis Obispo; SR-68/Corral de Tierra, Monterey; SR-68/San Benancio Road, Monterey; and Caltrans On-Call contract for Central California Storm Damage Repair, Central Coast (See Attached Project Write-ups).

KLEINFELDER

Kleinfelder, Inc. is pleased to participate as the Geotechnical Engineer for the City of Goleta interchange feasibility study. We understand the scope of work to be performed and are ready and able to perform the services to meet your schedule. Kleinfelder has adequate personnel and other resources to meet the schedule for delivery.

Kleinfelder, Inc. is a geotechnical, environmental and materials testing engineering consulting firm. Established in 1961, the company has since grown to its current size of over 2000 personnel located in 65 offices and laboratories throughout the western United States. Rated No. 43 in ENRs "Top 500 Engineering Firms" in the nation, Kleinfelder is a leader in the engineering field. Our staff includes geotechnical, environmental, chemical, civil and mechanical engineers; industrial hygienists; biologists; geologists; hydrogeologists; chemists; toxicologists; regulatory compliance specialists; and computer specialists.

Kleinfelder provides a wide range of services:

- Environmental permitting and planning

- Environmental assessment, engineering, and remediation;
- Geotechnical engineering;
- Engineering geology;
- Pavement designs;
- Materials testing & inspection,
- Water resource siting and development; and,
- Construction management.

We take pride in the variety of projects performed in the area. Our clients are private industry owners, utilities, and governmental agencies. A brief summary of local and historically relevant projects:

- Teff Street Bridge at Nipomo Creek (geotechnical engineering);
- Teff Street, Thompson Avenue and Mallagh Street Arch Culverts at Haystack Creek in Nipomo (geotechnical engineering);
- Ontario Road Bridge at San Luis Obispo Creek (geotechnical engineering);
- Vineyard Road Bridge at UPRR and Salinas River (geotechnical engineering)

Mr. David Pearson will serve as the Senior Project Manager for this project. He is a State of California, Registered Civil and Geotechnical Engineer with over 38 years of experience. He will be responsible for technical review throughout the project. Mr. Pearson has been responsible for hundreds of geotechnical investigations throughout California. His projects have included geotechnical engineering designs for roadways/highways, bridges, railroad grade crossings, multi- and single-story buildings, water and wastewater treatment facilities and associated pipelines/pump/lift stations, etc. Mr. Pearson's relevant project experience includes similar roadways types and bridges, as well as projects in the vicinity:

- Main Street Bridge, San Luis Obispo County
- San Luis Bay Drive Widening, San Luis Obispo County
- Moonstone Beach Road Bridge, San Luis Obispo County
- Niblick Road Bridge, San Luis Obispo County
- River Road Bridge, San Luis Obispo County

Mr. Nathan Dahlen will be assigned as Project Engineer. Mr. Dahlen is a Registered Civil Engineer in California, and has experience with geotechnical engineering services in the area. His projects have included bridges, railroad grade crossings, water and wastewater facilities, campus-type complexes, multi-story buildings, subdivisions, roadways, etc. Mr. Dahlen's relevant experience includes similar type projects and knowledge of soils conditions in the vicinity:

- Main Street Bridge, San Luis Obispo County
- Moonstone Beach Road Bridge, San Luis Obispo County
- River Road Bridge, San Luis Obispo County
- 7th Standard Road & State Route 99, Bakersfield

San Luis Bay Drive Widening

San Luis Obispo County, California

Personal Experience

Owner/Reference
San Luis Obispo County
Department of Public Works
County Government Center, Room 207
San Luis Obispo, CA 93408

Contact
Rosemarie Gaglione
Project Manager
(Now w/City of Goleta)
(805) 961-7569

Project Cost:
$5,000,000

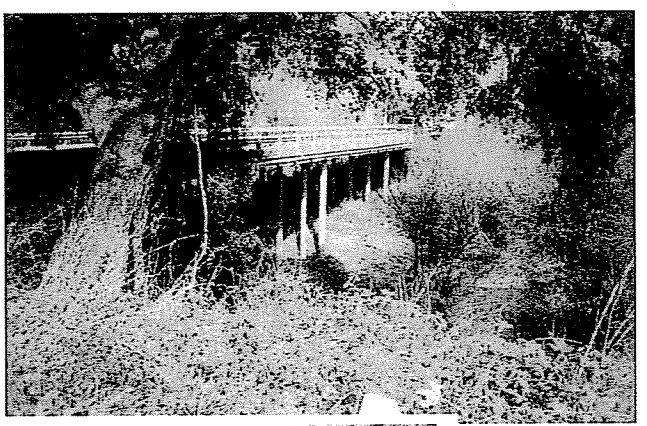
Completion Date(s):
Design: 1/2007
Construction: 1/2008

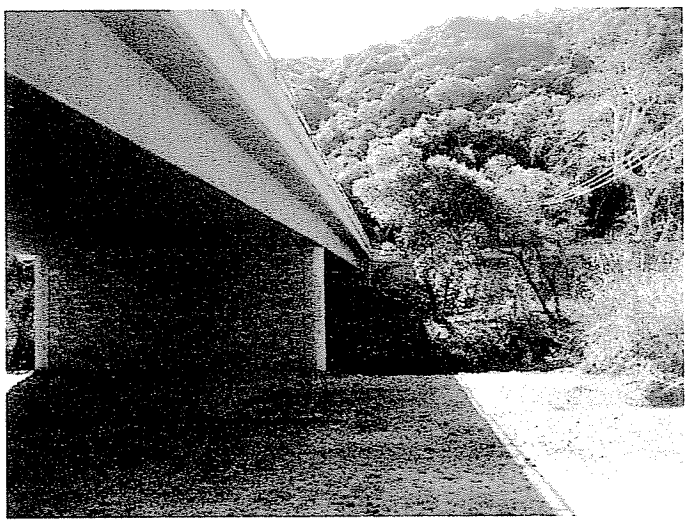
Project Team
Craig Drake
Project Manager

Kevin Ross
Bridge Design Engineer

Craig Drake was Project Manager for the project engineering consultant to the San Luis Obispo County Department of Public Works for this project to replace the bridge and improve the intersection facilities at the corner of San Luis Bay Drive and Avila Road near Avila Beach. Craig Drake was responsible for leading a multidisciplinary project development team that delivered the environmental approval and PS&E for the intersection improvements. Kevin Ross was the Project Engineer.

In the early stages of the project, Craig Drake assisted the county with the process of getting the project accepted into the federal-aid Highway Bridge Replacement and Rehabilitation (HBRR) Program that enabled 80 percent of eligible costs to be paid for with federal money.





Windy Hollow Road Feasibility Study

Point Arena, Mendocino County, California

Personal Experience

Owner/Reference
Action Network
PO Box 1163
Gualala, CA 95445

Contact
Janet Kukulinsky
Executive Director
(707) 884-5413

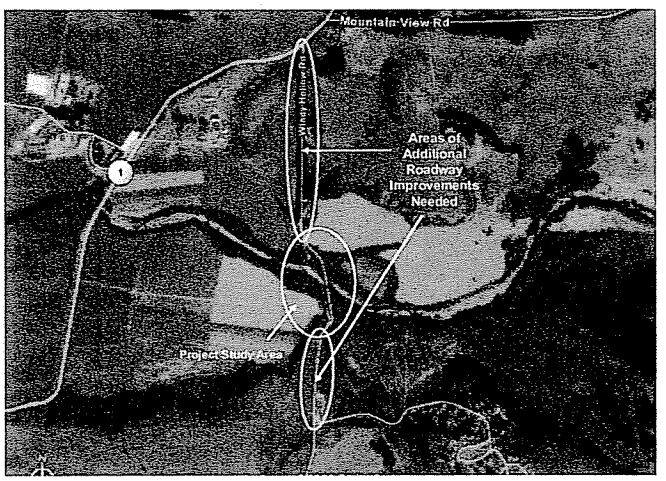
Project Cost:
$32,500

Completion Date(s):
February 2007

Project Team
Craig Drake
Project Manager

Kevin Ross
Bridge Engineer

Craig Drake was the Project Manager and author of the Windy Hollow Road Feasibility Study. This study was funded by an Environmental Justice grant awarded to the Manchester-Point Arena (MPA) band of Pomo Indians to study access improvements for their tribal lands. The feasibility study was undertaken to obtain input from community stakeholders and groups regarding the features of a new bridge across the Garcia River connecting Windy Hollow Road.



The MPA Rancheria is a community that's physically divided by the Garcia River. Although Windy Hollow Road (County Road) extends to the edge of the Garcia River on both sides, a permanent bridge has never been built. Over the years, the local residents have built a number of temporary, summer bridges over the Garcia "stream" for use during the dry season. Tribal and other community leaders have determined that a feasibility study is needed to evaluate the suitability of constructing permanent bridge for year-round use to provide for community safety, disaster responsiveness, and to improve the local transportation network to enhance the region's livability.


Windy Hollow Road Bridge

Project Fact Sheet

The Feasibility Study Will:

- Determine the most appropriate type of bridge for the site
- Identify environmental constraints and studies needed
- Evaluate the potential cost of a bridge project
- Identify sources of funds available for design and construction of the project

Environmental Studies and Permits

Land Use, Socioeconomics

Farmland

Aesthetics

Water Quality & Floodplain Impacts

Paleontology

Cultural Resources

Tribal Issues & Involvement

Section 4(f) Resources

Coastal Resources

Construction Impacts

Permits

U.S. Army Corps of Engineers

California Department of Fish and Game

Outside Governments

Why a bridge is being studied

Windy Hollow Road connects with Riverside Road in Point Arena and with State Route 1 south of Manchester. Windy Hollow Road dead-ends on both sides of the Garcia River and a bridge is needed to make this a through route. A bridge across the Garcia River on Windy Hollow Road would offer an alternative to the only existing crossing of the Garcia River on State Route 1. State Route 1 is subject to periodic flooding from the Garcia River that closes the road and severs traffic between Point Arena and Manchester for days at a time. Community leaders have determined that a feasibility study is needed to evaluate the suitability of constructing permanent bridge for year-round use to provide for community safety, disaster responsiveness and improve the local transportation network to enhance the region's livability. The bridge feasibility study is funded through an Environmental Justice Grant from the California State Highway Account administered by Caltrans. The grant was awarded to the Manchester-Point Arena Band of Pomo Indians and is administered by Action Network, a local non-profit organization committed to building a thriving, healthy community.

Windy Hollow Bridge will provide an alternative route across the Garcia River when river 1 closes due to flooding

Environmental Considerations

This is a proposed new bridge project, and it is likely that an Environmental Impact Report (EIR) will be required for CEQA, and an Environmental Assessment/ Finding of No Significant Effect (EA/FONSI) will be required for NEPA. Mendocino County will likely be the CEQA lead agency, and the Federal Highways Administration (FHWA) will be the NEPA lead agency, if they provide any federal funding for the project, and NEPA is required. The Bureau of Indian Affairs (BIA) may also be a reviewing agency under NEPA. If FHWA is the federal lead agency, the technical reports listed in the sidebar would likely be required

The project involved meeting with the local stakeholders to determine acceptable project alternatives and project constrints. A public information meeting was organized around a community event to maximize public participation and input into the project. The study culminated with the preparation of a report that will be used to pursue project funding. The project was completed in a short timeframe (16 weeks) to satisfy deadlines for the environmental justice grant.

drake haglan AND ASSOCIATES

Main Street/SR 101 Interchange (PSR/PDS)

Templeton, California

Personal Experience

Owner/Reference
San Luis Obispo County
Department of Public Works
County Government Center
Room 207
San Luis Obispo, CA 93408

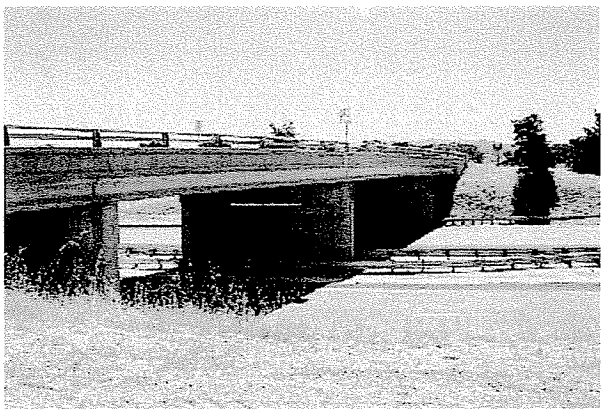
Contact
Frank Honeycutt
Project Manager
(805) 781-5269

Project Cost:
Contract Amount $165K

Completion Date(s):
Design: 2005

Project Team
Craig Drake
Principal-in-Charge

Craig Drake was Project Principal on a project to prepare a Project Study Report/Project Development Support (PSR/PDS) for the Main Street/SR 101 Interchange. The alternatives to be studied will range from a full diamond interchange that meets current standards to modifications to the existing to the "no-build" option. Preliminary roundabout analysis and design may be necessary for some alternatives as well. The project team provided project management, preliminary engineering, and preliminary environmental analysis for the project. The project required close coordination with and approval by Caltrans District 5.



Bass Lake Road Interchange

El Dorado Hills, California

Personal Experience

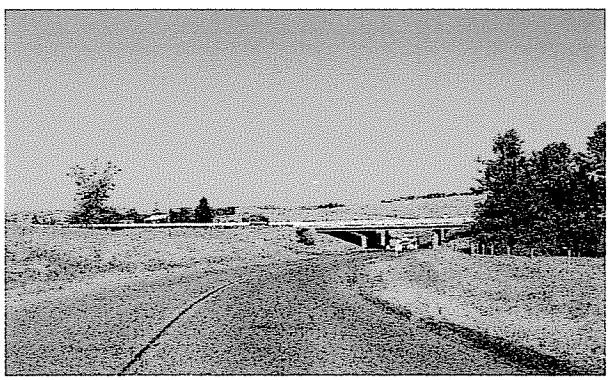
Owner/Reference
County of El Dorado,
Department of
Transportation
4850 Hillsdale Circle,
Suite 400
El Dorado, CA 75762

Contact
Russell Nygaard
Project Manager
(530) 941-8910

Project Team
Craig Drake
Project Principal

Dennis Haglan
Project Planning

Dennis Haglan provided project planning support for engineering services for the Highway 50/Bass Lake Road Interchange project. The services requested include providing the planning and preliminary engineering necessary to process the PSR, preparation of the PS&E, construction engineering and support, and all other services necessary to provide a turnkey project for the County of El Dorado Department of Transportation.



Vineyard Road/Highway 101 Interchange

Templeton, California

Personal Experience

Owner/Reference
San Luis Obispo County
Department of Public Works
County Government Center
Room 207
San Luis Obispo, CA 93408

Contact
Frank Honeycutt
Project Manager
(805) 781-5269

Project Cost:
$3.5M - $4.5M

Completion Date(s):
Design: 12/2007
Construction: 2008

Project Team
Craig Drake
Principal-in-Charge

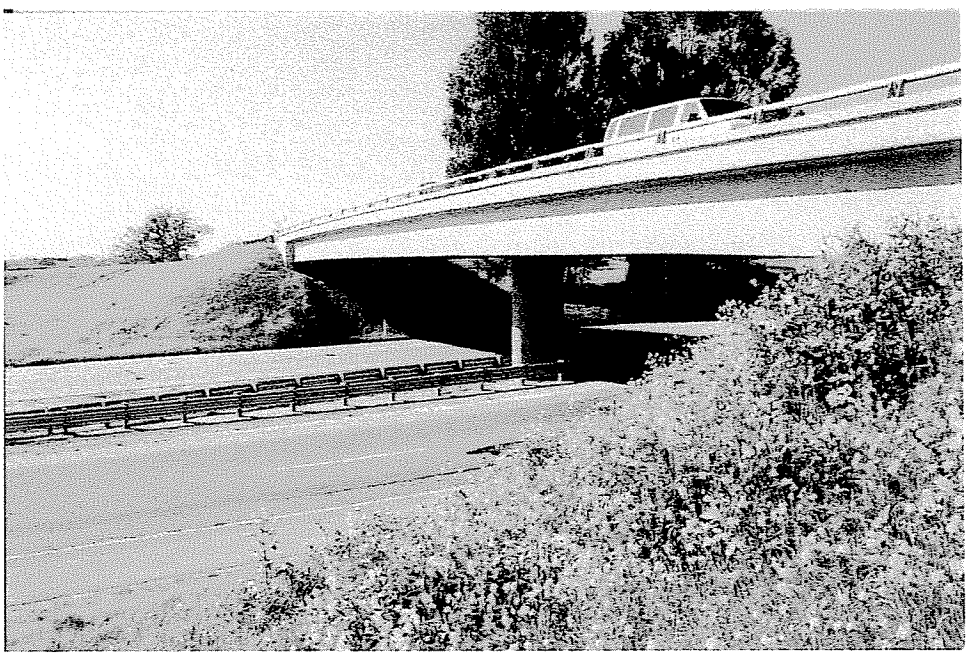
Kevin Ross
Project Engineer

Craig Drake and Kevin Ross were the Project Principal and Project Engineer, respectively, for the engineering firm retained by San Luis Obispo County to design the widening of Vineyard Drive, between Ashton Way and Old County Road in the community of Templeton, California. The project involves approximately one-half mile of roadway widening through rolling terrain and includes the widening of the Vineyard Drive Overcrossing over U.S. 101 as well as the widening of U.S. 101 ramps at their intersections with Vineyard Drive. The project will also signalize the intersections of Vineyard Drive and the U.S. 101 ramps to improve traffic operations and safety.

