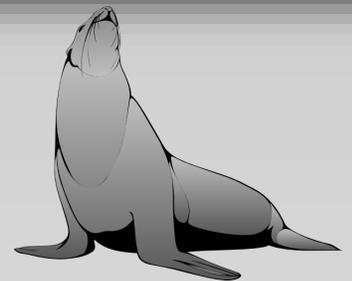


STATEMENT OF QUALIFICATIONS

SFOBB East Span Marine Foundation Removal Project



Prepared for: State of California, Department of Transportation
Prepared by: CEC/Silverado JV

June 3, 2014





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Form A
TRANSMITTAL LETTER

SOQ Date: June 3, 2014

California Department of Transportation
Division of Procurements and Contracts
1727 30th Street
Sacramento, California 95816-7006

Attn: Denetia Floyd-Smith

The undersigned (“Proposer”) submits this proposal and statement of qualification submittal (this “SOQ”) in response to that certain Request for Qualifications dated as of June 3, 2014 (as amended, the “RFQ”), issued by California Department of Transportation (“Department”) to provide preconstruction services and demolish the related facilities within the State Route 80, as described in the RFQ.

Enclosed, and by this reference incorporated herein and made a part of this SOQ, are the following:

- Transmittal Letter (this Form A)
- Form G, Proposer’s SOQ Certification
- Section 1: Legal Structure
- Section 2: Financial Capacity
- Section 3: Safety Program
- Section 4: Firm Experience and Past Performance
- Section 5: Proposer Organization and Key Personnel
- Section 6: Project Understanding and Approach
- Appendices A & B (Resumes and Legal Documents)

Proposer acknowledges receipt, understanding, and full consideration of all materials posted on the BidSync website (<http://www.BidSync.com>) as set forth in Section 1.3, and the following addenda and sets of questions and answers to the RFQ:

Addendum #1 - made on May 21, 2014

Proposer represents and warrants that it has read the RFQ and agrees to abide by the contents and terms of the RFQ and the SOQ. If the Proposer consists of more than one entity, all members of the Proposer entity agree to accept joint and several liability for performance under the Contract. Proposer understands that Department is not bound to award a contract and may reject each SOQ Department may receive. Proposer further understands that all costs and expenses incurred by it in preparing this SOQ and participating in the Project procurement process will be borne solely by the Proposer.

Proposer agrees that Department will not be responsible for any errors, omissions, inaccuracies, or incomplete statements in this SOQ. This SOQ shall be governed by and construed in all respects according to the laws of the State of California.

Proposer's business address:

2855 Mandela Parkway, 2nd Floor

 (No.) (Street) (Floor or Suite)
Oakland, California 94601 USA

 (City) (State or Province) (ZIP or Postal Code) (Country)

State or Country of Incorporation/Formation/Organization: California

1. Sample signature block for corporation or limited liability company:

[Insert Proposer's name]

By: _____
 Print Name: _____
 Title: _____

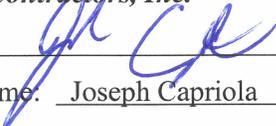
2. Sample signature block for partnership or joint venture:

California Engineering Contractors, Inc. / Silverado Contractors, Inc. a Joint Venture

By: ***California Engineering Contractors, Inc.***

By:  _____
 Print Name: Wahid Tadros
 Title: President

By: ***Silverado Contractors, Inc.***

By:  _____
 Print Name: Joseph Capriola
 Title: President

[Add signatures of additional general partners or equity members as appropriate]

3. Sample signature block for attorney in fact:

[Insert Proposer's name]

By: _____
 Print Name: _____
 Attorney in Fact

CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT

State of California

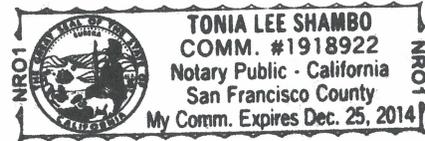
County of Alameda

On June 2, 2014 before me, Tonia Lee Shambo, Notary Public personally appeared Wahid Tadros and Joseph Capriola who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to within the instrument and acknowledged to me that ~~he/she~~they executed the same in ~~his/her~~their authorized capacity(ies), and that by ~~his/her~~their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public Signature

Notary Public Seal



Tonia Lee Shambo

ADA Notice: For individuals with sensory disabilities, this document may be available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

Form G
PROPOSER SOQ CERTIFICATION

A COPY OF THIS CERTIFICATION MUST BE COMPLETED AND SIGNED BY PROPOSER AND, IF A PROPOSER IS A PARTNERSHIP, LIMITED PARTNERSHIP, JOINT VENTURE OR OTHER ASSOCIATION, THEN A SEPARATE CERTIFICATION MUST BE SIGNED BY AN AUTHORIZED REPRESENTATIVE OF EACH MEMBER AND SUBMITTED WITH THE STATEMENT OF QUALIFICATIONS.

DECLARATION

STATE OF California)
)SS:
COUNTY OF Alameda)

I, Joseph M. Capriola, being first duly sworn, state that I am the President and Authorized Representative of the Proposer.

I certify that I have read and understood the information contained in the Request for Qualifications issued by the California Department of Transportation for the SFOBB East Span Foundation Removal Project and the attached Statement of Qualifications (SOQ), and that to the best of my knowledge and belief all information contained herein and submitted concurrently or in supplemental documents with this SOQ is complete, current, and true. I further acknowledge that any false, deceptive, or fraudulent statements in the SOQ will result in denial of pre-qualification status.

[Handwritten Signature]
(Signature)
Joseph M. Capriola
(Name Printed)

ACKNOWLEDGMENT

State of California
County of Alameda

On June 2, 2014 before me, Tonia Lee Shambo, Notary Public, personally appeared, Joseph M. Capriola, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

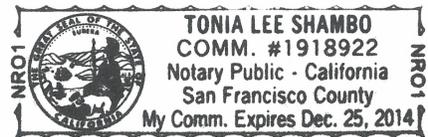
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public Signature

Notary Public Seal

[Handwritten Signature]



NOTICE TO APPLICANTS:

A material false statement, omission, or fraudulent inducement made in connection with this Statement of Qualifications is sufficient cause for denial of the application. In addition, such false submission may subject the person or entity making the false statement to criminal charges. (Title 18 USC 1001, false statements; California Penal Code section 132, offering altered or antedated or forged documents or records; and section 134, preparing false documentary evidence).

Form G
PROPOSER SOQ CERTIFICATION

A COPY OF THIS CERTIFICATION MUST BE COMPLETED AND SIGNED BY PROPOSER AND, IF A PROPOSER IS A PARTNERSHIP, LIMITED PARTNERSHIP, JOINT VENTURE OR OTHER ASSOCIATION, THEN A SEPARATE CERTIFICATION MUST BE SIGNED BY AN AUTHORIZED REPRESENTATIVE OF EACH MEMBER AND SUBMITTED WITH THE STATEMENT OF QUALIFICATIONS.

DECLARATION

STATE OF California _____)
)SS:

COUNTY OF Alameda _____)

I, Wahid Tadros, being first duly sworn, state that I am the President and Authorized Representative of the Proposer.

I certify that I have read and understood the information contained in the Request for Qualifications issued by the California Department of Transportation for the SFOBB East Span Foundation Removal Project and the attached Statement of Qualifications (SOQ), and that to the best of my knowledge and belief all information contained herein and submitted concurrently or in supplemental documents with this SOQ is complete, current, and true. I further acknowledge that any false, deceptive, or fraudulent statements in the SOQ will result in denial of pre-qualification status.

(Signature)

Wahid Tadros
(Name Printed)

ACKNOWLEDGMENT

State of California
County of Alameda

On June 2, 2014 before me, Tonia Lee Shambo, Notary Public, personally appeared, Wahid Tadros, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/their authorized capacity(ies), and that by his/~~her~~/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

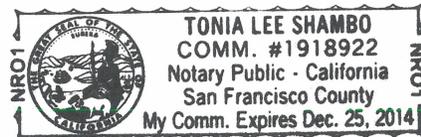
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public Signature

Notary Public Seal

Tonia Lee Shambo



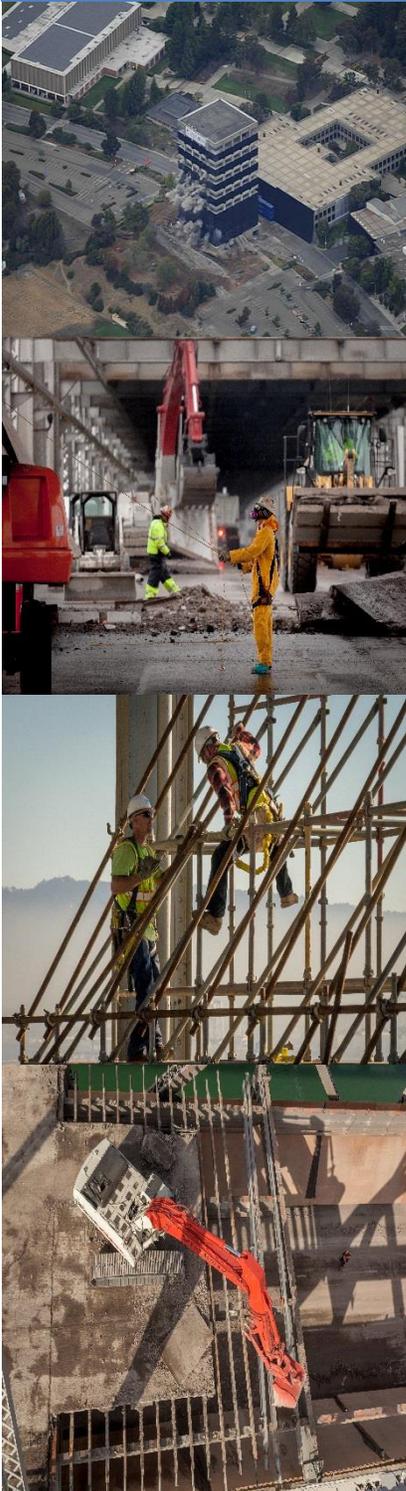
NOTICE TO APPLICANTS:

A material false statement, omission, or fraudulent inducement made in connection with this Statement of Qualifications is sufficient cause for denial of the application. In addition, such false submission may subject the person or entity making the false statement to criminal charges. (Title 18 USC 1001, false statements; California Penal Code section 132, offering altered or antedated or forged documents or records; and section 134, preparing false documentary evidence).



SECTION 1

Legal Structure



Section 1 Legal Structure

1.A Description of the Legal Structure

RFQ SECTION 3.2.A

Silverado Contractors, Inc. (Silverado) and California Engineering Contractors, Inc. (CEC), two of the most well respected demolition and bridge retrofit contractors on the West Coast, have formed a joint venture (JV), California Engineering Contractors, Inc. / Silverado Contractors, Inc., a Joint Venture (CEC / Silverado JV) in order to bid and perform work on one of the most technologically challenging bridge demolition and retrofit projects ever in California, the demolition of the East Span of the San Francisco-Oakland Bay Bridge (SFOBB). This JV already is successfully working with the California Department of Transportation (Department) on the first phase of the SFOBB demolition, the removal of the cantilever section. We are interested in continuing our effective partnership for the Construction Manager/General Contractor (CMGC) phase of the SFOBB project, as described in the Department's Request for Qualifications (RFQ), dated April 22, 2014. Silverado will serve as the lead member for the foundation demolition phase and holds a 70% equity interest for this phase, while CEC holds a 30% equity interest in this phase.

The CEC/Silverado JV legal documents and contractor's license, which allow us to conduct business in the state of California, are included in Appendix B.

1.B Fully, Jointly and Severally Liable

RFQ SECTION 3.2.B

Both JV members have executed the Form A Transmittal Letter, included at the beginning of this Statement of Qualifications (SOQ), and thereby agree to be held fully, jointly and severally liable for the performance under the Preconstruction Services Contract. In addition, letters on each company's respective letterhead, reaffirming each JV member's commitment to the obligations, duties and liabilities arising from any Contract or agreement stemming from this proposal, have been included at the end of this section.

1.C Major Participants

RFQ SECTION 3.2.C

The CEC/Silverado JV was formed to bring together the talents and expertise of our two firms in order to bid and then perform the first phase of demolition on the SFOBB. CEC and Silverado have performed some of the largest and most complex bridge retrofits and removals in the San Francisco Bay Area. We take great pride in having worked with the Department in the past to perform these projects in a safe, timely manner, and with the greatest respect for all environmental concerns. The CMGC process requires building an effective partnership with the Department and the associated permitting agencies. We believe that our prior experience working closely with the



Department, creating new approaches and techniques for changing and challenging conditions and schedules, proves that we have the skills necessary to complete the work described in the RFQ.

MAJOR PARTICIPANTS		
Silverado Contractors, Inc. 2855 Mandela Parkway, 2 nd Floor Oakland, CA 94608	Lead JV Team Member	Joe Capriola, President (510) 658-9960 joe@silveradocontractors.com
California Engineering Contractors, Inc. 20 Happy Valley Road Pleasanton, CA 94566	JV Team Member	Wahid Tadros, President (925) 461-1500 wtadros@cecmain.com

Silverado Contractors, Inc.

Silverado is the lead JV partner. Silverado was started 14 years ago by a group of experienced demolition individuals with the desire to focus on highly technical demolition projects. Silverado has completed more than 600 projects to date, including some of the most complex bridge demolition projects in the Bay Area. In addition to bridge demolition, Silverado has performed building demolition and implosions, industrial demolition, wharf/pier demolition and renovations, seismic building retrofits, and excavation and grading projects. Due to the nature of the demolition of old structures, concerns for the safety of our employees, the public, and the environment are constantly in the forefront of our activities. Silverado has an excellent track record of working closely with professionals and all relevant agencies to ensure the safety and protection of all parties.

California Engineering Contractors, Inc.

Recognized as one of the West Coast's most reputable and reliable heavy construction contractors, CEC regularly and successfully tackles difficult, complex projects with great skill and expertise, consistently delivering top-quality work on time and within budget. Since its inception in 1972, CEC has been well known for its focus on technically demanding and schedule-driven projects. CEC's experience includes virtually all types and sizes of public works projects: seismic retrofit and rehabilitation of major structures, bridge construction, marine construction, bridge demolition and fender replacement, flood control structure demolition, and other complex infrastructure-related projects.

1.D Conflicts of Interest

RFQ SECTION 3.2.D

CEC and Silverado are both local California corporations with no parent companies. As such, we have identified **no conflicts of interest** that currently do or potentially could exist in submitting this SOQ or performing the work described in the RFQ.



1.E Proposers Organization

RFQ SECTION 3.2.E

Form E, describing our organizational and local contact information, can be found at the end of this section.

1.F DVBE Project Goal Declaration Affidavit

RFQ SECTION 3.2.F

As equity members of our JV, CEC and Silverado have both signed Form F, Proposer's Small Business and Disabled Veterans Business Enterprise Project Goal Declaration Affidavit. The fully executed Form F can be found at the end of this section.

In addition per Section 1.13, Small Business and Disabled Veterans Business Enterprise Goals, we have included both the Documentation of Disabled Veteran Business Enterprise Program Requirements (STD. 840) and the Bidder Declaration (GSPD-05-105) forms at the end of this section as required.



SILVERADO  CONTRACTORS

June 3, 2014

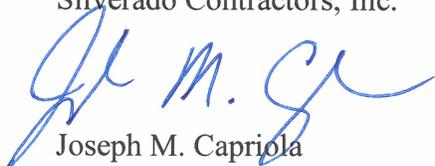
Denetia Floyd Smith
Contract Analyst
California Department of Transportation
Division of Procurements and Contractors
1727 30th Street
Sacramento, California 95816-7006

RE: Full and Joint and Several Liability
SFOBB East Span Marine Foundation Removal Project RFQ
Contract: 040135CM

Ms. Smith,

The undersigned, as President of Silverado Contractors, Inc., and JV Partner of the CEC / Silverado JV (the proposer), hereby agrees that Silverado Contractors, Inc. will be held fully and jointly and severally liable for any and all duties and obligations of the proposer under the Proposal, and all duties and obligations of the proposer under the Construction Manager / General Contractor under any contract or other agreement arising from the Proposal.

Sincerely,
Silverado Contractors, Inc.


Joseph M. Capriola
President

June 3, 2014

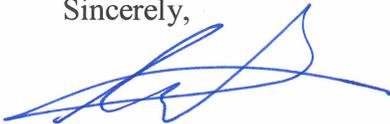
Denetia Floyd Smith
Contract Analyst
California Department of Transportation
Division of Procurements and Contractors
1727 30th Street
Sacramento, California 95816-7006

RE: Full and Joint and Several Liability
SFOBB East Span Marine Foundation Removal Project RFQ
Contract: 040135CM

Ms. Smith

The undersigned, as President of California Engineering Contractors, Inc., and JV Partner of the CEC / Silverado JV (the proposer), hereby agrees that California Engineering Contractors, Inc. will be held fully and jointly and severally liable for any and all duties and obligations of the proposer under the Proposal, and all duties and obligations of the proposer under the Construction Manager / General Contractor under any contract or other agreement arising from the Proposal.

Sincerely,



Wahid Tadros
President

Form E

PROPOSER'S ORGANIZATION INFORMATION

Name of Proposer:

Instructions for Form completion: Responses to each subject area shall be addressed within the table below. Should additional space be needed, Proposers are advised to increase space following question as appropriate. Form E shall have no SOQ page limitation.

Proposer (Individual Firm / <u>Joint Venture</u> / Partnership / LLC)	
Name of Entity: <u>California Engineering Contractors, Inc. / Silverado Contractors, Inc. a Joint Venture</u>	
Address: <u>2855 Mandela Parkway, 2nd Floor</u> <u>Oakland, California 94608</u>	
Contact Name: <u>Joseph M. Capriola</u>	Title: <u>President</u>
Telephone No.: <u>(510) 658-9960</u> Fax No.: <u>(510) 658-9961</u> E-mail: <u>joe@silveradocontractors.com</u>	
Local / Regional Contact	
Name: <u>Joseph M. Capriola.....</u>	
Address: <u>2855 Mandela Parkway, 2nd Floor</u> <u>Oakland, California 94608</u>	
Telephone No.: <u>(510) 658-9960</u> Fax No.: <u>(510) 658-9961</u> E-mail: <u>joe@silveradocontractors.com</u>	

Form F

**PROPOSER'S SMALL BUSINESS AND DISABLED VETERANS
BUSINESS ENTERPRISE PROJECT GOAL DECLARATION AFFIDAVIT**

Name of Proposer: CEC / Silverado JV

It is understood and agreed by the Proposer that it has carefully examined all documents that form this Request for Qualifications (RFQ) and acknowledges that California Department of Transportation (Department) will establish a Disabled Veterans Business Enterprise goal based on the total project value for this CMGC Project. This affidavit further serves to confirm that CEC/Silverado JV will take all necessary and reasonable steps to the satisfaction of Department to ensure that Small Businesses and Disabled Veterans Business Enterprises have the maximum opportunity to compete for and perform on the Construction Contract(s), when issued.

STATE OF California)

COUNTY OF Alameda)

Each of the undersigned, being first duly sworn, deposes and says that Joseph M. Capriola
(Contact Name)

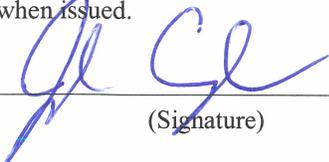
is the President of Silverado Contractors, Inc. and Wahid Tadros is the President
(Title) (Company) (Contact Name) (Title)

of California Engineering Contractors, Inc., which entity(ies) are the Joint Venture
(Company) (Joint Venture/Partnership, Other)

of California Engineering Contractors, Inc. / Silverado Contractors, Inc a Joint Venture, the entity making
(Joint Venture Company)

the foregoing Statement of Qualification.

The Proposer hereby affirms that it will meet the DVBE goal described in this solicitation and will take all necessary and reasonable steps to the satisfaction of Department to ensure that Small Businesses and Disabled Veterans Business Enterprises have the maximum opportunity to compete for and perform on the Construction Contract(s) when issued.



(Signature)



(Signature)

Joseph M. Capriola

(Name Printed)

Wahid Tadros

(Name Printed)

President, Silverado Contractors, Inc.

(Title)

President, California Engineering Contractors, Inc.

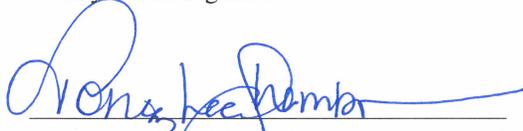
(Title)

State of **California**

County of **Alameda**

Subscribed and sworn to (or affirmed) before me on this **2nd** day of **June**, 2014, by **Wahid Tadros and Joseph Capriola**, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Notary Public Signature



Notary Public Seal

[Duplicate or modify this form as necessary so that it accurately describes the entity making the proposal and so that it is signed on behalf of all partners/members of the proposing firm.]

STATE OF CALIFORNIA – GENERAL SERVICES PROCUREMENT DIVISION

DOCUMENTATION OF DISABLED VETERAN BUSINESS ENTERPRISE PROGRAM REQUIREMENTS

STD. 840 (REV. 8/2009)

A. Designation Of Option – Check the appropriate box(es) to indicate the option(s) with which you choose to comply, complete the applicable sections and attach the required supporting documentation. You are advised to read all instructions carefully prior to completing this form. Remember that only California certified DVBEs who can provide related goods and/or services may be used to satisfy these program solicitation requirements. DVBEs must perform a commercially useful function. During contract performance, all requests for substituting DVBE subcontractors must be made in accordance with the provisions of California Code of Regulations, Title 2, §1896.64(c).

OPTION A – I commit to meeting the full DVBE Agreement participation requirement.

Complete: STD. 840, Section A (check the box on this form) and Bidder Declaration form GSPD-05-105 (located elsewhere in the solicitation)

OPTION B – I submit a copy of my firm's "Notice of Approved DVBE Business Utilization Plan."

Complete: STD. 840, Section A (check the box on this form) and Bidder Declaration form GSPD-05-105 (located elsewhere in the solicitation)

STATE OF CALIFORNIA – GENERAL SERVICES PROCUREMENT DIVISION

DOCUMENTATION OF DISABLED VETERAN BUSINESS ENTERPRISE PROGRAM REQUIREMENTS

STD. 840 (REV. 8/2009)

Date Contacted 05/21/2014	DVBE Company Name Ecotech Resources, Inc.		
DVBE Contact Name & Reference # Jeff Root, #1154903	Telephone Number (510) 528 -3975	Fax Number () -	E-mail (if available) jroot@ecotechresources.com
Street Address, City, State, and Zip Code 2403 Byron Street, Berkeley, CA 94702			

DVBE was selected and is listed on the GSPD-05-105 DVBE Approved BUP is Attached.

Date Contacted 05/21/2014	DVBE Company Name Leland Saylor & Associates		
DVBE Contact Name & Reference # Leland Saylor, #298	Telephone Number (415) 291-3200 ext.	Fax Number (415) 291-3201	E-mail (if available) lsaylor@lelandsaylor.com
Street Address, City, State, and Zip Code 101 Montgomery Street, Suite 800, San Francisco, CA 94104			

DVBE was selected and is listed on the GSPD-05-105 DVBE Approved BUP is Attached.

Date Contacted / /	DVBE Company Name		
DVBE Contact Name & Reference #	Telephone Number () - ext.	Fax Number () -	E-mail (if available)
Street Address, City, State, and Zip Code			

DVBE was selected and is listed on the GSPD-05-105 DVBE Approved BUP is Attached.

BIDDER DECLARATION

1. Prime bidder information (Review attached Bidder Declaration Instructions prior to completion of this form):

- a. Identify current California certification(s) (MB, SB, SB/NVSA, DVBE):** _____ or None (If "None", go to Item #2)
- b. Will subcontractors be used for this contract? Yes ___ No ___** (If yes, indicate the distinct element of work your firm will perform in this contract e.g., list the proposed products produced by your firm, state if your firm owns the transportation vehicles that will deliver the products to the State, identify which solicited services your firm will perform, etc.). Use additional sheets, as necessary.
- _____
- _____

- c. If you are a California certified DVBE:** (1) Are you a broker or agent? **Yes ___ No ___**
 (2) If the contract includes equipment rental, does your company own at least 51% of the equipment provided in this contract (quantity and value)? **Yes ___ No ___ N/A ___**

2. If no subcontractors will be used, skip to certification below. Otherwise, list all subcontractors for this contract. (Attach additional pages if necessary):

Subcontractor Name, Contact Person, Phone Number & Fax Number	Subcontractor Address & Email Address	CA Certification (MB, SB, DVBE or None)	Work performed or goods provided for this contract	Corresponding % of bid price	Good Standing?	51% Rental?
Ecotech Resources, Inc. Jeff Root Phone: (510) 528-3975 Fax: None	2403 Byron Street Berkeley, Ca 94702 jroot@ecotechresources.com	DVBE SB (Micro)	Environmental Permitting and Environmental Advisory Services	3%	Yes	N/A
Controlled Demolition, Inc. Mark Loizeaux Phone: (410) 667-6610 Fax: (410) 667-6624	2737 Merryman's Mill Road Phoenix, Maryland, 21131 jml@controlled-demolition.com	None	Controlled Blasting Consulting	TBD	Yes	N/A
Leland Saylor Associates lsaylor@lelandsaylor.com Phone: (415) 291-3200 Fax: (415) 291-3201	101 Montgomery St. #800 San Francisco, CA 94104 lsaylor@lelandsaylor.com	DVBE SB	Project Scheduling	3%	Yes	N/A

CERTIFICATION: By signing the bid response, I certify under penalty of perjury that the information provided is true and correct.

BIDDER DECLARATION

1. Prime bidder information (Review attached Bidder Declaration Instructions prior to completion of this form):

- a.** Identify current California certification(s) (**MB, SB, SB/NVSA, DVBE**): _____ or **None** (If "None," go to Item #2)
- b.** Will subcontractors be used for this contract? **Yes** ___ **No** ___ (If yes, indicate the distinct element of work your firm will perform in this contract e.g., list the proposed products produced by your firm, state if your firm owns the transportation vehicles that will deliver the products to the State, identify which solicited services your firm will perform, etc.). Use additional sheets, as necessary.

- c.** If you are a California certified DVBE: (1) Are you a broker or agent? **Yes** ___ **No** ___
 (2) If the contract includes equipment rental, does your company own at least 51% of the equipment provided in this contract (quantity and value)? **Yes** ___ **No** ___ **N/A** ___

2. If no subcontractors will be used, skip to certification below. Otherwise, list all subcontractors for this contract. (Attach additional pages if necessary):

Subcontractor Name, Contact Person, Phone Number & Fax Number	Subcontractor Address & Email Address	CA Certification (MB, SB, DVBE or None)	Work performed or goods provided for this contract	Corresponding % of bid price	Good Standing?	51% Rental?
Pacific Blasting & Demolition Ltd. Ron Woolf Phone: (604) 291-1255 Fax: (604) 291-2813	3183 Norland Avenue Burnaby, BC V5B 3A9 Canada ronw@pacificblasting.com	None	Drilling and blasting technical advise and analysis	TBD	No	N/A
D.H. Charles Engineering Inc. Jasper Calcara Phone: (707) 537-8282 Fax: (707) 537-8338	4706 Hoen Avenue Santa Rosa, CA 95405 calcara@charlesengineering.com	None	Shoring Design & Engineering	TBD	Yes	N/A
Foothills Bridge Co. J. Coleman Phone: (303) 449-3088 Fax: (303) 593-0142	3035 47th Street, Suite C4 Boulder, CO 80301 j@foothillsbridge.com	None	Structural Enginnering	TBD	Yes	N/A

CERTIFICATION: By signing the bid response, I certify under penalty of perjury that the information provided is true and correct.

BIDDER DECLARATION

1. Prime bidder information (Review attached Bidder Declaration Instructions prior to completion of this form):

- a. Identify current California certification(s) (MB, SB, SB/NVSA, DVBE):** _____ **or None** (If "None," go to Item #2)
- b. Will subcontractors be used for this contract? Yes** ___ **No** ___ (If yes, indicate the distinct element of work your firm will perform in this contract e.g., list the proposed products produced by your firm, state if your firm owns the transportation vehicles that will deliver the products to the State, identify which solicited services your firm will perform, etc.). Use additional sheets, as necessary.