As is typical for a project on the State Highway System, a Project Initiation and Programming Document needed to be prepared and approved by Caltrans District 5. The Project Engineer led a multidisciplinary team in the preparation of a combined Project Study Report/Project Report (PSR/PR) to address every aspect of the project, including preliminary roadway and bridge engineering, environmental analyses, community involvement and public relations, traffic studies, geotechnical investigations, and right-of-way and utility impacts.

After approval of the PSR/PR, the Project Engineer guided the multidisciplinary team in the preparation of Plans, Specifications, and Estimates (PS&E) for the detailed design phase of the project including final roadway and bridge engineering, traffic signal design, utility relocation, and right-of-way acquisition documents.

The project was coordinated with and approved by Caltrans District 5, the community of Templeton, and San Luis Obispo County. The project is fully funded by San Luis Obispo County.



Millbrae Avenue Pedestrian Overcrossing

Millbrae, California

Personal Experience

Owner/Reference
City of Millbrae
477 Lincoln Circle
Millbrae, CA 94030
(650) 259-2367

Contact
Mr. Khee Lim
Project Manager
(650) 259-2347

Project Cost:
Est. Construction Cost
$5,500,000

Completion Date(s):
Design: 2008
Construction: 12/2010
(estimate)

Project Team
Dennis Haglan
Project Manager

Kevin Ross
Project Engineer

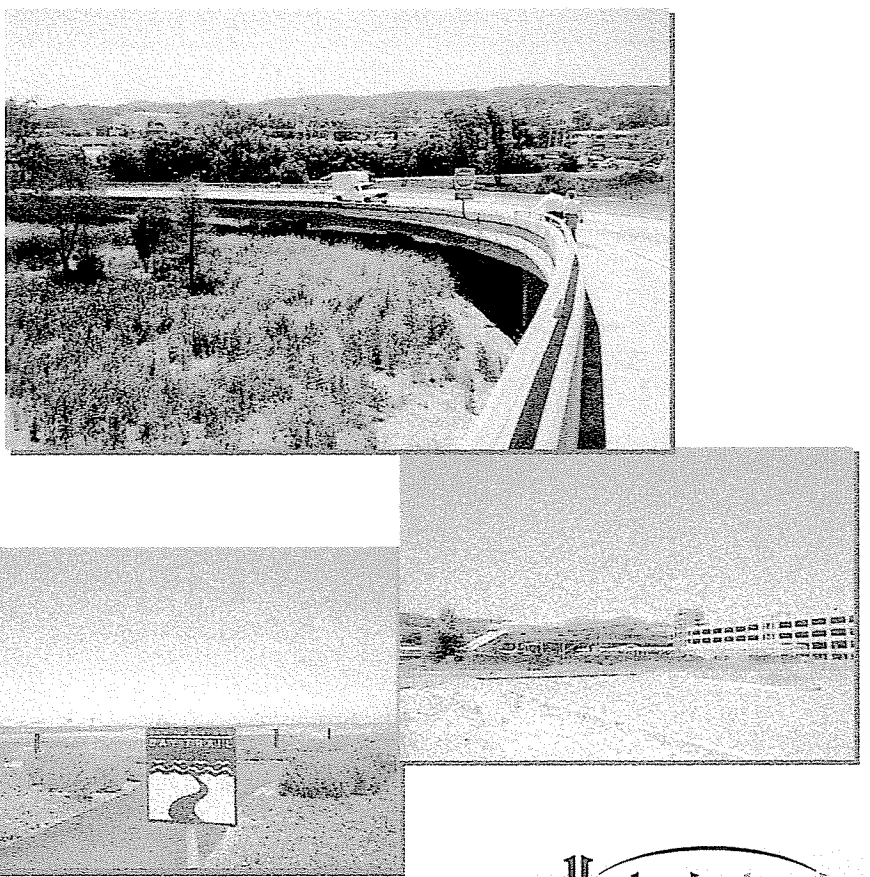
Craig Drake
PIC

The Millbrae Avenue Pedestrian overcrossing will ultimately link the transportation hub at the new Millbrae Bay Area Rapid Transit (BART) station with the business and recreational areas on the east side of U.S. Highway 101. The Project Manager and Project Engineer were responsible for leading a project development team for delivering the PS&E for a pedestrian/bikeway bridge crossing U.S. Highway 101.

In addition to helping the City acquire funding for the project the team prepared a Project Study Report (PSR), a Project Report (PR), and provided environmental engineering and approval, geotechnical engineering, structural engineering, civil engineering, and landscape architecture services. The Project Manager and Project Engineer were instrumental in guiding the complicated project through the Caltrans oversight processes.

Project Challenges: This structure was located in a very "tight' area with a water treatment facility on one side and an overcrossing adjacent to the treatment facility. Lateral displacements were a primary concern to avoid pounding of adjacent structures. These constraints made it difficult to finding an acceptable alignment that would avoid excessive utility conflicts and the at grade ramp crossings

Solutions Developed: The team considered several alternative alignments and ultimately decided upon an alignment that will span both the western on and off ramps. Several foundation design iterations and design criteria considerations were necessary to limit the lateral displacements of the new structure, while placing the structure as close as possible to avoid unnecessary utility conflicts.



dh drake haglan AND ASSOCIATES

Borregas Avenue Pedestrian Overcrossings at State Route 237

Sunnyvale, California

Personal Experience

Owner/Reference

City of Sunnyvale
Department of Public Works
465 West Olive Avenue
Sunnyvale, CA 94088-3707

Contact

Chuck Neumayer
Project Manager
(408) 730-7834

Project Cost:

Design Fee $500,000
Est. Construction Cost $3,000,000

Completion Date(s):

Design: 06/2007
Construction: 12/2008 (estimated)

Project Team

Dennis Haglan
Project Manager

Craig Drake
Principal-in-Charge

Kevin Ross
Bridge Design Engineer

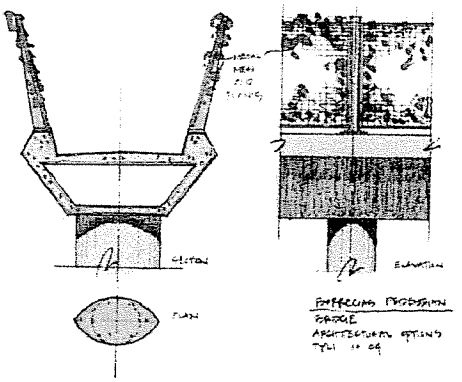
This project involved a new overcrossing over State Route 237. Complete services included the preparation of a Combined Project Study Report/ Project Report (PSR/PR), final design, construction support, and coordination with Caltrans functional units. The project addresses the need for improving linkages for bicycle and pedestrian traffic between employment and residential areas in the city of Sunnyvale.

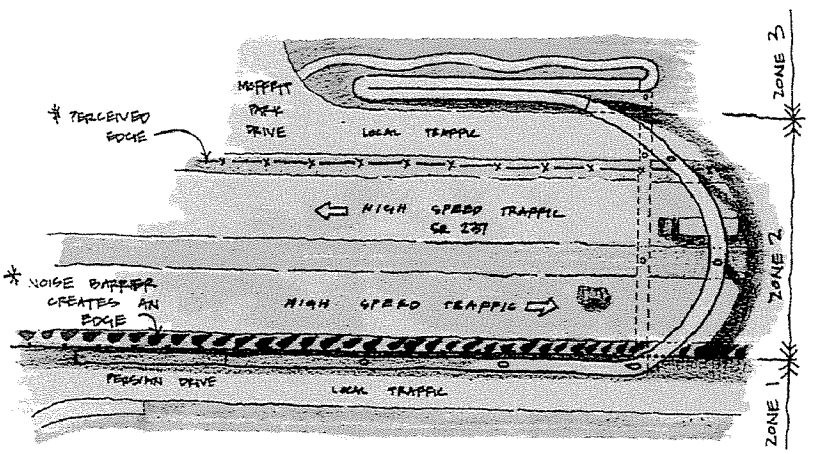
A total of three alternative alignments/ planning studies were prepared for the crossings, as well as six touchdown alternatives in an effort to minimize right of way and conform to ADA requirements.

Extensive utility location and coordination was necessary due to the enormous amount of utilities in the roadway and intersections.

The project manager led and directed the team, including public outreach and the architectural design of the overcrossing.

The project involved expediting Caltrans approvals in order to meet a very tight funding deadline. This involved a very proactive Project Manager and Project Engineer, as well as significant communication and coordination with Caltrans and the client.





drake haglan AND ASSOCIATES

Project Management – Roadway/Bridge Projects (continued):

Project Name	Los Carneros Road Overhead Bridge Replacement Project
Client	City of Goleta
Project Description	Replacement and widening of existing Los Carneros Road Overhead Bridge.
COM3 Scope	Project Manager for City of Goleta for the environmental, design, and right of way phase of project. Responsibilities include consultant oversight, environmental and deign oversight, issue resolution, coordination between involved agencies (City of Goleta, Caltrans, and UPRR) scheduling, and funding administration. This project is a Highway Bridge Program (HBP) funded project and requires extensive interface with Caltrans Local Assistance.
Project Cost	$9 M.
COM3 Contract Value (current)	$20,000
COM3 Personnel	Gerald Comati
Start Date	2007
Completion Date	2009
Client Reference	Rosemarie Gaglione, Senior Project Manager 805-961-7569

Project Name	Jameson Lane Bike Lane and Bridge Replacement Project
Client	County of Santa Barbara
Project Description	Class II bike lanes along a local County of Santa Barbara frontage road - North Jameson Lane - and replacement of North Jameson Lane creek bridges.
COM3 Scope	Provide project management assistance services from environmental though design for this STIP funded project.
Project Cost	$5 M.
COM3 Contract Value	$45,000
COM3 Personnel	Gerald Comati
Start Date	2002
Completion Date	2003 - Complete
Client Reference	Bill Vachon, Project Manager 805-739-8777

Project Name	101 "In Motion" Implementation Plan
Client	SBCAG/Parsons Brinckerhoff
Project Description	Evaluating long-range solutions to the deficiencies in the Highway 101 Corridor between the Santa Barbara County/Ventura County line and Winchester Common.
COM3 Scope	Provided intergovernmental liaison and developed a project implementation plan and schedule. This project involved extensive interface with Caltrans, SBCAG and all the local cities in south Santa Barbara County.
Project Cost	$2 M.
COM3 Contract Value	$69,250 (Subconsultant to Parsons Brinckerhoff)
COM3 Personnel	Gerald Comati
Start Date	2003
Completion Date	2006 - Complete
Client Reference	Fred Luna, SBCAG Program Manager 805 961-8926

I-805/Mira Mesa Boulevard/ Sorrento Valley road Interchange Project Study Report

PROJECT PROFILE

LOCATION
San Diego, California

PROJECT COMPLETION
Est. July 2007

CLIENT
Qualcomm Inc./City of San Diego/Caltrans
4050 Taylor Street
SAN DIEGO, CALIFORNIA 92110

FEE
$195,000 (approx.)

KEY PERSONNEL
Kai Ramer, P.E., T.E.
Project Manager

Edgar Camerino, P.E.
Project Engineer

David Tait
Local Assistance/PDT Coordination

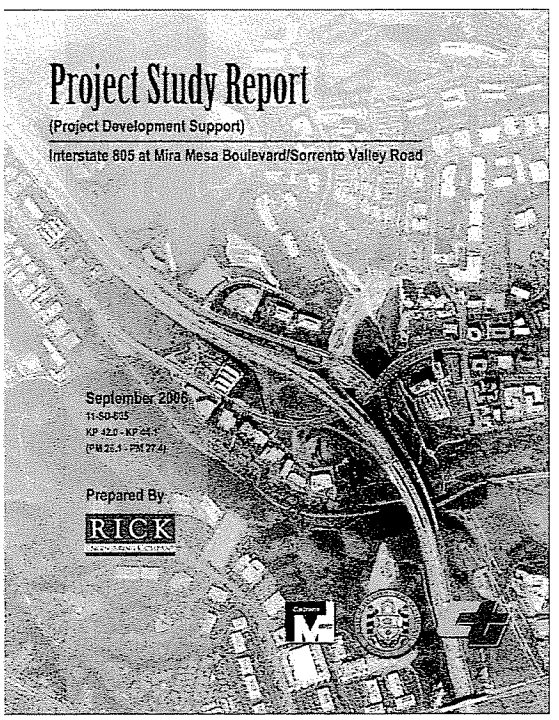
KEY COMPONENTS
Preliminary Engineering

- PSR Development
- Environmental (PEAR)
- Advanced Planning Coordination
- Direct Access Ramps/HOV
- Rail Coordination/Coaster station Relocation (NCTD/MTS)
- Bus Rapid Transit Station
- Bridge/Wall Design
- Construction Costs Estimates
- Value Analysis Participant
- Prime Consultant

Rick Engineering Company's Transportation Division prepared a Project Study Report for the Mira Mesa Boulevard / Sorrento Valley Road interchange in the City of San Diego on Interstate 805. The project included traffic forecasting, traffic impact analysis, and alternative studies to upgrade capacity for current and future area growth. The scope of work included preliminary design for upgrading of the existing interchange. The project also included alternative studies to integrate multi-modal transit components to the area, including High Occupancy Vehicle Direct Access Ramps at Carroll Canyon Road, a Bus Rapid Transit Center, and relocation of a Coaster station. Extensive coordination was required between the client, the City of San Diego, the California Department of Transportation, North County Transit District, and Metropolitan Transit System, as well as utility companies and other design consultants.

The report was one of the key elements in landing the San Diego Association of Governments (SANDAG) and Caltrans District 11 $400 million of CMIA funding which will be used for the design and construction of portions of this report's recommendations. The report also served as support for an Access Approval Request to the FHWA for a new access point to I-805 from Carroll Canyon Road.

Client Contact: Mr. Majid Kharrati, Caltrans District 11
(619) 688-6729



RICK™
ENGINEERING COMPANY

Craig C. Drake, P.E.

Principal Engineer

drake haglan AND ASSOCIATES

Education
BS, 1984, Civil Engineering, California Polytechnic State University, San Luis Obispo

Registration
1988, CA C43652

Affiliations
ASCE
APWA
CEAC
CELSOC
PMI

Mr. Craig Drake has over 22 years experience in the design and construction of bridge, highway, and transit projects. His experience includes direct management and engineering responsibilities for large design projects, and oversight engineering for numerous federal aid projects. He has a diverse background in bridge and highway development processes, from project conception through construction. He is thoroughly familiar with the Caltrans project development process and with federal aid program requirements.

As a project manager, project engineer and design engineer, he has completed planning studies and designs for several new projects, widening, rehabilitations and seismic retrofits. These projects have been in a variety of settings, from rural stream and river crossings to large urban interchanges. He has experience managing the activities of large design teams in the office and managing a team of construction inspectors in the field for large bridge and transit construction projects.

San Luis Bay Drive Bridge, San Luis Obispo, CA
Project manager for replacement of a 214-foot-long, two-span bridge over San Luis Creek. The project team was responsible for replacement advance planning studies, surveys, hydraulic studies, environmental clearance, type selection, bridge and roadway PS&E development and construction engineering support. The project includes three retaining walls and realignment of a recreational bicycle trail under the end span of the bridge. The project is funded through the HBRR program and requires conformance with Caltrans and FHWA program requirements.

Cypress Avenue Bridge, Redding, CA
Project manager for replacement of a 1,040-foot-long, six-lane-wide bridge over the Sacramento River and associated roadway improvements near downtown Redding. The project team is responsible for the bridge advance planning studies, surveys, hydraulic studies, environmental documentation support, bridge type selection, bridge and roadway PS&E development and construction support engineering. The project requires three-stage construction and environmental mitigation to reduce impacts to the salmon migrations in the Sacramento River. It also includes two retaining walls and a possible box culvert modification. The project is funded through the HBRR program and requires conformance with Caltrans and FHWA program requirements.

Redemeyer Road Extension Feasibility Study, Ukiah, CA
Project Manager and Project Engineer for a study to determine a suitable alignment for an extension of Redemeyer Road to improve access and traffic flow in the unincorporated area of northeastern Ukiah. The project involves study of three alignment alternatives, all of which cross the Russian River with one alignment that crosses a railroad. Public outreach is a primary aspect of the project to bring the citizen groups into the planning process. The study will recommend an alignment, and will be used as a project initiation document for funding and continuation of project development.