- c. If you are a California certified DVBE:** (1) Are you a broker or agent? **Yes** ___ **No** ___
 (2) If the contract includes equipment rental, does your company own at least 51% of the equipment provided in this contract (quantity and value)? **Yes** ___ **No** ___ **N/A** ___

2. If no subcontractors will be used, skip to certification below. Otherwise, list all subcontractors for this contract. (Attach additional pages if necessary):

Subcontractor Name, Contact Person, Phone Number & Fax Number	Subcontractor Address & Email Address	CA Certification (MB, SB, DVBE or None)	Work performed or goods provided for this contract	Corresponding % of bid price	Good Standing?	51% Rental?
FBA, Inc. Amir Kazemi Phone: (510) 265-1888 Fax: (510) 265-1891	1675 Sabre Street Hayward, CA 94545 amir@fbaengineers.com	None	Structural Engineering	TBD	Yes	N/A
Seismic Surveys, Inc. David Miller Phone: (301) 663-6630 Fax: (301) 663-6647	604 Solarex Ct. Suite 105 Frederick, MD 21703 dmiller@seismicsurveys.net	None	Surveys and monitoring	TBD	No	N/A
Underwater Resources Tom Belcher Phone: (415) 974-5464 Fax: (415) 974-1749	Pier 26, The Embarcadero San Francisco, CA 94105 tbelcher@underwater-resources.com	None	Diving and marine surveys	TBD	Yes	N/A

CERTIFICATION: By signing the bid response, I certify under penalty of perjury that the information provided is true and correct.

BIDDER DECLARATION

1. Prime bidder information (Review attached Bidder Declaration Instructions prior to completion of this form):

- a. Identify current California certification(s) (MB, SB, SB/NVSA, DVBE):** _____ **or None** (If "None", go to Item #2)
- b. Will subcontractors be used for this contract? Yes** ___ **No** ___ (If yes, indicate the distinct element of work your firm will perform in this contract e.g., list the proposed products produced by your firm, state if your firm owns the transportation vehicles that will deliver the products to the State, identify which solicited services your firm will perform, etc.). Use additional sheets, as necessary.
- _____
- _____

- c. If you are a California certified DVBE:** (1) Are you a broker or agent? **Yes** ___ **No** ___
 (2) If the contract includes equipment rental, does your company own at least 51% of the equipment provided in this contract (quantity and value)? **Yes** ___ **No** ___ **N/A** ___

2. If no subcontractors will be used, skip to certification below. Otherwise, list all subcontractors for this contract. (Attach additional pages if necessary):

Subcontractor Name, Contact Person, Phone Number & Fax Number	Subcontractor Address & Email Address	CA Certification (MB, SB, DVBE or None)	Work performed or goods provided for this contract	Corresponding % of bid price	Good Standing?	51% Rental?
Silverado Contractors, Inc. Joe Capriola Phone: (510) 658-9960 Fax: (510) 658-9960	2855 Mandela Parkway 2nd Floor Oakland, CA 94608 joe@silveradocontractors.com	None	Demolition consulting, constructability analysis, risk assessment, cost estimating, scheduling	TBD	Yes	N/A
California Engineering Contractors, Inc. Wahid Tadros Phone: (925) 461-1500 Fax: (925) 461-0510	20 Happy Valley Road Pleasanton, CA 94566 wtadros@cecmain.com	None	Marine consulting, constructability analysis, risk assessment, cost estimating, scheduling	TBD	Yes	N/A

CERTIFICATION: By signing the bid response, I certify under penalty of perjury that the information provided is true and correct.



SECTION 2

Financial Capacity

Section 2



Section 2 Financial Capacity

2.A Bonding Capacity

RFQ SECTION 3.3.A

Silverado and CEC both are very well-established and financially sound companies with proven track records. The CEC/Silverado JV insurance and bonding resources not only meet, but exceed the requirements stated in the RFQ.

Liberty Mutual Insurance Company (Liberty) is the surety for both companies. Liberty currently is providing the payment and performance bonds to the CEC/Silverado JV on the first phase of the SFOBB demolition, and is very familiar with the work associated with the current phase, as well as the upcoming phases of the SFOBB project. Liberty is an admitted surety in the state of California, with an A.M. Best Company rating of “A, XV” (Excellent).

Per the requirements of Section 1.15.1 of the RFQ, attached at the end of this section is a notarized letter from our surety.

2.B Insurance

RFQ SECTION 3.3.B

The CEC/Silverado JV will provide all insurance, as specified in the draft Preconstruction Services Contract. The CEC/Silverado JV currently maintains all the insurance required, as outlined in the RFQ, and we are committed to meeting all insurance limits set forth in the final contract. In addition, we will indemnify the Department, the Department’s consultants, and others involved in the SFOBB project, with respect to claims arising out of the Contract or Work.

An insurance certificate evidencing our current insurance coverage, which not only meets, but exceeds the policy limit requirements as currently specified in the draft Preconstruction Services Contract, is attached at the end of this section. General liability insurance is provided by Old Republic Insurance Corporation, a California admitted insurance company with an A.M. Best Company rating of “A, XI” (Excellent).





Liberty Mutual Surety

**71 Stevenson Street
San Francisco, CA 94105
Office: (415) 777-1307
Facsimile: (415) 896-9072**

May 29, 2014

State of California
Department of Transportation
Administration
Division of Procurement and Contracts
1727 30th Street
Sacramento, CA 95816-7006

Re: California Engineering Contractors, Inc. / Silverado Contractors, Inc., a
Joint Venture Request for Qualifications – SFOBB East Span Marine
Foundation Removal Project Project No. 040135CM

To Whom It May Concern:

Liberty Mutual Insurance Company provides surety credit to California Engineering Contractors, Inc./ Silverado Contractors, Inc., a Joint Venture for the referenced project. They are capable of obtaining Performance and Payment Bonds sufficient for the referenced project and have a current available bonding capacity of \$200,000,000.

It is our intention to furnish California Engineering Contractors, Inc. / Silverado Contractors, Inc., a Joint Venture 100% Performance and Payment Bonds if they are awarded the above referenced project. Our willingness to provide bonds is subject to our standard underwriting at the time of any bond request, including acceptable contract terms and conditions, acceptable bond forms, adequate contract financing as well as other underwriting conditions which may exist at the time of the request.

For further information you may contact Mr. Richard Bass at Arthur J. Gallagher & Co located at 1255 Battery Street, Suite 450, San Francisco, CA 94111; Phone number 415-288-1619.

Very truly yours,

Liberty Mutual Insurance Company A.M. Best Rating A, XV

Betty L. Tolentino, Attorney-in-Fact

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of San Francisco



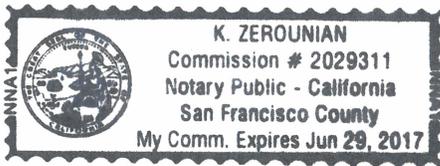
On May 29, 2014 before me, K. Zerounian, Notary Public,
Date Here Insert Name and Title of the Officer

personally appeared Betty L. Tolentino
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(\$) whose name(\$) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(\$) on the instrument the person(\$), or the entity upon behalf of which the person(\$) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Place Notary Seal Above

Signature [Handwritten Signature]
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer Is Representing: _____

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer Is Representing: _____

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6329414

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Betty L. Tolentino; Brian F. Cooper; J. M. Albada; Janet C. Rojo; K. Zerounian; Kevin Re; M. Moody; Maureen O'Connell; Robert Wrixon; Susan Hecker; Virginia L. Black

all of the city of San Francisco, state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 25th day of October, 2013.



American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: *Gregory W. Davenport*
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 25th day of October, 2013, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: *KD Riley*
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 29th day of May, 2014.



By: *David M. Carey*
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.



ADDITIONAL REMARKS SCHEDULE

AGENCY Aon Risk Insurance Services West, Inc.		NAMED INSURED California Engineering Contractors, Inc.	
POLICY NUMBER See Certificate Number: 570053910798			
CARRIER See Certificate Number: 570053910798	NAIC CODE	EFFECTIVE DATE:	

ADDITIONAL REMARKS

**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance**

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

ADDITIONAL POLICIES If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	AUTOMOBILE LIABILITY							
A				A-ICA-044013-01	10/01/2013	10/01/2014	Collision Deductible	\$1,000



SECTION 3

Safety



Section 3 Safety

3.A Safety Record

RFQ SECTION 3.4.1.A

The CEC/Silverado JV team believes that all incidents are preventable. Safety is a core value that the CEC/Silverado JV team shares with the Department. All work completed by our team will be performed with an emphasis on *planning, managing, and executing* the work safely. We are committed to safety programs that are protective of people, the community, and the environment, and we will address and effectively communicate safety and health considerations at all stages of the SFOBB Foundation Removal project. Preconstruction risk assessments will be completed for all viable methods of demolition to determine the best approach for each task, with worker safety our first and foremost concern.

Safety Record

The CEC/Silverado JV was formed in 2012 and maintains a current 1.00 experience modification rate (EMR). The CEC/Silverado JV has an excellent safety track record; the JV had *no recordable or lost-time injuries* in 2012 or 2013.

CEC/Silverado JV EMR Rates	
Year	EMR
2013	1.00
2012	1.00
2011	N/A
Average	1.00

CEC/Silverado JV Injury Rates		
Year	Recordable Injury/Illness Rate	Lost Work Rate
2013	0	0
2012	0	0
2011	N/A	N/A
Average	0	0



Alternative Dispute Resolution System

The CEC/Silverado JV is party to an alternate dispute resolution program, as provided for in Labor Code §3201.

California OSHA and Federal OSHA Citations

In the past five years, the CEC/Silverado JV has had *no serious, willful, or repeat violations* either with the California Occupational Safety and Health Administration (Cal-OSHA) or with the Federal Occupational Safety and Health Administration (FOSHA).

3.B Worker Safety Program

RFQ SECTION 3.4.1.B

Introduction

CEC/Silverado JV is firmly committed to ensuring a safe workplace for our staff, owners, subcontractors and all stakeholders.

Safety Commitment

No project objective is more important than safe performance! Achieving the goal of zero incidents requires commitment from leadership, a strong safety focus, and a comprehensive, systematic approach to all work. The CEC/Silverado JV team will approach the SFOBB Foundation Removal project in a methodical, controlled manner that captures all necessary design and engineering components and takes into consideration the sensitivity of performing on and in the San Francisco Bay, and all the environmental considerations thereof.

Achieving the CEC/Silverado JV zero-incident goal requires that we utilize our experience on multiple high-hazard, multi-employer work site demolition projects, and our state-of-the-art safety program. This program is comprised of the following key elements:

- the CEC/Silverado JV Corporate Environmental, Health and Safety Management System,
- the Site-Specific Health and Safety Plan (HASP),
- the Job Hazard Analyses (JHA),
- the comprehensive, task-specific work plans that communicate our objectives, requirements, constraints, and expectations, and
- the preconstruction risk mitigation process.

CEC and Silverado have a shared commitment to safety and were able to combine their safety programs together and establish an excellent safety system specific to the conditions and needs of the complex work involved on the SFOBB cantilever demolition project. This system defines our safety expectations, frames our safety culture, and provides for self-assessment and continued improvement. The Preconstruction Risk Mitigation Assessments and HASP combined with the JHAs and work plans assist us in identifying the safety requirements that must be factored in to all tasks. These documents detail the potential health and safety risks, the engineering survey findings,



task constraints and protections, and the administrative controls to be implemented to mitigate risk and keep our workers, the public and the environment safe.

Subcontractors/Subconsultants

We set a high safety bar for ourselves as well as our subcontractors and consultants. The JV has established subcontractor safety program reviews and training mandates that ensure that every worker that steps foot on our project has the proper training, protection and pre-task planning. We require subcontractors to perform project specific safety training and to submit jobsite safety meeting records on a regular basis. The project has security personnel at all access points to the project to ensure that only proper personnel is admitted to the project. All visitors must sign in and be accompanied by trained JV personnel at all times as project conditions and hazards are constantly changing due to the nature of the removal operations.

New Approaches

The CEC/Silverado JV team is constantly striving to improve our safety record and systems. Our team is committed to “zero-harm” safety training and improving our systems by adding new requirements to our means and methods. This has and will continue to result in improved performance, with an emphasis on creating zero harm to our people, those working around us, the community, and the environment. We are always looking for new state-of-the-art engineering controls on our equipment – controls that eliminate situations that would put people in harm’s way. We are continually upgrading our methods and equipment fleet, with the goal of mechanizing our procedures to the fullest extent possible. As part of our project approach, we will evaluate every task and determine if new approaches and mechanization can be utilized.

Safety Plan

Site specific safety plans are crafted for each project based on an analysis of all risks present on the site and in the work. The JV IIPP covers required regulatory elements and the Health and Safety Plan addresses emergency response and general safety such as those listed below.

- Hazard Communication
- Fire Safety
- Fall Protection
- PPE
- Traffic Control
- Tool & Equipment Use
- CPR First Aid
- Marine Rescue
- Silica Training
- Confined Space Training

Specialty safety plans are prepared where required by regulation, such as heat and lead, or where special risks merit a special plan. A sample of some of our current plan cover sheets are shown below.



Sample Safety Documents

HEALTH & SAFETY PLAN (H&SP)

Yerba Buena Island Transition Structure #2/
San Francisco-Oakland Bay Bridge Cantilever Truss Demo
04-SF-80-12.6/13.9

Prepared for: Caltrans – California Department of Transportation
Project # 04-0120T4

Prepared by: Robert Ikenberry
Safety Director
20 Happy Valley Road
Pleasanton, CA 94566



CALIFORNIA ENGINEERING CONTRACTORS, INC.
& SILVERADO CONTRACTORS, INC. A JOINT VENTURE

california engineering
SILVERADO CONTRACTORS, INC. a joint venture

INJURY AND ILLNESS PREVENTION PROGRAM

**California Engineering Contractors, Inc./
Silverado Contractors, Inc., a joint venture**

**INJURY AND ILLNESS
PREVENTION PROGRAM**

04/01/2013



CALIFORNIA ENGINEERING CONTRACTORS, INC.
& SILVERADO CONTRACTORS, INC. A JOINT VENTURE

CRISIS MANAGEMENT AND INCIDENT RESPONSE PLAN

**CALIFORNIA ENGINEERING CONTRACTORS,
INC./SILVERADO CONTRACTORS INC.**
A joint venture

**CRISIS MANAGEMENT
AND
INCIDENT RESPONSE PLAN**

4/28/2014



CALIFORNIA ENGINEERING CONTRACTORS, INC.
& SILVERADO CONTRACTORS, INC. A JOINT VENTURE

 **california engineering**  SILVERADO CONTRACTORS, INC. a joint venture



LEAD COMPLIANCE PLAN

SAN FRANCISCO/ OAKLAND BAY BRIDGE EASTERN SPAN
DEMOLITION PROJECT

CALTRANS CONTRACT NO. 04-0120T4

REVIEWED BY:

GLENN R. CASS, PE, CH, CDPH #717

SCA ENGINEERING, INC.
254 19TH STREET
OAKLAND, CA 94612
TEL: (510) 646-6200
EFA: (415) 962-0738

5/22/2014 1

SILVERADO CONTRACTORS, INC / CALIFORNIA ENGINEERING CONTRACTORS, INC. JV
San Francisco-Oakland Bay Bridge East Span Marine Foundation Removal Project
Construction Manager / General Contractor Services 04-0135CM
June 3, 2014



Safety Director

Our Safety Officer, Robert Ikenberry, has considerable experience running safety programs on large, complex projects. He has worked with both JV firms to establish the safety protocols and procedures for the current work on the SFOBB Cantilever Span demolition project. Robert's professional experience is summarized below.

Robert L. Ikenberry, CHST, PCS – Safety Director

Robert has been active in construction management for nearly 40 years. For more than half that time (1991-present), his focus has been on safety leadership. Robert has applied his background in chemistry and biology, combined with his decades of construction experience, to understand, interpret, and address the risks related to industrial chemicals, biometric hazards, and environmental considerations on construction job sites. Working with our in-house staff and consultant biologists, Certified Industrial Hygienists (CIHs), and environmental experts, Robert has developed, and presents most of our in-house safety training programs.

Robert is dedicated to communicating the importance of effective training and safe work practices to the CEC/Silverado JV team, as well as the industry. He is the author of numerous award-winning articles published in trade journals, primarily the *Journal of Protective Coatings and Linings*, which has featured his writings since 1993. His recent article, "Controlling Traffic on Highway and Bridge Painting Projects" won the 2010 top Editor's Award for Outstanding Paper of the Year.

Robert is currently the Safety Director for the CEC/Silverado JV SFOBB cantilever removal project and as such oversees all safety planning and training on the project. Robert has developed a comprehensive safety program to address all the many facets of work locations and conditions that are inherent to this highly complex project.

Education

University of La Verne, La Verne, CA – 1974; B.S. Chemistry/Biology (Departmental Honors in Chemistry)

Professional Registrations

Construction Health and Safety Technician (CHST)

Board of Certified Safety Professionals (BCSP)

Protective Coating Specialist (PCS)

Society for Protective Coatings (SSPC)

Certified Gas Tester (Cal-OSHA)

Certified Safety Representative (Cal-OSHA Mining and Tunneling)



Publications

Concrete Construction – “From the Trenches”, March 2002

Fundamental of Cleaning and Coating Concrete, The, Chapter 15 “Operations Safety”, pages 283-296, published by SSPC © 2001

Journal of Protective Coatings and Linings – “It’s All Relative – Advances in Environmental Controls for Coating Work”, August 2013 - Supplement

Journal of Protective Coatings and Linings – “A Contractor’s Overview of Fall Protection”, June 2010

Journal of Protective Coatings and Linings – “Controlling Traffic on Highway and Bridge Painting Jobs”, January 2010 – Received 2010 SSPC Outstanding Publication of the Year Award

Journal of Protective Coatings and Linings – “The Internet: What’s in it for Painting Contractors”, April 2001

Journal of Protective Coatings and Linings – "Putting It into Practice - A Contractor's Safety Program" April 1995;

Journal of Protective Coatings and Linings –"Developing a Contractor's Safety Program - Step by Step" April 1994 (received JPCL Editor's Award 1994),

Journal of Protective Coatings and Linings – "Cost-Effective Safety Programs for Painting Contractors" July 1993 (received JPCL Editor's Award 1993)

Materials Performance (NACE) –"Get the Lead Out" Column, September 1994

PWC Magazine – “Dirty Work Dangers” (Industrial Hygiene) with Daniel Hernandez, CIH, July/August 2008

PWC Magazine – “Can You Hear Me Now?” (Hearing Protection), May 2008

PWC Magazine – “The Eyes Have It” (Eye Protection), May 2008

Summary of Experience

California Engineering Contractors, Inc., 2000 - present

Safety Director

Certified Coatings of California (previously Clark Painting Company), 1977-2000

Safety Director 1991-2000

Division Manager, St. Louis Operations 1985-1986

Project Manager/Estimator 1977-1985

Fluor Engineers and Constructors, 1974-1976

Associate Engineer, Insulation and Coatings

Alyeska Pipeline Project (field experience in Alaska and Washington State)

SILVERADO CONTRACTORS, INC / CALIFORNIA ENGINEERING CONTRACTORS, INC. JV
San Francisco-Oakland Bay Bridge East Span Marine Foundation Removal Project
Construction Manager / General Contractor Services 04-0135CM
June 3, 2014



Relevant Project Experience

The following three jobs are just a small summary of Robert's professional experience on projects that are similar in scope to the SFOBB project outlined in the RFQ.

<u>Project Name:</u> San Francisco Oakland Bay Bridge Retrofit	
<u>Project Number:</u> 04-0435U4	<u>Project Dates:</u> 1999-2004
<u>Project Role:</u> Safety Director	<u>Time on Job:</u> 100%
<u>Owner Contact:</u> Deanna Vilcheck / (510) 772-7895 / Deanna_Vilcheck@dot.ca.gov	

The Bay Bridge seismic retrofit is a highly complex project with small crews of JV and subcontractor employees working at up to 20 separate locations, spread across 2 miles of structure. Work locations range from water level to the tops of the towers 425 feet above the bay. We had to be able to respond to an emergency at any location at any time.

Robert targeted four main areas for safety focus:

Communication – each crew on the bridge needed to be able to check in, and to call for aid if required. CEC/MCC JV developed a comprehensive communication network based on Nextel push-to-talk technology that provided the best available solution at the time. It used the best features of both cell phones and radios. One problem was that the CEC/MCC-jv Main offices on Treasure Island were in a poor coverage area in the middle of the bay. Robert coordinated the installation of a repeater/booster cell site in our offices.

Training – workers needed a variety of skills and information to deal with complex technical work, difficult access, scaffolds, platforms, and traffic. Robert developed for the joint venture a comprehensive PowerPoint based training program with modules covering each risk area so new workers received consistent instruction.

Inspections – Large heavy-duty platforms up to 80' X 100' provided the critical access necessary for the work. However, moving and maintaining them safely was a challenge. Robert worked with the manufacturer and our engineers to develop a training program and comprehensive Daily, Weekly and Traversing Checklists for reach type of platform.

Access/Traffic Control – Essentially all the work on the truss and upper towers required workers to get to their worksite by entering and exiting temporary lane closures on the heavily traveled Bay Bridge's lower deck. Traffic safety was a constant focus for Robert and his 3 to 4 full-time safety officers. Close relationships were developed with multiple stations of the San Francisco Fire Department, including those on Treasure Island, operating fireboats in the bay, and heavy rescue. Dozens of visits to the bridge site were made by the department for familiarization and training. No actual rescues were required.



<u>Project Name:</u>	Bay Bridge Fender Replacement		
<u>Project Number:</u>	04-049044	<u>Project Dates:</u>	March 2005 – August 2006
<u>Project Role:</u>	Safety Director	<u>Time on Job:</u>	50%
<u>Owner Contact:</u>	Fernando Abela / (510) 385-7230 / Fernando_Abela@dot.ca.gov		

Robert provided both project management and safety leadership on the West Span Fender replacement project. Safety challenges were typical for marine demolition. The potential for toxic exposure from Creosote treated timbers, exposure to extremes of weather and temperature, risk of falls into the water (swift currents and hypothermia).

Robert works with CEC supervision to sequence the work to minimize all risks. Techniques were developed to enhance safety including pre-assembly of new structural supports and layers of sheathing at our yard at Mare Island. This minimized our crews' work over water and avoided handling a multitude of small parts around those workers while simultaneously trying to keep them in place suspended from a crane on the water.

The demolition of the existing vendor system was also conducted in large pieces, minimizing worker exposure to creosote treated timbers.

CEC also scheduled work on the lowest portions of the fenders to follow the tides, so work in the water, and diving operations were avoided.

<u>Project Name:</u>	Demolition of the 1927 Carquinez Bridge, Crocket, California		
<u>Project Number:</u>	04-013094	<u>Project Dates:</u>	April 2005 – May 2008
<u>Project Role:</u>	Safety Director	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Peter Strykers / (510) 714-7076 / Peter_Strykers@dot.ca.gov		

The demolition of the Carquinez Cantilever Truss Bridge presented numerous safety challenges. Both men and equipment would be highly stressed to be able to safely remove the various components in the proper sequence, using essentially untested techniques.

Robert led the safety effort to address all aspects of the project, including lead paint exposure, falls, excavations, and work on and over water. The work was further complicated by difficult and changing access, with the structure literally disappearing day-to-day.

Comprehensive orientation training was provided all new hires. Even though lead based paint was present on the project, extensive monitoring showed that only a few categories of tasks were exposed above the action level. Close involvement by our structural engineer during the dismantling insured a safe and predictable disassembly process. The safety practices and techniques pioneered on the Carquinez Bridge have been successfully applied to the similar demolition process on the Bay Bridge East Span.





SECTION 4

Firm Experience and Past Performance



Section 4 Firm Experience and Past Performance

CEC/Silverado JV Team Overview

RFQ SECTION 3.5.A

The CEC/Silverado JV team brings together a group of companies that have proven they can be successful working together on some of the most complex bridge demolition and blasting projects in the construction industry. Silverado has been performing highly technical demolition activities for 14 years. CEC has performed retrofit and demolition activities on many of the Bay Area's signature bridges over the last 40 years, including the complete demolition in 2007 of the historic Carquinez Bridge, built in 1927. Silverado and CEC have worked together in the past and are currently executing the first phase of the SFOBB demolition, the dismantlement of the SFOBB cantilever section. This historic project has required intensive engineering and coordination in order to safely complete the removal activities.

In addition to these two respected local companies, our team includes the highly respected blasting firm, [Controlled Demolition, Inc. \(CDI\)](#). CDI has performed and consulted on work all over the world, on all structure types, including bridge foundations, and in all conditions. CDI has worked with our team's key personnel on several blasting projects, including the implosions of the 13-story Warren Hall administration building at the California State University (CSU) East Bay campus, the Seattle Kingdome stadium, and the South San Francisco Geneva Towers high-rise housing project. Mark Loizeaux, President of CDI, has perfected the art of controlled explosives technology over his long and distinguished career and will be directly involved in the SFOBB Foundation Removal Project.

[Pacific Blasting & Demolition Ltd.](#) (Pacific Blasting), headquartered in British Columbia, adds blasting and drilling expertise to our team. In 2000, JV key personnel, CDI, and Pacific Blasting worked together on the Seattle Kingdom implosion. Pacific Blasting has been involved in the demolition of bridges, buildings and structures since 1954. Pacific Blasting has worked on numerous bridges and has considerable experience working in environmentally sensitive areas. Pacific Blasting Vice President Ron Wolf and Superintendent Corry Goumans authored a paper in 1997 for the International Society of Explosives Engineers titled "Bridge Demolition in an Environmentally Sensitive Area" about the successful demolition by Pacific Blasting of the Stave River Bridge in Mission, British Columbia, Canada.

As part of our controlled blasting design the CEC/Silverado JV will work with the Department and regulatory agencies to develop evaluation criteria to be utilized during the E3 Demolition Project. [Seismic Surveys, Inc.](#) will consult with our team regarding underwater blast vibration and pressure monitoring. They have considerable experience in controlled blast monitoring and have worked in the past with CEC/Silverado JV team members including most recently at the Warren Hall Implosion Project located at University of California, East Bay campus.



[Foothills Bridge Co.](#) and [FBA, Inc.](#) (FBA) have worked closely with the CEC/Silverado JV team on many technical projects, including the current SFOBB cantilever demolition project. Both firms have been instrumental in the preparation of complex engineered demolition plans on all the bridge removal projects completed by CEC and Silverado. FBA has also provided Silverado with structural engineering analyses and demolition plans on all implosion projects performed by Silverado. In addition, FBA has teamed with CDI in reviewing blast plans while assessing the viability of the structure during controlled structural weakening on several projects in the Bay Area.

[D.H. Charles Engineering, Inc.](#) (DHC) currently is working with the CEC/Silverado JV team in providing scaffolding, shoring, and jacking designs for the SFOBB cantilever demolition project. In addition, CEC has worked with DHC on other demolition and retrofit projects for more than a decade. DHC has provided marine piling, trestle, cofferdam, shoring and scaffolding designs on multiple projects, including the very complex Carquinez Bridge dismantlement project.

In preparing this SOQ, the CEC/Silverado JV team performed extensive research to identify firms that provide superior environmental and diving services. The JV team interviewed representatives of these firms to select the most highly qualified group for the SFOBB East Span Marine Foundation Removal Project. The selected companies, described below, are experienced in providing all the environmental consulting and testing services required for the activities outlined in the RFQ.

[Ecotech Resources](#), a Disabled Veteran Business Enterprise (DVBE)-certified environmental management and consulting firm located in Berkeley, California will provide the CEC/Silverado JV team with the depth of knowledge and experience to successfully partner with the Department and all relevant environmental agencies to complete the activities associated with the SFOBB Foundation Removal project. Additionally, Ecotech will provide environmental risk assessment services and assist with permitting activities for the project.

Because of the marine environment, the age of the structure, and the changing conditions in San Francisco Bay, the CEC/Silverado JV team also selected a firm that could provide diving and testing services as part of the risk assessment and environmental controls and analyses required for this project. [Undewater Resources, Inc.](#) (URI), a San Francisco company, was chosen for these tasks. URI has been providing these services locally for more than 30 years, and will be a valuable asset to our project team.

CEC/Silverado JV has selected, [Leland Saylor Associates](#), a local San Francisco based DVBE Small Business firm to perform our critical path scheduling on the project. Leland Saylor has worked successfully with CEC/Silverado team members on past projects and will be an asset to our project team.

The following pages provide a brief summary of the capabilities and capacities of each member of the CEC/Silverado JV team identified above.





Silverado Contractors, Inc.

Silverado is one of the largest union demolition contractors in the western United States, and is known for taking on the demolition industry's toughest challenges. Silverado provides full-spectrum, high-hazard demolition services on projects involving structures such as bridges, towers, industrial and power plants, and high-rise buildings. Our team thrives on challenge, and we have the experience and resources to meet any demolition challenge. Our clients will attest to our excellence and professionalism, affirming our ability to undertake any demolition task. Since its inception, Silverado has successfully completed more than 600 projects, including very high-profile, large-scale projects such as the implosion of Warren Hall on the CSU East Bay campus, the implosion of the South Bay Power Plant in Chula Vista, the demolition of the Carquinez Bridge Approaches, the demolition of San Francisco International Airport's Boarding Area "A", the demolition of the 240-foot-tall Bank of America Clock Tower in downtown San Francisco, the demolition of two thousand feet of the San Francisco Bay Bridge, and several, large projects at the Port of Oakland.

The City of New York's Office of the Mayor/Department of Design & Construction specifically requested the services of Silverado to respond to the 9/11 World Trade Center bombings. Our experience, coupled with our commitment to service, translates to quality delivery during all phases of a project. We complete our contracts using the highest level of professionalism – safely, on time, and within budget.

Commitment to Safety

Silverado recognizes the inherent dangers of working on complex demolition projects, and we view safety as a core value. Accordingly, our values focus on conducting our operations in a manner that protects people, property, communities, and the environment. We provide our team with the resources to make sound, appropriate safety and health-related decisions, and hold each team member accountable for such decisions.

Silverado's safety and health programs are designed to minimize the potential for injuries, property damage, and production loss. We have established systems for the early detection and correction of unsafe practices and conditions. Our team management structure is organized to safeguard our resources and foster an environment in which all team members share a concern for safety compliance. We recognize that safety extends beyond the technical applications of our work. Our safety programs are designed to address the safety and quality concerns that are external as well as part of the demolition program. We take into account sensitive environments and promote strong stewardship of the environment. We recognize that projects can often result in complex community stakeholder issues. We plan, prepare, and execute our activities with a primary emphasis on safety, compliance and risk mitigation.

Silverado was started by a group of highly experienced estimators, project managers and superintendents who had worked for some of the most respected demolition contractors in the industry. Our goal is to provide accident and claim-free job sites for our clients. In the last 14 years, no claims have been filed against Silverado, and no fatalities have occurred. We think this speaks highly of our commitment to our clients and workers for each and every project.



Preconstruction Philosophy

While Silverado has worked on several formal design-build projects, we are continuously operating in design-build environments due to the very nature of the removal and retrofit of older complex structures when as-built drawings are no longer available. With our commitment to providing quality services the first step of every project involves meeting with the client to review the primary objectives of the project; then we plan, budget, and execute the work in the manner that best achieves the agreed upon objectives.

As a contractor based in Oakland, Silverado is familiar with the local issues, regulations and ordinances that govern our work. Having completed hundreds of projects for repeat clients in the Bay Area, our expertise and ability to work with contractors and owners in the pre-construction phase establishes the goals and expectations for the project. Communicating the means and methods to achieve those goals to the clients and other stakeholders, including regulatory agencies, adjacent property owners and the general public while still in the preconstruction/design phase educates those not familiar with the workings of the demolition industry and ensures that during the deconstruction phase we comply with our commitments- a core value in the way we conduct our business.

Currently Silverado along with CDI have been retained to perform demolition and implosion consulting services for the demolition of Candlestick Park. We are working for the environmental consultant and the project developer to assist in the following preconstruction services including demolition methodology and permitting.

Equipment

To execute its work Silverado owns, operates and depends on its large fleet of well-maintained heavy equipment complete with every attachment made for demolition. Our fleet is new and compliant with CARB air regulations.

Areas of Expertise and Experience

Our scope of expertise includes every conceivable type of demolition including the following services.

- Preconstruction Services
- Demolition Consulting
- Building Demolition
- Implosion
- Industrial Plant Decommissioning
- Dismantling
- Selective Demolition
- Concrete Crushing
- Bridge & Transportation
- Marine
- Historic Renovation
- Excavation & Earthwork
- Asset Recovery, Recycling & Reuse
- HAZMAT Remediation



California Engineering Contractors, Inc.

CEC is a Bay Area based heavy civil contractor that was formed in 1972. Over the last forty years the Company has evolved into a highly successful contractor that focuses on tough, technically demanding and schedule driven projects. We believe success in business is all about building relationships, establishing trust and successful performance. We pride ourselves on these relationships, and we are constantly working with our clients and partners to build and strengthen our relationships through hard work and dedication to our core values of safety and quality.

CEC, District 4 staff and the Department designers have worked together on numerous projects to value engineer the project design. We proposed new and innovative means and methods of construction and then have worked with the Departments designers to modify the design accordingly. CEC and the Department have been successful partners on a myriad of projects, large and small. Each job is approached with a goal of establishing a superior working relationship with the Department staff, and then exceeding performance expectations in terms of safety, quality, cost and schedule.

We have successfully completed numerous projects in a many different disciplines of heavy civil construction. These projects can be categorized as follows:

Engineered Demolition

We have successfully completed one of the most complex engineered demolition projects of a major structure in an aquatic environment with active marine traffic, the 1927 Carquinez Bridge Structure. In addition to the Carquinez Bridge we have completed numerous projects that included demolition of a variety of structural components in marine environments such as Bridge Foundations, Columns and Decks, Bridge Bearings, Bridge Fender Systems, and Wharf Structures.

Marine Construction

CEC has completed several projects that were primarily marine contracts and numerous other projects that had heavy involvement of marine construction. We completed the Carquinez Bridge removal, Bay Bridge West Span retrofit, Antioch Bridge retrofit, Bay Bridge Fender replacement, Bay Bridge emergency fender repairs and Richmond San Rafael Bridge emergency fender repair, Wharf 7 and Pier 7 demolition and reconstruction in the port of Oakland and construction of the San Leandro Marina.

CEC has been selected numerous times by the Department for emergency Director's Orders marine construction contracts. After the Cosco Busan container ship struck and damaged Delta Tower Pier supporting the Bay Bridge's Western Span the bridge fenders were badly damaged. The Department called upon CEC to repair the bridge, allowing 100 days and \$2 million dollars for project completion. Repairs requiring rolled, fabricated and galvanized steel supports, concrete demolition, forming and cast-in-place assemblies and new plastic lumber sheathing assemblies were substantially completed and the bridge was back in operation within 36 days, with less than \$1.5 million spent.

CEC also designed and executed complex marine operations in its other projects. The lowering of the Suspension Trusses of the old Carquinez Bridge onto barges and the complex tow is one such



example. On other projects we have built trestles, reconstructed wharf structures, and erected steel structures and completed concrete construction from barges in active marine channels.

Our staff is highly experienced in:

- Marine Pile Driving
- Cofferdam Construction and Removal
- Construction and demolition of Wharves, Jetties and other marine structures
- Setup and management of large marine fleets
- Restoration of wetlands and environmental mitigation

Seismic Retrofitting of Steel Structures

Since 1999 CEC has been heavily involved in the retrofitting of steel structures and has successfully completed projects for the Toll Bridge Program. Some of the key projects completed are Bay Bridge West Span Retrofit, Antioch Bridge Seismic Retrofit and the Bay Bridge East Span Interim Retrofit.

Seismic Retrofitting of Concrete Structures

Since the Loma Prieta earthquake in 1989 CEC has successfully completed the retrofits of numerous bridge structures and interchanges in Northern California. Some of the key projects completed are the 101/280 interchange in San Francisco, sections of the 280 Freeway 280 Freeway Sections in San Francisco and the Bay Bridge Distribution Structures in Oakland.

Other Projects

Painting of Bridge Structures - CEC maintains SSPC QP-1 & 2 certifications for painting of complex structures and safe removal of hazardous coatings, respectively. We have completed various projects that included removal of existing coating systems and repainting.

Rehabilitation of Bridge Structures - CEC has completed numerous projects that including rehabilitation of Bridge Decks (Bridge deck treatment, Replacement of Hinges and Joint Seals). CEC has also completed projects that involved bridge deck overlays with Polyester Concrete (Richmond San Rafael was one of the largest contracts in the Bay Area)

Roadway Construction and Rehabilitation - CEC has completed numerous projects throughout the Bay Area that involved replacement of existing roadways (primarily concrete sections) and bridge approach slabs with Rapid Set Concrete.

Transit Systems - CEC has completed numerous transit structures. Some of the noted projects that we have completed as a prime contractor are BART – Dublin Pleasanton extension and Pittsburgh Antioch Extension, SCVTA – San Jose Light Rail and MTA – Metro red line yard and tunnel track work.

Environmental Stewardship

On numerous projects CEC and its staff have dealt with a myriad of environmental challenges including protected bird and land based species, fish, marine mammals, sensitive aquatic environments as well as air and water quality. CEC has navigated these challenges without any environmental or other permit violations or delays to the projects.





Controlled Demolition Inc.

CDI was incorporated in 1960 and is internationally recognized as the pioneer and leader in explosives demolition technology. CDI's founder, John D. "Jack" Loizeaux, demolished his first structure with explosives in 1947, as President of Burnbrae, Inc., a drilling and blasting company that specialized in rock blasting. Jack's wife, "Freddie", took over the administrative aspects of the business, including an intensive, long-term public relations effort that essentially put the Loizeaux family name and its new and innovative "implosion" methodology on the global map. Over the years, Jack continued to demolish increasingly larger industrial structures, until 1957, when he demolished his first three major urban buildings for the U.S. Department of State in Washington, DC.

Jack and Freddie's sons, Mark and Doug, entered the business in the 1960s and 1970s, respectively. They have managed CDI since 1974, and remain the current owners. Industry sources have stated that since 1960, CDI has been responsible for approximately 70 percent of the high-rise demolition performed with explosives.

Although explosives operations are the most visible portion of CDI's work, over the past 20 years, CDI has expanded into the fields of commercial and industrial demolition and dismantling operations, off-shore/marine contracting, nuclear decommissioning, Department of Energy (DOE) projects, weapons disarmament, and environmental remediation. Throughout its history, CDI has demolished thousands of structures across six continents.

Corporate Philosophy

For more than half a century, three generations of Loizeaux family innovation, expertise, and leadership have created a unique demolition service company that has saved property owners and contractors billions of dollars worldwide. CDI is a member of the Loizeaux Group of Companies that, with its leadership and unparalleled experience, gives clients access to a full range of services and capabilities through a global network of offices and agents, all dedicated to the precision application of our technology. CDI's team of talented professionals with decades of experience is dedicated to absolute perfection on each project.

Projects of Interest

CDI's "World Record" projects are summarized below.

- **WECT Tower, Elizabethtown, North Carolina.** Shot Date: September 20, 2012. World Record: at 2,000 feet, the tallest manmade structure ever felled with explosives.
- **Ocean Tower, South Padre Island, Texas.** Shot Date: December 13, 2009. World Record: at nearly 380 feet, the tallest reinforced concrete building ever felled with explosives.
- **Seattle Kingdome, Seattle, Washington.** Shot Date: March 26, 2000. Guinness World Record: the world's largest structure by volume (19.821 million cubic meters) to be demolished by explosives.
- **J.L. Hudson Department Store, Detroit, Michigan.** Shot Date: October 24, 1998. Guinness World Record: at 439 feet, Hudson's is the tallest building and the tallest structural



steel building ever imploded; at 2.2 million square feet, Hudson's is the largest single building ever imploded.

- **Villa Panamericana and Las Orquideas, San Juan, Puerto Rico.** Shot Date: August 16, 1998. Guinness World Record: the largest number of high-rise buildings shot in a single implosion sequence.

Representative Honors and Awards

A partial list of the honors/awards presented to CDI is provided below.

- In 2010, Mark Loizeaux made Engineering News Record's "Top 25 Newsmakers in the Construction Industry". The January 15th edition contained the quote "Loizeaux Triumphs Over His Most Daunting Implosion in More Than Four Decades...[his] experience, expertise and dedication to safety led to the successful controlled demolition of a faulty Texas tower" following CDI's successful implosion of the Ocean Tower in South Padre Island, Texas on December 13, 2009.
- In 2002, Jack Loizeaux posthumously received the Lifetime Achievement Award from the National Demolition Association for his role in founding the explosives demolition industry.
- In 1998, Mark Loizeaux made Engineering News Record's "Top 25 Newsmakers in the Construction Industry". The April 2nd edition contained the quote "Mark Loizeaux cited for his innovation, exceptional achievements and dedication to the construction industry" following CDI's successful implosion of the "one-of-a-kind" Omni Arena in Atlanta, Georgia on July 26, 1997.
- In 1997, Mark Loizeaux is a Nobel Lecturer in Edinburgh, Scotland at the annual meeting with a presentation titled "The Evolution of Demolition with Explosives".
- In 1995, CDI was presented the U.S. Army Corps of Engineers' Silver Castle Award for exceptional sensitivity and professionalism in completing the politically sensitive demolition and removal of the Former Soviet Military's Large Phased Array Radar facility in Skrunda, Latvia ahead of schedule, within budget, and to the host country's satisfaction.
- In 1977, Jack Loizeaux received the Society of Austrian Explosives Engineers Golden Order of Merit Award "Dynamite for Peace" at the International Symposium on Blasting Techniques in Linz, Austria.
- In 1975, Mark Loizeaux made Engineering News Record's "Those who made marks in 1974". The February 19th edition contained the quote "Mark Loizeaux, of Controlled Demolition, Inc., calling attention to deterioration of Miami-area concrete buildings."
- In 1973, Mark Loizeaux made Engineering News Record's "Men who made marks in 1972". The February 14th edition contained the quote "John D. Loizeaux and sons, Mark and Douglas, developing demolition by explosives to a fine art."



Pacific Blasting

The Pacific Group of Companies consists of the following wholly owned companies/divisions:

Blasting:	Pacific Blasting
Slope Stabilization:	Pacific Blasting
Mining Division:	Pacific Blasting
Demolition:	Pacific Blasting
Excavating and Shoring:	BelPacific
Heavy Construction:	Bel Contracting
Heavy Industrial Moving:	Apex Heavy Industrial Movers
Specialty Engineering/Construction:	LNS Services
Drilling Equipment Sales/Service:	Traxxon Rock Drills Ltd

The company employs 450 to 600 people, depending upon project status, and is fully insured and bondable. Annual revenue for the above is in excess of \$120,000,000. Pacific Blasting & Demolition Ltd. is a specialist contractor that has performed precision drilling, blasting, and rock slope stability work, both nationally and internationally, since 1954. The Blasting Division provides in-house expertise in design and implementation of blasting operations through a team of certified specialists, each qualified and experienced in all phases of controlled blasting in close proximity to structures and utilities. All blasts are computer designed and initiated with sequential blasting machines, electronic detonators, or non-electric systems. Blast vibrations and air blasts from every shot are monitored and recorded on seismographs.

Pacific Blasting has a superior track record and extensive experience in the fields of precision drilling, controlled blasting, construction/bulk blasting, road construction, controlled demolition blasting, quarry, mining, tunneling, and underwater blasting applications, blast densification, and slope stabilization. Pacific Blasting is the largest marine blasting company in Western Canada, and performs the majority of the underwater projects on the West Coast. We are recognized for our drilling skill and the ability to provide superb drilling accuracy. We specialize in designing and building new drill systems, and modifying existing drilling equipment and systems to fit the project application. Our management team is also experienced in the fields of mining engineering, mine operations, geological engineering and project management of small to multi-million dollar projects.

The Blasting and Rockwork Division specializes in rock slope stabilization using various catchment fences and mesh systems, rock slope scaling, rock bolting, trim blasting and shotcreting. Engineering firms and government agencies throughout the world recognize our experience and commitment to public and worker safety. We have a wide range of drills, drilling equipment, and specialized rock slope stability equipment to handle projects of any size and can mobilize quickly to anywhere in the world in the event of emergencies.

Pacific Blasting & Demolition Ltd. specializes in blasting for; housing subdivisions, quarrying, highways, railways, pipelines, utilities, underwater applications, metal hardening, explosive compaction of soils, and demolition blasting. We are recognized as industry leaders in our field, employing the latest in “state of the art” technology. We are recognized worldwide for our close-in blasting expertise as well as our commitment to safety, quality, productivity, and professionalism.



Areas of Expertise and Experience

Underwater Blasting

Pacific Blasting is the most experienced underwater blasting contractor on the west coast of Canada. We have performed projects for the construction of docks, bridges, ship loading facilities, outfalls, and various underwater demolition projects including removal of reefs and other hazards to navigation. Computer blast designs and installation of bubble curtains are used to minimize or eliminate any damage to the environment. We work closely with Fisheries Canada guidelines and environmental monitors to minimize impact on the environment and stay within established regulatory guidelines.

Demolition Blasting

Pacific's blasters have experience with carrying out select demolition from blasting of machine bases inside operating plants right up to implosion of high rise structures in the downtown core. Expertise includes the demolition blasting of buildings, smoke stacks, silos, towers, bridge piers, dock structures, etc.

Urban Blasting

Our clients can draw on our over 50 years of experience with close-in controlled blasting expertise. Blasting operations are routinely carried out for the construction of high rise buildings in the downtown core, where blasting must be carried out close to people and right next to structures. All blasts are engineered to ensure minimal vibration effects. We are also recognized for our expertise in residential and utilities blasting. All blasts are covered with blasting mats and seismic monitoring is carried out at the closest structures.

Explosive Metal Hardening

We have developed techniques for the explosive hardening of metals that dramatically improve the wear characteristics and prolong the life of metal components. The majority of the manganese steel railway frogs used in North America are hardened using the EDH system at our facility located southeast of Chilliwack, BC. Typical hardness increase from 155 up to 300 Brinell can be easily achieved.

Explosive Compaction of Soils

In conjunction with Explosive Compaction Inc., we have extensive experience with the use of explosives for soil stability improvement. We have carried out projects for the densification of foundation soils for the construction of dams, bridges, highways, industrial building sites, and oil drilling platforms. The technique is used to improve the stability of soils to resist liquefaction in the event of an earthquake. Sequential blasting techniques are used to compact soils to improve bearing capacity and reduce volume. Relative density increases of 70%-80% can be achieved. The technique can be used to increase storage capacity behind tailings dams. In conjunction with ECI, we have also developed a technique for liquefaction evaluation of foundation soils. Explosive compaction is an economic alternative to other more traditional soil improvement techniques





Seismic Surveys, Inc.

Seismic Surveys, Inc. was founded in 2001 by its current Owners, David and Elena Miller. The company has grown over the past eleven years and has conducted many high-profile projects since its inception. Some of these challenging projects include the implosion of Veteran's Stadium, the Inter-County Connector, the Wilson Bridge, The Lincoln Memorial Reflecting Pool Reconstruction, and the Smithsonian Institution's National Museum of African American History and Culture..

Seismic Surveys, Inc. consists of highly respected and qualified professionals with a proven track record in the industry. We offer a full range of services in vibration monitoring and control related to the construction and mining industry. These industries are often faced with claims that vibrations caused damage to residential homes, commercial buildings, water supply wells, and underground piping. Our services assist these industries in minimizing their exposure to claims and resolving claims should they occur. Seismic Surveys, Inc. is committed to developing long-term relationships with its clients by responding quickly to their needs and providing value to the projects they are involved with.

PROFESSIONAL SERVICES OFFERED

- Instantel® Seismograph Sales, Lease, and Service
- Blasting Plan Review
- Vibration Monitoring, Analysis, and Control
- Programs (Blasting, Demolition, Implosion, Heavy Construction, Pile Driving, DDC, Traffic, Transit)
- Pre-Blast/Construction Survey Services
- Damage Claim Investigation/Post-Condition Survey .Services
- Sound Level Studies
- Structural Response Measurements
- Geotechnical Instrumentation Monitoring
- Remote Geoscience Instrumentation
- Expert Testimony
- Seismograph Operator Training

Seismic Surveys, Inc. will utilize its personnel's specialized and vast professional experience to provide clients with unsurpassed comprehensive technical support during the vibration needs of their projects. The results of Seismic Surveys, Inc. professional expertise, experience and service will be to generate a stable and thriving business with an unmatched reputation in the industry for quality and service.

From the simplest to the most demanding applications, we use Instantel® MiniMate® and BlastMate® series of instruments which offer innovative features, specialized sensors, and a variety of recording formats that increase their functionality and allow for flexibility across a wide variety of project needs.



With this equipment, we measure monitor ground vibration, air blasts, and water pressure changes created by blasting, demolition, mining, quarrying, and construction activities. SSI can meet your consulting and equipment needs for most vibration or sound monitoring applications including.

REPRESENTATIVE PROJECTS

- Woodrow Wilson Bridge Foundation Removal, Alexandria, VA
- Rocky Pen Run Reservoir, Spotsylvania, VA
- Holtwood Dam Expansion, Holtwood, PA
- Warren Hall Implosion, Hayward, CA
- El Segundo Boilers Demolition, El Segundo, CA
- Blasting Consultant to State of Maryland
- Wilmington, NC Harbor Rock Blast and Dredge
- Howard Hughes Medical Institute, Janelia Farm
- Campus, Ashburn, VA
- Maine Yankee Nuclear Plant Decommissioning, Wiscasset, ME
- Davis Avenue Bridge Demolition, Pittsburgh, PA
- Rancho Seco Nuclear Power Plant Decommissioning, Sacramento, CA



CALIFORNIA ENGINEERING CONTRACTORS, INC. / SILVERADO CONTRACTORS, INC. JV
San Francisco-Oakland Bay Bridge East Span Marine Foundation Removal Project
Construction Manager / General Contractor Services 04-0135CM
June 3, 2014



Foothills Bridge Co

Foothills Bridge Co, based in Boulder, Colorado, provides engineered solutions for heavy civil contractors engaged in the erection and dismantling of bridges and related structures. We know that our success is tied to the success of our clients. Our passion is designing systems that provide a competitive advantage to our clients. We are currently licensed in:

California	Maine	North Carolina	Texas
Colorado	Maryland	Oregon	Washington
Idaho	Missouri	Rhode Island	Washington, DC
Louisiana	New York	Tennessee	British Columbia

Foothills Bridge Co was founded in 2004 with the purpose of contributing to the success of our clients by helping them build more safely, more efficiently, and more creatively. Since then, we have grown to a staff of 10 professionals with projects throughout the United States and in Canada. We perform all kinds of construction engineering, but engineered bridge dismantling is our specialty. Like you, we are passionate about bridges, and we look forward to being a part of your project team.

Foothills Bridge Co is qualified to provide construction engineering services related to the erection and dismantling of steel, concrete, and timber bridges, with an emphasis on the following areas:

- Bridge Dismantling Plans
- Bridge Erection Plans
- Temporary Support And Jacking Systems
- Heavy Lifting Systems
- Falsework And Formwork
- Excavation Shoring
- Access and Protective Cover Systems

Short List of Projects

- | | | |
|---|-------------------|-------------|
| • Tappan Zee Bridge | Tarrytown, NY | In progress |
| Engineered bridge dismantling plan for steel cantilever truss spans | | |
| • SFOBB Cantilever and Viaduct Spans | San Francisco, CA | In progress |
| Engineered dismantling plan for 1934 steel cantilever truss structure and 2009 steel and concrete detour structures | | |
| • Port Mann Bridge | Coquitlam, BC | 2014 |
| Engineered dismantling plan for steel plate girder bridge approaches | | |
| • Waldo-Hancock Bridge | Bucksport, ME | 2013 |
| Engineered dismantling plan for 1931 steel suspension bridge | | |
| • Pawtucket Bridge No. 550 | Pawtucket, RI | 2012 |



Engineered dismantling plan for steel plate girder bridge

- Manette Bridge Dismantling Bremerton, WA 2011
Engineered dismantling plan for steel truss bridge
- Hood Canal Bridge Replacement Poulsbo, WA 2009
Engineered erection and dismantling plans for floating steel truss bridge
- San Francisco-Oakland Bay Bridge San Francisco, CA 2009
Temporary Bypass and Yerba Buena Island (YBI) Spans Dismantling Engineered
dismantling plan for 1934 steel truss bridge approaches
- 1927 Carquinez Bridge Crockett, CA 2007
Engineered dismantling plan for steel cantilever truss spans and plate girder approach spans
- Russian River Bridge Geyserville, CA 2006
Emergency dismantling plan for flood-damaged steel truss bridge



FBA, Inc.

FBA is a structural engineering firm in the San Francisco Bay Area that specializes in the design of concrete structures. FBA was established by Mr. Florian Barth, PE and Mr. Walid Naja, SE in 1995, and was incorporated soon after. The firm has been a leader in the field of structural concrete design. In 1997, Mr. Amir Kazemi, PE, who has 18 years of experience in post-tensioned concrete design and demolition engineering, joined the principals of FBA.

The principals of FBA have a combined structural concrete design experience of over 75 years. This work has been performed for developers, architects, contractors and other consultants. Over this time period, FBA has designed over 1,500,000 square feet of structural concrete per year.

From our headquarters in the San Francisco Bay Area, as well as offices in Orange County and Sacramento, we have been serving local, national and international clients for many years. Our activities include structural concrete design, evaluation and repair; seismic assessment and retrofit; and engineered demolition.

Engineered Demolition-Conventional

FBA is responsible for developing state-of-the-art controlled demolition applications. We are the leading controlled bridge and building demolition engineering company in the U.S. The principals of FBA have been a powerful force in the development of de-construction plans for high-profile structures that have been compromised by seismic events.

We have prepared demolition plans for several unique buildings, and for more than 95 percent of the Department's engineered bridge removal projects in the last 10 years. The state-of -the-art controlled demolition plans developed for the damaged and unstable double-decker Embarcadero freeway in the aftermath of the Loma Prieta earthquake in San Francisco remain the common practice and the standard of operation today.

Engineered Demolition-Controlled Blasting

FBA has performed analysis of numerous structures prior to implosion via controlled blasting. FBA worked on the Geneva Towers Implosion, the South Bay Power Plant and CSU East Bay's Warren Hall Implosion. FBA works with the demolition and blasting contractors to analyze the structure and determine how much the structure can be compromised structurally pre-implosion. FBA conducts review of both as-built drawings and exploratory demolition to expose connections as well as physical inspections of structures throughout the pre-blast preparation phase.

Forensic Engineering: Seismic Evaluation and Retrofit

Because of its location in the San Francisco Bay Area, and the background of its principals, FBA is particularly sensitive to and involved in advancements in seismic design, evaluation and rehabilitation. The company's expertise in seismic analysis and engineering, along with its extensive experience in concrete frame design, have provided major relief to many clients with earthquake-damaged buildings or seismic evaluation projects. Our seismic retrofit solutions combine a thorough and accurate structural analysis with an effective retrofit design that maximizes safety and construction economy.



Design Work - Concrete

A key to our success is our persistent focus on the highly technical and specialized field of concrete design, where our engineers bring the latest in theoretical developments to the point of design application.

FBA's dominance in this highly competitive design-build field is achieved through providing technically competent, responsive service throughout the project. Our staff is committed to identifying the needs and challenges of the contractor, and working in close cooperation with the construction team towards the project's success. Our designs are sensitive to budget restrictions and scheduling; the company's economical designs are the backbone of many medium- to high-rise structures. Our design team is dedicated to remaining flexible throughout a project to adapt to changes that may be required.



D.H. Charles Engineering, Inc.