Vineland Road Interchange at State Route 178, City of Bakersfield, CA
Principal-in-Charge for the development of the conceptual layout and specific plan line for the Vineland Road Interchange on State Route 178. Developed an interchange footprint, based upon a partial cloverleaf (Type A) configuration, on the future SR 178 freeway and Vineland Road alignments to provide a right of way reservation necessary to protect the future interchange from encroachment of

adjacent development. The design required strict conformance with Caltrans standards. Special attention was paid to the planning of a very "flexible" interchange footprint that will accommodate current development activities in the region and protect the area required for the future interchange. The Vineland Road Interchange is a part of the City of Bakersfield's Thomas Road Improvement Program (TRIP).

Borregas Avenue Pedestrian Bridges 101 & 237, Sunnyvale, CA
Project manager for preparation of bridge advance planning studies for several alternative alignments of Borregas pedestrian traffic over Routes 101 and 237. Planning required compliance with Caltrans requirements for bridges on a state highway.

Vineyard Drive at U.S. 101 Interchange Improvements, San Luis Obispo County, CA
Project Principal and QA/QC Manager for the preparation of a combined Project Study Report/Project Report (PSR/PR) and plans, specifications and estimates (PS&E) for widening Vineyard Drive in the unincorporated area of Templeton, CA. The project includes widening the Vineyard Drive Overcrossing over U.S. 101, ramp modifications, and the installation of traffic signals to improve circulation and reduce congestion.

Golden Gate Bridge Seismic Retrofit, San Francisco, CA
State oversight engineer for seismic retrofit of the Golden Gate Bridge. Attended all design peer review meetings, facilitated Caltrans review of consultant seismic retrofit design and details, and monitored project process for compliance with federal and state regulations.

Gilman Avenue Overcrossing I-5, San Diego, CA
Project manager for design of a two-span, cable-stayed bridge over I-5 in San Diego. The University of California, San Diego, sponsors this bridge as an example of the use of advanced composite technology for bridges. The bridge features carbon "shells" for the pylon legs and deck panels supporting the roadway. The project required coordination with Caltrans for compliance with state and federal regulations regarding the construction of a bridge over an interstate highway.

Caltrans, Division of Structures, CA
State contract manager for seismic retrofit of 36 bridges in California. Provided oversight for analysis and preparation of plans, specifications, and estimates. A variety of structure types were retrofitted, such as continuous steel plate girder viaduct, cast-in-place concrete overcrossings and precast-concrete girder bridges.

Caltrans, Division of Structures, CA
As structures local assistance engineer for Los Angeles County, provided technical support and program oversight for its Local Bridge Seismic Retrofit program, which had 287 eligible bridges. Administered the federal aid HBRR program in Caltrans District 7. Also responsible for oversight of statewide bridge demonstration projects, which had both new and rehabilitation projects, among them the seismic retrofit of the Golden Gate Bridge, seismic retrofit of the Gerald Desmond Bridge in Long Beach, and several projects associated with improvements to the Alameda Corridor in Los Angeles County. Also responsible for oversight of Emergency Relief program in Los Angeles and Ventura counties.

Caltrans, Division of Structures, CA
As a junior, assistant associate and senior bridge engineer, developed expertise in bridge design engineering mostly as a long-time member of Design Section 11. Participated in the engineering rotation program with assignments to Structures

Construction, Preliminary Investigations (North), and Structures Maintenance. Also volunteered for later temporary assignments to Preliminary Investigations (South) and to Structures Construction.

Route 125 Toll Road, San Diego, CA
Deputy project manager for the preliminary design of an 11.5-mile highway in San Diego County. The project included 22 bridge sites and featured a 3,300-foot-long viaduct crossing over 180 feet above the Otay River. Project duties included planning and directing the efforts of the bridge design group within the overall project design team and assisting the project manager with overall project design strategy and implementation.

San Diego–Coronado Bay Bridge Seismic Retrofit, San Diego, CA
Assistant project manager for seismic retrofit design of a 1.8-mile-long bay crossing. The bridge has spans consisting of orthotropic deck on steel plate and steel box girders up to 660 feet long and narrow two-legged piers up to 220 feet high. Seismic retrofit involved complex analyses, including response-spectrum and non-linear time histories. The structure will receive retrofit consisting of a mix of strengthening, seismic isolation and dampers.

San Diego–Coronado Bridge Maintenance Platforms, San Diego, CA
Project engineer for the design of a new traveling scaffold system for a 6,800-foot-long steel bridge. Design of light steel truss platforms supported by existing rails under the bridge. The moveable platforms use a compressed air pneumatic drive system to provide complete access to the underside of the bridge.

San Diego–Coronado Ramps Seismic Retrofit, San Diego, CA
Project engineer for seismic retrofit of five approach ramp structures. These ramps are mostly pre-cast I-girder on single column bents. Retrofit included a combination of shear keys, restrainers and footing strengthening.

Oak Park Overcrossing, Hwy 101, San Luis Obispo County, CA
Project engineer for replacement of an existing bridge over Highway 101. Design included a retaining wall and barrier railings with extensive architectural treatments.

Moonstone Beach Drive, Cambria, CA
Project manager for replacement of a structurally deficient bridge over a small creek on scenic Moonstone Beach on the California central coast. The project is funded by the HBRR program and includes civil and bridge design, hydraulic design, geotechnical, environmental and public outreach services. Corrosion resistant detailing is required for this bridge in a marine environment. During construction, the bridge will remain in service for access to the adjacent state park.

Main Street Bridge, Cambria, CA
Project manager for replacement of a two-span bridge over Santa Rosa Creek with a simple span bridge, which allowed for the removal of the existing pier from the channel. During construction of the new bridge, the roadway was realigned so the existing bridge could be used. The project was funded by the HBRR program to replace a structurally deficient bridge.

Picachio Road Bridge, Cayucos, CA
Project manager for replacement of a bridge over a small creek near the coast. A temporary detour routed traffic around the new bridge during construction. The project was funded by the HBRR program to replace a structurally deficient bridge.

Bay Bridge HOVL Separation Project, Emeryville, CA
Project and design engineer for a 2,300-foot-long, cast-in-place post-tensioned box-girder bridge with reinforced concrete slab approach spans. Soft soil site, corrosive

soils, and outrigger bents were unusual features of this design. This project had a precast concrete girder widening, a prestressed concrete slab widening, a raising and retrofit of a steel girder bridge, and an MSE wall using lightweight fill.

Bayshore Viaduct, San Francisco, CA
Design engineer for a portion of the seismic retrofits of a several- mile-long steel freeway viaduct. Retrofit included modification of steel column frames to increase ultimate capacity of steel built-up section single-column bents.

Home Avenue Overcrossing, San Diego, CA
Project engineer for a multi-span concrete box-girder bridge. Stage construction limitations resulted in the application of continuous bent caps built in two stages. Design considered the effects of long-term shrinkage and creep stresses on the monolithic bent cap closure pour.

Main Street Undercrossing, Santa Ana, CA
Project engineer for design of the complex widening of a reinforced concrete box-girder bridge with a 75-degree skew. Design included extensive analysis of structural concrete floor beams framed into high cantilever retaining walls.

North Connector Overcrossing, Los Angeles County, CA
Project and design engineer of the first seismic retrofit project in California using steel column casings. Many details developed for this project became California state standards for seismic retrofit of bridges. Ongoing research data was used to justify seismic design assumptions that were considered a first in bridge engineering, such as the use of external steel casings to add displacement capacity to otherwise brittle bridge elements.

Riverside Bridge Strengthening, Riverside, CA
Project engineer for the rehabilitation and live-load upgrade of four steel girder bridges. An external post tensioning system on steel plate girders was used to increase the ultimate capacity of the bridge.

Salinas River Bridge, Paso Robles, CA
Design engineer of a 776-foot-long continuous box-girder bridge with one frame (among the longest at that time for Caltrans), post tensioned two-stage construction. This unique structure has two approach ramps framed into the middle of the first span. Because the bridge crosses a streambed of loose alluvial deposits, bridge hydraulics and bridge scour were major concerns during the design process.

Squaw Creek Bridge, Squaw Valley, CA
Provided detailed design independent checks of a two-span bridge using pre-cast I-girders. Portions of the existing abutments were incorporated into the new structure, with innovative design of abutment bearings for service and seismic loads.

SR 511 Seismic Retrofit, San Diego, CA
Project engineer for the retrofit of the 99/50/51 interchange. The project included more than eight concrete overcrossing type bridges and two reinforced concrete pedestrian overcrossings. Provided seismic retrofit training for six civil engineers assigned to this project.

SR 585 Seismic Retrofit, San Diego, CA
Project engineer for retrofit of three bridges on I-5 in San Diego. Retrofit consisted of footing tie-downs, footing overlays, steel column casings and hinge restrainers. All bridges are concrete box girders and one is a reinforced concrete pedestrian overcrossing.

Dennis Haglan, P.E.

Principal Engineer

drake haglan AND ASSOCIATES

Education
BS, 1989, Civil Engineering, University of California, Davis

Registration
1992, CA C51985

Affiliations
ASCE
APWA
CEAC
CELSOC
SEI

Dennis M. Haglan, P.E., has more than 18 years experience in design, construction and project and contract management for a wide variety of projects, including Project Study Report and Project Report Preparation, Feasibility and Planning Studies, and state and public agency bridge replacement, rehabilitation, and seismic retrofit. His experience includes eight years with Caltrans as structures representative, resident engineer and structures local assistant, as well as providing oversight for the federal Highway Bridge Replacement and Rehabilitation (HBRR) Program. He is a proven project manager and is adept at coordinating the work of large project design teams. His proactive management approach has resulted in the consistent delivery of contract documents on or ahead of schedule. His management style and techniques have earned him a reputation among local agency officials as an excellent partner in any public works bridge project.

HBRR Administration Services, Amador County, CA
Responsible for the overall bridge program management, local programs compliance, local assistance coordination, and HBRR paperwork, including request for authorization forms. Acted as the county's agent for management of four HBRR projects, including review of PS&E and environmental documents; assistance with consultant and contractor coordination; and Caltrans coordination and reporting. Services focused on local programs compliance, obtaining environmental approval and coordination with the design consultants.

HBRR Administration Services, Broadway Street HBRR Bridge Replacement City of Jackson, CA
Project Manager for design and Construction Manager for the construction of 700 feet of roadway, channel reconstruction, and a bridge replacement project. Also acted as the city's agent for management of one HBRR project, including environmental and Caltrans coordination and reporting. Extensive coordination was necessary with Caltrans, the Fish and Game, and the US Fish and Wildlife Service.

Bethany Road Bridge , San Joaquin County On-Call Bridge Design Services (HBP Funding), San Joaquin, CA
Project manager for on-call bridge PS&E services for the County's bridge rehabilitation and/or replacement needs. The project involved assisting the County with design support and providing the independent check for the Bethany Road Bridge Project.

11th Street East Tracy Overhead Bridge Seismic Analysis/Rehabilitation vs. Replacement Study (HBP Funding), Tracy, CA
Project Manager for the Cost analysis and Advanced Planning Studies for the replacement vs rehabilitation of the 11th Street East Tracy Overhead Bridge located on East 11th street at the Union Pacific Railroad tracks. The project involves extensive coordination with UPRR and the CPUC.

Borregas Avenue Pedestrian/Bicycle Overcrossing PSR/PR and PS&E, Sunnyvale, CA
Project Manager for the design of two new bridges over U.S. 101 and State Route 237 along the Borregas Avenue Corridor. The project required the approval of a PSR/PR, a cooperative agreement, coordination, and liaison work with Caltrans district project development staff for design and construction of these pedestrian overcrossings over the state highways mentioned above.

Millbrae Avenue Pedestrian Overcrossing, Millbrae, CA
Project manager for the design of a new pedestrian overcrossing and associated bicycle trail improvements adjacent to Millbrae Avenue over Highway 101. The new pedestrian overcrossing will be a component of the San Francisco Bay Trail, connecting the existing trail east of Route 101 with a new combined BART/Caltrain station west of Route 101. The project included bridge advance planning studies, surveys, PSR, environmental clearance, bridge type selection, trail and bridge PS&E and construction support. A cooperative agreement and liaison work with Caltrans District 04 project development staff were required.

Uvas Creek Bridge HBRR Replacement, Santa Clara County, CA
Project manager for the replacement reinforced concrete structure over Uvas Creek. The new replacement structure will be a 3-span precast I-girder supported by drilled shafts. The site involved extensive coordination with regulatory agencies due to the presence of riparian habitat, bats, steelhead, and red-legged frog habitat.

Pleasants Valley Road Bridge at Pleasants Creek (HBP Funding), Suisun City, CA
Project manager for preparation of emergency plans, specifications and estimates for an existing bridge that suffered heavy damage during flooding from a rainstorm that began on December 13, 2002. The Solano County Office of Emergency Services declared a local state of emergency on December 20, 2002, due to the washout of the approaches and foundations of the Pleasants Valley Road Bridge.

Shenandoah Bridge Deck Replacement, Amador County, CA
Project manager for the deck replacement involving a precast, post-tensioned cored slab. A load rating of the existing 14' long structure was conducted to determine the most cost-effective strategy. Ultimately the existing abutments were retained and the existing deck replaced. The county required a quick and cost-effective solution to repair the existing structure.

Norwood Street Bridge (HBP Funding), City of Sacramento, CA
Project Manager for the replacement of the existing 11-span scour critical concrete slab bridge on pile extensions. The proposed bridge will be a four (4) span 380 foot long cast-in-place box girder structure on pile extensions being 60 feet wide which will accommodate two traffic lanes, two shoulders/bike lanes and two sidewalks. The project will require significant public outreach and utility coordination along with the challenges of replacing the existing bridge utilizing stage construction.

Jelly's Ferry Road (HBP Funding), Tehama County, CA
Project Manager for the replacement of the existing 940' long Jelly's Ferry Road Bridge over the Sacramento River under the HBP program. The existing structure consists of five simply supported steel Pratt truss spans combined with ten timber approach spans. The new project will consist of constructing approximately 1200 LF of new roadway and an 1100 foot long seven span cast-in-place concrete structure on piles. The project will require significant public, stakeholder and environmental coordination due to the potential impacts to the river. The major stakeholders will consist of FHWA, Caltrans, Bureau of Reclamation and Tehama County.

Orwood Bridge Replacement Project (HBP Funding), Contra Costa County, CA
Project Manager for the replacement of a twelve span 220-foot long timber bridge

that provides the only access into the Orwood Tract. The County is responsible for completing the topographical mapping, NEPA and CEQA clearances and permitting.

Contra Costa County On-Call Services, Contra Costa County, CA
Project Manager for the Alhambra Valley Emergency Road Repair Project for the Contra Costa On-Call contract. TYLI was responsible for preparing project plans, specifications, and a cost estimate for stabilizing the slopes and repairing the existing roadway and guardrails adjacent to the creek on the north side of Alhambra Valley Road at two locations, approximately 1.2 miles west of Deer Creek Drive) in the unincorporated area of Contra Costa County.

First Street Bridge over Napa River (HBP Funding), City of Napa, CA
Project Manager for the retrofit/rehabilitation/replacement assessment of the existing 155-foot-long, three span reinforced concrete deep-haunch T-beam superstructure supported on three column bents with skirt walls and timber pile foundations. Constructed in 1925, no structure plans were available for review. An approximate working stress design was performed to determine the likely reinforcement present, and then a conventional seismic assessment was performed. A cost comparison was made between the retrofit and rehabilitation option and the replacement option. The selected bridge replacement will consist of a 160-foot-long three-span, reinforced concrete T-beam superstructure supported on pier walls and seat abutments founded on pile foundations. His oversight responsibilities included coordination of geotechnical investigations, hydrologic and hydraulic evaluations, utility relocation and layout, bridge and roadway construction stages, design and check calculations, and incorporating extensive public outreach program for project aesthetics and stakeholder impacts.

Cypress Avenue Bridge and Roadway (HBP Funding), Redding, CA
Quality Assurance/Quality Control Manager for the replacement of a 1,040-foot-long, six-lane-wide bridge over the Sacramento River and associated roadway improvements near downtown Redding. The project team is responsible for the bridge advance planning studies, surveys, hydraulic studies, environmental documentation support, bridge type selection, bridge and roadway PS&E development and construction support engineering. The project requires three-stage construction and environmental mitigation to reduce impacts to the salmon migrations in the Sacramento River. It also includes two retaining walls and a possible box culvert modification. The project is funded through the HBRR program and requires conformance with Caltrans and FHWA program requirements.

Chestnut Street Bicycle and Pedestrian Bridge (CMAQ Funding), Gilroy, CA
Project Manager for the PS&E for the construction of a new 12-foot wide, single span bridge or culvert to be placed over Miller Slough to provide pedestrian access across the slough. The pedestrian bridge will be a pre-fabricated steel truss structure, 50 feet in length with abutment footings outside the channel banks. The project is Federally funded and there will be close coordination with Caltrans and the Santa Clara Valley Water District.