DHC is a civil/structural engineering firm specializing in providing construction engineering services to contractors throughout the U.S. and Canada. The firm, which was founded in 1992, is owned and managed by Jasper Calcara, P.E., who has been providing design, consulting, and field inspection services on thousands of projects since 1998.

A professional and experienced staff of 11 engineers ensures that projects are prepared efficiently and accurately by qualified personnel, and, in many cases, same day turnaround is provided. DHC goes out of its way to ensure its clients throughout the U.S. and Canada are provided with the same quality of service as is provided to contractors in its home state. Providing e-mailed, faxed and/or overnight-signed plans and calculation packages ensures that important deadlines are always met.

Services Provided

Excavation shoring plans for jack and bore pits, pump stations, manholes, cofferdams, foundations, pipe trenches, tank removal/installation, and contaminated soil removal in accordance with OSHA and the Department's *Trenching and Shoring Manual*, using the following construction methods:

- beam and plate (soldier piles)
- sheet piles
- trench shields and manhole boxes
- secant shafts
- slide rail systems
- soil nail walls
- cofferdams
- hydraulic trench jacks
- deadmen and tiebacks

Excavation safety and slope stability plans to approve temporary excavations for trenches or Pits structures over 20'-deep, or steeper than limits outlined in federal OSHA regulations.

Falsework, formwork and reshore design for building seismic retrofits, renovations, new suspended slabs, bridge widening, box girder bridges, etc. in accordance with the Department's *Falsework Design Manual*, and American Concrete Institute (ACI) formwork specifications.

Structural shoring design for building and bridge retrofit to temporarily relieve/support loading of structural members to allow for modification or replacement, or new footing construction.

Bridge jacking design to support and lift bridge decks from supports during abutment and bearing pad retrofit operations.

Scaffold design, including accessing scaffold for low- and high-rise work, structural shoring systems, work platforms, pedestrian canopies, hanging platforms, containment structures for bridges retrofit, and miscellaneous temporary stages, bridges and towers.



Shoring equipment design, including trench shields, manhole boxes, slide rail systems, arch spreaders, and miscellaneous specialized equipment, in accordance with federal OSHA guidelines.

Roof suspension equipment design, including portable and fixed davit, socket and pedestals, adjustable outriggers, fall protection and arrest systems, controlled decent apparatus, tie-back anchors, swing stage components, and temporary rigging layouts.

Crane design and rigging design, including tower crane footings, spreader beams, picking frames, complex rigging plans, mast climber supports, demolition, and structural shoring for heavy equipment loading.

Demolition-related design, including structure evaluation for demolition phasing/heavy equipment access, column and wall stability bracing, structural shoring, demolition debris support, and containment platforms.

Permanent works design of reinforced concrete, steel, timber, masonry, and aluminum structures in accordance with ACI, American Institute of Steel Construction (AISC), National Design Specification (NDS), the *Aluminum Design Manual*, and the Uniform Building Code.

Rebar cage erection stabilization design, including complex wire rope stabilization systems, internal and external steel templates, erection and fabrication supports, and lifting beam and rigging assembly design.

Seismic anchorage calculations and detailing for tanks, pumps, pipes, utilities, and other equipment designed to meet applicable building codes.

PE Stamps

All 50 states, Washington D.C., Ontario, Alberta, British Columbia, Manitoba, Saskatchewan and Newfoundland and Labrador

SE Stamps

California, Illinois, Nevada, Hawaii and Washington



Ecotech Resources, Inc.

Ecotech Resources, Inc. is a DVBE environmental management and consulting firm located in Berkeley, California providing professional services to public-sector agencies and commercial clients. Ecotech provides qualified professionals to meet project requirements and client expectations. Our senior associates have a minimum of 20 years of experience working with regulatory agencies and clients, and are recognized experts in their fields.

J. Jeffrey Root, founder of Ecotech Resources, has more than 25 years of environmental consulting experience, with an emphasis in project management, regulatory compliance, and environmental due diligence. Mr. Root's professional experience gives him an in-depth perspective on the environmental regulatory landscape, and an expansive knowledge of how the individual environmental specialties work together to accomplish a stated objective. His areas of expertise include strategic planning and analysis, risk mitigation, remediation, and agency negotiations. He has considerable experience working with California environmental regulatory agencies on land use planning, entitlements, and permitting projects.

Core Strengths

- Project management
- Strategic environmental planning
- Regulatory compliance and permitting
- California Environmental Quality Act (CEQA) document preparation and environmental review
- Mitigation monitoring and reporting
- Environmental transactional due diligence
- Environmental risk mitigation
- Stormwater Pollution Prevention Plan (SWPPP) and consulting

Advantages

- Meet agency participation goals
- Meet regulatory and project objectives in a cost-effective manner
- Provide large-business experience with small-business efficiency

Services

- Subcontractor Management
- Risk Assessment
- Due Diligence
- Health and Safety
- Regulatory Compliance
- Environmental Permitting
- Fisheries and Ecological Modeling
- Wetlands Surveys/Delineation
- Phase I/II Site Assessment
- CEQA/NEPA Project Management
- Environmental Impact Reports (EIR)/EIS
- Climate Action Planning
- GIS Mapping and Spatial Analysis
- Greenhouse Gas Inventory
- Sustainability Analysis
- Community Involvement

Partners

To expand their capacity Ecotech has developed relationships with several environmental and specialty partner firms to provide their clients with special focus as required by each project. For the Bay Bridge East Span Marine Foundations Removal project Ecotech has surveyed it array of sub-consultants and proposes to utilize the following firms should the need arise:

Tenera Environmental - California DGS Certified Small Business #34521

Tenera provides marine biological studies and hydro-acoustic monitoring , environmental permitting and regulatory compliance, natural resource inventories. TENERA staff have over 30 years of experience in designing and conducting marine studies, including one of the largest NPDES marine monitoring programs ever conducted. TENERA staff includes several diving scientists who collectively have decades of experience conducting sampling programs using SCUBA. Tenera Environmental staff are experts in the deployment and maintenance of instrumentation in the marine environment and the processing and analysis of physical oceanographic data including the integrating of GIS. TENERA has several boats ranging from small inflatables to a 23' dive boat to help support diving operations, instrument deployments, and sample collection.

Pendergrast Consulting Group

Pendergrast Associates provides community outreach and education services on large projects throughout California. Some of their notable projects include the Doyle Drive Replacement Project and the san Francisco Oakland Bay Bridge Seismic Safety Program – Small Business Program.



Underwater Resources, Inc.

URI is Small Business Enterprise (SBE) certified and licensed as a General Engineering Contractor both in California (#639975) and in Nevada (#67863). Providing full-service marine and diving contracting, URI conducts above and UW structural condition surveys and detail inspections, provides repairs to and rehabilitation of existing submarine structures, and performs new construction. In conjunction with the Marine Exchange of the San Francisco Bay Region, our management staff, field personnel, and equipment are available as needed on a 24-hour “on-call” basis, year around. Our 10,000-square-foot office, shop facility, and yard are located along the San Francisco waterfront, on Pier 26 beneath the Bay Bridge, and we also have two off-site storage yards for storage of larger equipment that enable us to readily respond to and mobilize for any job requiring marine or interstate highway access.

URI marine support, technical and commercial diving personnel have been providing UW construction inspection, repair and rehabilitation, and new marine construction field services throughout the 11 Western States, Mexico and Canada and along the Pacific Rim since 1982. We primarily service the public sector, performing rehabilitation, seismic upgrades and new construction to the infrastructure in water, wastewater, maritime, transportation and industrial plant industries.

URI staff is familiar with the marine and diving conditions in San Francisco Bay and has worked along the SFOBB East Span on more than a dozen projects for the East Bay Municipal Utility District (EBMUD) and other general contractors working under Department contracts for more than 20 years. In addition, URI staff participated for three years in the Mentor Protégé Program sponsored by the Department and Association of General Contractors, and graduated in July 2011.

Diving and technical personnel are proficient in light/heavy construction, nondestructive testing (NDT), dredging and core-drilling/wire saw cutting demolition, UW cutting/wet welding, rigging and pipefitting, grout and concrete placement for restoration/new construction and patch repairs, epoxy/urethane injection, mechanical repairs to slide gates/valves, and pipeline installations. We routinely conduct in-water operations under severe tidal currents with "zero-visibility" conditions utilizing special video/lighting systems and/or other remote sensing equipment, including scanning and towed-side-scan sonar and remotely operated vehicles (ROVs) to monitor and document conditions of UW structures, bottom features, and topography. Above water (dry) inspections and repairs are often performed using confined-space guidelines within lined and unlined water transmission tunnels and sanitary outfall pipelines.

URI maintains a comprehensive list of commercial diving equipment, including multiple USCG-certified decompression chambers, shallow/deep air breathing compressor packages, and enriched air (Nitrox) and HeO2 gas diving systems used to a water depth of 300 feet. While conducting surface-supplied dive operations with continuous two-way voice communications, our dive tethers are configured between 250 to 3,300 feet in length, include primary/secondary breathing hoses, and may also incorporate an additional hot water hose, video cable, and/or power tool members. Diver personal equipment, such as helmets/masks, dresses and undergarments, are job specified for potable water or contaminated/hazardous liquid environments and thermal protection (“cold-vests” or water heaters), and are always a consideration during mission planning. We offer portable



dredging jetting/vacuum systems (diesel/gas powered), and pneumatic and hydraulic control units to power an assortment of UW power tools. Our equipment includes a primary modular floating work platform (six 4' x 8' x 20' barges) that can be transported to job sites on trailers and operated using 17-foot/19-foot steel work skiffs, and a 27-foot aluminum utility boat/landing craft with bow ramp and push knees. A three-ton hydraulic davit and twin, 10-ton planetary winches add versatility to our barges.

Other specialized equipment developed, fabricated, and/or modified for UW use includes a liquid crystal display (LCD) digital level/slope indicator to measure plumb and angles of straight surfaces, “clear-water” adapters fitted onto video/still cameras for documentation under turbid water conditions, ultraviolet (UV) lighting and infrared video systems, and a 3000-foot-long neutrally buoyant tethered closed-circuit video inspection system for use in long tunnels or pipelines to enable above water “real-time” monitoring and recording of diver activities during inspections and repairs within remote submerged structures.

Representative Experience

Brief descriptions of representative projects, similar in nature to the project activities described in the RFQ, are provided below.

Crystal Springs/San Andreas Transmission System Upgrade, Demolition and Retrofit CSOS1 Tower (2014)

– Conducting ongoing shallow and deep air diving operations for core-drilling up to 6-inch Ø holes through a 60-inch-thick brick and mortar tower wall; performing layout and service horizontal/vertical wire-saw cutting operations; preparing UW rigging for removal of multiple 20,000-pound demolished tower sections and installation of three 44-inch spool pieces and isolation valves for the general contractor on behalf of the San Francisco Public Utilities Commission.

Dumbarton Bridge Seismic Retrofit Project, Ravenswood Pier 1 Removal (2012)

– Mobilized dive crew and equipment to conduct reconnaissance investigation to obtain and verify horizontal/vertical dimensions along both north/south and east/west faces of submerged concrete pier and footing to assist the general contractor with possible sheet pile and/or wire-saw layout options for demolition and removal.

Cypress Avenue Bridge on Sacramento River Removal of Brackets, Anchors and Concrete Patch Repairs (2011)

– Mobilized dive crew and equipment with UW torches to cut/remove 160 SS wedge anchors and conduct patch repairs on two bridge support foundation piers. Diving operations were conducted in swift flowing water at a depth of less than 10 feet for the general contractor on behalf of the City of Redding.

San Francisco-Oakland Bay Bridge, Damaged Fender Recovery Project (2008)

– Mobilized surface-supplied dive crew/equipment and scanning sonar imaging system to assist in locating, rigging, and recovering multiple structural steel/ high-density polyethylene (HDPE) fender material sections of the West Span pier fender assembly that were broken and fell to the seabed west of YBI as a result of impact contact from a container ship. Services were performed on behalf of California Engineering Contractors under Department Contract No. 04-4A8604.



Form B
PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Instructions for Form completion: Form B is limited to a maximum of 3 pages for each completed project.

Name of Firm: **Silverado Contractors, Inc.**

Project Role: Prime Trade Package Contractor (Abatement and Demolition)

Principal Participant: Yes Designer: _____

Other (Describe): _____

Years of Experience (provide length of activity as it relates to the following three elements):

Roads/Streets: 1 Bridges/Structures: 1 Utility Relocations: 1

Project Name, Location, and Nature of Work for Which Company Was Responsible:

Warren Hall Implosion, California State University, East Bay, Hayward, California
Abatement, Demolition, Site Work and Utilities



Project Highlights:

- Design Build
- Controlled Blasting
- Permitting
- Agency Coordination
- Hazardous Materials
- Zero Claims
- DVBE Goals Exceeded
- Environmental Permitting

Provide Project Description and Describe Site Conditions:

Project Description:

Silverado was awarded the contract for the demolition of the signature Warren Hall administration building, which had been rated by the California State University (CSU) Seismic Review Board as the most seismically unsafe building in the CSU system, and was located almost directly on top of the active Hayward fault line. Silverado's subcontractor abated all hazardous materials from the 13-story concrete structure. Then the pedestrian bridge to the adjacent University library was removed in preparation for the implosion. Due to the campus environment and the notoriety of the project

in the area, many agencies, neighbors, and interested parties were involved in planning for and coordinating the implosion. The implosion occurred in the early morning, attracting significant media attention and thousands of spectators. In addition the implosion was used by the United States Geological Survey Department to collect valuable scientific data related to the fault line by the placement of numerous seismic monitors throughout the surrounding area. The implosion was successful, and Silverado proceeded with the final removal of the downed concrete structure. Due to the performance of Silverado and the partnering relationship developed with Sundt Construction and the owner, upon the completion of the base demolition contract additional site restoration and construction change orders were added to our contract.

Pre-construction Services:

The proposal for this design-build services project was submitted in the summer of 2012. After receiving the highest score for its combined technical proposal and price, Silverado was awarded the preconstruction services contract and worked with the client, the owner, and our subcontractors and subconsultants to engineer and design the final demolition requirements, technical implosion details, hazardous materials abatement activities, containment requirements, and final site restoration activities. We worked with the client to understand the building’s design and site restraints, and determined that an implosion was the safest, least disruptive to campus activities, and most cost efficient means of removal. Coordinating closely with CDI, Sundt, and the owner, Silverado obtained all necessary permits and approvals from the various agencies including Bay Area Air Quality Management District (BAAQMD), state and local fire departments, and Cal-OSHA.



Key Subcontractors/Team Members

Silverado worked closely with our blasting subcontractor, Controlled Demolition Inc. (CDI) and our structural engineer FBA, to design and engineer all pre-implosion preparations, blasting design, and day of blast procedures and protocols. Silverado and CDI coordinated with the general contractor, owner, and multiple agencies, including the California Highway Patrol, four local police departments, Caltrans, and others to facilitate safe day of blast activities with the least amount of disruption to the public.

Environmental Issues/Sensitive Location

While not in a marine or aquatic environment the Warren Hall demolition had many environmental and location related issues that had to be properly managed and abated. We worked closely with our abatement subcontractor to ensure that all hazardous materials were completely removed from the building prior to implosion, including the removal of all the friable asbestos fire proofing throughout the structure. The implosion of structures always require special permits and notifications to various agencies including the BAAQMD. Special attention was given to the placement of dust mitigation systems and protection of adjacent building prior to the implosion. In addition the structure was located almost directly over the active Hayward fault. This caused interest within the geological science community that the impact of the structure during the implosion may create measurable data that could be used to further study the Hayward fault line. However, as in all implosion projects, Silverado, our blasting subcontractor CDI and our structural engineer FBA worked closely to design the implosion so that minimal amounts of explosives were used. The building was appropriately prepared and phased with delays so that the structure would fall in a direction away from the adjacent library and with minimal impact.



Completion Overview

Silverado completed the main project on time and within budget. It is our firm belief that the award of the preconstruction services contract directly lead to our ability to work with the client to determine the best method that met their primary project objectives. Schedule and timing is important on any job, but on an occupied college campus with a large student population the implosion had to be completed in a narrow project window to ensure that classes would not be interrupted in any way. Based on our successful relationship with the client and owner on this project, Silverado performed additional site construction work on a change order basis. Silverado exceeded the 6% Disabled Veteran Business Enterprise goal for the project.

List Any Awards, Citations, and/or Commendations Received for the Project:

Name of Client (Owner/Agency, Contractor, etc.): Sundt Construction Inc.

Address: 2860 Gateway Oaks Drive, Suite 300, Sacramento, CA 95833

Contact Name: Marie Crist

Telephone: (916) 830-8088

Owner's Project or Contract No.: C120101

Fax No:

Contract Value (US\$): \$5,579,525

Final Value (US\$): \$7,136,347

Percent of Total Work Performed by Company: 50%

Commencement Date: March 2013

Planned Completion Date: October 2013

Actual Completion Date: April 2014

Amount of Claims: None

Any Litigation? Yes No

Form B
PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Instructions for Form completion: Form B is limited to a maximum of 3 pages for each completed project.

Name of Firm: Silverado Contractors, Inc.	
Project Role: Subcontractor	
Principal Participant: Yes	Designer: _____
Other (Describe): _____	
Years of Experience (provide length of activity as it relates to the following three elements):	
Roads/Streets: 4	Bridges/Structures: 4 Utility Relocations: 0
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
SFOBB South Detour, Yerba Buena Island, California	
Bridge Demolition	
	<p>Project Highlights:</p> <ul style="list-style-type: none"> • Bridge Removal • Agency Coordination • Zero Claims
Provide Project Description and Describe Site Conditions:	
<p><u>Project Description:</u> Phase 1: Silverado Contractors worked with the general contractor, C.C. Myers, and the Department to develop and execute a plan to remove a 348-foot-long by 75-foot-wide section of the San Francisco Bay Bridge on Yerba Buena Island to facilitate future traffic routing to the South Detour. Working around the clock with a total crew of more than 200, Silverado completed the job in only 49 hours, on time and with no injuries. Two teams of four excavators each severed concrete deck and girder sections using excavator-mounted hydraulic breakers and steel shears. Once</p>	

severed, each of the 48 sections, weighing an average of 170,000 pounds, were hoisted to heavy-haul trailers. Next, the concrete edge beams and columns were separated and hoisted to trucks for off haul. These 19 members weighed up to 200,000 pounds each. Silverado completed the work during a Labor Day weekend closure, within the planned work window, and the entire roadway was reopened to the public ahead of schedule. All off-hauled concrete and rebar was recycled at the off-site laydown area.



Phase 2: Silverado Contractors performed the initial separation required to remove a 300-foot-long section of the SFOBB. Once the double decker section of roadway was cut free, it was jacked and the 3,200-ton section of bridge was rolled out by Mammoet. The new connector section for the temporary south detour then was rolled into place. After traffic was diverted to the new detour structure, Silverado began the removal of the four double-deck truss spans and adjoining concrete

viaduct, making way for the construction of the new transition structure connecting to the SAS to the Yerba Buena Island Tunnel.

Pre-construction Services:

Although this was originally a design, bid, build contract the project was delayed for several years. Various design and schedule changes and other considerations that were not anticipated by Silverado or the Department resulted in the development of a new design-build working relationship between the Department and Silverado that continues to this day. Silverado worked closely with C.C. Myers and the Department to understand the new primary objectives of the project and developed a completely new approach and designed new methods for our removal operations.

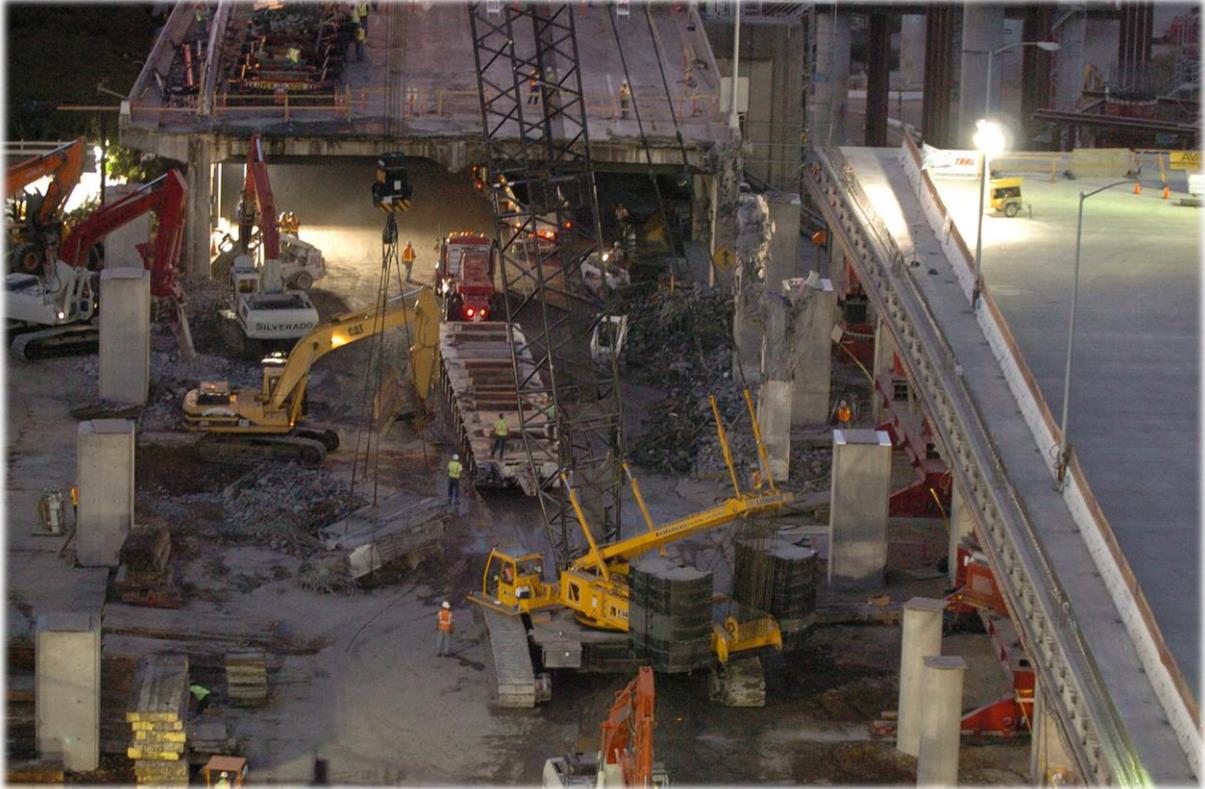
Key Subcontractors/Team Members

Silverado had a long established relationship with C.C. Myers and the Department, having performed multiple projects with them in the past including the removal of the Maxwell Bridge over the Napa River, the removal of the Crockett Interchange at the Carquinez Bridge, and on the fast paced emergency bridge replacement of the Russian River Bridge in Geyserville. Our previous relationship with C.C. Myers and the Department was critical to the success of this project, particularly the planning and implementation of the two weekend closures of the entire SFOBB.

Environmental Issues/Sensitive Location

Although the work was not performed directly over the water other permits and environmental considerations were encountered on the project. Silverado performed removal operations of hazardous soil and asbestos containing transite pipe by our trained and skilled workforce. Compliance with applicable regulations relating to lead painted steel was part of our daily project

safety program. Due to the congestion in the area with other contractors, and coordination with USGC operations, considerable care had to be taken as with removal operations occurring at heights up to 150 feet over the surrounding area.



Completion Overview

All work was completed on time and with no claims. The contract value changed from the original bid amount as a result of the complete redesign of the project to align with the Department’s new project objectives.

List Any Awards, Citations, and/or Commendations Received for the Project:

Name of Client (Owner/Agency, Contractor, etc.): C.C. Myers

Address: P. O. Box 2948, Rancho Cordova, CA 95741

Contact Name: Bob Coupe

Telephone: (916) 635-9370

Owner’s Project or Contract No.: 04-0120R4

Fax No: (916) 635-1527

Contract Value (US\$): \$5,160,850

Final Value (US\$): \$21,337,740

Percent of Total Work Performed by Company: 90%

Commencement Date: July 2007

Planned Completion Date: October 2010

Actual Completion Date: October 2010

Amount of Claims: None

Any Litigation? Yes **No**

Form B
PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Instructions for Form completion: Form B is limited to a maximum of 3 pages for each completed project.

Name of Firm: **Silverado Contractors, Inc.**

Project Role: Prime

Principal Participant: Yes Designer: _____

Other (Describe): _____

Years of Experience (provide length of activity as it relates to the following three elements):

Roads/Streets: 0 Bridges/Structures: 1 Utility Relocations: 1

Project Name, Location, and Nature of Work for Which Company Was Responsible:

South Bay Power Plant Implosion, Chula Vista, California
Abatement, Demolition, Site Work and Utilities



Project Highlights:

- Preconstruction Services
- Controlled Blasting
- Permitting
- Agency Coordination
- Hazardous Materials
- Sensitive Marine Environment
- Zero Claims

Provide Project Description and Describe Site Conditions:

Project Description:

Silverado was contracted by Dynegey, Inc. to demolish the 60-year-old, 750-megawatt power plant, formerly operated by the San Diego Gas & Electric Company (SDG&E), and located south of downtown San Diego. The plant contained four boilers, each with a 140-foot-tall stack. All hazardous materials were abated to prepare the structure for an environmentally safe implosion. The plant's location, directly on the San Diego Bay and adjacent to an active SDG&E high-voltage electrical switching station, required working closely with various agencies and neighbors. The implosion went flawlessly in the early morning, with thousands of spectators witnessing the event from a safe distance. In addition to the main power block, additional structures and two six-million-

gallon fuel oil tanks situated just south of plant were removed.

Pre-construction Services:

Silverado worked closely with the client, prior to final project award, on the project design and implosion considerations and engineering. Silverado attended California Coastal Commission (Commission) meetings prior to the Commission demolition approvals to understand and address the concerns and issues of stakeholders. Silverado continued working with Dynegey and the Commission throughout the process including, a suggestion to revise the existing permit to change the work from two separate implosions of two boilers each to one single event encompassing all four boilers. By changing our project approach Silverado was able to complete the implosion and demolition in the allowed permit window and recover valuable schedule time for our client, Dynegey.



Key Subcontractors/Team Members

Silverado worked closely with the project contractors and consultants to ensure that all activities were performed safely and to the highest environmental standards. Early in the project Silverado discovered that the prior abatement contract had not identified and removed all asbestos-containing materials. Silverado contracted with an abatement subcontractor that had an existing relationship with Silverado and a proven track record of getting complex asbestos removal work done safely in a specialized power plant environments. Additional remediation consultants worked with Silverado, our subcontractor and the client to ensure that all hazardous material was removed prior to the plant implosion. This was essential to our permitting and values as a company, ensuring that no asbestos containing or other hazardous materials were released in the resulting implosion.

Environmental Issues/Sensitive Location

The former power plant was located directly on the San Diego Bay with intake and outtake canals and piping leading directly into the plant itself. Due to this fact all activities and methods were highly scrutinized and evaluated by multiple agencies. Silverado worked closely with the owner and agencies to understand all concerns and comply with all permitting requirements. To comply with permits the boilers were dropped away from the bay. However this meant that they were then rotating in the direction of the active high voltage switching station located only 250 feet from the base of the boilers. Silverado came up with an innovative solution to build a 16 foot tall steel wall in order to protect the active switching yard by stacking shipping containers two high along the entire 500 foot length of the fall zone and included additional netting above to further protect against the possibility of damage outside the demolition zone. The system worked perfectly and no damage was caused to the switching yard. Large dust suppression systems were placed on the downwind side of the boilers to help mitigate dust caused by the implosion.

Completion Overview

Silverado completed the project within the project completion window and all structural demolition and implosion activities were completed on budget. Additional tasks were performed on the contract as a result of the asbestos materials that were not completely removed by the previous abatement contractor.



The project had no claims and we were able to establish an excellent working relationship with Dynegey. Silverado has subsequently performed another project for Dynegey and provided input on several future additional power plant decommissioning projects.

List Any Awards, Citations, and/or Commendations Received for the Project:

Name of Client (Owner/Agency, Contractor, etc.): Dynegey, Inc.