Tenth Street Bridge, Gilroy, CA
The Tenth Street Bridge will carry the extension of Tenth Street over Uvas Creek. The Tenth Street extension will complete Tenth Street from its present western terminus at Uvas Creek Drive to Santa Teresa Boulevard at Miller Avenue. The extension will add a key east-west link to the City of Gilroy road network, providing a direct link between Santa Teresa Boulevard and the Tenth Street/SR 152 corridor. The Tenth Street extension will also be an important circulation element for the Glen Loma residential project, which is a recently approved development with about 1,600 homes on 360 acres located between Santa Teresa Boulevard

and Uvas Creek. The estimated length of the Tenth Street Bridge is 450-500 foot. The construction of the new Tenth Street Bridge at Uvas Creek will require reconstruction of the existing eastern approach roadway to provide two through lanes and a bike lane in each direction, as well as a fourteen foot wide median and sidewalks. The existing pedestrian/bike trail on east side of Uvas Creek may need to be reconstructed (lowered) in order to accommodate the bridge and/or approach roadway. A new signalized "Tee" intersection would be constructed to connect Uvas Park Drive with Tenth Street. The approach roadway on the east side of Uvas Creek will match the existing roadway (74 feet from curb-to-curb).

City of Gilroy 10% Cost Analysis, Gilroy, CA
Project Manager for the developing the 10% design cost estimates for 29 bridges/culverts located throughout the City by assembling and analyzing existing data and spreadsheets used in the City's Traffic Circulation Master Plan". This process includes evaluating existing data for completeness, field review of project sites, developing updated project construction cost estimates, developing support costs, and identifying potential funding sources.

Project and Contract Management, Caltrans, Division of Structures, CA (1989-1997)

HBRR Program Management: Managed local agency projects under the federal Highway Bridge Replacement and Rehabilitation (HBRR) Program. Responsibilities included maintaining close liaison with District 04 local assistance engineers as well as environmental, right-of-way, and hydraulics departments; project scoping; scheduling; tracking; funding approval; PS&E review and approval; and coordination with local agencies. Hydraulic reports were reviewed for long-term aggradation and degradation and downstream effects of the project. Participated in consultant selection panels and gave presentations at Public Works Association Meetings.

Route 110/01 Separation Widening. Design engineer for the widening of a 200-foot-wide, 110-foot-long structure. The steel girder structure was widened with precast concrete I girders. The design involved stairways and an elevator to access a future bus station facility on the structure.

Westbound 580/Eastbound 80 Connector Retrofit and Widening. Bridge design engineer for the retrofit and widening of a 283-foot-long, six-span steel girder structure, involving the raising and retrofitting of the existing steel structure and its widening with precast, prestressed concrete girders.

Arfour Overhead Connector Retrofit, I-5. Design engineer for this three-span, 259-foot-long box girder structure with 50-foot-high columns. The retrofit design included pier and abutment retrofit with large diameter CIDH piling.

Pit River Bridge Retrofit, Highway 299. Resident engineer and structure representative for a 721-foot-long, 17-span steel I-girder structure retrofit at an archaeologically and sensitive and river diversion site. Jun 1997 const.

Cold Creek Canyon Bridge, SR 192, Santa Barbara, CA
Structure representative for structure repair, including pier silane and methacrylate treatment of this steel arch bridge. The steel truss structure is situated on very tall columns in a picturesque setting. 1990 const.

Highway 101 Crosstown Freeway, Santa Barbara, CA
Bridge inspector for five structures involving post-tensioned box girders, seal slabs, and pumping plants. 4/89 -1991 const.

Kevin J. Ross, P.E.

Senior Bridge Engineer

drake haglan AND ASSOCIATES

Education

BS, 1988, Civil Engineering, University of California, Davis

Registration

1991, CA C49652

Affiliations

ASCE

PCI

PCA

SEI

Former Chair Caltrans Reinforced Concrete Committee

Former Member, Caltrans General Earthquake Committee

Mr. Kevin Ross has 20 years of engineering experience including over 5 years supervising the daily activities of the bridge engineering group of a prominent engineering firm in Sacramento. He is currently the Bridge Services Manager for Drake Haglan & Associates.

At Caltrans Division of Structures, he performed the duties of Section Leader; Seismic Specialist; contract management; project engineer; district seismic design mentor; design engineer; and construction of bridges and buildings. He also served as Structure Representative on Caltrans bridge construction projects.
Mr. Ross's experience as a Caltrans Bridge Design Section Leader included the supervision of 18 employees involved in various phases of PS&E project delivery while ensuring that all Caltrans policies and procedures were fulfilled.
Mr. Ross's design experience includes developing bridge advance planning studies, design of post tension concrete structures, precast structures, steel structures and reinforced concrete structures.

San Luis Bay Drive Bridge, San Luis Obispo, CA
Independent check for replacement of a 214-foot-long, two-span bridge over San Luis Creek. The project team was responsible for replacement advance planning studies, surveys, hydraulic studies, environmental clearance, type selection, bridge and roadway PS&E development and construction engineering support. The project includes three retaining walls and realignment of a recreational bicycle trail under the end span of the bridge. The project is funded through the HBRR program and requires conformance with Caltrans and FHWA program requirements.

Millbrae Avenue Interchange Pedestrian Overcrossing, Millbrae, CA
Senior engineer for the design of a new bridge and bicycle trail adjacent to the Millbrae Avenue interchange over Highway 101. The project required a approval of a PSR/PR, a cooperative agreement, coordination, and liaison work with Caltrans district project development staff for construction of this pedestrian overcrossing over a state highway.

Borregas Avenue Pedestrian/Bicycle Overcrossing, Sunnyvale, CA
Project Engineer for the design of two new bridges over U.S. 101 and State Route 237 along the Borregas Avenue Corridor. The project required the approval of a PSR/PR, a cooperative agreement, coordination, and liaison work with Caltrans district project development staff for design and construction of these pedestrian overcrossings over the state highways mentioned above.

Vineyard Drive Bridge Widening, San Luis Obispo County, CA
Project Engineer for the preparation of plans, specifications and estimates (PS&E) for widening Vineyard Drive in the unincorporated area of Templeton, CA. The project includes widening the two span reinforced concrete box girder structure as well as a designing a soldier pile retaining wall that requires tieback anchors.

State Route 210, Los Angeles, CA
Project manager and lead design engineer for one of the first widening projects on the statewide soundwall program. The structures consisted of two single-span reinforced concrete box structures. The Caltrans soundwall structures manager adopted the design guidelines developed for this project for the statewide soundwall program.

I-580/I-880 Distribution Structure Seismic Retrofit, Oakland, CA
Project engineer on a $40 million retrofit of an existing steel girder, reinforced concrete and CIP post tensioned structures. The project included retrofitting four separate steel structures, three separate reinforced concrete structures, and one cast-in-place post-tensioned box girder structure. The project had significant railroad involvement due to the close proximity of the bents to several railroad tracks.

Eastbound I-580/I-880 Connector Replacement, Oakland, CA
Project engineer for a $10 million replacement of a portion of the existing reinforced concrete T-beam steel girder structure. The existing structure was replaced with a reinforced concrete slab bridge with a precast bulb-tee drop-in span over I-80.

Eastbound I-80/I-580 Interchange Replacement, El Cerrito, CA
Project designer on multiple cast-in-place post-tensioned box girder structures. Mr. Ross developed one of the first accessible hinge details for standard post-tensioned structures on this project. The project required significant railroad involvement due to the proximity of the bent locations to the railroad tracks. This project also required close coordination with multiple utility owners since the construction of the bridge foundations required relocating many utilities.

Mococo Overhead, Martinez, CA
Project engineer for a $40 million approach to the new Benicia bridge project. The complex project consisted of an eight-span precast bulb-tee/reinforced box girder structure; six-span reinforced concrete slab structure; several retaining walls including a soil nail wall. The precast portion included a spliced bulb-tee girder spanning 205 feet. The bedrock varied tremendously across each bent, thus isolation casings were deemed necessary at certain bents to "tune" each bent to meet the SDC requirements for bent stiffnesses. The project included many railroad, environmental and utility issues that needed to be addressed during the design process. A non-linear time history seismic analysis including both functional and safety level ground motions were performed since this structure was deemed to be "important."

I-210/I-5 Emergency Repair, Los Angeles, CA
Lead project designer for the repair and retrofit of existing structures in the interchange after the Northridge earthquake. The design required significant railroad coordination due to the proximity of the several bents adjacent to the existing railroad tracks.

LA Triple Track, Los Angeles, CA
Performed seismic analysis on several Burlington Northern-Santa Fe Railroad bridge underpasses being widened to accommodate a third track.

I-15, San Diego, CA
Project manager and lead design engineer for the first phase of the managed lane construction. The project consisted of removal of two existing overcrossings and replacement with two three-span cast-in-place post-tensioned structures. A project challenge was the incorporation of aesthetic features requested by the Caltrans District 11 landscape architect.

State Route 56, San Diego, CA
Design engineer for final phase of construction connecting I-5 and I-15. The project consisted of ten undercrossings and two overcrossings. The challenging part of this project was training a staff of inexperienced engineers in the proper analytical processes as well as the proper Caltrans detailing techniques.

I-5, Orange County, CA
Project manager and lead design engineer for an emergency contract to raise an existing MSE wall to accommodate a superelevation correction. The project was completed in one month because of safety issues associated with the incorrect superelevation.

State Route 280 Seismic Retrofit, Daly City, CA
Project engineer and lead designer for the retrofit of five reinforced concrete bridges on State Route 280. The structures consist of two cast-in-place post-tension box structures and three reinforced concrete structures.

State Route 56, San Diego, CA
Project manager and lead design engineer for final phase of construction connecting I-5 and I-15. The project consisted of 12 CIP/PS structures.

State Route 60, Los Angeles, CA
Project manager and lead design engineer for a widening project to accommodate placement of soundwalls on existing structures. The structures consisted of three, three-span reinforced concrete structures.

SR 101 (Seismic Retrofit), Eureka, CA
Technical director along with lead designer for the retrofit of two reinforced concrete T-beam structures and two reinforced concrete box girder structures.

Trinity River Bridge (Seismic Retrofit), Hoopa, CA
Technical director for the retrofit of a three-span steel superstructure over the Trinity River.

Preliminary Design

Route 15. Managed Lanes, Escondido, CA Responsible for the development of over 10 advanced Planning studies for the widening and replacement of structures along Route 15, in San Diego County.

I-405/101 interchange , Los Angeles, CA Responsible for the development of the advanced planning studies for the widening and replacement of three structures along with several retaining walls.

I-80 HOV lane, Oakland, CA Responsible for the development of an advance planning study for the addition of an HOV lane on eastbound I-80 from the Bay Bridge to Emeryville.

Value Engineering

I-580/I-880 Distribution Structure Seismic Retrofit, Oakland, CA Primary team member for the weeklong value analysis session for the retrofit of the I-580/I-880 Distribution Structure Seismic Retrofit. The team was assembled to come up with innovative retrofit techniques to reduce the overall project cost.

I5/State Route 14 Interchange HOV Lane, Los Angeles, CA Primary team member for the weeklong value analysis session for the addition of HOV lanes at the I5/S.R. 14. Interchange. The team was assembled to come up with innovative ways to modify the existing interchange to accommodate the proposed HOV lanes between I5 and state route 14.

Design Oversight

I-405/101 Gap Closure, Ventura, CA
Performed technical oversight. Duties included review of design assumptions for

widening a steel girder structure over Ventura Boulevard and assessment of environmental issues associated with pile driving.

New Carquinez Bridge, Vallejo, CA
Performed technical oversight on the new steel box girder suspension bridge across the Carquinez Strait. Work included reviewing design assumptions for the pier foundations.

Moonstone Beach Drive, Cambria, CA
Project Engineer for replacement of a structurally deficient bridge over a small creek on scenic Moonstone Beach on the California central coast. The project is funded by the HBRR program and includes civil and bridge design, hydraulic design, geotechnical, environmental and public outreach services. Corrosion resistant detailing is required for this bridge in a marine environment. During construction, the bridge will remain in service for access to the adjacent state park.

Main Street Bridge, Cambria, CA
Independent check for replacement of a two-span bridge over Santa Rosa Creek with a simple span bridge, which allowed for the removal of the existing pier from the channel. During construction of the new bridge, the roadway was realigned so the existing bridge could be used. The project was funded by the HBRR program to replace a structurally deficient bridge.

Picachio Road Bridge, Cayucos, CA
Project Engineer for replacing an existing timber structure with a 66-foot long precast/prestressed cored slab including a temporary detour routing traffic around the new bridge during construction. The project was funded by the HBRR program to replace a structurally deficient bridge.

Cypress Avenue Bridge Replacement, Redding, CA
Project Engineer for a $35 million replacement of a 1,040-foot-long, six-lane wide bridge over the Sacramento River and associated roadway improvements near downtown Redding. The project team is responsible for bridge advance planning studies, surveys, hydraulic studies, environmental documentation support, bridge type selection, bridge and roadway PS&E development, and construction support engineering. This project requires three-stage construction, and environmental mitigation to reduce impacts to the salmon migrations in the Sacramento River. The project also includes two retaining walls and a possible box culvert modification.

Hoover Dam Bypass, Clark County, NV
Performed independent design check of the skewback footings for the concrete arch bridge crossing the Colorado River as well as an independent check of the abutments and retaining walls using LRFD design codes. The abutments and retaining walls required special design to ensure that the bearing stresses in the spread footings and the wall reinforcement were not overstressed in the various construction stages. Since the tieback anchors for the abutments and retaining walls were stressed in multiple stages, it was important to track wall deflections in the various construction stages to make sure that the final wall layout was correct.

Norwood Street Bridge, City of Sacramento, CA
Project Engineer for the replacement of the existing 11-span scour critical concrete slab bridge on pile extensions. The proposed bridge will be a four (4) span 380 foot long cast-in-place box girder structure on pile extensions being 60 feet wide which will accommodate two traffic lanes, two shoulders/bike lanes and two sidewalks. The project will require significant public outreach and utility coordination along with the challenges of replacing the existing bridge utilizing stage construction.

Statement of Qualifications

Goleta Overcrossing Improvement Project - Resume

City of Goleta

Resume of Gerald Comati.

NAME:	Gerald Comati
TITLE:	President, COM3 Consulting

Education:

B.S. Civil Engineering, Georgia Tech, Atlanta, Georgia
M.S. Civil Engineering, Stanford University, Palo Alto, California

Professional Licenses:

Civil Engineer, **California No. C 41941**

Summary of Experience:

Mr. Comati has twenty five years of extensive program and project management experience on major transportation projects.

COM3 Consulting Inc. (1998 to Present)

Mr. Comati founded COM3 Consulting in 1998. COM3 Consulting provides project/program management services, engineering management and construction management, claims analysis, and strategic planning services for infrastructure projects, specializing in the field of transportation. As President of the firm, Mr. Comati is responsible for directing all projects.

Mr. Comati has served as Project Manager for all the projects undertaken to date by COM3 Consulting. Details of these projects are listed under the experience section of the Statement of Qualifications.

Fluor Daniel (1993 to 1998)

Client: **Santa Barbara County Association of Governments (SBCAG).**
Project: **Measure D Highway Program.**

As Program Manager or the SBCAG Measure D Highway Improvement Program, Mr. Comati oversaw the Fluor Daniel program management team made up of project engineers, project control staff, and administration staff. Mr. Comati was responsible for all aspects of project implementation, from environmental to design and right of way, through construction of the $130 million Measure D Highway Program. All fifteen projects within the program were on Caltrans facilities. The highway improvements were part of a sales tax program in the County of Santa Barbara. Specific responsibilities involved coordination with local government, managing and monitoring consultants, preparation of agency cooperative agreements, client representation at project development and public meetings, program status presentations to the (SBCAG) Board, preparation of strategic plans, revenue/expenditure analysis, cost and schedule monitoring of all phases of each project within the Highway Program, and construction claims analysis and resolution.

Resume of Gerald Comati (continued).

Bechtel Corporation (1986 to 1993)

Client: **Santa Clara County Traffic Authority**
Project: **Measure A Highway Improvement Program**

Mr. Comati served as Senior Project Coordinator on the Bechtel Program Management Team, responsible for all elements of project delivery from environmental through construction for $120 Million of highway improvements on Route 237 as part of the $1 Billion transportation improvement program in Santa Clara County. Mr. Comati managed seven projects all of which were on Caltrans facilities.

Bechtel Corporation (1983 to 1986)

During this period Mr. Comati performed conceptual engineering, constructability analysis, cost estimating, and project controls on various large infrastructure related projects including a floating runway.