Address: 601 Travis Street, Houston, Texas

Contact Name: Larry Randel

Telephone: (619) 420-8431

Owner's Project or Contract No.: C120101

Fax No:

Contract Value (US\$): \$7,715,647

Final Value (US\$): \$7,715,647

Percent of Total Work Performed by Company: 75%

Commencement Date: August 2012

Planned Completion Date: March 2013

Actual Completion Date: March 2013

Amount of Claims: None

Any Litigation? Yes **No**

Form B
PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Instructions for Form completion: Form B is limited to a maximum of 3 pages for each completed project.

Name of Firm: **Silverado Contractors, Inc. (J. Harper Contractors, Inc./Silverado Contractors, Inc JV)**

Project Role: Prime Contractor

Principal Participant: Yes Designer: _____

Other (Describe): _____

Years of Experience (provide length of activity as it relates to the following three elements):

Roads/Streets: 0 Bridges/Structures: 2 Utility Relocations: 2

Project Name, Location, and Nature of Work for Which Company Was Responsible:

Boeing Plant 2 Demolition, Seattle Washington
Abatement, Demolition, Grading, Utilities, New Construction, Water Collection/Treatment



Project Highlights:

- Sensitive Marine Environment
- Hazardous Materials
- Zero Claims
- Storm Water Management
- Recycling

Provide Project Description and Describe Site Conditions:

Project Description:

This project entailed the industrial demolition of more than 1.7 million square feet of the former Boeing Airplane Manufacturing Plant 2. Originally built in 1936, this plant produced Boeing's B-17 Flying Fortresses, which helped the United States win World War II, as well as producing many other aircraft over the years. Extensive pre-planning was involved as the utilities that serviced the active buildings ran throughout a massive underground tunnel system. Extensive planning and coordination was involved in assessing how best to demolish this massive structure. A special work plan was required for the removal of the three-story-high walls that extended more than 900 feet along the banks of the Duwamish Waterway, an active Superfund site located adjacent to the plant. Because the waterway was a Superfund site, it was critical that no material of any type fall into the river during the abatement and removal of the perimeter walls. Silverado developed an innovative

approach to installing the protection necessary to comply with the key objective of this project. Steel members that were cantilevered through and out over the waterway were engineered and installed, and were used as a base for installation of the scaffolding. The transite panels and windows then were removed safely without requiring access from the water.

The project also required removal of the entire slab on grade, as well as the plant's massive foundation system, equipment foundations, subterranean elements, and concrete tunnels. All concrete was recycled on site and crushed into three-quarter-inch aggregate base, yielding 90,000 tons of reusable material.

Because some of the structure was attached to one of Boeing's main administrative buildings, our subcontractor, Skanska, was required to shore and retrofit the structural elements that remained. This work required additional coordination and precautions as the project boundaries were next to live utilities and active internal plant roadways on which vehicles and other plant equipment travelled.



Pre-construction Services:

The project did not require preconstruction services in the typical design-build way, however, due to the multi-year budgeting limitations and continuing need for various utilities on site, we worked with the owner to determine the primary project objectives, and revised the scheduling and work area sequencing to allow for continuous operation while meeting the key objectives.

Key Subcontractors/Team Members:

Silverado teamed with J. Harper Contractors, Inc. (Harper), a certified small local demolition contractor in the Seattle area. Silverado was the managing partner of the joint venture, and also performed the accounting, banking and other related administrative functions for the joint venture. Harper had previously performed contracts for The Boeing Company, and they required a partner due to the size of the Plant 2 Demolition project. Silverado and Harper worked closely together and provided Boeing with a quality project, bringing together their skilled crews and equipment fleets. Silverado purchased and mobilized specialized equipment for the project, including a 130-foot, telescoping high-reach excavator and multiple hydraulic shears in order to safely reach and process the steel structure. Harper provided a talented and trained local workforce and developed an excellent relationship with the Boeing staff.

Environmental Issues/Sensitive Location: Boeing is under a United States Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA) Correction Action to remediate Plant 2, and the demolition of the former facility was an integral part of the early action taken by Boeing to facilitate the cleanup of historical releases, which included contaminants, such as polychlorinated biphenyls (PCBs), metals (chromium, copper, cadmium), cyanide, petroleum products, and chlorinated solvents (e.g., trichloroethylene). Throughout the project, PCB-

contaminated concrete was encountered on numerous occasions. Working closely with Boeing, the contaminated concrete was removed and disposed of under a risk-based disposal work plan approved by the regulatory agencies. Because the project was located adjacent to a sensitive waterway, proper planning, training and protocols were necessary to ensure a safe environment. The Lower Duwamish Waterway had been designated a Superfund site by the EPA in 2001, and was subject to comprehensive oversight by federal and state governmental agencies, such as the EPA, U.S. Army Corps of Engineers, Washington Department of Ecology, and Port of Seattle. In addition,



community action groups, such as the Puget Soundkeeper and the Duwamish River Cleanup Coalition, provided input regarding the cleanup activities. As such, a key objective of Boeing was that absolutely no untreated storm water, debris, or contaminant of any kind be allowed to enter the waterway. To achieve this objective, an active storm water treatment system was designed, permitted, and maintained. An extensive testing protocol was developed for the treatment of storm water to ensure that all storm water on the site was treated and tested to meet stringent regulatory requirements prior to discharge. Our team worked on an innovative approach involving grading and covering the site to meet this critical client objective.

Completion Overview:
All work was completed on time and on budget, with the only contract increases coming from additional work not originally included in the contract scope. In addition, Boeing awarded the team a second, \$500,000+ contract to reroute utilities beyond the Plant 2 project boundaries.

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All work was completed on time and on budget, with the only contract increases coming from additional work not originally included in the contract scope. In addition, Boeing awarded the team a second, \$500,000+ contract to reroute utilities beyond the Plant 2 project boundaries.

List Any Awards, Citations, and/or Commendations Received for the Project:

Name of Client (Owner/Agency, Contractor, etc.): The Boeing Company

Address: P.O. Box 3707 MC 1W-08, Seattle, Washington 98124

Contact Name: Dave Horsfall

Telephone: (206) 662-2324

Owner's Project or Contract No.: CNT-S-10048-101073

Fax No: (253) 657-4569

Contract Value (US\$): \$7,993,517

Final Value (US\$): \$9,393,609

Percent of Total Work Performed by Company: 30%

Commencement Date: October 2010

Planned Completion Date: April 2012

Actual Completion Date: April 2012

Amount of Claims: None

Any Litigation? Yes No

Form B
PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Instructions for Form completion: Form B is limited to a maximum of 3 pages for each completed project.

Name of Firm: Silverado Contractors, Inc.	
Project Role: Subcontractor	
Principal Participant: Yes	Designer: _____
Other (Describe): _____	
Years of Experience (provide length of activity as it relates to the following three elements):	
Roads/Streets: 0	Bridges/Structures: 1 Utility Relocations: 0
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
Berth 22, Port of Oakland, Oakland, California	
Demolition, Grading, Marine, Concrete Recycling	
	<p>Project Highlights:</p> <ul style="list-style-type: none"> • Sensitive Marine Environment • Zero Claims • Storm Water Management • Recycling • Concrete Crushing
Provide Project Description and Describe Site Conditions:	
<p><u>Project Description:</u> Working for Manson Construction, Silverado Contractors, Inc. (Silverado) demolished Berth 22 at the Port of Oakland to allow for construction of a new concrete wharf supporting new container cranes. Demolition of the wharf consisted of the removal of a 100,000-square-foot concrete and wood timber wharf along a 1,000-foot span of the berth, and processing of more than 2,500 concrete piles. The concrete was then crushed on site yielding 36,000 tons of Class-2 recycled base rock. Silverado then mass excavated 20,000 cubic yards of soil for the construction of the new wharf. Creosote-treated wood timbers were removed. Silverado was able to divert from disposal sites hundreds of tons of what would have been classified hazardous materials by salvaging and</p>	

repurposing the treated wood material for use in other construction and rail projects in the recycle/reuse market. Silverado was able to complete its operations on the critical path, two weeks ahead of schedule.



Pre-construction Services:

This contract did not require preconstruction services, however, Silverado worked with Manson and the Port of Oakland to meet all project objectives. Silverado crushed 36,000 tons of concrete, half of which was crushed to meet the project specifications and was then incorporated into the new construction site, saving 2,000 truckloads of rubble export as well as import of new aggregate.

Key Subcontractors/Team Members:

Silverado developed an excellent relationship both with the prime contractor, Mason Construction, as well as the Port of Oakland. This relationship continued as Silverado next performed the demolition work at the Port of Oakland's Berth 32/33 for the Mason/Dutra JV. Working in conjunction with the Port, Silverado completed several projects, both as a prime contractor and as a subcontractor, including Berth 30, Berth 34, Building 590 Demolition, 14th Street Oakland Army Base (OAB) Buildings, and the complete removal and rehabilitation of the Franklin Delano Roosevelt (FDR) Memorial Pier.

Environmental Issues/Sensitive Location:

Silverado worked adjacent to and over the bay for the entire project, in accordance with all permitting and regulatory requirements. Silverado applies innovative approaches to debris containment in all of its marine rehabilitation projects, including suspending a custom-fabricated steel catchment device to contain slurry and rubble and prevent it from entering the bay. In addition, Silverado removed the concrete quay wall at Berth 22. This massive structure and its foundations were removed during the lowest tides to minimize cost and impact to the environment.



Completion Overview:

All work was completed ahead of time and on budget, the only contract increases coming from additional work requested by the client.

List Any Awards, Citations, and/or Commendations Received for the Project:

Name of Client (Owner/Agency, Contractor, etc.): Port of Oakland

Address: 530 Water Street, Oakland, California 94607

Contact Name: Chris Chan

Telephone: (510) 627-1257

Owner's Project or Contract No.: X2003-01-M3

Fax No: (510) 893-2812

Contract Value (US\$): \$1,654,000

Final Value (US\$): \$1,686,863

Percent of Total Work Performed by Company: 95%

Commencement Date: January 2004

Planned Completion Date: August 2004

Actual Completion Date: July 2004

Amount of Claims: None

Any Litigation? Yes **No**

Form B

PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Name of Firm: California Engineering Contractors, Inc. (CEC)	
Project Role: General Contractor	
Principal Participant: Yes	Designer: California Department of Transportation (for owner), Foothills Bridge (for contractor)
Other (Describe): _____	
Years of Experience (provide length of activity as it relates to the following three elements): Roads/Streets: 3 Bridges/Structures: 3 Utility Relocations: 3	
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
Carquinez Bridge Demolition –	
Remove 1927 Carquinez Bridge and Approaches in Contra Costa and Solano Counties.	
<ul style="list-style-type: none">• Bridge Structure Demolition• Environmentally Sensitive Bay Location• Innovative In-water Structure Solution• Attained Aggressive Completion Dates• Final Costs Well Below Initial Estimates	
The project included construction of a new approach deck for the 1958 bridge and demolition of the multi-span 1927 cantilever truss bridge and approaches, construction of surface streets, and installation and relocation of associated utilities.	
Working as subcontractor to CEC, Silverado performed demolition of the steel girder approach spans, concrete columns, and concrete roadway decks on the cantilever truss suspended span and 1958 bridge approach spans.	
Provide Project Description and Describe Site Conditions:	
This project involved demolition of the original bridge across San Francisco Bay, the historic 1927 Carquinez Straights Bridge. An engineering marvel in its time, the innovative construction sequences used to build the bridge, including raising the pre-assembled suspended spans into place and hanging them onto the cantilever arms of the bridge, were used by CEC to guide the safe and successful demolition of the bridge.	
The removal of the Carquinez Bridge was the first major bridge removal project in the Bay Area to use extensively engineered, piece-by-piece dismantling, rather than a controlled explosive demolition. The first phase of the project included the replacement of the deck of the approach to the adjacent 1958 bridge. The actual deck replacement work was completed ahead of schedule in only 35 days – 115 days ahead of the time allowed.	
The project involved the complete removal of the 1927 steel-truss-balanced cantilever bridge, which	

spanned the Carquinez Strait, Union Pacific Railroad (UPRR) tracks, and the C&H Sugar main truck/rail transfer yard. Close coordination was required with the U.S. Coast Guard (USCG), UPRR, and C&H Sugar to avoid disruption of their operations throughout the duration of the project. Additionally, the bridge was positioned between two existing bridges that comprised the eastbound and westbound lanes of Interstate 80. Traffic management was carried out on a daily basis to avoid disruptions to commuter traffic. Activities involved the removal of more than 18,000 tons of concrete and more than 15,600 tons of structural steel. Individual steel sections, weighing approximately 700 tons each, were lowered onto barges for eventual disposal. Entire spans of the bridge, up to 450 feet in length each, were supported on falsework during the engineered removal operation. The work was performed in compliance with the environmental and governmental permits obtained by the Department for the project.



Silverado worked with CEC on three major phases of the work. Initially, Silverado removed the concrete deck of the bridge prior to reconstructing the roadway. Secondly, the concrete roadways of the bridge's suspended spans were removed in phases. This work was closely coordinated with the demolition activities performed by CEC to lower the suspended spans. The final portion of Silverado's responsibility was the removal of the southern approach over the UPRR, as well as the ramps around Wanda Street and the C&H Sugar truck yard. This included removal of the concrete deck and steel girders, and demolition of reinforced

concrete columns as tall as 100 feet. This work was closely coordinated with all stakeholders.

Total changes: Adjustment of Compensation: \$2,225,382, Extra Work = \$5,118,215

CEC discovered substantial complications with the planned removal of the marine foundations of Pier 4. After extensive evaluation of alternatives and options, CEC and the Department determined that the most appropriate path was to eliminate this work, and avoid the associated cost over runs and schedule impacts. Sometimes the best option for avoiding excess costs is not the most obvious choice. CEC's strategy is to evaluate all the options and suggest solutions that are the best for the project.

A Dispute Review Board (DRB) was established for the project, but no issues required submission.

- A. **SIZE & COMPLEXITY** The Carquinez Bridge demolition project shared many of the challenges encountered during the Bay Bridge East Span demolition. Essentially the "little sister" to the Bay Bridge cantilever truss project, the removal of the Carquinez Bridge was managed by CEC with support from the same team as that planned for the project outlined in the RFQ. This project demonstrated that a complex cantilever truss can be successfully dismantled, even when located immediately adjacent to heavily traveled lifeline bridges and over an active, environmentally sensitive waterway.
- B. **AQUATIC ENVIRONMENT** CEC participated in the planning and evaluation of several methods of demolition for the in-water pier foundations on the Carquinez Bridge. Extensive preparation was made for underwater wire sawing and cofferdam installation of the south pier. Controlled blasting was evaluated, but determined not to be feasible for this application. Ultimately, the Department made the decision not to remove the structure.

- C. **ENVIRONMENTAL STEWARDSHIP** The environmental concerns and sensitivities encountered during the Carquinez Straight project are very similar to those associated with the SFOBB project. CEC was able to remove the bridge successfully, while complying with environmental regulations. No delays occurred due to nesting by protected species of birds, nor did any “takes” of species of concern (marine mammal, avian, aquatic or plants) occur.
- D. **SUCCESSFUL COMPLETION** The original Engineer’s estimate for the Carquinez Bridge removal was \$42,251,000. The project was A+B for the first phase, as discussed above. The balance of the bridge was to be completed in 1,120 working days. CEC completed the first phase in record time, and the entire project within the approved CPM schedule. The final contract value was within the approved budget, and was less than 85% of the original EE.
- E. **MEETING SBE GOALS** No WBE or SBE goals were established for the project. CEC worked diligently and successfully to meet its accepted DVBE commitment.
- F. **MINIMIZING DELAYS/CLAIMS** The successful and on-time completion of the first-of-its-kind deconstruction of the Carquinez Bridge is yet another example of CEC working with the Department and its key team members, Foothills Bridge and Silverado Contractors, to manage a large and complex project adroitly while minimizing problems, delays, claims, and disputes of all kinds. CEC’s track record of resolving all disputes without DRB action, NOPCs, or claims is all the more remarkable when one considers that CEC is also committed to the success and support of all of our subcontractors and suppliers, and does not hesitate to advocate on their behalf or present their requests for additional compensation, wherever warranted.
- G. **INNOVATION** Innovative designs and construction techniques abounded on the project, from the stay-in-place forms and rapid construction techniques used to replace the approach roadway in only 35 days, to the unique use of strand jacks to lower a 1.4-million-pound bridge span, and the piece-by-piece removal of the main structure using cranes and equipment mounted on the bridge deck. Through all of these operations, CEC and its team demonstrated an ability to successfully innovate on this project.

List Any Awards, Citations, and/or Commendations Received for the Project:

Featured on the National Geographic Channel as the premier episode of the demolition series “Break it Down” and as an episode of MegaStructures on National Geographic International.

Name of Client (Owner/Agency, Contractor, etc.): California Department of Transportation

Address: 111 Grand Avenue, Oakland, California

Contact Name: Peter Strykers

Telephone: 510-714-7076

Owner’s Project or Contract No.: 04-013094

Fax No: NA

Contract Value (US\$): \$28,870,314.90

Final Value (US\$): \$35,184,635

Percent of Total Work Performed by Company: 65%

Commencement Date: 4/21/2005

Planned Completion Date: 9/18/2007

Actual Completion Date: 5/29/2008

Amount of Claims: None

Any Litigation? Yes **No**

Form B

PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Name of Firm: California Engineering Contractors, Inc. (CEC)	
Project Role: General Contractor	
Principal Participant: Yes Designer: CEC / California Department of Transportation	
Other (Describe): _____	
Years of Experience (provide length of activity as it relates to the following three elements): Roads/Streets: 1 Bridges/Structures: 1 Utility Relocations: 1	
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
Richmond-San Rafael Bridge Pier 35 Fender Repair	
Richmond San Rafael (RSR) Bridge Pier 35 Emergency Repairs, Interstate 580, Milepost 0.05, Marin. CEC worked with the Department to assess the damage to, and develop a design for the pier reconstruction. Subsequent to design development, CEC performed/managed all required field work, including demolition, underwater debris removal, pile extraction, pile driving, acoustic monitoring, formwork, rebar installation, epoxy injection, concrete construction, and mechanical repairs.	
	<ul style="list-style-type: none">• Collaborated on True Design/Build• Demolition of Reinforced Concrete Pier and Pilings• Compliance with Environmental Requirements• Rapid, Problem-Solving Approach• Cost-Saving Performance• Completion Well Ahead of Schedule
Provide Project Description and Describe Site Conditions:	
<p>On the night of January 10, 2008, under heavy fog, the fully loaded 309-foot petroleum transport barge Cascade collided with the protective fendering system of Main Pier 35, located adjacent to the shipping channel under the Richmond San Rafael Bridge. CEC received a request from the Department to respond by mid-day on January 11, and, by that evening had a protective 35-foot by 110-foot barge in place on the damaged side of the fender to serve as a temporary protective fender until repairs could be started.</p> <p>During the next several days, CEC management, engineering and field construction staff inspected the damaged pier with Department representatives and started working together on a plan for repairs. The fendering system for the RSR Bridge is a modified ring-beam fender, independently supported on piles and connected to the main bridge pier through a series of large compressible rubber donuts. During the collision the fender system experienced significant damage and was significantly displaced.</p> <p>The initial budget established for the field repairs and materials associated with the repair work to be completed by CEC was \$6,000,000. <i>The final total costs were less than \$2,500,000.</i> The scope of the repairs did not change significantly, but CEC was able to perform the work for much less than the Department</p>	

originally had anticipated. Due to efficiencies, diligence and innovations, CEC was able to reduce both the cost and the time for repairs on the project. No claims or disputes occurred on the project. A Disputes Review Board was not created.

- A. **SIZE & COMPLEXITY** This emergency project was an excellent example of exactly the kind of relationship and tasking expected for such a project. CEC understands that this particular project closely reflects the relationship, challenges and success desired by the Department on all projects of this kind. CEC was selected to assist in the creation of a plan and specifications for complex marine demolition, and then to secure expert subcontractors, and coordinate and manage or perform all the required field work. In many ways, this project was quite complex, as not only was it necessary to demolish the damaged structure, but a new replacement fender had to be built and installed, all as soon as possible.
- B. **AQUATIC ENVIRONMENT** Three types of marine demolition activities were required on this project. First, since new piles had to be driven, the overlying, heavily-reinforced concrete ring structure had to be demolished over the water. CEC utilized remotely operated excavators and suspended steel bins enclosed with mesh tarps and debris nets to capture all of the demolition debris. Once the overhead structure was removed, the damaged piles were removed. After a discussion of options and needs, the Department and CEC decided that complete removal was the best choice and should be tried first. CEC was able to successfully extract all the damaged piles completely. Finally, several piles that potentially had been damaged but not broken needed to be inspected to see whether they were suitable to remain in place. In addition, the bay floor under the ring fender needed to be inspected to ensure that no debris would interfere with pile driving. Several pre-cast concrete segments supporting the lower ends of the plastic lumber sheathing had been knocked off in the collision. These were to be recovered if possible, but, in any event, we needed to ensure that they would not inhibit the pile driving activities. Divers confirmed that the area under the fender was clear. The pre-cast pieces were not located.



- C. **ENVIRONMENTAL STEWARDSHIP** CEC closely coordinated with the Department regarding the permits and environmentally protective measures required. CEC prepared and instituted a Water Pollution Control Plan. Acoustic monitoring was conducted for the first several piles, even though exceedences were not expected for the 12-inch-diameter piles being replaced. Sound monitoring confirmed that the pile driving, primarily driven with vibration methods, did not exceed allowable levels.

D. **SUCCESSFUL COMPLETION** *This project clearly demonstrated CEC's ability to perform on time and on budget. Typically a design-bid-build project of this size and scope would have required a year or more to design and bid, with construction requiring several additional months. The damage occurred on January 10, 2008. The fender was repaired and operational by May 1, 2008, even though the project required complex, long-lead items, such as the custom precast concrete sections and reinforced plastic lumber. The winter Bay conditions often were not conducive to working. Despite these challenges, CEC personnel completed the entire project for less than half of the allowed budget.*

E. **MEETING SBE GOALS** CEC worked pro-actively to include local and small business enterprises on the project. From the Loch Lomond Marina where our boats were moored to the small businesses used for electrical repairs, acoustic monitoring, Water Pollution Control Program preparation, and other activities, *CEC was committed to actively seeking out and using qualified small and local businesses.*

F. **MINIMIZING DELAYS/CLAIMS** Many of the damages, problems and constraints encountered could have caused significant delays. CEC worked closely with the Department to develop a cost-effective design, execute and monitor budgets, and complete the project significantly under time and budget. The RSR Pier 35 emergency repairs are just one example of our application of this approach.



G. **INNOVATION** This project could not have been completed successfully and on time without the innovative design, work practices, and construction techniques pioneered by CEC, including installation of a slick-line, and concrete pumping from the deck of the bridge 150 feet above the fender. After structural repairs were completed, CEC was able to jack the ring fender back into position and re-seat the large rubber donuts that had been pushed out of alignment or had fallen into the gap between the ring fender and the main pier column.

List Any Awards, Citations, and/or Commendations Received for the Project:

N/A

Name of Client (Owner/Agency, Contractor, etc.): California Department of Transportation

Address: 111 Grand Avenue, Oakland, California

Contact Name: Walid Khalife

Telephone: 650-222-7513

Owner's Project or Contract No.: 04-3A1204

Fax No: N/A

Contract Value (US\$): \$6,000,000

Final Value (US\$): \$2,339,000

Percent of Total Work Performed by Company: 95%

Commencement Date: 01/11/2008

Planned Completion Date: 06/27/2008

Actual Completion Date: 05/02/2008

Amount of Claims: None

Any Litigation? Yes **No**

Form B

PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Name of Firm: California Engineering Contractors, Inc. (CEC)	
Project Role: General Contractor	
Principal Participant: Yes Designer: California Department of Transportation	
Other (Describe): _____	
Years of Experience (provide length of activity as it relates to the following three elements): Roads/Streets: 0 Bridges/Structures: 2 Utility Relocations: 2	
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
Bay Bridge Fenders –	
Demolish and Replace Fenders – West Span San Francisco-Oakland Bay Bridge, City and County of San Francisco on Interstate Highway 80 (Bay Bridge), CEC was prime contractor.	
	<ul style="list-style-type: none">• In-water Structure Demolition• Compliance With SF Bay Environmental Requirements• Innovative Pre-Assembly• Work on Original Bay Bridge• On-Time Completion• Final Price Well Under Original Cost Estimates
Provide Project Description and Describe Site Conditions:	
<p>The West Span Towers of the SFOBB are protected from collisions with marine traffic through the use of fendering systems. These systems, which had been in service for decades, were deteriorated and badly in need of replacement. CEC worked with the Department to refine the design of new steel struts, anchored to the concrete pier, and steel walers that supported the new system of environmentally responsible, fiberglass-reinforced recycled plastic lumber.</p> <p>CEC's crews carefully removed damaged treated lumber for appropriate disposal. New panels of pre-assembled steel and plastic lumber were assembled off site, so that installation of the new system was safe and efficient.</p> <p>Many of the original posts that were necessary for support of the replacement system were found to be damaged and structurally unsound. CEC worked with the Departments' designers to determine an efficient, constructible design and expedited fabrication of steel posts to replace the existing deteriorated wood posts.</p> <p>The fender replacement project provided proof of CEC's ability to safely demolish and contain debris from marine structures, and effectively and efficiently work with the Department and the U.S. Coast Guard (USCG) to install the marine protective measures that would be severely tested in just a little</p>	

over two years.

CEC worked closely with the Department and the USCG to coordinate the interfacing of the fender demolition and replacement operations, and marine support equipment and materials. The removal of the lower fender sheathing could create a risk to both small boats and large ships, so the work and supply barges were used as temporary fenders. CEC coordinated with the USCG to have the support barge(s) tied up to the work location(s) whenever CEC temporarily removed the existing fenders, so that the in-process work zone did not constitute a hazard to navigation.

Original Contract Price - \$6,117,000.00 (Engineer's Estimate = \$10,844,000 [9 Bidders])

Final Contract Price - \$7,683,741.90

Adjustment of Compensation - \$0.0

Extra Work - \$1,144,741.90

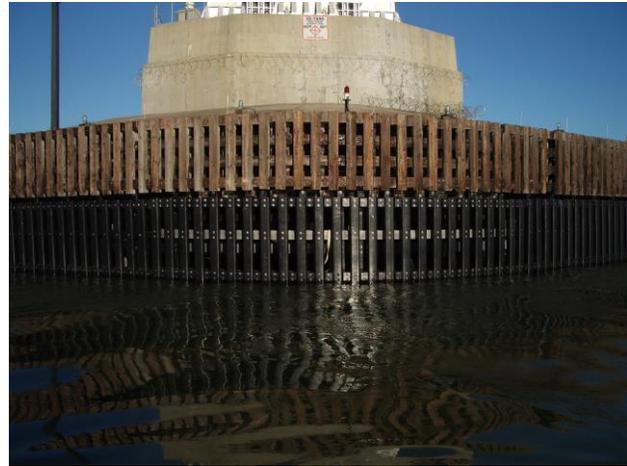
The majority of the extra work on the project related to the steel posts that CEC helped design. These replaced original wood posts that were to be the structural supports for the lower fender system, but had deteriorated or had been otherwise damaged.

The original strut-to-post connection design at towers W3 – W6 had constructability/clearance issues, so CEC worked with the Department to re-sequence the work to start at W2 (a different design on the San Francisco wharf).

No Claims, No Notices of Potential Claims (NOPC).

A DRB met approximately four times over the course of the project. The DRB meetings were all for the purposes of keeping the DRB members abreast of the job progress. No issues were presented to the board, as no NOPCs were prepared, and all issues were successfully addressed at the project level.

- A. **SIZE & COMPLEXITY** CEC performed all work from support equipment mounted on a barge. A second barge was used to store removed materials (e.g., treated lumber) prior to proper disposal, and to deliver and stage new materials. The sequencing of the work was extremely complex, requiring close coordination of steel shipments from the fabricator, plastic lumber shipments from the supplier in Virginia, and assembly of sub-components at the Mare Island yard, all while managing choppy Bay conditions and following tides to eliminate the need for diving operations, even for work below mean low water level.
- B. **AQUATIC ENVIRONMENT** Due to the proximity of the project to the structural foundations of the SFOBB towers, the nature of the work, and its location adjacent to active shipping channels, this was a unique and demanding project. These and other demolition considerations, relating to complexity, sequencing, just-in-time logistics, and coordination with regulators and stakeholders, were all managed successfully during the project.
- C. **ENVIRONMENTAL** CEC carefully coordinated the work with the Department, the USCG, Bay Area Air Quality Management District, California State Water Resources Control Board, California Department of Fish and Game, and other stakeholders. Shipping channels were not interrupted, discharges from the work did not occur, and all plastic lumber was successfully disposed at upland sites. No “takes” of protected marine life or birds occurred on the project.



- D. **SUCCESSFUL COMPLETION** CEC worked diligently with Department Design teams to come up with prompt solutions to very difficult problems. The project was completed in accordance with the approved CPM schedule and within the approved contract price, with no claims submitted. *It should be noted that when the Cosco Busan container ship struck Tower 5 of the bridge on November 10, 2007, spilling 50,000 gallons of oil and destroying the corner of the fendering system, the Department hired CEC to perform the repair work with a budget of \$2 million and a time of 100 working days. The emergency repairs were completed and the bridge was back in service in 35 days at a cost of less than \$1.5 million.*
- E. **MEETING SBE GOALS** CEC performed essentially all the work on the project with our own forces. No MBE or WBE goals were required for the project. A 3% DVBE goal was established, and was met. CEC maximized the participation of small and DVBE businesses for any extra or subcontracted work, using small business subcontractors for fencing work on the fender security measures, and an electrical subcontractor for relocating and reinstalling navigational lighting.
- F. **MINIMIZING DELAYS/CLAIMS** Due to the complex sequencing required and the requirement to complete each segment of fender before moving on to the next section, several situations arose that could have caused major delays to the project. However, CEC identified potential problems early, and developed cost-effective solutions to mitigate impacts to the project. Much of the successful completion of the project with minimal disputes or delays was due to CEC taking a proactive approach to planning and pioneering innovative marine construction techniques.
- G. **INNOVATION** Upon starting the project, CEC secured dock-side space and materials handling capacity at Mare Island in Vallejo. CEC crews were able to work at this location to preassemble modules of the new system for load-out on barges to the worksite. The labor and fit-up required on the water were dramatically reduced by use of these pre-fabricated panels.

The close working relationship established with the supplier of the fiberglass-reinforced SeaTimber plastic lumber piles allowed CEC to use this relationship to secure emergency materials for repairs to the various fendering systems when they were damaged by ship collisions over the succeeding years. In addition to the Cosco Busan repairs mentioned above, the tower across the shipping channel (W6) was struck by an oil tanker on January 7, 2013. While no oil was spilled, the damage was even more extensive than the previous collision. The Department again assigned CEC to perform the repairs, this time with a budget of \$3 million and 90 working days. CEC again worked efficiently and diligently to complete the work, coming up with innovative ways to pump concrete in the middle of the Bay, and *completed this repair for under \$1.6 million in less than half the allotted time.*

List Any Awards, Citations, and/or Commendations Received for the Project:

The Department recognized the cooperation and innovation of the CEC crews by immediately issuing to CEC not just one, but ultimately (to date) three emergency contracts for repairs to various fenders after ship collisions occurred in 2007, 2008, and 2013.

Name of Client (Owner/Agency, Contractor, etc.): California Department of Transportation

Address: 111 Grand Avenue, Oakland, California

Contact Name: Fernando Abela

Telephone: 510-385-7230

Owner's Project or Contract No.: 04-049044

Fax No: N/A

Contract Value (US\$): \$6,117,000

Final Value (US\$): \$7,683,741

Percent of Total Work Performed by Company: 95%

Commencement Date: 3/28/2005

Planned Completion Date: 1/02/2006

Actual Completion Date: 8/01/2006

Amount of Claims: None

Any Litigation? Yes **No**

Form B

PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Name of Firm: **California Engineering Contractors, Inc. (CEC/Modern Continental – JV)**

Project Role: General Contractor

Principal Participant: Yes Designer: California Department of Transportation

Other (Describe): _____

Years of Experience (provide length of activity as it relates to the following three elements):

Roads/Streets: 5 Bridges/Structures: 5 Utility Relocations: 5

Project Name, Location, and Nature of Work for Which Company Was Responsible:

SFOBB West Span Retrofit -

Bay Bridge West Span Superstructure Seismic Retrofit, City and County of San Francisco

- Largest Caltrans Contract at Award
- West Span of Bay Bridge
- Massively Challenging
- Work from Water for Lower Tower and Pier Retrofit work
- Completed Without Claims and Below Original Budget



The entire West Span of the Bay Bridge dual-span suspension bridge was seismically retrofitted. Much of the lacing on existing riveted members was removed and replaced with

solid or perforated cover plates. Corner brackets at the junctions of the floor beams and side trusses, both at upper and lower connections, all along the spans, were retrofitted. Lower laterals were replaced and new upper laterals were installed. Tower X-braces were strengthened with cover plates, and the lower tower legs received additional cover plates. Truss-tower connections were extensively retrofitted and viscous dampers (shock absorbers) were installed at 96 locations. The approach truss in San Francisco also was retrofitted and support bearings replaced.

Provide Project Description and Describe Site Conditions:

At the time, the largest construction contract ever awarded by the Department, and the first of the major Toll Bridge retrofit projects.

The work required the fabrication and erection of over 17 million pounds of structural steel, the removal of over 500,000 rivets, and the installation of over one million high-strength bolts. Access was provided using work platforms that ranged from 250-foot-high fixed scaffolds to multiple traveling platforms affixed to the sides and under the traffic decks of the spans. Work was performed over or adjacent to active roadway traffic, while maintaining traffic management for more than 250,000 public vehicles/day.

CEC demonstrated its ability to successfully craft and manage a Joint Venture on this project. It was clear very early in the project that the on-site team considered the project first. Outsiders (and many insiders for that matter) didn't know which organization a staff member came from; all the members worked as a seamless team.

CEC had worked with the Department for decades prior to the SFOBB West Span retrofit, but this project really cemented the relationship and established their co-operative, partnering approach, which has been a hallmark of the relationship between the organizations ever since.

Original Estimate for the project was \$202,400,000

CEC-MCC JV original contract value was \$146, 641,203.

No claims were made. Contract changes totaled \$14,634,992 for Adjustment in Compensation and \$18,512,190 in Extra Work, with a final contract value of \$182,673,243

Primary cost increases and schedule impacts were due to several factors:

Necessary design changes by the Department required CEC to re-fabricate parts to avoid project-wide delays.

Numerous security changes were necessitated after the 9/11 attacks, impacting both cost and schedule.

Repainting of structural steel components, due to a previously unreported flaw in the paint specified, caused additional costs as outlined below. The Department also added scope to the project.

No claims were submitted. All issues and changes on the project were handled through direct negotiation or through the Disputes Review Board (DRB) process.

The Project utilized a DRB. During the four-plus years of the project, only one issue was presented to the DRB for resolution. It was successfully resolved after DRB presentations were completed. No outstanding disputes ended up as claims.



- A. **SIZE & COMPLEXITY** The Bay Bridge retrofit project included demolition of complex members that required careful planning and execution. Ranging from the San Francisco Abutment at Beale Street to Yerba Buena Island, dozens of worksites spanned the entire length of the bridge and involved every major structural component of the bridge, even the cables themselves. The West Span retrofit demonstrates CEC’s ability to successfully complete large and complex projects in an aquatic environment.
- B. **AQUATIC ENVIRONMENT** Several phases of the Bay Bridge retrofit project related to marine demolition in a major shipping channel. Retrofit work on the truss and towers involved the demolition of millions of pounds of the existing steel structure. Lower laterals under the roadway were removed and replaced, without any interruption to marine traffic and without incident. No obstruction in the navigation channel was created during this operation. Work on the lower towers was supported from barge-based marine crews. Steel plates on the lower towers were also installed, requiring abrasive blasting removal of lead-based paint, sequential removal of rivets, and installation of large (up to 60-foot-long) steel cover plates from barge-mounted cranes.
- C. **ENVIRONMENTAL STEWARDSHIP** Numerous environmental factors complicated the project. Essentially every work location required the contained removal of lead based paint from the existing steel. New steel installations required finish painting. The contractor, working closely with the Department, followed all best practices for containment and capture of debris. All stormwater and environmental best practices were followed. The project adjusted schedules to deal with working around the nesting birds. Working with the Department, CEC implemented mitigation methods to prevent further delays from nesting birds. The project was completed with no “take” and no violations of environmental permits.
- D. **SUCCESSFUL COMPLETION** Even with the addition of extra work, and implementing pioneering concepts of performing major retrofit work on an active, operational structure (without imposing any limits to traffic loads or bridge capacity), the parties were able to limit cost overruns.

Confronting unforeseen events such as 9/11, CEC and the Department worked diligently together and completed the project under the original Engineer's Estimate and within the approved schedule.

- E. **MEETING SBE GOALS** The project did not have SBE, UBE, WBE or DBE goals, but did have a DVBE goal of 3.0% which CEC worked diligently and successfully to attain.
- F. **MINIMIZING DELAYS/CLAIMS** Efforts to minimize delays, prevent claims, and resolve disputes required proactive participation by all parties on multiple levels. CEC's engineers worked closely with the Department's design engineers. They investigated, identified, and proposed solutions, and made changes during the preparation of shop drawings, thus saving several months of delays on the contract. When paint problems arose, CEC immediately took steps to address the problems, using local facilities for re-blasting and re-painting. We then set about discovering the cause of the problem and its ultimate solution. We conducted extensive research with several leading forensic protective coatings laboratories, which later resulted in specification changes that helped prevent further problems, protecting both the Department and contractors from further delays, disputes, costs and liability.
- G. **INNOVATION** The CEC-MCC JV pioneered numerous innovative techniques on this first-of-its-kind project. The contract anticipated that 30 full closures of the bridge would be required for placement of large steel plates on the upper towers. By designing deck shields, erected over the roadway at each side of each of the four main towers, CEC was able to safely work erecting steel plates over live traffic. Ultimately, the only full closures required were to erect and remove the deck shields. CEC was able to limit the total number of closures to 6.

The Department had specified steel channel sections to be installed within built-up members while rivets and lacing bars were removed and new plate covers were installed. By redesigning these braces using aluminum rather than steel, CEC was able to provide equivalent strength, and substantially better constructability (and reduced chance of injuries to our workers).

Hundreds of new, 50-foot-long steel-tube lateral braces were installed under the upper roadway. Since the lower deck was required to remain open, and the work required more than half the lanes be closed, only a brief window in the middle of the night was available for the work. CEC worked with Gradall Corporation to design and build a specialized piece of equipment with an articulated arm and clamp that could raise the heavy steel pieces off a truck, rotate and pivot the pieces into place, and hold the steel steady while workers secured it to the underside of the upper deck and floor beams. This giant robot-armed vehicle was created specifically for the project and worked flawlessly.

List Any Awards, Citations, and/or Commendations Received for the Project:

N/A

Name of Client (Owner/Agency, Contractor, etc.): California Department of Transportation

Address: 325 Burma Road, Oakland, CA

Contact Name: Deanna Vilcheck

Telephone: 510-772-7895

Owner's Project or Contract No.: 04-0435U4

Fax No: NA

Contract Value (US\$): \$146,641,203

Final Value (US\$): \$182,673,244

Percent of Total Work Performed by Company: 78%

Commencement Date: 9/25/1999

Planned Completion Date: 3/2003

Actual Completion Date: 6/30/2004

Amount of Claims: None

Any Litigation? Yes **No**

Form B

PROJECT DESCRIPTION

Name of Proposer: **CEC/Silverado JV**

Name of Firm: California Engineering Contractors, Inc. (CEC)	
Project Role: General Contractor	
Principal Participant: Yes	Designer: Caltrans
Other (Describe): _____	
Years of Experience (provide length of activity as it relates to the following three elements): Roads/Streets: 2 Bridges/Structures: 2 Utility Relocations: 2	
Project Name, Location, and Nature of Work for Which Company Was Responsible:	
Antioch Seismic Retrofit –	
Antioch Bridge Seismic Retrofit, Antioch, California. Access, site preparation, and marine and on-land retrofit work consisting of demolition, concrete and structural steel work, bridge jacking, and painting.	
	<ul style="list-style-type: none">• Demolition over water• Critical Environmental Concerns• Challenging Designs• Difficult Work Location
<p>This Project involved reinforcing the main steel girders, jacking the bridge, removing and replacing all bridge bearings with seismic isolation bearings, and installing structural steel cross bracing within each major pier. The cross braces were tied into vertical steel columns up to 140 feet high, which were embedded in cast-in-place (CIP) concrete along the inside vertical faces of the existing tower legs. For the in-water piers, barges were used to transfer and pump the concrete necessary to integrate the new steel bracing into the existing towers. Total steel cross bracing amounted to 3.7 million pounds of new steel. Finish painting with an ultra-dark, custom-color coating selected to match the Core-Ten™ weathering steel of the main bridge, was applied by CEC’s in-house painting crews.</p>	
<p>The Antioch Bridge Seismic Retrofit is a project that showcases how to successfully deal with protected and regulated biological species. During the project, no delays were experienced due to nesting birds or other environmental considerations. The schedule was maintained as a result of the development and implementation of a thoughtful, effective Bird Protection Plan (BPP).</p>	
Provide Project Description and Describe Site Conditions:	
<p>The Antioch Bridge spans the Sacramento River north of the city of Antioch and along State Highway 160. One of the greatest concerns for planners and project staff at the Department was how to deal with the anticipated delays caused by the myriad of environmental concerns on the project. Situated over protected wetlands which are habitat for burrowing owls, endangered Giant Garter Snakes, numerous protected migratory birds, and rare flowering plants, both environmental and stormwater-required restrictions were expected to cause significant delays. Environmental concerns were raised early by the Department, and, in response, CEC crafted a comprehensive BPP to ensure that the regulatory limitations</p>	

could be met without delays or negative impacts to the project.

One objective of the project was to replace the bridge bearings at the tops of the towers with friction pendulum bearings, weighing up to 10,000 pounds each. Replacement of the existing bearings meant jacking the bridge off the old bearings at the tops of each pier (up to 150 feet above the water), removing the old bearings and placing new bearings. Detailed sequencing and scheduling was required, including critical fabrication times. Early in the project, newly discovered thermal expansion effects required that the Department revise the sequence that had been specified for the project. This caused multiple significant disruptions to CEC's planned sequence, and required a complete re-scheduling of the project. The Department also made major changes and additions to the design of the required on-site access roads. CEC was able to work with the Department to mitigate some of the delay time, and much of the cost impact.

Steel cross bracing then was installed to stiffen approximately half of the twin-leg concrete towers (the tallest ones, 10 of which are situated over water). CEC assessed constructability challenges, particularly those associated with a major flaw in the shop welding procedure specified for the steel cross-bracing design. Working closely with our steel fabricator and with project and design staff, we were able to agree on procedural and specification changes before the steel components were fabricated, and were able to deliver all materials to the job site without delaying the project.



The project was originally bid as an A+B project, with a maximum duration of 560 working days. Timing was particularly critical on the project due to numerous protected species (including raptors and migratory birds) that typically used the bridge for roosting and nesting. This meant that, for significant portions of the year, delays and buffer (exclusion) zones could be expected. The project, with agreed time extensions, was completed in 467 working days.

Adjustment in Compensation - \$6,640,088, Extra Work - \$4,786,168;

Total of Owner initiated change orders = \$9,596,896

No claims, no Notices of Proposed Change submitted.

A Dispute Review Board (DRB) was established for the project, but no issues were referred to the DRB for adjudication.

- A. **SIZE & COMPLEXITY** The Antioch Bridge Seismic Retrofit is very comparable, both in value and complexity, to the project described in the RFQ. With an Engineer's Estimate of \$93,011,215 - CEC and its partner firms were able to complete the project successfully for less than half of the originally planned costs. The SFOBB Marine Foundation Removal Project will also be approached with a goal of reducing costs and minimizing impacts to marine and other protected species.
- B. **AQUATIC ENVIRONMENT** Various aspects of the Antioch Bridge project relate to marine demolition considerations that have parallels to the proposed Foundation Removal Project. Removal and replacement of the bridge bearings required the core drilling of 10-inch-diameter shafts entirely through the tower legs. Removal of the existing bearings utilized wire sawing under the bearing. Capture and containment of the drilling and wire sawing slurry was complex, but completely successful. Gutter systems were installed and sealed around the entire perimeter of the pier caps. Slurry was captured and pumped up the tower and along the bridge catwalk back to land and into tanks for treatment and disposal. Over the water, secondary containment dams were

created inside the footprint of the towers on the pile caps, which ensured successful containment of all debris. No discharges occurred during demolition or any other work associated with the overwater structures.

- C. **ENVIRONMENTAL** Historically, the bridge hosted both migratory birds and raptors during nesting seasons. Even with diligent abatement efforts, delays were expected due to mandated exclusion zones around work activities. CEC implemented a “suite” of options, essentially an “all of the above” approach, to ensure continued construction progress and compliance with all regulations. Led by staff biologists, CEC monitored the site constantly. Biologist-led crews also were busy installing exclusion measures, removing nest starts, and otherwise dealing with protected species activities in non-critical areas. Use of these myriad measures ultimately proved successful, with no delays to construction due to nesting birds or other protected species. In addition, no stormwater violations, discharges, or exceedances occurred.
- D. **SUCCESSFUL COMPLETION** CEC completed the Antioch project within the approved allowable contract time and in accordance with the approved schedule.
- E. **MEETING SBE GOALS** The Antioch Bridge project did not have a SBE or DVBE goal. CEC worked diligently with the Caltrans’ Small Business Department, and increased small business participation significantly.
- F. **MINIMIZING DELAYS/CLAIMS** CEC worked closely with the Department to form a true partnering environment. Potential problems were identified early, when there was an opportunity for solutions before negative impact to the project’s costs or schedule. Solutions were sought without regard to “responsibility” for the problem, considering only the party’s ability to contribute to the solution. Our application to the International Partnering Institute for the project’s partnering award estimated that cooperation between the parties through partnering saved \$2.5 million in avoided impacts and costs.
- G. **INNOVATION** An array of innovative methods and materials were utilized, from the high-strength (150 ksi) 10-inch-diameter steel rods used to jack the bridge, to small items like the use of environmentally-sensitive vegetable oil paintballs to remotely remove swallow nest starts. CEC’s greatest strengths in innovation arise from our experienced and dedicated staff. Our crews not only have the ability to follow the innovative practices planned, but can evaluate and refine repetitive operations to continuously improve productivity and reduce time and costs.

List Any Awards, Citations, and/or Commendations Received for the Project:

The project received the 2013 International Partnering Institute’s John L. Martin - Partnered Project of the Year, Sapphire Award

Name of Client (Owner/Agency, Contractor, etc.): California Department of Transportation

Address: 111 Grand Avenue, Oakland, California

Contact Name: Bill Howe

Telephone: 510-385-7084

Owner’s Project or Contract No.: 04-01A5214

Fax No: NA

Contract Value (US\$): \$34,926,343.50

Final Value (US\$): \$46,476,059.17

Percent of Total Work Performed by Company: 93%

Commencement Date: 7/13/10

Planned Completion Date: 9/20/11

Actual Completion Date: 7/12/12

Amount of Claims: None

Any Litigation? Yes No



SECTION 5

Proposer Key Personnel



Section 5 Proposer Key Personnel

5.A Key Personnel

RFQ SECTION 3.6.A

The Form D, Proposed Key Personnel Information form, is included at the end of this section.

5.B Required Resumes

RFQ SECTION 3.6.B

The resumes of Key Personnel are included in Appendix A, Resumes.

5.C Required Licenses

RFQ SECTION 3.6.C

The following table lists the current California contractors' licenses held by the CEC/Silverado JV, as well as by the Major Participants. Copies of the licenses can be found at the end of this section.

California State Contractors License		
Major Participant	License No.	Licenses Held
CEC/Silverado JV	973262	<u>Class</u> A – General Engineering Contractor
Silverado Contractors, Inc.	782547	<u>Class</u> A – General Engineering Contractor B – General Building Contractor C-21 – Building Moving, Demolition <u>Cert</u> ASB – Asbestos (DOSH Certification) HAZ – Hazardous Substances Removal
California Engineering Contractors, Inc.	274652	<u>Class</u> A – General Engineering Contractor



Organization and Key Personnel

RFQ SECTION 3.6.1

The CEC/Silverado JV team and the Key Personnel committed to this CMGC contract are all highly experienced demolition, blasting, environmental, and construction professionals. They have proven that they can work closely with the Department and are prepared to work as a cohesive team to assist with all aspects of the CMGC contract. Incorporating the CMGC approach, we are confident that the expertise of the Key Personnel will be applied to develop environmentally sound project approaches and designs that can be implemented safely and cost effectively.

Key Positions

Rich Riggs, Project Manager/Demolition Manager

Mr. Riggs has been employed in the construction industry for 40 years, and has spent the past three decades specializing in demolition, most specifically in the removal of bridges and piers. In addition to his extensive experience in the demolition and dismantlement of all bridge types, he has considerable experience with implosion projects, and with all the planning and permitting involved with these highly sensitive projects. Rich has been the Project Manager on some of the largest implosion projects on the West Coast, and has proved he can successfully work with clients, owners, and all required agencies to bring these projects from project conception and design to successful project implosion reality. Rich has an excellent reputation within the Department of performing work safely, on time, and on budget. Rich has worked with the Department on several past emergency projects that required a CMGC project approach in order to expedite the work. Over the years, Rich has worked on numerous projects from the budget and design phases to preconstruction and permitting, and final project performance. Rich was contacted immediately after the 9/11 terrorist attacks and was on site at the World Trade Center within days of the disaster. Rich was contracted to consult on the rescue recovery and debris removal in cooperation with multiple contractors, and federal, state and local agencies.

Mark Loizeaux, Controlled Blasting Specialist

Mr. Loizeaux is considered one of the preeminent blasting professionals in the world. Mark has been working in the demolition and explosives field for his entire career, having learned the trade from his father, the founder of CDI. Mark has worked on all manner of structures across the globe. Mark has extensive experience in the implosion of reinforced concrete structures, and has performed work in very controlled environments with environmentally sensitive surroundings. Mark and his highly skilled team have performed numerous implosions of piers in a marine environment, as well as other specialized marine-related projects, including decommissioning of vessels and other structures. Mark has successfully worked on nuclear decommissioning projects, DOE projects, and weapons disarmament projects requiring extensive planning, coordination, and permitting.

Rick Gusman, Lead Estimator

Mr. Gusman has been working in the demolition industry for the past 34 years. Rick is a highly skilled estimator who learned the demolition trade while working for 24 years under his father, John



Weber, a demolition industry veteran, innovator and National Demolition Association Lifetime Achievement honoree. Rick has spent his career preparing estimates for varying types of demolition, including highly complex controlled blasting and industrial decommissioning's. Rick has worked on numerous controlled blasting estimates and his disciplined attention to detail ensures that all scope, costs, and risks have been thoroughly quantified. As Chief Estimator for Silverado, Rick provides preconstruction services on numerous projects, which includes assisting clients in the demolition and environmental permitting process.

Greg Demetrulias, Planning and Scheduling Professional (PSP), Scheduler

Mr. Demetrulias has 30 years of experience as a certified planning and scheduling professional. Greg has developed schedules on many projects similar in size and scope to the SFOBB Foundation Removal project. Greg has extensive experience in conducting earned value analyses with resource- and cost-loaded schedules, and is expert in the use of multiple software platforms, including Primavera, Microsoft Project, Prolog Manager, SureTrak, Constructware, and Buzzsaw.

Jeff Root, Environmental/Permit Manager

Mr. Root has more than 25 years of experience in environmental permitting in California, and in particular the San Francisco Bay Area. Mr Root's expertise makes him a credible and effective advocate for the project team. He has a proven ability to clearly understand project objectives, regulatory constraints and effectively communicate with the agencies in a manner that facilitates the permitting processes.

In addition to the key job descriptions described in the RFQ, CEC/Silverado JV has identified two additional key positions that we know will be vital to the successful completion of the design and demonstration phases, and final job performance. A [Drilling and Hydroacoustic Specialist](#) will be responsible for ensuring that all drilling and "Bubble Curtains" are designed and executed per the project requirements. A [Marine Construction Specialist](#) will be responsible for analyzing various marine access methods and the constructability of all temporary marine support elements. The qualifications of Key Personnel associated with these activities are provided below.

Ron Woolf, Drilling Specialist

Mr. Woolf has more than 40 years of experience in the drilling, blasting, and mining industries. In addition, he has spent the last 15 years in the demolition industry. Ron has a vast array of highly technical drilling experience involving all types of rock and concrete. Ron has overseen work on a multitude of in-water marine pier-controlled blasting projects, and fully understands all the requirements of these special conditions. Ron has worked to design safe and effective ways to execute marine blasting projects, including designing and testing "Bubble Curtain" systems for the protection of fish habitat for the Canadian Department of Defense in association with their underwater demolition training exercises.

Mike Green, Marine Construction Manager

Mr. Green has three decades of experience in planning, coordinating, and supervising marine construction and marine support operations. Mike has particular expertise in pile driving and barge-supported construction, and the erection and dismantling of complex steel structures. Mike has



worked on the planning and installation of cofferdams and trestles for multiple projects to ensure project safety and constructability.

Key Personnel Commitments				
Position	Design	Post Design	Construction	Other Project Commitments
<i>Rich Riggs</i> Project Manager/ Demolition Manager	100%	100%	100%	Rich is 100% committed to the Foundation Removal project. He will not be working on any projects that are not related to the SFOBB.
<i>Mark Loizeaux</i> Controlled Blasting Specialist	100%	50%	100%	Mark is 100% committed to the Foundation Removal project. He will only work on other projects if time allows.
<i>Rick Gusman</i> Lead Estimator	100%	50%	25%	Rick is 100% committed to the Foundation Removal project. He will only work on other projects if time allows.
<i>Greg Demetrulias</i> Scheduler	100%	50%	50%	Greg is 100% committed to the Foundation Removal project. He will only work on other projects if time allows.
<i>Jeff Root</i> Environmental/Permit Manager	100%	100%	100%	Jeff is 100% committed to the Foundation Removal project. He will only work on other projects if time allows.
<i>Ron Woolf</i> Drilling Specialist	50%	50%	50%	Ron is 100% committed to the Foundation Removal project. He will only work on other projects if time allows.
<i>Mike Green</i> Marine Construction Manager	50%	50%	100%	Mike is 100% committed to the Foundation Removal project. He will only work on other projects if time allows.

The CEC/Silverado JV is committed to having all the necessary personnel available for this project. As such we have indicated above that all personnel will be 100% committed to this project. However, all work will be performed only as requested and required to meet the project deliverables.



Organization

The specific roles to be performed by each team member are summarized in the following table. In addition an Organizational Chart is included on the following page.