Awards:
- Recipient of Caltrans 2001 Excellence in Transportation Award – System Operations for the Route 101/Milpas Street Interchange Project (roundabout)
- Recipient of Caltrans 1998 Excellence in Transportation Award - Major Structure for the Route 101/La Cumbre Interchange Project
- Recipient of Irvan F. Mendenhall Award of Excellence for Engineering for the Route 101/La Cumbre Interchange Project
- Recipient of two MVP awards from Fluor Daniel in recognition of performance
- Recipient of Bechtel Corporation Special Performance Award

Training:
- Roundabout Training Course, San Diego State University - 10/2000.
- Design-Build Contracting Course, Design-Build Institute - 08/2000.
- California Laws Governing Capital Project Development, Institute of Transportation Studies – 07/2000.
- Specification and Special Provisions for Capital Improvement Projects, Institute of Transportation Studies – 07/2000.
- Project Finance, Fluor Daniel In-house Course - 09/1998
- Bidding and Execution of Risk Projects, Fluor Daniel In-house Course - 04/1998
- Project Management Excellence, Fluor Daniel In-house Course - 06/1997
- Controlling Your Project, Fluor Daniel In-house Course - 08/1994
- Legal and Commercial, Fluor Daniel In-house Course - 04/1994
- Project Management Execution, Fluor Daniel In-house Course - 09/1993
- FrontLine Leadership, Bechtel In-house Course - 11/1992
- Effective Business Presentations, Bechtel In-house Course - 12/1991

Contracts Management, Bechtel In-house Course - 05/1991

DONALD A. DRUSE, P.E.

PERSONNEL PROFILE

PROJECT ASSIGNMENT
Director/ Point-of-Contact
Civil Engineering

EDUCATION
BS in Civil Engineering
1985, California State University, Chico

REGISTRATION
Registered Civil Engineer
California, # 44519

YEARS OF EXPERIENCE
22

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers (ASCE)

Home Builders Association of the Central Coast (HBACC)

American Public Works Association (APWA)

Consulting Engineers and Land Surveyors of California (CELSOC)

Donald Druse is an Associate Principal and Office Manager of the San Luis Obispo office of Rick Engineering Company. He manages a staff of designers and engineers whose responsibilities include the preparation of preliminary studies, tentative maps and development estimates, as well as final maps, construction plans, and specifications.

Don has managed several projects in the past that have included the design and construction of public streets and the widening of existing ones.

A few of Mr. Druse's representative projects include:

- **BROAD STREET – CITY OF SAN LUIS OBISPO, CA:** (CURRENT) Project manager for planning and preliminary design for the "redevelopment" of approximately one mile of Broad Street. Design considerations include existing land uses adjacent to Broad Street, proposed land uses consistent with the City's Updated General Plan and proposed traffic volume and circulation characteristics. The preliminary design recommendations will include extensive input from a citizen advisory committee, as well as technical input from both the City and Cal Trans.

- **CALLE JOAQUIN – COUNTY OF SAN LUIS OBISPO, CA:** Civil Engineering Department Director whose project responsibilities included QA/QC and design oversight. The project design included the realignment of approximately ¾ mile of Calle Joaquin between Hwy 101 and Froom Creek at the intersection of Los Osos Valley Rd. The proximity to Froom Creek created environmental permitting challenges. Connection to the Los Osos Valley Road/Highway 101 interchange required coordination and permitting from Cal Trans. This project was with another firm.

- **EL CAMINO REAL – CITY OF ATASCADERO, CA:** Civil Engineering Department Director whose responsibilities included QA/QC and design oversight for the widening of El Camino Real and Santa Barbara Road. This portion of El Camino is a four-lane major street that fronts the Dove Creek development. Extension of an existing major storm drain facility required issuance of a CLOMR and LOMR from FEMA as part of the development and permitting process for El Camino Real and Dove Creek. This project was with another firm.

- **OLD COACH ROAD – POWAY, CA:** Project Manager for the Old Coach Golf Estates development; a 700-acre, 156-estate lot subdivision with an 18-hole golf course in the City of Poway. Related design included the widening and realignment of approximately 1.5 miles of existing Old Coach Road. Old Coach is an urban collector street in the City of Poway's Circulation Element of the General Plan. The design constraints included the steep topography of Sycamore Canyon; heavily wooded oak tree habitat, the environmental and hydraulic issues associated with Sycamore Creek; and the existing utility and property accesses.

THOMAS MARTIN, P.E.

PROJECT ASSIGNMENT
Project Manager
Civil Engineering

EDUCATION
BS in Civil Engineering
1991, Old Dominion University

REGISTRATION
Registered Civil Engineer
California,#64222

YEARS OF EXPERIENCE
15

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers (ASCE)

Home Builders Association of the Central Coast (HBACC)

COMMUNITY INVOLVEMENT
Habitat for Humanity of SLO County

Mr. Thomas Martin is a Principal Project Engineer at the San Luis Obispo office of Rick Engineering Company. He manages a design team whose responsibilities include the preparation of roadway and utility studies, construction drawings, specifications and estimates.

Tom has worked in the San Luis Obispo area for 7 years, including employment with Caltrans (District 5) and currently in the private sector. Prior to San Luis Obispo, Tom worked in San Diego, CA and Seattle, WA in both the private and public sectors.

A few of Mr. Martin's representative projects include:

- **NORTH AND SOUTH RIVER ROAD – CITY OF PASO ROBLES, CA:** Project Manager for the development of a Preliminary Design Report (PDR) for the improvements to a three-mile portion of River Road along the Salinas River. Design constraints include existing steep slopes escarpments, Oak, riparian areas, floodplain / floodway encroachments and utility conflicts . The PDR will address these constraints and present alternative recommendations on the roadbed cross section, slope stabilization, earthwork needs, sight distance and will address a potential roundabout or traffic calming location. A cost analysis will be developed to help determine future funding for the project. PDR is 90% Complete.

- **SANTA BARBARA ROAD AND EL CAMINO REAL – CITY OF ATASCADERO, CA:** Project Manager for the public street improvements associated with the Dove Creek development. Duties included design, scheduling, management and oversight of the project. The project included the addition of a landscape median, overlay, and a four lane widening of curb, gutter, parkway, sidewalk and striping improvements on El Camino Real. Work on Santa Barbara Road included re-profiling the road to enhance culvert drainage, removal and replacement of existing deteriorated asphalt and acceleration / deceleration lanes. A hydraulic analysis was also processed through FEMA to determine the effects of culvert extensions and re-shaping. This project was with another firm.

- **WOODRIDGE OFFSITE IMPROVEMENTS - CITY OF ATASCADERO, CA:** Project Manager for a project to widen approximately two miles of rural road and upgrade it to the City collector standard. Mr. Martin's duties included design, cost estimating, project management and review. The Woodridge development was conditioned to widen, add bike lanes, provide striping and add safety improvements to Halcon Road, Viejo Camino and Santa Barbara Roads. The project also included realignment of the intersection of Santa Barbara Road and El Camino Real with a new signal and turn lanes. This project was with another firm.

- **CALTRANS TRANSPORTATION ENGINEER – DISTRICT 5, SAN LUIS OBISPO, CA:** Prepared Traffic Control Plans for maintenance and construction in a five county district. Reviewed weekly lane closures and performed delay and queue calculations for traffic control areas. Development of the district Traffic Management Center (TMC) including design, training and operation of system elements. This project was with another firm.

KAI E. RAMER, P.E., T.E.

PROJECT ASSIGNMENT
Principal-In-Charge
Transportation Civil & Traffic Engineering

EDUCATION
B.S. in Civil Engineering
1985, California State University at Chico

YEARS OF EXPERIENCE
23

REGISTRATION
Registered Civil Engineer
California, # 44146
Registered Traffic Engineer
California, # 1940

PROFESSIONAL AFFILIATIONS
American Public Works Association (APWA)

American Society of Civil Engineers (ASCE)

Past President – San Diego Highway Development Association

Consultant Engineers and Land Surveyors of California (CELSOC)

Institute of Transportation Engineers (ITE)

Transportation Research Board (TRB)

Kai E. Ramer is a Principal of Rick Engineering Company and serves as Director of the Transportation Division. He supervises and manages a design division of transportation engineers, traffic engineers, civil engineers, designers and drafters. Work by his Division consists of preliminary and final design of streets, highways, expressways and freeways, storm drains, traffic control systems, traffic planning and flood control facilities. He has significant experience on various successful major public and private transportation and traffic related projects and studies.

In addition to his receiving his degree, Mr. Ramer has completed additional education classes including graduate work in transportation engineering; seminars and courses on contracts and specs for public works projects for local agencies and Caltrans; Federal Highways and Caltrans seminars; training in value analysis (VA) and participation in VA studies.

A few of Mr. Ramer's representative projects include:

HIGHWAY, FREEWAY AND INTERCHANGE PROJECTS:

- State Route 125 Sweetwater – Spring Valley
- State Route 125 South Tollway – Otay Mesa
- I-805 at Olympic Parkway – Chula Vista
- I-805 at Telegraph Canyon Road – Chula Vista
- State Route 86/111 Realignments – Imperial County
- I-8 at Los Coches Road – San Diego County
- State Route 78 at Jefferson – City of Oceanside
- I-15 at Scripps Poway Parkway – City of San Diego
- State Route 94 Highway Widening – San Diego County
- State Route 54 Highway Widening – San Diego County
- State Route 56 at Rancho Peñasquitos Boulevard – City of San Diego
- State Route 75/Naval Amphibious Base – Coronado

ROADWAY PROJECTS:

- Center City Parkway Intersections – City of Escondido
- Genesee Avenue Widening – City of San Diego
- La Jolla Village Drive Widening – City of San Diego
- Palm Avenue at I-805 – City of San Diego
- Torrey Pines Road Widening – City of San Diego
- Scripps Poway Parkway at I-15 – City of San Diego
- Jamacha Road Widening – San Diego County
- Olympic Parkway / Orange Avenue – City of Chula Vista
- Telegraph Canyon Road – City of Chula Vista
- Melrose Drive – City of Carlsbad
- Black Mountain Road / Park Village – City of San Diego
- El Camino Real – City of San Diego

EDGAR CAMERINO, P.E.

PERSONNEL PROFILE

PROJECT ASSIGNMENT
Project Manager

EDUCATION
BS in Civil Engineering
1991, San Diego State University

REGISTRATION
Registered Professional Engineer
California, # 58844

YEARS OF EXPERIENCE
15

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers (ASCE)

Past-Chair – ASCE Transportation Group

Practitioner Advisor – ASCE San Diego State University (SDSU) Chapter

Industry Advisory Board Member – SDSU Minority Engineering Program (MEP)

American Public Works Association (APWA)

San Diego Highway Development Association (SDHDA)

Secretary - APWA Transportation Group

Edgar Camerino is an Associate in Rick Engineering Company's Transportation Division. Work assignments consist of Project Management for preliminary design/planning and preparation of plans, specifications and estimates (PS&E) for streets, highways, freeways and interchanges.

A few of Mr. Camerino's representative projects include:

- **SR-125 TOLL ROAD PROJECT, SEGMENT 1A – CHULA VISTA AND SAN DIEGO, CA:** Roadway and Drainage Project Manager for PS&E of Segment 1A, the southerly 3.5-miles of the overall 9.5-mile Toll Road project, which includes a 1-kilometer long bridge that spans over the Otay River and a half-diamond interchange at Otay Mesa Road. Responsibilities included managing the production of the design plans and drainage reports for Segment 1A. Also, managed the work of subconsultants preparing the water quality plans and reports for the project. Directly coordinated issues with Caltrans, the Cities of San Diego and Chula Vista, and the County of San Diego.

- **I-805 / EAST ORANGE AVENUE / OLYMPIC PARKWAY – CHULA VISTA, CA:** Project Manager/Engineer for the preparation of a Project Study Report (metric), Project Report (metric), Environmental Documents (metric) and Plans, Specifications and Estimates (metric) to upgrade an existing freeway interchange with approximately 1.6 miles of auxiliary lanes, ramp and bridge widenings, sound walls and retaining walls. Responsibilities include coordinating with sub-consultants for completion of the Environmental Documents(CEQA/NEPA), preparation of PSR, PR, and PS&E, Noise Abatement Decision Report (NADR), directing MicroStation and InRoads design and drafting, cost estimates, grading and alternative studies, and coordinating with the City of Chula Vista and Caltrans District 11.

- **EL CAMINO REAL ROAD AND BRIDGE WIDENING PROJECT – SAN DIEGO, CA:** Project Manager for the preparation of.the Environmental Impact Report (EIR) and Environmental Assessment (EA) documents in conjunction with the City of San Diego, Caltrans, and environmental consultant staff. Responsibilities included overseeing the preliminary engineering design, preliminary hydrology/hydraulic studies, preliminary bridge studies and analysis, hydrology/hydraulic studies of the San Dieguito River, preparation of environmental exhibits for inclusion into the EIR & EA documents, utility impact studies, right of way documentation, and preliminary construction estimates for this project. The project is funded by the City of San Diego and FHWA.

- **CAMPO ROAD/JAMACHA ROAD (STATE ROUTE 54 / STATE ROUTE 94) – SAN DIEGO, CA:** Project Manager/Engineer/Design Engineer for project study report/project report and preparation of plans, specifications, and estimates to upgrade existing four-lane facility to Interstate standards. Responsibilities included geometrics, determining location and height of retaining walls, earthwork, construction details, analyzing drainage requirements in direct coordination with Caltrans Hydraulic Department, and MicroStation and InRoads design and drafting.

- **I-805/MIRA MESA BLVD./SORRENTO VALLEY ROAD INTERCHANGE – SAN DIEGO, CA:** Project Manager for the preparation of a Project Study Report (Project Development Support) for the Mira Mesa Boulevard / Sorrento Valley Road interchange in the City of San Diego on Interstate 805. The project included traffic forecasting, traffic impact analysis, and alternative studies to upgrade capacity for current and future area growth, preliminary design for upgrading of the existing interchange, and alternative studies to integrate multi-modal transit components to the area (i.e. High Occupancy Vehicle Direct Access Ramps at Carroll Canyon Road, a Bus Rapid Transit Center, and relocation of a Coaster train station). Directly coordinated with the City of San Diego, Caltrans, North County Transit District, and Metropolitan Transit System, as well as utility companies and other design consultants.

- **STATE ROUTE 125 SWEETWATER STAGE 3 FREEWAY PROJECT – SPRING VALLEY, CA:** Project Engineer/Lead Designer for the preparation of metric PS&E for 2.8 kilometers of a new six-lane freeway. Responsibilities include MicroStation and InRoads design and drafting, geometrics, drainage, grading, a Feasibility and Reasonableness of Noise Abatement Report, Caltrans Survey Staking coordination and cost estimates. This project was locally funded by SANDAG and performed in accordance with Caltrans metric standards.

DENNIS C. BOWLING, P.E.

PROJECT ASSIGNMENT
Hydrology/Hydraulics

EDUCATION
B.S. in Civil Engineering
1978, San Diego State University

M.S. in Civil Engineering with a Specialty in Surface Hydrology
1983, San Diego State University

REGISTRATION
Registered Professional Engineer
California, #32838
Arizona, #22083
Nevada, #09055

YEARS OF EXPERIENCE
29

PROFESSIONAL AFFILIATIONS
American Society of Civil Engineers (ASCE)

The Association of State Flood Plain Managers

Chairperson – The American Public Works Association (APWA); Water Resources Committee

Dennis C. Bowling is Principal-In-Charge of the Water Resources Division at Rick Engineering Company's San Diego office. A civil engineer with a specialty in Surface Hydrology, he joined Rick Engineering Company in 1978. His staff consists of engineers, designers, and computer support staff. Work includes hydrologic and hydraulic calculations, preparation of master drainage plans and FEMA flood insurance studies/maps, hydrologic and hydraulic analysis and design for major flood control channels, desilting and detention basins, and storm drain systems. He excels in the use of computer models such as the HEC-1 Hydrologic model, HEC-2/HEC-RAS hydraulic models, and FLUVIAL-12 and HEC-6 sediment and scour analysis model.

Mr. Bowling is especially proficient in Public Works projects, and has extensive experience with agecy policies and standards. He regularly directs preliminary and final planning studies and reports, preliminary and final design documents, contract drawings, control cost estimates and specifications for flood control dams, channels and levees.

A few of Mr. Bowling's representative projects include:

- **PASO ROBLES FEMA RESPONSE LETTER – PASO ROBLES, CA:** Currently assisting the City of Paso Robles preparing a response letter to the Community Assistance Visit (CAV) conducted by the Department of Water Resources (on behalf of FEMA). Project includes preparing an updated Floodplain Management Ordinance for City Council adoption, researching the floodplain status of four identified structures, assisting with an Elevation Certificate filing system, and additional miscellaneous floodplain-related engineering design and support services.

- **FOREST MEADOWS OFFSITE ROAD IMPROVEMENTS – CALAVERAS COUNTY, CA:** Preparing detailed drainage design calculations to determine the hydrologic and hydraulic impacts of the offsite road widening projects associates with the Forest Meadows project.