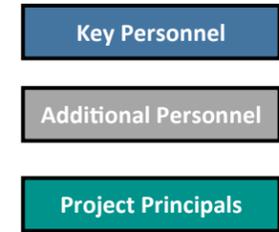
PROJECT TEAM RESPONSIBILITY MATRIX										
	Preliminary Design	Permitting Assistance	Constructability Analysis	Cost Estimating	Scheduling	Risk ID & Mitigation	Final Design Review	Final Pricing	Project Delivery	
Joe Capriola - Project Sponsor			●			●	●	●		
Wahid Tadros - Project Sponsor			●			●	●	●		
Rich Riggs - Project & Demolition Manager	●	●	●	●	●	●	●	●	●	
Mark Loizeaux - Controlled Blasting Specialist	●	●	●			●	●		●	
Ron Woolf - Drilling Specialist	●	●	●			●			●	
Mike Green - Marine Construction Manager	●	●	●						●	
Rick Gusman - Lead Estimator	●		●	●				●		
Saif Lodhi - Marine Estimator	●		●	●						
Dave Piermarini - Pre-construction Services Facilitator	●		●		●					
Greg Demetrulias - Scheduler					●	●			●	
Jeff Root - Environmental Permit Manager		●	●			●			●	
Robert Ikenberry - Safety Director						●			●	





SFOBB East Span Marine Foundation Removal Project
STATEMENT OF QUALIFICATIONS | ORGANIZATIONAL CHART

Legend:



PROJECT STAKEHOLDERS

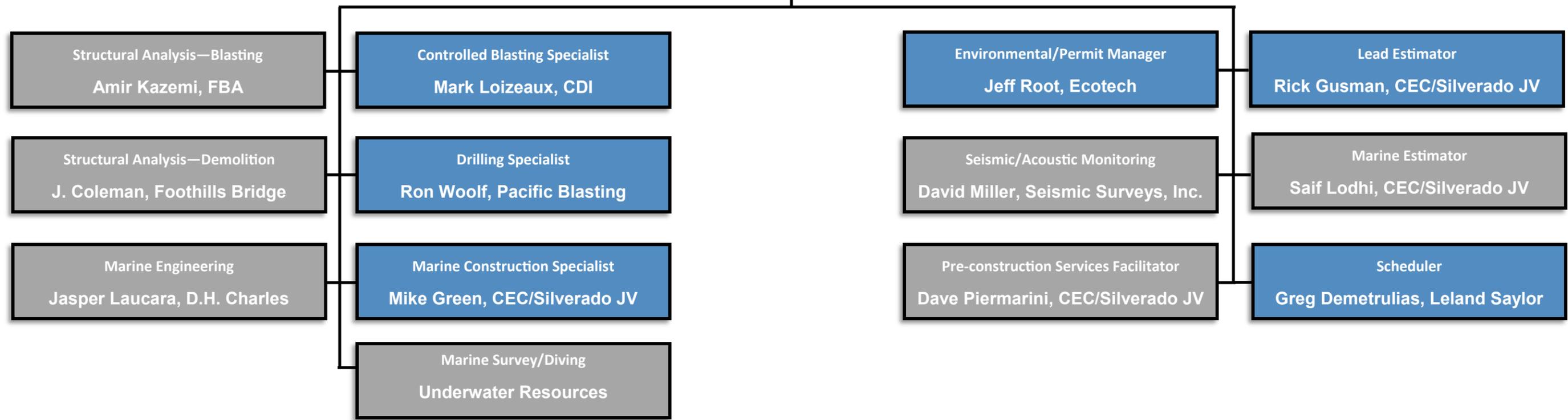
- San Francisco Bay Conservation & Development Commission (BCDC)
- State and Regional Water Quality Control Boards
- National Oceanic and Atmospheric Administrations' National Marine Fisheries Service (NMFS)
- United States Fish & Wildlife Service (USFWS)
- United States Coast Guard (USGC)
- United States Army Corp of Engineers (ACOE)
- California Department of Fish & Game (CDFG)

Caltrans
 Caltrans District 4
 Project Team

Project Sponsors
 Joe Capriola & Wahid Tadros
 CEC/Silverado JV

Project Manager/Demolition Manager
 Rich Riggs, CEC/Silverado JV

Safety Director
 Robert Ikenberry, CEC/Silverado JV



Form D

PROPOSED KEY PERSONNEL INFORMATION

Name of Proposer CEC/Silverado JV

Instructions for Form completion: Responses shall be addressed within the table below. Should additional space be needed to adequately respond, Proposer is advised to increase the number of lines within the table as appropriate. Form D has no SOQ page limitation. [Note to Drafter: Edit positions for Project, refer to Section 3.6.1.]

Position	Name	Years of Experience	Education and Registrations	Parent Firm Name
Project Manager / Demolition Manager	Rich Riggs	40 Years	California Class C-21 Contractors License #783862	Silverado Contractors, Inc.
Controlled Blasting Specialist	Mark Loizeaux	40 Years	California Class C-21 Contractors License #279855	Controlled Demolition, Inc.
Lead Estimator	Rick Gusman	35 Years	B.A. Business, Western Washington University, Bellingham, WA	Silverado Contractors, Inc.
Scheduler	Greg Demetrulias	30 Years	Civil Engineering, Southern Illinois University PSP, 2004 AACE, 2005 ASHE, 2006	Leland Saylor Associates
Environmental / Permit Manager	Jeff Root	25 Years	M.S. Wildland Resource Sciences, University of California, Berkeley	Ecotech Resources, Inc.
Drilling Specialist	Ron Woolf	40 Years	B.S. Business Mining Engineering, Montana Tech, Butte, Montana	Pacific Blasting
Marine Construction Manager	Mike Green	37 Years	Alameda High School	California Engineering Contractors, Inc.

STATE OF CALIFORNIA

Contractors State License Board

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code
and the Rules and Regulations of the Contractors State License Board,
the Registrar of Contractors does hereby issue this license to:

CALIFORNIA ENGINEERING CONTRACTORS INC / SILVERADO CONTRACTORS INC A JOINT VENTURE

License Number 973262

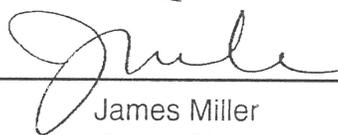
to engage in the business or act in the capacity of a contractor
in the following classification(s):

A - GENERAL ENGINEERING CONTRACTOR

Witness my hand and seal this day,

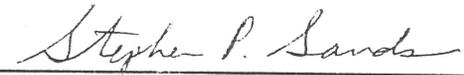
May 25, 2012

Issued May 24, 2012



James Miller
Board Chair

This license is the property of the Registrar of Contractors,
is not transferrable, and shall be returned to the Registrar
upon demand when suspended, revoked, or invalidated
for any reason. It becomes void if not renewed.



Stephen P. Sands
Registrar of Contractors

STATE OF CALIFORNIA
Contractors State License Board

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code
and the Rules and Regulations of the Contractors State License Board,
the Registrar of Contractors does hereby issue this license to:

SILVERADO CONTRACTORS INC

to engage in the business or act in the capacity of a contractor
in the following classification(s):

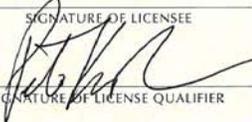
**B - GENERAL BUILDING CONTRACTOR
C21 - BUILDING MOVING, DEMOLITION
A - GENERAL ENGINEERING CONTRACTOR
ASB - ASBESTOS**

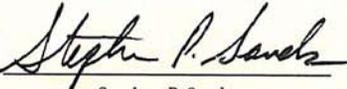
Witness my hand and seal this day,

October 22, 2001

Issued August 7, 2000

This license is the property of the Registrar of Contractors,
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SIGNATURE OF LICENSEE

SIGNATURE OF LICENSE QUALIFIER


Stephen P. Sands
Registrar of Contractors

782547

License Number

STATE OF CALIFORNIA
Contractors State License Board

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code
and the Rules and Regulations of the Contractors State License Board,
the Registrar of Contractors does hereby issue this license to:

SILVERADO CONTRACTORS INC

to engage in the business or act in the capacity of a contractor
in the following classification(s):

HAZ - HAZARDOUS SUBSTANCES REMOVAL

Witness my hand and seal this day,

October 22, 2001

Issued August 7, 2000

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is not transferrable, and shall be returned to the Registrar
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SIGNATURE OF LICENSEE
[Signature]

SIGNATURE OF LICENSE QUALIFIER

[Signature]
Stephen P. Sands
Registrar of Contractors

782547

License Number

This license is the property of the Registrar of Contractors, is not transferable, and shall be returned to the Registrar upon demand when suspended, revoked, or invalidated for any reason. It becomes void if not renewed on or before June 30th of each odd-numbered year.

RONALD REAGAN, GOVERNOR

STATE OF CALIFORNIA

DEPARTMENT OF CONSUMER AFFAIRS

CONTRACTORS' STATE LICENSE BOARD

№ 274652

CONTRACTOR'S LICENSE



Pursuant to the provisions of Chapter 9 of Division 3 of the Business and Professions Code and the Rules and Regulations of the Contractors' State License Board, the Registrar of Contractors does hereby issue this license to:

CALIFORNIA ENGINEERING CONTRACTORS, INC.

to engage in the business or act in the capacity of a contractor in the following classification(s):

A GENERAL ENGINEERING CONTRACTOR

WITNESS my hand and official seal this
20th day of March, 1972

Registrar of Contractors

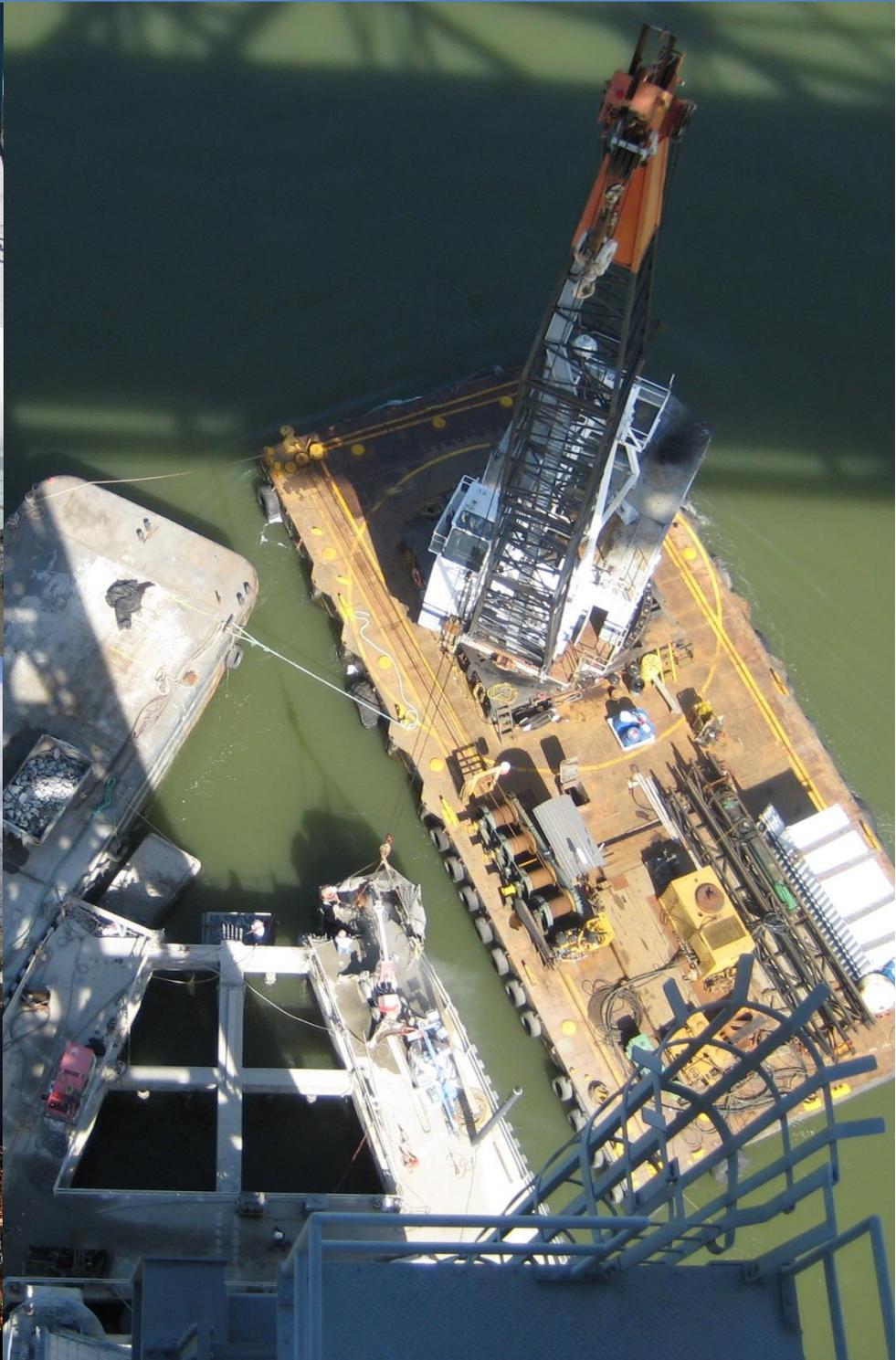
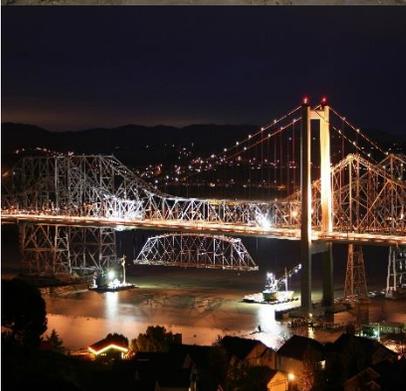
Signature of licensee

Signature of person who qualified
on behalf of the licensee



SECTION 6

Project Understanding and Approach



Section 6 Project Understanding and Approach

6.A Understanding of the Project Scope – General

RFQ SECTION 3.7.A

The CEC/Silverado JV team understands that successful performance of the scope of this project involves working hand-in-hand with the Department as an integrated project team, using the CMGC process, to review, modify as required, and validate the project design and schedule; evaluate its constructability within the parameters of safety, environmental permits, cost and schedule constraints; obtain or modify the necessary permits from environmental and regulatory agencies; establish scope and GMP and subsequently remove the foundations of the East Span of the SFOBB. The foundations to be removed are listed in the table below.

MARINE FOUNDATIONS TABLE		
Location	Dimensions	Type
Pier E3	80 feet by 134.5 feet	Cellular concrete caisson, deep water
Pier E4 and E5	60 feet by 90.5 feet	Cellular concrete caisson, deep water
Piers E6-E14	Varying sizes	Timber pile supported, deep water
Piers E15-E18	Varying sizes	Timber pile supported, shallow water*

*Note: E2 and E19-E22 may be left in place

The CEC/Silverado JV team is uniquely qualified to undertake this contract. We are currently working on the demolition of the cantilever span and the south detour of the SFOBB. We are thoroughly familiar with all aspects of the Department's Toll Bridge Program, its project and management staff, and other stakeholders involved in the Program, including the Metropolitan Transportation Commission (MTC), the Bay Area Toll Authority (BATA), the Toll Bridge Program Oversight Committee (TBPOC), and environmental and regulatory agencies involved in the project, including but not limited to, San Francisco Bay Conservation and Development Commission (SFBCDC), the SWRCB and Regional Water Quality Control Boards (RWCQBs), CDFW, U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACOE), National Oceanic and Atmospheric Administration (NOAA)/National Marine Fisheries Service (NMFS) and the USCG. We are operating under the various permits in place and are well versed in the specific requirements and constraints of those permits. The combined current and past extensive Toll Bridge program experience of the CEC/Silverado JV team, as well as completion of numerous other projects on the waters of the San Francisco Bay, have provided us with a unique and comprehensive understanding of how regulatory permit requirements and constraints associated with such projects, if not carefully considered and planned for in the preconstruction phase, can impact project safety, constructability, schedule and cost. The CEC/Silverado JV has assembled a team of the most qualified experts in the industry, including Project Manager Rich Riggs for demolition, Mark Loizeaux and Ron Woolf for blasting, and Mike Green for marine construction, to provide planning and management services during the design and permitting phase of the project. Other team members will provide cost estimates and schedules and will assist in obtaining permits. Then our CM team will seamlessly



transition to the construction phase. We believe that our team possesses the knowledge and skills to provide the Department and the public with the highest probability of project success, and completion of the project safely, on time, on budget, and in full compliance with all of the environmental and regulatory permitting requirements.

Project Understanding – Project Phases

The project will include the following phases:

- Construction Management (CM) Portion of Contract – Preconstruction Services
- Off-site Demonstration Project (Controlled Blasting)
- Demolition of Pier E3 - Demonstration Project (Controlled Blasting)
- Construction Contract #1: Removal of Piers E4 and E5
- Construction Contract #2: Removal of Piers E6 – E14
- Construction Contract #3: Removal of Piers E15 – E18
- Construction Contract #4: Miscellaneous SAS Repairs

The CEC/Silverado JV team understands that many of these phases will occur simultaneously. The CM and pre-construction services phase will continue concurrently with other phases until all design documents are finalized and the Guaranteed Maximum Price (GMP) is agreed to for all construction contracts.

CM Portion of Contract – Preconstruction Services

During the CM portion of the contract, The CEC/Silverado JV team, as the Construction Manager, will work closely with the Department and the project stakeholders to review and enhance the design. This will be achieved by continuously evaluating the combination of permit and regulatory requirements, constructability issues, cost estimates, schedule analysis and innovative value engineering. The goal of this process will be to achieve a validated design that can be constructed safely within cost and schedule constraints, in compliance with all environmental and regulatory permit requirements, and without impact to marine traffic. To identify and eliminate potential delays to the foundation contract and adjacent corridor projects, the CEC/Silverado JV team will lead the efforts to integrate the foundation removal work with adjacent corridor projects by openly communicating with Caltrans and other stakeholders and by conducting weekly coordination meetings. The intent of these meetings will be to insure that work schedules prepared during design of the foundation demolition project are aligned with the work schedules of other corridor contracts to avoid project delays. Our project team will work closely with the Department to identify risks associated with potential schedule delays or changes on other corridor contracts and to develop mitigation strategies for possible implementation. Our CM project team will also work actively with the Department Public Information Office (PIO) on the development and implementation of a public information plan for the project. Members of our staff will attend public meetings and provide answers to questions as necessary to avoid or resolve public relations issues. On our current project, CEC/Silverado JV has communicated well with Caltrans on all public information topics. The application of the CMGC process by the CEC/Silverado team for this project is discussed in detail in the following section. Specifically, the GMGC process includes:



- Design review
- Permitting assistance
- Constructability analysis and innovation
- Cost estimating
- Scheduling and work planning
- Risk identification and mitigation

Off-Site Demonstration Project

The CEC/Silverado JV team understands that the Department may opt to conduct an off-site demonstration project in order to validate the feasibility of in-water controlled blasting of Pier E-3, and, subsequently, the remaining marine foundations. A mockup of a portion of Pier E-3 would be constructed on land (outside of the project limits) and the pressures associated with a submerged structure would be simulated as needed. A test blast of this mockup would then be performed in order to evaluate controlled blasting as a viable demolition method for the in-water cellular piers. CEC/Silverado and its controlled blasting specialists will work with the Department as a team to review and enhance the design of the means and methods of the demonstration project so that it will produce data that can be used to enhance the efficiency and efficacy of controlled blasting for the in-water piers, and allow the project team to successfully negotiate and finalize the permits required for controlled in-water blasting.

Pier E-3 Demonstration Project

The Pier E-3 demonstration project will consist of in-water controlled blasting of Pier E-3 to demonstrate that this method of controlled blasting can be accomplished without exceeding the parameters under which the environmental permits are issued. The CEC/Silverado JV has assembled a team of industry experts who are highly qualified in demolition of large concrete structures, controlled blasting, and marine construction in sensitive aquatic environments. This team will consult with team members from the Department and other stakeholders to ensure that the blast design, and ultimately the demonstration blast, meets the project objectives of safety, cost, and schedule constraints, as well as environmental and regulatory permit compliance. Because this work will be performed in the water, the CEC/Silverado JV team understands that the blasting activities will be subject to a permitted window for in-water work as it may adversely disturb the marine environment. If the work window is missed, delays of several months could occur until the next available work window. The CEC/Silverado team will utilize its collective experience to ensure that all preparatory work necessary for the blast to occur during the critical allowable window is completed in a timely manner.

Construction Contracts

After completion of the Pier E3 demonstration project, the next step will be to remove the remaining foundations. Successful completion of the pre-construction and construction phases for this work will require iterations of design reviews, cost and schedule analysis, value engineering, and demonstration projects in conjunction with ongoing negotiations with environmental and regulatory agencies. This process will culminate in negotiation of the GMP for the construction contracts. The CEC/Silverado JV team has the required expertise, experience, personnel and equipment to ensure



success in the pre-construction phase and to perform the work in a safe, efficient and environmentally compliant manner. We have a record with the Department of providing timely and responsive cost estimates, as well as an ability to reach consensus on cost and schedule negotiations.

Project Understanding – Environmental Concerns

The Department’s stated goal is: *“to achieve a safe and efficient method for removing submerged foundations while avoiding and minimizing impacts to the San Francisco Bay environment and species within the project area.”*

Because the foundations present a navigational hazard, their removal is required by the USCG. Removal of the foundations will require significant interaction with environmental and regulatory agencies tasked with protecting the marine environment and water quality in the waters of the San Francisco Bay. The CEC/Silverado JV team understands that the means and methods used in the removal process must comply with: (1) the existing permits issued for the construction of the new SFOBB project, (2) the permits associated with the removal of the superstructure of the old SFOBB, (3) any future modifications to those permits, and (4) the new permits issued for the project described in the RFQ. The CEC/Silverado JV is currently operating under the existing permits and fully understands the requirement of these permits.

The CEC/Silverado JV team will work with the Department to determine safe and efficient demolition procedures that also will protect the various aquatic and bird species that coexist in the surrounding environment. Efforts must be undertaken during the bird nesting season of February 1st through August 31st to limit nesting on the foundations within the project limits, to avoid potential take or delays to the work. The CEC/Silverado JV employs two full-time biologists with extensive experience in monitoring wildlife and proposing solutions to mitigate potential delays due to bird nesting. In addition, in-water work will be highly restricted outside of the work window of June 1st through October 31st. This will require careful planning of all in-water operations and strict adherence to construction schedules in order to avoid missing the available work windows. Water quality is of paramount concern and must be considered in planning all marine operations. The CEC/Silverado JV team has a history of innovation and performance resulting in its ability to meet or exceed demanding construction schedules including schedules with highly restrictive work windows due to environmental concerns and restrictions. The CEC/Silverado team is well versed and experienced in complex projects in environmentally sensitive areas with a proven track record of completing these projects on time and in full compliance with all permit requirements.

The Problem with Design-Bid-Build

One of the biggest challenges the Department has encountered on the SFOBB project is associated with the environmental and other permits issued during the design phase. These permits stipulate requirements based on assumed means and methods of construction that, after contract award, may not be practical or not the preferred methodology of the lowest responsible bidder. This has been the case to varying degrees on many of the toll bridges projects in the San Francisco Bay, including the new SFOBB, and demolition of portions of the existing superstructure. Each time this situation occurs, the permits must either be modified to suit the practical methods of construction (which, in some cases, are the only viable methods available), or be forced to use other methods of



construction not as cost or schedule efficient just to be in compliance with the permits. This situation almost always leads to severe schedule delays and additional costs.

CMGC the Clear Winner

The CEC/Silverado JV team believes that the Department has made a positive choice to implement the CMGC method of project delivery on the foundation removal contract, and fully understands its part in the process. This contract will be one of the most challenging toll projects to date as the work is not only *on* the waters of the San Francisco Bay, but it's nearly entirely immersed *in* the water. This will make compliance with permit and regulatory requirements even more challenging, especially if the construction methods are not known in advance.

Construction methods for the type of work to be undertaken on this project (i.e., removal of large reinforced concrete foundations in deep and shallow waters) are not well defined and can vary greatly depending on analysis of constructability, cost, and schedule all coupled with permit compliance. For the upcoming project, many of the final construction methods will only be selected after the demonstration projects are completed and the viability of the methods are determined. The CMGC process will allow the various construction means and methods to be presented and evaluated in terms of constructability, cost, and schedule, in concert with issuance of the environmental permits, so that the two elements are aligned. When this occurs, demolition can proceed without unnecessary delays and cost impacts. This process will greatly enhance risk identification, provide for meaningful, qualitative and quantitative risk evaluation, and allow more successful risk monitoring and response strategies. It will also increase the probability of risk retirement at minimal cost and ultimately resulting in a project delivered safely and within budget and schedule constraints.

6.B Construction Manager's Approach

RFQ SECTION 3.7.B

The Benefits of CMGC Contracting

The CEC/Silverado JV team clearly understands why the Department has selected this innovative contracting method for the Marine Foundation Removal Project and we applaud the Department for endeavoring to reach beyond its traditional delivery methodology. The Department's decision to work with a contractor early in the pre-construction process to review in-process designs, discuss methodology, investigate cost and schedule variables and insure that the permits issued from the regulatory agencies are in alignment with the chosen work delivery method will reduce financial and schedule risks associated with this unique project. This real-time technical partnering will ensure that the best solutions are ultimately applied, thereby achieving project success for the Department and other stakeholders.

During the CM Phase of the contract, the CEC/Silverado JV team will work expeditiously with the Department and the regulatory agencies through each step of the process. Our team has extensive experience working on similar projects with the Department. In addition to the YBITS2 contract, we also worked together on the Carquinez Bridge Demolition project. CEC/Silverado JV team members Joe Capriola and Rich Riggs have worked together with CDI's Mark Loizeaux on several



successful implosion projects, including Warren Hall at CSU East Bay, the Seattle Kingdome Implosion, and the Geneva Towers implosion. Joe and Rich also worked with Ron Woolf and Pacific Blasting on the Seattle Kingdome Implosion project.

Our team will work under the direction of our Project Manager, Rich Riggs. Under the leadership and coordination of Mr. Riggs, this proven team, identified below, will apply their technical expertise to each task as directed.

PROJECT TEAM KEY PERSONNEL			
Title	Company	Team Member	Expertise
Project Sponsor	Silverado Contractors	Joe Capriola	Demolition, Controlled Blasting, Management
Project Sponsor	California Engineering Contractors, Inc.	Wahid Tadros	Heavy Civil Construction
Project Manager / Demolition Manager	Silverado Contractors	Rich Riggs	Demolition, Controlled Blasting, Management
Controlled Blasting Specialist	Controlled Demolition Inc.	Mark Loizeaux	Marine Blasting
Drilling Specialist	Pacific Drilling and Blasting	Ron Woolf	Marine Blasting
Marine Construction Manager	California Engineering Contractors, Inc.	Mike Green	Marine Construction
Lead Estimator	Silverado Contractors, Inc.	Rick Gusman	Estimating
Pre-construction Services Facilitator	California Engineering Contractors, Inc.	Dave Piermarini	Heavy Civil and Marine Construction
Environmental/Permitting Manager	EcoTech Resources	Jeff Root	Environmental Engineering
Scheduler	Leland Saylor Associates	Greg Demetruvias, PSP	CPM Scheduling

Partnering

The CEC/Silverado JV team believes that partnering is a process by which achievement of common project goals becomes the focus of all team members on the project. It is fostered by an atmosphere of mutual trust, open communication, collaboration, and innovation in solving problems. Partnering is paramount on this project and the CMGC process will enhance the partnering atmosphere as all parties will be working together toward common mutually beneficial goals throughout both the design and construction phases. Most of the Key Personnel on this project have experience in working together as an integrated team and have partnered with the Department Toll Bridge Program personnel on numerous projects. This level of partnering was evident when *CEC and the Department won "The 2013 IPI John L. Martin Partnered Project of the Year Sapphire Award" for their work together on the Antioch Bridge project.*



Approach to Pre-Construction Services

It is our understanding that the CMGC process will allow the Department to benefit from the Contractor's advice and expertise through the design process. This will reduce project risks and produce a smoother construction process with fewer unknowns both for the Department and the CEC/Silverado JV team, leading to a safer, on-budget and on-time project delivery.

Design Review and Permitting Assistance

The first task in the project will be to assess the status and viability of the current design documents, the current project and program schedules, and the terms and conditions of the existing permits. Members of the project team, led by Project Manager Rich Riggs, will conduct initial meetings with Department project staff and designers to review and fully understand the basis of the current design, schedule, and permit conditions. Regular meetings then will be scheduled and conducted with the goal of modifying, finalizing, and validating the design to meet the project constraints of schedule and cost, as well as all permit requirements.

Mr. Riggs, who possesses extensive experience in highly technical demolition projects, along with Mark Loizeaux and Ron Woolf, our Controlled Blasting Specialists, and Mike Green, our Marine Construction Manager, will provide valuable input and advice on the validity and constructability of the design. Our team will identify errors, ambiguities and conflicts in the design on an ongoing basis. All aspects of the project will be evaluated for constructability in light of available equipment and techniques operating within permit constraints. Meetings will be conducted with the Department and the various permitting and regulatory agencies to discuss and negotiate the final permit conditions under which the work will be performed. Jeff Root of Ecotech Resources will join other members of the project team to provide expertise in environmental and permitting issues.