- **MCMILLIN TUSCANY – BAKERSFIELD, CA:** The McMillin Tuscany project is a 49-unit residential subdivision project within the City of Bakersfield. The project includes preparing detailed hydrology and hydraulic calculations as well as a drainage concept study that addresses storm water quantity (detention) and quality.

- **DETENTION STUDY FOR CARLSBAD RESEARCH CENTER - CARLSBAD, CA:** Performed a hydrologic and hydraulic analysis for the design of a detention basin to attenuate peak discharges to below pre-project discharge levels for the ten-year storm. This basin was designed to meet the criteria set by the California Division of Safety of Dams and incorporates a wet-pond as a landscape feature and provides a park to serve the surrounding development.

JAMES KUHLKEN, R.L.A., LEED AP

PROJECT ASSIGNMENT
Landscape Architecture

EDUCATION
B.S. in Landscape Architecture
1979, California Polytechnic State University, San Luis Obispo

REGISTRATION
Registered Landscape Architect
Arizona, #40791
California, # 2281

Council of Landscape Architectural Registration Board
CLARB #3335

State California Contractor License
C-27 Landscape #436529
Inactive

YEARS OF EXPERIENCE
27

ASSOCIATIONS
American Institute of Landscape Architects (member)

James Kuhlken has more than 27 years of experience as a landscape architect, park planner and urban designer for a large range of project types for both private and public sectors. Mr. Kuhlken is the Principal-in-Charge of the Landscape Architecture Division of seven of Rick Engineering Company branch offices. His division works in a design studio atmosphere and in a team-like manner with both in-house and other members of the design team. He strongly believes that creative and innovative design must meet the needs of the client and the user. He has won several awards for his projects and is highly respected by his clients and peers.

In May of 2003, Rick Engineering Company acquired Marquez Kuhlken Landscape Architects (MKLA) and expanded their services to include landscape architecture. Dolores Marquez and Jim Kuhlken, prior to starting their own firm in 1992, were the project managers for a 7000-acre planned community named North City West now known as Carmel Valley located in San Diego, California. Their ten-year commitment to this project included a broad scope of services including Streetscape design and construction documentation.

These Streetscape projects included complete construction documents, specifications, cost estimates and contract administration. This early experience provided stepping stones to numerous other similar Streetscape projects and clients such as:

- Sabre Springs – Pardee Homes
- Torrey Highlands – D.R. Horton
- Escondido Highlands – Shea Homes
- The Arbors – The Brem Company
- Rancho Cielo – Cielo Estates
- Pacific Highlands – Pardee Homes
- Saxony – D.R Horton
- Silver County Estates – D.R. Horton
- Scripps Ranch Villages – D.R. Horton
- Avalon Point – McMillin
- Robinhood Ridge – McMillin
- Rancho Del Rey – McMillin
- Otay Ranch – McMillin

In 1998, the Otay Development Company selected MKLA (aka Rick Engineering Landscape Architecture Division) as the project landscape architect for Otay Ranch located in Chula Vista, California. Otay Ranch is a 5300-acre pedestrian friendly planned community with schools, parks, and shops tied together by trials, paseos, tree lined sidewalks and bike paths.

Dr. Richard Dowling P.E. P.E. is a licensed Civil and Traffic Engineer in the State of California. He obtained his Ph.D. in Transportation Engineering from the University of California at Berkeley. He has over 25 years of experience in transportation planning, traffic engineering operations, research and education. Mr. Dowling will act as Principal-In-Charge, ensuring the delivery of high quality services/products on all projects undertaken by the firm. Rick will ensure that the needed firm resources are committed to the project to ensure timely delivery of all products. Dowling Associates actively incorporates a Quality Assurance Program into its projects.

Mr. Jim Damkowitch will function as project manager for this project. Mr. Damkowitch will be managing from the Sacramento office. He will be responsible for project oversight, allocating staff resources, monitoring timely performance and quality assurance. As a member of the Dowling Associates team, Mr. Damkowitch served as the project manager for all prior City of Goleta/Dowling Associates modeling contracts. He has also served as project manager for other high profile traffic studies including the SR-88 Bypass PSR Traffic Study and the Atwater-Merced Expressway Project Report/EIR.

Prior to joining Dowling Associates in June 2005, Mr. Damkowitch garnered over 13 years of planning experience (1992-2005) in Santa Barbara County. As a staff member for the Santa Barbara County Association of Governments, Mr. Damkowitch administered the county's Congestion Management Program (CMP). He is familiar with the transportation planning process and staffs of the City of Goleta, Caltrans District 5, SBCAG, the Air Pollution Control District, the County of Santa Barbara as well as the other incorporated cities of Santa Barbara County. Mr. Damkowitch is familiar with past modeling work performed for the Goleta area (by the City of Goleta and the County prior to Goleta incorporation). Mr. Damkowitch is intimately familiar with the Goleta area (i.e., VISUM modeling domain) and is knowledgeable of the model network and future infrastructure improvement projects currently programmed/planned in the City. His participation in the development and application of the SBCAG TransCAD travel demand model – of which a sub-area includes the City of Goleta – provides additional insight and knowledge of the traffic circulation and modeling issues facing the City of Goleta.

Mr. Damkowitch's recent experience at Dowling Associates includes managing large scale traffic studies including: the Atwater-Merced Expressway PSR-PDS & EIR (Approved August 2007); the SR-88 Lockeford Bypass PSR (Approved July 2006), the City of Goleta General Plan Circulation Element (Approved September 2006), City of Goleta Travel Modeling On-Call (2006-present) and the Caltrans District-5 Modeling On-Call to name a few. He is proficient with TransCAD, VISUM, TP+/CUBE, and TRANPLAN transportation demand modeling software; HCM/HCS 2000; TRAFFIX; SYNCHRO operational programs.

Jose Cardenas, PLS
Principal

Education
BS Surveying Engineering
Fresno State, 1985

Registration
PLS, California-6491

Professional Affiliations
State CLSA
Central Coast CLSA

Jose Cardenas started his own firm in June 2000. Locally he worked for Penfield & Smith as well as MNS locally, as both a party chief in the field and as a survey department manager. Also Mr. Cardenas has worked for Cal-Trans as party chief, department manager and as contracts manager.

In February 2007, Cardenas and Associates was hired to work with Com3 Consulting on two base maps for the City of Goleta Overpass Feasibility Study. We provided aerial control and property line data for the base maps at Elwood Station and La Patera sites.

Mr. Cardenas has been involved in many significant projects, some of which include:

- Exxon Processing Plant Las Flores Canyon
- Chevron Route Alignment from Lompoc to Buellton
- SB-154 Operational Improvements
- Milpas Roundabout
- SB-101/154 Bridge Overpass North of Buellton

John Keating
Project Surveyor

John Keating has worked as a surveyor locally since 2001. Mr. Keating has progressed from an entry level surveying position to a project surveyor in charge of his own projects.

Mr. Keating has worked on many significant projects, some of which include:

- City of Goleta La Patera/ Ellwood Station Aerial Project
- Comstock Homes Subdivision
- City of Ojai- Ojai Meadows Restoration Project

Various Private Development Projects

CARDENAS AND ASSOCIATES SURVEYING, INC.

JILL WILSON O'CONNOR

PRINCIPAL

EXPERTISE

Environmental Planning and Report Management
Environmental Impact Reports/Statements
Biological Permit Processing

EDUCATION

California Polytechnic State University, San Luis Obispo, Bachelor of Science in Natural Resources Management, 1980.

PROFESSIONAL EXPERIENCE

Principal, LSA Associates, Inc., environmental and transportation planning and traffic engineering consultants, Southern California, 1986-present.

Project Planner, BSI Consultants, Inc., traffic and civil engineering, traffic operations and transportation planning consultants, Santa Ana, California, 1983-1986.

Professional Staff, Ultrasystems, Inc., environmental planning and engineering consultants, Irvine, California, 1981-1982.

PRINCIPAL PROFESSIONAL RESPONSIBILITIES

Ms. O'Connor manages projects requiring environmental impact analysis under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and other regulatory processes. In this capacity, Ms. O'Connor oversees and contributes to the preparation of environmental documents including Environmental Impact Reports (EIRs), Environmental Impact Statements (EISs), Environmental Assessments, Initial Studies, Negative Declarations, Addendums to EIRs, land use and transportation planning studies, and resource management plans. Responsibilities include coordination/organization of report preparation with client and LSA staff, assignment and review of prepared report sections, research and compilation of data for environmental reports, coordination of project team meetings, review and comment of technical studies, and tracking of project budgets, scope of work, and contractual agreements.

Specific project experience includes management and contribution to the preparation of CEQA and NEPA environmental documents for a proposed international airport Specific Plan, a regional transportation corridor (toll road), environmental documents analyzing coastal zone developments, mixed use master planned communities, regional flood control improvements, a marsh enhancement plan, school facilities, and roadway improvements. From 1991 to 2006, Ms. O'Connor has served as an extension of staff to the County of Orange for CEQA and NEPA consultation on the Santa Ana River Mainstem Project (U.S. Army Corps of Engineers, Lead Agency).

As part of her experience in the environmental consulting industry, Ms. O'Connor has coordinated with multiple State, federal and local agency representatives, in addition to project applicants and other consultants on project teams. In coordination with LSA's Natural Resources Division, Ms. O'Connor has also prepared resource management/conservation plans, mitigation plans, and federal and State permit applications related to wetlands, endangered species, water quality, and sensitive habitat regulations.

REPRESENTATIVE PROJECT EXPERIENCE

County of San Luis Obispo Biological Database Assessment, San Luis Obispo, CA. Ms. O'Connor served as Principal in Charge of the County of San Luis Obispo's first phase of work on the Biological Database Assessment project. LSA conducted an assessment of the County's biological resources database, including outside data identified and incorporated into the County's Geographic Information System (GIS) database. A constraints model was developed using standard modeling tools included with ArcGIS software. The model was used to develop a County-wide preliminary biological resources constraints map, which ranked the biological resources of the County into areas of high, medium and low sensitivity. The constraints map and this first phase of a three phase database mapping project will be used by County staff to make planning decisions. Ms. O'Connor provided quality control and management oversight to LSA's project manager and GIS technical staff during the course of this research, modeling and mapping effort.

San Miguel Ranch GPA EIR, San Luis Obispo, CA. Ms. O'Connor serves as Principal in Charge of preparation of an EIR for a proposed residential and commercial development in the unincorporated community of San Miguel in San Luis Obispo County. The proposed project would convert 550 acres of land in agricultural production to primarily developed uses, along with open space and recreational uses including trails and parks. The proposed project will require connection to the community's wastewater treatment plant on the east side of Highway (US) 101 and circulation connections to US 101 at the north and south ends of the project site. Conversion of agricultural lands, removal of oak woodland habitat and potential kit fox habitat and consumption of domestic water are a few of the more substantial areas of potential impact that the proposed project may cause. The proposed project would require approvals of a General Plan Amendment, annexation of the property to the San Miguel Community Services District, Expansion of the San Miguel Urban Reserve Line and Urban Services Line and a Vesting Tentative Tract Map. The proposed project is viewed as controversial to some community members because approval would allow development outside the established urban areas which would cause consumption of limited resources, reduction of natural habitats, disruption of wildlife movement corridors, aesthetic changes to the area, and requirements for additional infrastructure for services and utilities.

Willow Road Extension and U.S. 101 Interchange Supplemental EIR and Environmental Assessment, San Luis Obispo, CA. LSA prepared both CEQA and NEPA environmental analysis documentation for the proposed extension of Willow Road, a local road in southern San Luis Obispo County and new interchange with U.S. 101. A Supplement Environmental Impact Report was prepared for the County of San Luis Obispo under CEQA and an Environmental Assessment/FONSI is underway for the interchange portion of the project. In addition to the County Department of Public Works, LSA coordinates with Caltrans District 5 staff for the review as well as the Federal Highway Administration. Ms. O'Connor is LSA's Project Manager of the environmental documentation and is responsible for

coordination with the project team and public agency staffs for completion of the technical analysis and environmental documents through the CEQA and NEPA processes.

Community Environmental and Transportation Acceptability Process, Tier 1 EISs/EIRs - Riverside County, CA. The Riverside County Transportation Commission (RCTC), in conjunction with the Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), and the County of Riverside, initiated CETAP to preserve right-of-way for both a north-south and an east-west multimodal transportation corridor in western Riverside County. In 2001-02, LSA simultaneously prepared two separate Tier 1 EIS/EIRs to evaluate route location alternatives in each internal corridor. The purpose of the proposed action covered by the Tier 1EIS/EIRs is to preserve right-of-way for these future transportation facilities, which may not be built for many years. The Federal Record of Decision for the north-south CETAP corridor (Winchester to Temecula) was approved in September 2003.

Ms. O'Connor served as an Environmental Task Manager working alongside LSA's Project Manager and other team members for preparation of the two simultaneous EIS/EIRs. LSA was instrumental in maintaining a fast-track schedule to ensure that the CETAP process kept pace with other Riverside County Integrated Project components (General Plan update and western Riverside County MSHCP). Innovative practices for environmental streamlining implemented for this project included conducting the normally time-consuming Section 106 process as a phased undertaking (consistent with recent changes in Section 106 guidelines) and concurrent transportation/resource agency reviews of the technical studies and the EIS/EIRs.

Santa Ana River Mainstem Project, Orange County. From 1991 through 2006, Ms. O'Connor has served as an extension of County of Orange staff for the Santa Ana River Mainstem Project (SARP). The SARP is funded in part by the federal government as well as Orange, Riverside, and San Bernardino counties as local sponsors. The U.S. Army Corps of Engineers (Corps) is the Lead Agency responsible for project design and construction. The SARP involves improvements to the Santa Ana River for flood protection of downstream property. Ms. O'Connor provided CEQA and NEPA expertise to the County for a variety of tasks, including review and preparation of reports addressing project modifications since the original Final Supplemental EIS (FSEIS), annual updates of the Mitigation Monitoring and Reporting Program, and revision of a Habitat Management Plan for the flood zone lands within Santa Ana Canyon, downstream of Prado Dam. Ms. O'Connor's work on the SARP required her to coordinate with staff from the County of Orange, U.S. Army Corps of Engineers, local agencies, and resource agencies.

The complexity of the project requires an extensive amount of environmental review and evaluation under NEPA, and coordination among the Corps, the three local sponsors (counties of Orange, Riverside, and San Bernardino), resource agencies, and locally affected jurisdictions. Environmental clearance for project design and construction requires permits and processes in accordance with the Clean Water Act (Section 404), the Endangered Species Act (Section 7 consultation), and processing and evaluation of supplemental environmental documentation to the SFEIS, as necessary for changes to the project design and/or mitigation measures subsequent to the adopted SFEIS in 1988.

PROFESSIONAL MEMBERSHIPS

Association of Environmental Professionals (AEP) current member and President, 1992, Orange County Chapter

PAMELA LICHTMAN READING

ENVIRONMENTAL PLANNER

EXPERTISE

Environmental Planning
Land Use Policy and Planning
Environmental Impact Report/Statements
Natural Resource Management

EDUCATION

M.S. School of Forestry and Environmental Studies, Yale University, 1992
B.A. *Magna Cum Laude*, Environmental Studies/Political Science, University of Vermont, 1988

PROFESSIONAL EXPERIENCE

Environmental Planner, LSA Associates, Inc., Oct. 2006 – Present

Assistant Environmental Planner, LSA Associates, Inc., Oct. 2004 – Oct. 2006

Program Director, Jackson Hole Conservation Alliance, Jackson, WY, 1994-2003

Community Planning Director, Jackson Hole Conservation Alliance, Jackson, WY, 1993-1994

Research Associate, Northern Rockies Conservation Cooperative, Jackson, WY, 1992-2004

Educator, The Wetlands Institute, Stone Harbor, NJ, 1991

Legislative Aide, Zero Population Growth, Washington, DC, 1990

Marine Debris and Entanglement Project Assistant, The Ocean Conservancy, Washington, DC, 1989

Consultant, Natural Resources Defense Council, Washington, DC, 1988

PRINCIPAL PROFESSIONAL RESPONSIBILITIES

Ms. Reading serves at Project Manager for preparation of CEQA and NEPA documents for a variety of public agencies and private entities. Ms. Reading assisted in the completion of the CEQA and NEPA environmental analyses and environmental documents for the *Willow Road Extension/U.S. 101 Interchange* project for the County of San Luis Obispo, as well as the EIR for the *Santa Barbara Cottage Hospital Seismic Compliance and Modernization Plan.* She has prepared farmland impacts analyses for several roadway and transportation corridor projects in accordance with the Farmland Conversion Rating Form AD-1006 and the California Agricultural Land Evaluation and Site Assessment (LESA) Model. Ms. Reading prepared a visual impact assessment in accordance with Caltrans requirements for an intersection improvement project on SR 68 in Monterey County. Ms. Reading is currently the Project Manager for two separate EIRs in Monterey County: one for a proposed subdivision project and the other for a

commercial retail project. She is also the Project Manager for a proposed hotel in the City of Seaside in Monterey County. Ms. Reading is part of a multidisciplinary team that provides ongoing land use planning and environmental management support for Pacific Gas and Electric's Diablo Canyon facility. Specific team disciplines include biology, archaeology, paleontology, traffic engineering, and urban and environmental planning. Current projects include preparation of the *North Ranch Managed Access Plan* (prepared as part of the Independent Spent Fuel Storage Facility Project Coastal Development Permit) and the *Steam Generator Replacement Project Mitigation Monitoring and Reporting Program.*

REPRESENTATIVE PROJECT EXPERIENCE

SR-68/Corral De Tierra Road, Monterey County, CA. Ms. Reading prepared a Preliminary Environmental Assessment Report (PEAR) and is currently preparing a Visual Resource Assessment for the proposed improvements to the SR-68/Corral De Tierra Road intersection, including the installation of an additional westbound SR-68 to southbound Corral De Tierra Road left turn lane and an additional receiving lane on Corral De Tierra Road.

Tefft Street/US 101 Interchange Improvement Project, San Luis Obispo County, CA. Ms. Reading is LSA's Project Manager for the Preliminary Environmental Assessment Report (PEAR) and technical author of the Hazardous Waste Initial Site Assessment for the proposed improvements to the Tefft Street/US 101 Interchange.

Mid County Parkway, Riverside County, CA. LSA is preparing a joint Environmental Impact Statement/Environmental Impact Report for the proposed Mid County Parkway project involving the adoption of an alignment and construction of a major limited access transportation facility for a 32-mile transportation corridor in western Riverside County. The study area is located on either side of the existing roadway known as Cajalco Road between I-15 and I-215 and the Ramona Expressway east of I-215. The intent of the project is to develop a facility along portions of the existing alignment to meet current and projected travel demand for 2035. Ms. Reading is responsible for conducting the farmlands impact analysis for this project, which includes utilizing the Land Evaluation and Site Assessment Model (LESA) and the Federal Farmland Conversion Impact Rating.

Willow Road Extension and U.S. 101 Interchange Supplemental EIR and Environmental Assessment, Nipomo, CA. LSA assisted in the preparation of both CEQA and NEPA environmental analyses for the proposed extension of Willow Road, a local road in southern San Luis Obispo County, and new interchange with US 101. Ms. Reading prepared technical analyses and assisted in the preparation of the Supplemental Environmental Impact Report (SEIR) (certified May 9, 2006). In addition to the San Luis Obispo County of Public Works, Ms. Reading coordinated with Caltrans District 5 for their review of environmental documentation. Ms. Reading is currently assisting in the preparation of the Environmental Assessment/Finding of No Significant Impact documentation under NEPA.

Diablo Canyon Power Plant, Pacific Gas & Electric, Avila Beach, CA. Ms. Reading is part of a multidisciplinary team that provides ongoing land use planning and environmental management support for Pacific Gas and Electric. Specific team disciplines include biology, archaeology, paleontology, traffic engineering, and urban and environmental planning. Current projects include preparation and implementation of the North Ranch Managed Access Plan (prepared as part of the Independent Spent Fuel Storage Facility Project Coastal Development Permit) and the Steam Generator Replacement Project Mitigation Monitoring and Reporting Program.

Mohsin-Samoske General Plan Amendment, Zone Change, Subdivision, and Variance Environmental Impact Report, Monterey County, CA. LSA has recently completed the Draft Environmental Impact Report for a proposed rural subdivision development located on River Road in the Toro Planning Area of Monterey County. Ms. Reading is LSA's Project Manager of the environmental documentation and is responsible for coordination with the project team and public agency staffs for completion of the technical analyses and environmental documents for the CEQA process.

Corral de Tierra Neighborhood Retail Village, Monterey County, CA. LSA is working with the County of Monterey to complete an Environmental Impact Report for a proposed commercial retail development along SR-68 in the Toro Planning Area of Monterey County. Ms. Reading is LSA's Project Manager of the environmental documentation and is responsible for coordination with the project team and public agency staffs for completion of the technical analyses and environmental documents for the CEQA process.

Del Monte Boulevard Hotel, City of Seaside, CA. LSA has been selected by the City of Seaside to prepare an Environmental Impact Report for a proposed hotel along Del Monte Boulevard in the City of Seaside. Ms. Reading is LSA's Project Manager of the environmental documentation and is responsible for coordination with the project team and public agency staffs for completion of the technical analyses and environmental documents for the CEQA process.

Santa Barbara Cottage Hospital Seismic Compliance and Modernization Plan, Santa Barbara, CA. Ms. Reading assisted in the completion of the Environmental Impact Report for the proposed Seismic Compliance and Modernization Plan for Santa Barbara Cottage Hospital.

PROFESSIONAL MEMBERSHIPS/AFFILIATIONS

Association of Environmental Professionals
San Luis Obispo Chamber of Commerce

PUBLICATIONS

Berger, J., Dulamtseren, S., Cain, S., Enkkhbileg, D., Lichtman, P., Namshir, Z., Wingard, G., and R. Reading. 2001. Back-casting sociality in extinct species: new perspectives using mass death assemblages and sex ratios. *Proceedings of the Royal Society*. Biological Sciences. Volume 268. Number 1463.

Lichtman, P. 1998. The Politics of Wildfire: Lessons From Yellowstone. *Journal of Forestry*. Volume 96, Number 5.

Lichtman, P. and T. W. Clark. 1994. Rethinking the *Vision* Exercise in the Greater Yellowstone Ecosystem. *Society for Natural Resources*. Vol. 7.

Bage, K., C. Bennett, and P. Lichtman. 1991. Salt Marsh Trail Guide. The Wetlands Institute. Stone Harbor, NJ.

Lichtman, P. 1990. An Uncompromising Position: China, the UNFPA and U.S. Population Policy. *ZPG Activist*. Zero Population Growth, Washington, DC.

The Earthworks Group. 1989. *50 Simple Things You Can Do To Save The Earth* and *50 Simple Things Kids Can Do To Save The Earth*. Earthworks Press, Box 25, 1400 Shattuck Avenue, Berkeley, CA

WENDY FISHER

SENIOR BIOLOGIST

EXPERTISE

Biological Resource Evaluations
Vegetation Ecology
Jurisdictional Waters Delineation and Permitting
Arborist Evaluations

EDUCATION

Humboldt State University, Arcata, California, B.S., Forest Ecology, minors in Botany and Forestry, 1996.

CERTIFICATIONS/SPECIALIZED TRAINING

California Native Plant Society, Rapid Assessment Training, August 2007
International Society of Arboriculture, Certified Arborist, #WE-3872A, Valid thru December 2009
Scientific Collecting Permit, California Department of Fish and Game, 2007
Richard Chinn's Advanced Wetland Training Course, 2005
California Department of Fish and Game and NatureServe, Vegetation Accuracy Assessment Training, 2002
Denton Belk's Fairy Shrimp Identification Course, 1999

PROFESSIONAL EXPERIENCE

Senior Biologist, Vegetation Ecologist. LSA Associates, Inc., San Luis Obispo, CA, July 2007 – present
Botanist/Ecologist, Contractor to NatureServe, 2002
Project Manager, Live Oak Associates, Oakhurst, CA, May 1998 - June 2007
Consulting Utility Forester, Western ECI, Oakhurst, CA, October 1997 - May 1998
Biological Science Technician, GS-5, US Forest Service, Sierra National Forest, CA, June 1995 - November 1997 (Intermittent)
Assistant Plant Propagator and Nursery Salesperson, Intermountain Nursery, Prather, CA, November 1996 – June 1997
Forestry Technician, GS-4, US Forest Service, Lolo National Forest, MT, June 1994-September 1994
Forestry Aide, GS-3, US Forest Service, Rogue River National Forest, OR, June 1993-September 1993

PRINCIPAL PROFESSIONAL RESPONSIBILITIES

Ms. Fisher serves as a biologist for LSA's San Luis Obispo office. In this capacity, she conducts biological resources assessments and biological and botanical surveys in terrestrial, wetland, and riparian ecosystems. She interprets aerial photographs to define the limits of biotic habitats. She assists clients in securing US Army Corps of Engineers, California Department of Fish and Game, and Regional Water Quality Board permits for filling wetlands and other jurisdictional waters. She has obtained Section 7 and Section 10 permits with the U.S. Fish and Wildlife Service for take of threatened or endangered species. As a certified arborist, Ms. Fisher has extensive experience with silvics/silviculture and stream/watershed evaluation. Prior to work with LSA, Wendy served as Project Manager for a biological consulting firm called Live Oak Associates, Inc. for nine years out of Oakhurst, Madera County, California.

While Ms. Fisher worked as a contractor to NatureServe in 2002, she gained valuable experience lead a tow person crew collecting field data to verify the accuracy of the vegetation map (accuracy assessment) using the National Vegetation Classification System in Yosemite National Park, California. Ms. Fisher worked directly with the personnel still involved with developing methodology for vegetation mapping from CNPS, CDFG, USGS and NatureServe.

Ms. Fisher's prior work experience with Western ECI, a vegetation and asset management consulting company providing support for PG&E's Vegetation Management Program, included locating specific power poles and trees near power lines and evaluating trees to be pruned or removed. While working in the Sierra National Forest, her responsibilities included inputting plant and fuel data into a handheld field computer; using Forest Service software to analyze data and maps; identifying forest insects and diseases; and evaluating tree health at all stages of maturity.

PROFESSIONAL AFFILIATIONS

Morro Coast Audubon Society
Wildlife Society, Western Section
International Society of Arboriculture
Sierra Foothill Conservancy
California Native Plant Society, San Luis Obispo Chapter

IVAN STRUDWICK

ASSOCIATE/ARCHAEOLOGIST

EXPERTISE

Prehistoric Archaeology
Prehistoric Artifact and Marine Shell Identification
Circular Shell Fishhooks
Cultural Resource Management

EDUCATION

California State University, Long Beach, California, M.A. in Anthropology *(magna cum laude)* specializing in Archaeology, 1986.

California State University, Long Beach, California, B.A., Anthropology, 1981.

PROFESSIONAL EXPERIENCE

Associate/Archaeologist, LSA Associates, Inc. (LSA), Irvine, California, 1994–present.

Project Archaeologist and Field Director, Gallegos & Associates, 1991–1994.

Field Director for Crowder Canyon, Assistant Field Director for Las Flores Ranch, Chambers Group, 1990–1991.

Field Director for Pelican Hill Transportation Corridor, The Keith Companies, 1988–1990.

Assistant Field Director, Vail Ranch Project, Chris Drover, Archaeological Consultant, 1988.

PRINCIPAL PROFESSIONAL RESPONSIBILITIES

Mr. Strudwick, an Associate at LSA, is responsible for managing archaeological projects, including archaeological fieldwork and report completion. His duties include project design and proposal preparation for surveys, testing and mitigation; personnel supervision; and report write-up and recommendations. Mr. Strudwick also serves as LSA's primary field and laboratory director.

SPECIFIC PROJECT EXPERIENCE

Mr. Strudwick is responsible for monitoring, surveys, test and data recovery programs, and report preparation. He has written reports for archaeological survey and test reports in Alameda, Del Norte, Humboldt, Lake, Mendocino, Monterey, Napa, Orange, Riverside, San Diego, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, San Bernardino, Santa Clara, Santa Cruz, and Tehama Counties.

Additional experience includes the following:

Gallegos & Associates. Project Archaeologist and Field Director. Responsibilities included monitoring, surveys, test and data recovery programs, 1991–1994.

The Chambers Group. Field Director for Crowder Canyon test excavations (SBR-113-115, 3769, 3771-3774, 3803/H). Assistant Field Director for the Las Flores Ranch project (SBr-1615, 1672, 1674 and JS-1), 1990–1991.

The Keith Companies. Field Director for the Newport Coast Archaeological Project at over 15 sites including ORA-660-663, 671-673, 679 and 683, 1988–1990.

Archaeological consultant to Chris Drover. Assistant Field Director for the excavation of prehistoric site RIV-364, near Temecula, 1988.

RMW Paleo Associates. Crew member for the survey and excavation of 10 sites (including Ora-647, 648 and 1063), in the south Saddleback foothills, 1988.

The Chambers Group. Laboratory analysis and recording of artifacts and ecofacts from steatite quarry sites in Fresno, including FRE-632, 633- 1154, 1155, 1987.

Archaeology Advisory Group. Crew member for the excavation of historic refuse site in Irwindale, as part of the initial test for the construction of the proposed Los Angeles Raiders football stadium, 1988.

Mike Macko Archeological Consulting. Crew Chief for survey and test excavation of a series of sites inland of Pelican Point as part of the San Joaquin Hills Transportation Corridor, including site ORA-662 (Pelican Hill), 1987.

Mike Macko Archaeological Consulting. Directed survey and mapping of historic and prehistoric sites (including SBR-180), near the Mojave River Narrows in Victorville, 1987.

Pacific Coast Archaeological Society. Laboratory analysis, illustration and publication of PCAS artifact collection obtained from the Crystal Cove survey (March, 1983), 1987.

LSA Associates, Inc. Survey and excavation of ORA-718 (Bee Canyon), 1987.

LSA Associates, Inc. Survey and excavation of ORA-123, 221-222 (Bonita Mesa Canyon), 1987.

Sanchez-Talarico, Inc. Excavation of ORA-3 in north Laguna Beach, 1987.

LSA Associates, Inc. Survey and test excavation of ORA-64 in upper Newport Bay, 1986.

URS Corp. Survey, excavation, grading observation, mapping, photography, and monitoring of the twenty mile Union 76 pipeline project (platform Irene) in Lompoc/Vandenberg, 1986.

U.S. Forest Service, Idyllwild Ranger Station. U.S. Forest Service Reconnaissance Report Archaeologist for a 790-acre project within the Pinyon Flats area, 1986.

LSA Associates, Inc. Survey and test excavation of RIV-1970-1974, 1986.

Statistical Research, Inc. Test excavation of RIV-269 (Mission Creek), 1986.

Westec Services, Inc. Assisted with phosphate analysis of a late prehistoric site near Escondido, California, 1986.

Westec Services, Inc. Survey and excavation of W-182, Carlsbad, 1985.

Henry Koerper. Laboratory identification of shellfish remains on Batiquitos Lagoon, Carlsbad, 1985.

Westec Services, Inc. Excavation of burial site ORA-287 (Fluor) in Irvine. Included discovery and excavation of the first burial associated basketry discovered in Orange County since the 1930s, 1985.

Post-graduate studies, UCLA. Field excavation and laboratory analysis of SCLI-119 (Big Dog Cave), SCLI-1178 and SCLI-1215 on San Clemente Island, 1985.

SRS, Inc. Topographical mapping, excavation and grading monitoring of the Encino village burial grounds, LAN-43, 1984.

ARF, Inc. Survey, topographical mapping, grading observation, excavation, photography, and illustration of several sites, including ORA-504, 632, 635-640, 746-750, 789, 1053, in Rancho San Clemente, 1984.

Archaeological Advisory Group. Final of Prado Flood Control Basin surveys, topographical mapping and excavations, 1984.

Archaeological Associates. Excavation of LAN-59, 1983.

UCLA. Survey, recording and test excavation of several sites, including KER-1, 4 and 11 in Kern County, 1983.

LSA Associates, Inc. Excavation of several Newport Bay shell middens, 1983.

U.S. Army Corps of Engineers. Field survey, topographical mapping with transit, map production, and excavation of the Prado Flood Control Basin extension for the U.S. Army Corps of Engineers, 1983.

CSU, Long Beach. Transit mapping of ORA-125, 1983.

Early Man Site. Research and excavation of Calico Hills Early Man Site, Yermo, 1973.

REPRESENTATIVE PROJECT EXPERIENCE

Level (3) Long Haul Fiber Optic Project, Santa Barbara, CA. As the Certified Archaeologist, Mr. Strudwick was responsible for providing 30 professional archaeologists (B.A., Anthropology level) to monitor all construction activities with Native American monitors along the 205-mile San Luis Obispo-to-Ventura portion of the Level (3) Fiber Optic Project. No impacts to cultural resources were to occur due to Level (3) project construction. In order to eliminate impacts to cultural resources, Mr. Strudwick was responsible for documenting all previously unidentified cultural resources identified during monitoring, as well as updating all previously recorded cultural resources within the project alignment. To this end, Mr. Strudwick wrote several survey and testing reports, one human reburial report, and many small survey reports for the purpose of documenting cultural resources along the alignment. When completed, nearly 60 cultural resource sites were documented for this project. All studies and recommendations were overseen and subject to review by the California Public Utilities Commission (CPUC). Much of the work was also conducted with the assistance of three Native American groups (Owl Clan, Diane Napoleone & Associates, and Santa Ynez Chumash Band), requiring a good working relationship. Finally, Mr. Strudwick assisted in writing the Final Report describing the San Luis Obispo-to-Ventura portion of the Level (3) project.

Caltrans On-Call Contracts for Storm Water Damage Repair Projects (Contract Nos. 06A0073 and 06A0169), Santa Barbara, San Luis Obispo, and Monterey Counties, CA. During the period 1997B1999, Mr. Strudwick conducted nearly 30 storm damage repair surveys for 16 California counties including Santa Barbara, San Luis Obispo, and Monterey Counties. This work consisted of conducting a record search and survey of the storm-damaged roadway and then writing a positive or negative Historic Property Survey Reports (HPSR) for the area. Positive surveys also entailed completing State of California Site Record Forms with detailed site information, the purpose of which was to avoid impacts to cultural resources due to road repair work.

Laguna Canyon Road Widening Project Report/Environmental Documentation, Orange County, CA. Ivan Strudwick was the Certified Archaeologist conducting surveys, Extended Phase I Surveys, Archaeological Evaluation testing, lab analysis, and report writing for this Caltrans project. The project was conducted for nine historic and prehistoric cultural resources through completion of an Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR), Historic Study Report (HSR), Ext ended Phase I Survey Report, Research Design for the Archaeological Evaluation, and the Archaeological Evaluation Report (AER). An important aspect of testing was that it identified prehistoric occupation and shellfish collection over a period of 7,000 years at sites in the canyon, as well as describing historic occupation at some of the sites.

West Vista Way Widening, Vista, CA. Mr. Strudwick was responsible for assisting with the field survey and site recording prehistoric site CA-SDI-16,502, a habitation site with bedrock milling features, pottery, and marine shell, was recorded a part of this project. The site was avoided and preserved resulting in substantial time and cost savings.

Camp Pendleton Archeological Testing of Site CA-SDI-10156, Camp Pendleton, CA. This project involved National Historic Preservation Act (NHPA) Section 106 level significance testing of a major prehistoric village site (CA-SDI-10156/12599/H) located on Camp Pendleton. The project was completed for a proposed levee extension along the Santa Margarita River. Mr. Strudwick was responsible for writing the testing plan, conducting a record search, directing field excavation, submitting special studies, and completion of the final report. Testing required several weeks to

complete and was dependent on permits allowing excavation along the Marine Corps Air Station runway that was in use. Testing was also conducted at a circa 1840s adobe building used as the Commanding General's residence. Archaeological testing identified prehistoric habitation debris deposited over a 7,000-year period. Information from this project was presented at a symposium on the cultural resources of Camp Pendleton for the Annual Meeting of the Society for California Archaeology in April 1996.

APPOINTMENTS

Executive Committee, CSULB Anthropology Alumni Association, 1999–2002.
Graduate Field Assistant, CSULB, Archaeological Field Class, Trabuco Hills, 1983.
Graduate Field Assistant, CSULB, Archaeological Field Class, Santa Catalina Island, 1981.
President, Anthropology Club, CSULB, 1981.

AWARDS

Scholarship, Anthropology Club of CSULB, December, 1981.
President's Honor List, CSULB, Spring, 1980, 1981.
Scholarship, National Science Foundation, marine biological research, 1975.

ACCREDITATIONS

Register of Professional Archaeologists (RPA)

MEMBERSHIPS

Society for California Archaeology
Society for American Archaeology
Southern California Academy of Sciences
Pacific Coast Archaeological Society

PROFESSIONAL CERTIFICATIONS/LISTINGS

Professionally listed Archaeologist for the Counties of Orange, Riverside, San Diego, and Santa Barbara

KLEINFELDER
EXPECT MORE

David L. Pearson, PE, GE
Principal Geotechnical Engineer

Mr. Pearson will be immediately available upon award of this project. He offers 38 years of experience as a geotechnical engineer and has been responsible for hundreds of geotechnical investigations throughout California.

His project experience includes highways, bridges, flexible and rigid pavements, residential, commercial, and industrial developments; schools and hospitals; pipelines; power facilities; impoundments; and forensic studies.

Years experience: with current employer: **10**
with other employers: **28**

Education

B.S. Engineering and Applied Sciences, UC Los Angeles, California, 1970

Registrations

1974, California, Civil, C-23997
1987, California, Geotechnical, GE674

Specific Relevant Experience to Merced County Geotechnical Projects:

- **Extensive understanding of the work to be done**
- **Experience with similar kinds of projects**
- **Knowledgeable of local soil conditions**
- **Performed similar responsibilities for:**

1. **Main Street Bridge, San Luis Obispo County**
2. **San Luis Bay Drive at San Luis Obispo Creek, San Luis Obispo County, CA**
3. **River Road Bridge Replacement and Roadway Widening, San Miguel, CA**
4. **7th Standard Road at SR99, Kern County**
5. **State Route 168 Segments 3, 4, & 5, Fresno County**

Summary listing of relevant projects (size, delivery approach, position/responsibility):

State Route 168, Segments 4 and 5, Fresno, California. This project consists of 6.0 km of new state highway. Geotechnical Design Reports were prepared for the roadway design, which includes embankments to heights of 9.5 m and cuts to depths of 8.5 m, 2300 meters of soundwalls and retaining walls and 3 box culverts. Foundation Reports are being prepared for 15 bridge structures that are supported by spread footings and CIDH piles.

7th Standard Road, Bakersfield, California. Performed the geotechnical review for the widening of the existing overpass at State Route 99 and the widening of 7th Standard Road between State Route 65 and Coffee Road in Bakersfield, California. Investigation included pavement design for the realignment and widening of 7th Standard Road. Foundation recommendations included spread footings at abutment and bents.

River Road Bridge Replacement and Roadway Widening, San Miguel, California. The proposed project consisted of the realignment and widening of River Road from about 450 feet west of the existing bridge to approximately 800 feet east of the bridge. The widening encroached on essentially undeveloped land. However, at the eastern end of the alignment, significant cuts were required into the southern hillside of River Road. The River Road realignment was required in association with the replacement of the River Road bridge over Salinas River. The new bridge consisted of an 8-span reinforced concrete structure, approximately 1107 feet long and 35 wide. The foundation design included 7-foot diameter CIDH piles at 7 piers and driven HP 12x53 piles at the abutments.

San Luis Bay Drive Widening, San Luis Obispo, California. Kleinfelder served as the geotechnical subconsultant for this project to improve the intersection facilities at the corner of San Luis Bay Drive and Avila Road near Avila Beach. The project included a

replacement bridge, road improvements and retaining walls.

Kleinfelder provided pile capacities and associated tip elevations for the bridge structure, which included the effects of liquefaction. Lateral capacities were evaluated considering the effects of liquefaction and cyclic softening for deflections up to 2.5 inches. Geologic structure of the bedrock slopes above Avila Road was considered in developing the lateral earth pressures on retaining walls and lateral resistance of CIDH wall piles.

San Luis Obispo County On-Call—Main Street Bridge, Cambria, California. Kleinfelder was the geotechnical consultant for this bridge replacement project. The project was to replace a deficient bridge on Main Street over Santa Rosa Creek near downtown Cambria. Due to hydraulic capacity issues, the new bridge will be raised about three feet higher than the existing bridge and moved to an adjacent upstream alignment, requiring the design of new roadway to tie into the existing street.

The Kleinfelder scope of services includes geotechnical investigation to evaluate alternative foundations for support of the structure, development of seismic design parameters resulting from faults in close proximity to the bridge and evaluation of pavement structural sections. The project is funded primarily by the federal-aid Highway Bridge Replacement and Rehabilitation (HBRR) Program.

San Luis Obispo County On-Call—Moonstone Beach Drive Bridge, Cambria, California. The Moonstone Beach Drive Bridge serves the community of Cambria on the north coast of San Luis Obispo County. The bridge is located across the inlet to a small coastal stream, crossing over a portion of the beach adjacent to San Simeon State Park. The new bridge will replace an aging steel girder bridge at the same location. Moonstone Beach Drive provides access to the state park and several small businesses, mostly commercial hotel and resort properties along the ocean. The proximity of this bridge to the state park and the beach, required drilling through the existing bridge deck to avoid disturbance to the marine environment.

The County proposed to replace the existing bridge with a 271 foot long, three-span haunched concrete box-girder bridge with an overall width of 43.5 feet. The bridge will have two 12 foot lanes with standard eight foot shoulders. The shoulders will provide room for bicyclists and pedestrian traffic along Moonstone Beach Drive. The study for the FR included evaluation of CIDH piles into bedrock and development of seismic design parameters based on close proximity to faults with complex faulting mechanisms.

San Luis Obispo County On-Call—Picachio Drive Bridge, Cayucos, California. Kleinfelder served as the geotechnical consultant to the San Luis Obispo County Department of Public Works for this bridge replacement project. The project will replace a deficient timber bridge on Picachio Road over Cayucos Creek near the community of Cayucos on the north coast of San Luis Obispo County. The bridge will be replaced on the existing alignment, with traffic routed around the site on a temporary creek crossing. The existing two span timber A-frame bridge will be replaced with a 65 foot simple span precast/prestressed concrete slab bridge. Rock slope protection will be installed to stabilize the creek banks.

The Kleinfelder scope of services initially included a Foundation Report to SLO County identifying alternate pile types and Caltrans seismic design parameters. The Foundation Report was subsequently amended to address the selected foundation type and reflect new procedures in the seismic design criteria.

Santa Fe Overcrossing at SR 198, Visalia, California. The project involved replacing the abandoned Visalia Underpass with the Santa Fe Street overcrossing at SR 198. The bridge consists of a four-span precast prestressed concrete structure, which is about 75.9 m long and 25.5 m wide. The structure design involved support at the bridge abutments and bents by 400-mm diameter CIDH concrete friction piles. The project was dual metric and English units in Caltrans format.

KLEINFELDER
EXPECT MORE

Nathan L. Dahlen, PE
Project Engineer

Mr. Dahlen will be immediately available upon award of this project. Mr. Dahlen has eight years of geotechnical engineering and materials testing experience in California.

His projects have included highways, bridges, dams, schools, essential facilities, commercial and residential developments, wastewater treatment facilities, military installations, roadway widening, and pipelines. He is responsible for conducting geotechnical investigations including site reconnaissance, field classification of soils, sampling, design, and report preparation and review. Performs field inspection and testing, data analysis, laboratory testing, and construction special inspections.

Years experience: with current employer: 8

Education

B.S. Civil Engineering, California State University, Fresno, California, 2000

Registrations

2007, California, Civil, C-71334
CPN Nuclear Gauge

Specific Relevant Experience to the San Luis Obispo County Geotechnical Projects:

- Experience with local soil conditions
- Performed similar responsibilities for other projects:
  1. River Road Bridge Replacement and Roadway Widening, San Miguel, CA
  2. Picachio Road Bridge at Cayucos Creek, San Luis Obispo, CA
  3. Main Street Bridge, Cambria, CA
  4. Moonstone Beach Road Bridge, Cambria, CA
  5. 7th Standard Road, Bakersfield, CA

Summary listing of relevant projects (size, delivery approach, position/responsibility):

River Road Bridge Replacement and Roadway Widening, San Miguel, California. The proposed project consisted of the realignment and widening of River Road from about 450 feet west of the existing bridge to approximately 800 feet east of the bridge. The widening encroached on essentially undeveloped land. However, at the eastern end of the alignment, significant cuts were required into the southern hillside of River Road. The River Road realignment was required in association with the replacement of the River Road bridge over Salinas River. The new bridge consisted of an 8-span reinforced concrete structure, approximately 1107 feet long and 35 wide. The foundation design included 7-foot diameter CIDH piles at 7 piers and driven HP 12x53 piles at the abutments.

7th Standard Road, Bakersfield, California. Performed full geotechnical investigation for the widening of the existing overpass at State Route 99 and the widening of 7th Standard Road between State Route 65 and Coffee Road in Bakersfield, California. Investigation included pavement design for the realignment and widening of 7th Standard Road. Foundation recommendations included spread footings at abutment and bents.

Avenue 416 Widening, Fresno County, California. The project included preparation of a technical preliminary foundation report for the existing Avenue 416 bridge over the Kings River. The bridge consisted of a 21-span, 850-foot reinforced concrete structure. The report addressed the design issues associated with the rehabilitation/replacement of the Avenue 416 bridge across the Kings River.

San Luis Obispo County On-Call—Main Street Bridge, Cambria, California. Kleinfelder was the geotechnical consultant for this bridge replacement project. The project was to replace a deficient bridge on Main Street over Santa Rosa Creek near downtown Cambria. Due to hydraulic capacity issues, the new bridge will be

raised about three feet higher than the existing bridge and moved to an adjacent upstream alignment, requiring the design of new roadway to tie into the existing street.

The Kleinfelder scope of services includes geotechnical investigation to evaluate alternative foundations for support of the structure, development of seismic design parameters resulting from faults in close proximity to the bridge and evaluation of pavement structural sections. The project is funded primarily by the federal-aid Highway Bridge Replacement and Rehabilitation (HBRR) Program.

San Luis Obispo County On-Call—Moonstone Beach Drive Bridge, Cambria, California. The Moonstone Beach Drive Bridge serves the community of Cambria on the north coast of San Luis Obispo County. The bridge is located across the inlet to a small coastal stream, crossing over a portion of the beach adjacent to San Simeon State Park. The new bridge will replace an aging steel girder bridge at the same location. Moonstone Beach Drive provides access to the state park and several small businesses, mostly commercial hotel and resort properties along the ocean. The proximity of this bridge to the state park and the beach, required drilling through the existing bridge deck to avoid disturbance to the marine environment.

The County proposed to replace the existing bridge with a 271 foot long, three-span haunched concrete box-girder bridge with an overall width of 43.5 feet. The bridge will have two 12 foot lanes with standard eight foot shoulders. The shoulders will provide room for bicyclists and pedestrian traffic along Moonstone Beach Drive. The study for the FR included evaluation of CIDH piles into bedrock and development of seismic design parameters based on close proximity to faults with complex faulting mechanisms.

San Luis Obispo County On-Call—Picachio Drive Bridge, Cayucos, California. Kleinfelder served as the geotechnical consultant to the San Luis Obispo County Department of Public Works and TYLI for this bridge replacement project. The project will replace a deficient timber bridge on Picachio Road over Cayucos Creek near the community of Cayucos on the north coast of San Luis Obispo County. The bridge will be replaced on the existing alignment, with traffic routed around the site on a temporary creek crossing. The existing two span timber A-frame bridge will be replaced with a 65 foot simple span precast/prestressed concrete slab bridge. Rock slope protection will be installed to stabilize the creek banks.

The Kleinfelder scope of services initially included a Foundation Report to SLO County identifying alternate pile types and Caltrans seismic design parameters. The Foundation Report was subsequently amended to address the selected foundation type and reflect new procedures in the seismic design criteria.

Santa Fe Overcrossing at SR 198, Visalia, California. The project involved replacing the abandoned Visalia Underpass with the Santa Fe Street overcrossing at SR 198. The bridge consists of a four-span precast prestressed concrete structure, which is about 75.9 m long and 25.5 m wide. The structure design involved support at the bridge abutments and bents by 400-mm diameter CIDH concrete friction piles. The project was dual metric and English units in Caltrans format.

Ben Maddox Way Overcrossing Widening at SR 198, Visalia, California. The project involved the widening of the Ben Maddox overcrossing at SR 198. The bridge consists of a four-span reinforced concrete structure, which is about 63.7 m long and 14.9 m wide. The structure design involved support at the bridge abutments and bents by 400-mm diameter CIDH concrete friction piles. The project was dual metric and English units in Caltrans format.

SCHEDULE OF FEES - 2008

Professional Services – Drake Haglan & Associates
Fees valid from January 1, 2008 – December 31, 2008

Classification	Range	Hourly Rate
Principal Bridge Engineer/Principal Transportation Engineer/Engineering Services Manager		$200.00
Senior Specialist/Environmental Services Manager		$175.00
Senior Bridge Engineer/Senior Transportation Engineer/Resident Engineer	Range A Range B Range C	$145.00 $160.00 $170.00
Bridge Engineer/Transportation Engineer	Range A Range B Range C	$120.00 $135.00 $145.00
Senior Highway Designers/Senior Construction Inspectors	Range A Range B Range C	$100.00 $115.00 $125.00
Assistant Bridge Engineer/Assistant Transportation Engineer	Range A Range B Range C	$100.00 $110.00 $120.00
Highway Designer/Construction Inspector	Range A Range B Range C	$90.00 $100.00 $110.00
Production Manager		$140.00
CAD Manager		$130.00
Senior CAD Draftsperson		$120.00
CAD Draftsperson	Range A Range B Range C	$80.00 $90.00 $105.00
Admin & Word Processing	Range A Range B	$60.00 $75.00
Administrative Manager		$95.00

Vehicle Mileage.....Current IRS Standard Rate

Hourly charges include provision for normal office overhead costs, such as office rental, utilities, insurance, clerical services, equipment, normal supplies and materials, and in-house reproduction services. Other project specific expenses such as travel, special consultants, and purchased outside services will be billed at cost plus 15%.