We believe that clear and focused communication is essential to the success of any project. Dave Piermarini, the Pre-Construction Services Facilitator, will track the activities undertaken during the design review process and will provide clear and concise communication to all team members as to the current status of the design, the permits, and the project schedule.

Constructability Analysis and Innovation

Innovation and constructability reviews are core components of the CMGC process. The CEC/Silverado JV team believes that ample opportunities exist for innovation on the project and will assist the project team in identifying, analyzing, and quantifying each one. The CEC/Silverado JV team will schedule and conduct brainstorming sessions to propose new ideas and methods to improve schedule and cost, and reduce risks. The team will also ensure that the design is constructible using the available technology, tools, and methods. Evaluations will include controlled blasting, conventional demolition methods, and other innovative methodologies designed to meet the requirements of the project. Means and methods for safe access to the work, debris containment, sound attenuation, protection of water quality, protection of wild life, and other project requirements will be developed and evaluated in order to select the most efficient methods with respect to cost and schedule constraints.



Integration of Cost Estimating and Scheduling

The incorporation of prospective changes and innovations into the design will require qualitative and quantitative evaluation so that informed decisions can be made that will minimize project cost and improve the overall project schedule. One of the many benefits of the CMGC process is that real-time analysis of the cost and time impacts of every scenario will be provided by the project staff. Lead Estimator, Rick Gusman, and Lead Scheduler, Greg Demetrulias will work with Project Manager Rich Riggs to provide detailed cost estimates and resource-loaded schedules that will allow the project team to study the costs, schedule impacts, and risks associated with each proposed construction method or sequence. The team will assess risks and assumptions and assign values to each, keeping in mind that “time equals money”. An Opinion of Probable Construction Cost (OPCC) will be generated as each change or innovation is introduced into the design and the project schedule. This will enable the project team to engage in iterative “what if” scenarios, resulting in the selection of most efficient design in terms of cost and time of completion. Dave Piermarini will track and catalogue the information generated using these estimates and schedules. If project conditions change, the team will have options to fall back on that have already been studied and evaluated.

Risk Identification and Mitigation

Early identification and mitigation of risks greatly enhance the probability of the project being completed under budget and on time. The CEC/Silverado JV team will work with the Department risk managers and other team members throughout the CM portion of the contract to identify risks during design reviews and constructability analyses. Risks will be added to the project risk register as appropriate. The CEC/Silverado JV team will provide input to the qualitative and quantitative risk evaluation process through cost estimating and schedule analysis. Together with the Department, the team will use its experience and expertise to develop risk monitoring and response strategies, and will work toward the abatement of project risks until construction is complete and all risks are retired.

Final Design and Pricing

The CEC/Silverado JV, acting as Construction Manager, will advise the Department’s designers regarding the desired priority and sequence of construction packages so that work can commence in stages. This will enhance the overall schedule, especially in light of the restricted in-water work windows. Once the design is finalized for each construction package, Project Manager Rich Riggs and Lead Estimator Rick Gusman will lead the CEC/Silverado JV team in establishing the final scope of the work from which detailed quantity takeoffs will be finalized. A work breakdown structure for each phase or package of work will be generated. Risks and contingencies will be identified so they can be allocated appropriately. Selected consultants and specialty subcontractors will be prequalified by the CEC/Silverado JV team, scope packages will be identified and developed in order to solicit pricing. Cost models compatible with the typical “Engineer’s Estimate” format will be created, and detailed estimates of labor, materials, equipment, subcontractors, and incidentals will be provided.

The CEC/Silverado JV team will actively seek involvement of SBEs and DVBEs in the procurement process to maximize their utilization. We will work with the Department Office of



Small Business Development to set achievable goals for the project and work closely with their team to fulfill those goals. The final cost of the work will be compiled, and a GMP will be negotiated with the Department. *The CEC/Silverado team has never failed to reach consensus in any negotiation with the Department on projects performed to date and we are committed to continuing this trend on this project.*

Construction and Project Delivery

After the demonstration project is completed and the design is finalized, the Department and the CEC/Silverado JV will work to reach agreement on a GMP for each construction contract to remove the remainder of the marine foundations. Once agreement is reached and construction begins, the project team will transition seamlessly from its CM role to management of the construction work. This benefit of the CMGC process allows the construction team to be equipped with a unique knowledge base based on its involvement in the design and permitting process which will be instrumental in mitigating risk and in delivering a safe successful project. Further, because the CM team is also the construction team, a seamless integration into the actual work provides a substantial reduction of overhead and associated costs.

6.C Ensuring a Successful Project

RFQ SECTION 3.7.C

Goal Achievement

The CEC/Silverado JV is in the business of goal achievement. Individually, our companies have built their reputations on delivery. *Repeat client after repeat client will testify that our people deliver.* Currently, our JV is delivering on its commitments to the Department. Well beyond the requirements of the contract, we have partnered with the Department to solve intricate and complex problems with mutually beneficial solutions.

Project Goals

We understand that the Department's goals for the project are:

- **safety** – maintain safety of the public, mariners and employees during construction
- **mobility** – minimize impacts to marine traffic during construction
- **quality** – remove foundations in a cost effective and environmentally sound manner
- **environmental compliance** – comply with all environmental commitments and permits
- **project delivery** – complete demolition by April 2018

Methods to Achieve Project Goals

The methods that the CEC/Silverado JV team will use to accomplish these goals are described below.

Safety. *Safety is our primary concern.* The CEC/Silverado team will plan our work during the CM portion of the contract, and then work our plan during the construction phase. During the CM portion of the contract, the CEC/Silverado JV team will engage our construction experts Rich Riggs, Mark Loizeaux, and Mike Green, along with our Safety Director Robert Ikenberry to provide input to the project design team so that the resulting design will be constructible in as safe a manner as possible. Special attention will be devoted to analyzing job hazards for each task through use of



JHA. We will develop means and methods, and select equipment, protective barriers, exclusion zones, and other means to provide a safe workplace and protection for the travelling public and mariners and incorporate them into the design as applicable. The project will be staffed with experienced safety professionals to ensure that our team can go home every day in as healthy a condition as they arrived.

Mobility. The CEC/Silverado JV team will minimize impacts to marine traffic by working with the project design team during the CM portion of the contract so that the resulting design will allow the work to proceed with minimal impact to marine or vehicular traffic. We will work closely with the Department, the U.S. Highway Patrol, the USCG, and any other applicable agencies to provide exclusion zones, warning lights and beacons, notices to mariners, etc. so that our project can coexist without impact to vehicular, bicycle and pedestrian traffic on the adjacent bridge as well as marine traffic on the waters of San Francisco Bay. *CEC has more than 15 years of experience working closely with the USCG on projects over and in the waters of the San Francisco Bay, including the West Span Retrofit Project 18, the Carquinez Bridge removal, the Antioch Bridge retrofit, numerous fender repair/replacement projects, and other marine projects.* Impacts to marine traffic did not occur on any of these projects. In addition, CEC has safely performed over 2,000 lane closures on the Bay Bridge. Silverado's experience with projects on the San Francisco Bay, Carquinez Bridge, Napa and Russian Rivers, along with multiple Port of Oakland projects adds to the CEC/Silverado team experience of working within navigable waters.

Quality. During the CM portion of the contract, the CEC/Silverado JV team will consider all viable options, and produce thorough estimates and prepare achievable schedules to determine the most safe and cost-effective methods of removal. We will weigh impacts to the environment against cost and schedule to develop methodologies for project delivery that optimize cost and save time, while minimizing environmental impacts.

Environmental Compliance. *Non-compliance is not an option.* The CEC/Silverado JV team will thoughtfully apply the expertise of our key personnel and that of our Environmental Engineer, Jeff Root from EcoTech Resources, in partnering with the Department and the stakeholder agencies to develop permits during the CM process that are in line with chosen work plans. Our staff will attend meetings and discussions with environmental and permitting agencies to ensure that the terms and conditions of the permits are truly buildable and, thus, achievable. We will educate our managers, supervisors, craft workers, subcontractors, and vendors regarding the permits and our joint responsibility to perform the work every day in compliance with these permits.

Project Delivery. The CEC/Silverado JV team will plan and schedule the work to achieve complete demolition of the designated marine foundations by or before April 2018. In the early stages of the project, we will provide input and consider the impact of permit and environmental work window restrictions, especially those for in-water work. We will work with the Department's schedulers to provide accurate estimates regarding the durations for each major task, so that a realistic project schedule is developed to allow work to take place during allowable windows. We will consider and identify the risks resulting from delays that may cause certain work to fall outside the work windows. We will work with the project team to formulate alternative plans and risk mitigation strategies so that the work can be completed on time.



6.D Project Risks

RFQ SECTION 3.7.D

Risk Identification and Solutions

The CEC/Silverado JV has reviewed the project and has identified the following potential project risks and associated solutions on our risk register.

RISK REGISTER		
Risk Type	Identified Risk	Risk Mitigation
Demolition (Drilling)	Drill holes are misaligned or improperly sized from a design standpoint: Drilling must be designed to allow for appropriate distribution of the correct type of explosives to ensure complete fragmentation of all concrete to be removed above the contract removal limit, including sub-drilling. Drilling alignment for this drill plan and subsequent blasting will require drilling holes that are perfectly vertical, maintaining exact distances from the rebar curtains on either side of the interior cell and exterior caisson walls. If the drill hole alignment is not in exact position from top to bottom, the desired result of the explosives charge detonation may not be achieved.	Employ an experienced drilling contractor having deep-hole drilling experience with the precision equipment needed to drill 60-foot-deep holes accurately, per CDI's design, on this project. Employ an experienced blaster with deep-hole/hydrostatic pressure blasting design/performance experience to design the proper location, spacing and diameter of drill holes.
Demolition (Blasting)	Blasting sequence design error. If the explosives delay sequence and the initiation system is not appropriately designed/implemented, all charges may not detonate in sequence and some charges may be disrupted by earlier delays before they can detonate. As a result, the overall blasting plan will fail, resulting in incomplete fragmentation of the caisson structure, and incomplete delamination of concrete from rebar. As a result, live explosives may remain in the debris pile. In addition, incomplete detonation as a result of incorrect initiation would require unconfined secondary blasting, which would create significant impact on the environment.	Employ a marine blasting contractor with experience in explosives demolition of robust marine structures under high hydrostatic pressure conditions. The blasting of a heavily reinforced concrete structure, both above and below water, with varying hydrostatic pressures, is much more complex than blasting rock or reinforced concrete in the dry. The cellular nature and structural configuration of the caisson requires a far more sophisticated multiple-redundant initiation system to absolutely guarantee complete initiation in accordance with the blasting plan. The blasting sequence must be designed to ensure that all explosive charges detonate both completely, as well as in the correct sequence, to ensure structural failure of the caisson structure.
Demolition (Blasting)	Incorrect explosive type and quantity selection: Selection of the wrong type of explosives for the type of caisson being blasted, as well as the associated reinforcing and cellular configuration, would be catastrophic. This risk could impair the safe and successful elimination of the pier to removal limits, and cost taxpayers time and money. Use of excessive amounts of even the correct explosives product could cause damage to the ecosystem, including the risk to marine mammals and fish present in the vicinity of the bridge pier. Lack of detailed drilling logs could limit the blaster's ability to employ hole-specific loading operations within blasting plan tolerances, which could result in excessive transmission of energy to the detriment of aquatic life. This scenario would most certainly result in unacceptable fish take levels and other undesirable impacts to marine life.	Employ an experienced blasting contractor who is familiar with blast plan design and related in-process loading controls to ensure that byproducts of blasting operations do not adversely impact the marine environment. The redundant blasting sequence must be perfectly timed with both primary and micro delays to reduce air overpressure above water and control underwater pressures in consideration of the species of fish and marine mammals that are likely to be present at the time of blasting. First and foremost, the blasting plan must be designed to adequately fracture the caisson to allow subsequent debris handling/removal. If the caisson structure is not properly blasted, the post-blast alternatives for completing the project are unacceptable from an environmental standpoint. The blasting contractor must have the experience and be prepared to design and implement additional blast control measures (such as bubble curtains), where necessary, if the blasting plan required to successfully demolish the caisson cannot be achieved with safety of the marine environment in mind.
Demolition (Blasting)	Incomplete structural collapse: A controlled blasting failure could result in the caisson not being fully fragmented. This scenario would not allow management of debris to occur so that the majority of the concrete could be placed in caisson voids below the limit of removal.	Employ a blasting contractor experienced in dealing with complex pier systems similar to those associated with the proposed project. The key to the successful fragmentation of concrete and delamination of multiple rebar curtains, while controlling blasting byproducts that may threaten marine species, requires more than the use of proper blasting techniques. It involves a complex combination of integrated explosives design, drilling performance/documentation, explosives loading controls, and redundant initiation systems. If any one of these elements is not addressed properly, the blasting operation will fail.
Design	Unachievable blast monitoring requirements: Design parameters for acceptable measures of sound transmission and vibration from marine blasting can be difficult to achieve.	The CMGC Contractor, its specialty blasting contractor, and monitoring and environmental subconsultants must be involved in the project through the design and permitting process to ensure that industry standard project deliverables are implemented.
Right-of-Way	Excessive explosive utilization: Use of excessive explosive and/or insufficient protection can cause injury to motorists due to flying debris from the blast or damage to the EBMUD Outfall or BART structures.	1. Employ an experienced blasting contractor. 2. Design a blasting sequence that achieves the desired result while using the minimal amount of explosives necessary. 3. Design and install adequate blast protection/blasting mats. 4. Close bridge to traffic during blasting. 5. Enforce a mariner exclusion zone during blasting.
Stakeholder - Environmental	Controlled blasting not permitted: Permitting agencies may not allow blasting to be performed under any circumstances.	Work closely with agencies and stakeholders early in and throughout the process to understand their constraints, concerns, and objectives. Educate agencies on work methods and the use of mitigations to control environmental conditions while ensuring complete removal of the pier structure. Design work plans and methodology to comply. Develop contingency plans using conventional demolition methodologies.
Stakeholder - Environmental	Controlled blasting not permitted after E3 demonstration project: Permitting agencies may not allow blasting after reviewing the results of the E3 Demonstration Project.	Work with stakeholder agencies to develop measureable and achievable outcomes to ensure that blasting will be allowed on future piers and projects. Develop contingency plans using conventional demolition methodologies.



6.E Approach to Managing Risk

RFQ SECTION 3.7.E

Risk Management

The CEC/Silverado JV team has a proven and highly successful track record of performing high-visibility, high-exposure work. As reputable contractors, we are consummate risk managers. We face and mitigate risk every day in the bids we prepare, the work planning decisions we make, and the daily execution of our obligations in the field. Our estimators, project managers, superintendents and field teams are all in the regular daily business of risk management. Risk management is truly part of our culture as well being critical to our vitality and success. Regarding the proposed project, the first risk management decision was made when we decided to compose our CM project team of two blasting firms that are the most highly respected in their respective countries. CDI and Pacific Blasting are the United States and Canada's most preeminent blasting and implosion contractors, respectively. CDI is largely recognized as a leading blasting contractor world-wide, holding numerous world records for its incredible body of work. Pacific Blasting has performed numerous drilling, scaling and blasting projects in very sensitive marine environments across British Columbia. Both CDI and Pacific Blasting having worked successfully with our team members previously and have chosen to work exclusively with the CEC/Silverado CM team for this project.

Due to the size and complexity of the SFOBB East Span Marine Foundations Removal Project, the CEC/Silverado JV team will use an approach to risk management that incorporates a risk register with quantitative analysis. The risk register will be updated regularly during the course of the project. Risks will be categorized based on their impact to the project's stated goals. Risk management would be a standing topic in every regular coordination meeting from the CM/Design phase of the project through the Demonstration Project, and each successive construction contract. From the beginning to the end of the project, identified risks, and their mitigations, would be communicated through a coordinated flow of information.

Almost every subject matter expert necessary to analyze and advise the collective project team on how to reduce the risks involved is readily available for, and familiar with, the project. This will result in thoughtful and timely responses to risk management challenges, assessments, and decisions. As new team members, staff, subcontractors, and subconsultants join our team, a project-specific risk management education session would be a mandatory part of their onboarding process. Employees new to the project would be required to read the Department's manuals *Project Delivery Directive*, and *Project Risk Management Handbook: A Scalable Approach*, as well as the Risk Register for the project. We believe that this approach and commitment to risk management, coupled with our proven track record with the Department staff, will ensure the highest chance of success for this challenging project through the creation of a common knowledge, shared purpose, and alignment among all members of the project team.

Responsibility for maintaining the risk register and onboarding all new team members regarding risk management is the job of our Risk Manager, who will track and update the register, provide risk management training, and lead the charge in our quantitative risk analysis. Our risk manager will be



supported in this effort by our team of estimators, construction specialists, and subject matter experts on demolition, marine, blasting, and environmental permitting and procedures.

Our risk management procedures include the following steps:

- Risk Identification
- Quantitative Analysis
- Risk Response
- Risk Monitoring
- Communication
- Risk Retirement

Risk Identification will be an ongoing activity. While we have identified many potential project risks in our Risk Register, these are initial assessments. Once the project is awarded and the team assembled, we will conduct brainstorming sessions to identify project risks. As the sequential contracts are issued and the project progresses, we will continue to eliminate risks attributed to completed tasks and continually analyze and add new risks as they are identified.

Quantitative Analysis will follow our risk identification, and will include ranking the risks, and sorting them by their respective risk type (i.e., demolition, design, right-of-way, or stakeholder) along with their potential impact. With the assistance of our estimators and scheduler, we will assess each risk for its potential impact to the project goals, particularly safety, cost and time impacts. We will apply a likelihood of occurrence to each risk, as well as values for impacts due to schedule and cost and reasons for our assumptions. Using risk management software, our risk manager will analyze the project for cost and schedule risk.

Risk Response will be our reaction to the information obtained through the feedback produced by the risk management software. Based on this information, we will apply strategies to avoid, transfer, or mitigate risk threats, and exploit, share and/or enhance risk opportunities. When none of those options is available, we may be left with accepting the risk and proceeding with a contingency plan. These contingency plans would be prepared based on educated, discussed, and vetted decisions derived through the collective knowledge of the entire CM Project Team.

Risk Monitoring will be an ongoing effort to continually track the project's ever-changing risks and update the risk register working toward the eventual goal of completing the work with a minimized risk exposure for all parties. A regularly maintained and up-to-date risk register will provide the project team with an effective and valuable tool to monitor and manage risk.

Communication is critical to so that all team members can be informed regarding risks that are no longer relevant, risks that have been modified, and new risks that currently exist. This communication will occur via regular sharing of the updated risk register with all CM team members. The CEC/Silverado CM team will identify, analyze, act on, monitor and communicate project risks to ensure project success.



6.F Project-specific Safety Considerations

RFQ SECTION 3.7.F

Safety Philosophy

Safety is a core value that the CEC/Silverado JV team shares with the Department. All work performed by our team will be undertaken with an emphasis on planning, communicating, managing, and executing the work safely. We are committed to behavior-based safety programs that are protective of people, the community, and the environment, and we expect that safety and health considerations will be addressed and communicated at all stages of the SFOBB East Span Marine Foundations Removal Project.

Safety Commitment

No project objective is more important than safe performance. Achieving the goal of zero incidents requires commitment from leadership, a strong safety focus, and a comprehensive, systematic approach to all work. The CEC/Silverado JV team will approach the Foundations Removal project in a methodical, controlled manner that captures all necessary design and engineering components, and takes into consideration the environmentally sensitive environment in which the work is being performed. Achieving our zero-incident goal requires that we apply our experience from multiple high-hazard, multi-employer work site demolition projects, and employ our state-of-the-art safety program. This program is comprised of the following key elements: (1) the Corporate Environmental, Health and Safety Management System, (2) the SSHSP coupled with the JHA, (3) comprehensive, task-specific work plans that communicate our objectives, requirements, constraints and expectations and (4) Continual and active training, site inspections, and evaluation of ongoing operations. Our safety tools consist of training, work planning, and communication of critical information, such as changing site conditions, and coordinating our work to ensure a safe work environment. Additionally, we coordinate, communicate and monitor the safety programs and actions of our subcontractors. Regarding the traveling public, the CEC/Silverado JV team will coordinate with the Department to ensure protection and safety of the public and mariners.

We have a large number of long-term employees, and we know our staff individually. We educate our employees and provide them with training, we medically monitor their health, we care about the well-being of each employee, and we depend on their daily productivity and contributions to enable us to deliver our projects successfully and safely. *Our people are our biggest asset and their health and safety are paramount.*

Safety Considerations

Safety considerations specific to the project include the typical demolition and marine safety challenges, as well as the unique safety challenges present in blasting.

Demolition Safety

We will develop an engineered demolition plan that describes how we plan to execute the work in a coordinated and controlled manner. A pre-demolition survey will be completed. We will develop a site-specific safety plan that will address any known hazardous materials; safety policies; safe work practices; competent persons; employee orientation; safety meeting regularity; site safety inspections;



enforcement guidelines; evacuation plans; emergency action plan; first aid/medical services; JHA and mitigations; required personal protective equipment, and a respiratory protection program. If we determine we need to change our work methodology, we will stop and modify our plan first, and then effectively communicate the changes to our crews.

Blasting Safety

A blasting safety plan will be created to address handling, transportation, and storage of explosives; employee training programs and certifications; types of explosives; schedules of activities and loading procedures; detailed blasting schedule; explosives transportation route; danger area clearance; site security; vibration and damage control; test shots; post-blast inspection procedures; and disposal of unused/extra blasting materials. Only properly trained personnel will be allowed on or near the piers when explosives are present. Additionally, we will develop a monitoring plan so we can accurately measure the results of the blast. The designated blaster will have control of all blasting operations.

Marine Safety

A marine safety plan will be developed that will include floating equipment inspections; USCG documentation; personnel qualifications; severe weather precautions; emergency planning; equipment requirements; safe work practices; access; marine fall protection; main deck perimeter protection and railing; launch, skiff and barge safety. The marine work will be coordinated so as to maintain navigable waterways within the project limits during construction. Care will be taken to address the requirements of the USCG, as well as providing “notices to mariners” as applicable during the course of the work.

Public Safety

The potential to impact the traveling public is real and present in many blasting environments. Whether the public is on the adjacent bridge, the bicycle path, or on the water, we must be prepared to work safely and harmoniously with the traveling public. Piers E9 through E22 are very close to the existing skyway structure of the new bridge. As a result, we will coordinate and plan all marine-based so as not to impact the bridge traffic. Additionally, the removal of Piers E3, E4 and E5 will be performed in deep water, so planning, notification, and physical monitoring will be critical to provide a safe environment. As needed, we will coordinate and communicate with EBMUD and BART regarding the properties they manage that are located near the project area.





APPENDIX A

Resumes



Rich Riggs: Project Manager / Demolition Manager

Rich Riggs has more than 40 years of experience in the construction industry, the last 34 of which have been in the demolition field. He is adept at developing new methods of removal to meet the many variables inherent to specialized demolition projects. He has particular expertise with bridge demolition and building implosions. Mr. Riggs' vast project experience and invaluable background of work history and job duties, from Journeyman Laborer, Superintendent, General Superintendent to Senior Estimator / Project Manager, gives him a unique understanding of the constructability of a project. Mr. Riggs has supervised or consulted on many high-visibility projects, including the Cypress Structure following the Loma Prieta earthquake, and the 5/14 Interchange following the Northridge earthquake, and has a proven track record of working with all concerned stakeholders to ensure project success. After 9/11, Mr. Riggs was contracted to consult on rescue, recovery, and debris removal at the World Trade Center site in cooperation with a multitude of contractors and federal, state, and local agencies, including the FBI, FEMA, NYPD, FDNY, USEPA and others.

Education:

Plum Borough Senior High School
Pittsburgh, Pennsylvania

Licensing & Registration:

California Class C-21 Contractors
License #783862

Industry Experience:

40 Years

Similar Experience:

34 Years

RELEVANT PROJECT EXPERIENCE

Project Name: SFOBB South Detour, Yerba Buena Island, California

Project Number: 04-0120R4

Project Dates: July 2007 – October 2010

Project Role: Project Manager

Time on Job: 100%

Owner Contact: Bill Casey / (510) 455-1798/ bcasey@dot.ca.gov

Project Description: Phase 1: Silverado Contractors worked with the Owner (the Department) and Prime Contractor (C.C. Myers) in developing and executing a plan to remove a 348-foot-long by 75-foot-wide section of the San Francisco Bay Bridge on Yerba Buena Island to facilitate future traffic routing to the South Detour. Working around the clock with a total crew of more than 200, Silverado completed the job in only 49 hours, on time and with no injuries. Two teams of four excavators each severed deck sections at each end of the project using excavator-mounted hydraulic breakers and steel shears. Once severed, each of the 48 concrete deck and beam sections, weighing an average of 170,000 pounds, was craned to heavy-haul trailers. Next, the concrete edge girders and columns were separated and hoisted onto trucks for off haul. These 19 members weighed up to 200,000 pounds each. Silverado completed its work on the Labor Day weekend closure within the planned work window, and the entire roadway was reopened to the public ahead of schedule. All off-hauled concrete was recycled at an off-site laydown area. **Phase 2:** Silverado Contractors performed the initial separation demolition required to remove a 300-foot-long section of the SFOBB. Once the double decker section of roadway was cut free, it was jacked, the 3,200-ton section of bridge was rolled out by Mammoet, and the new connector section for the temporary south detour was rolled into place. After traffic was diverted to the new detour structure, Silverado began the removal of the four double-deck truss spans and adjoining concrete viaduct, making way

for the construction of the new viaducts to the Yerba Buena Island Tunnel.

Project Responsibilities: Rich worked closely with the Department and C.C. Myers, as well as multiple engineers, subcontractors and agencies, including the U.S. Coast Guard, CHP, and Cal-OSHA, to develop and execute a workable means of demolition that could be completed over the very aggressive holiday weekend freeway closure period in 2007, as well as during the 2009 closure. Rich focused on every detail of the project estimating, planning, and risk assessment, and ensured the field execution could be completed safely and on time by having backup plans and all potential additional resources at hand.

<u>Project Name:</u>	Warren Hall Abatement and Demolition Project, Hayward, California		
<u>Project Number:</u>	C120101	<u>Project Dates:</u>	March 2013 – December 2013
<u>Project Role:</u>	Blasting Manager	<u>Time on Job:</u>	50%
<u>Owner Contact:</u>	Marie Crist / (916) 830-8088 / Email mcrist@sundt.com		

Project Description: Silverado was awarded the design-build contract for the demolition of the Warren Hall administration building on the campus of California State University (CSU), East Bay, which had been identified by the CSU Seismic Review Board as the most seismically unsafe building in the CSU system as a result of being located almost directly on the active Hayward Fault Line. All hazardous materials were abated from the 13-story concrete structure, and the pedestrian bridge to the adjacent University library was removed in preparation for the implosion. Due to the campus environment, and the high profile of the project in the area, many agencies, adjacent neighbors, and other affected parties were involved in planning and coordinating the implosion. The implosion occurred in the early morning, amidst significant media attention and thousands of spectators, and using numerous seismic monitors throughout the surrounding area. The implosion was executed successfully, and Silverado proceeded with the final downsizing and removal of the downed concrete structure.

Project Responsibilities: Rich was responsible for managing our blasting subcontractor Controlled Demolition, Inc. and working with the general contractor Sundt Construction, Inc., the owner of CSU, East Bay, as well as state and local agencies, including four local police departments, CHP, BAAQMD, FAA, Cal-OSHA(Blasting Division), the State Fire Marshal, and the Hayward Fire Department to coordinate all permitting and day-of-blast plans. Rich oversaw implosion preparations and all blast activities.

<u>Project Name:</u>	Seattle Kingdome, Seattle, Washington		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	June 1999 – April 2000
<u>Project Role:</u>	Project Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Gus Sestrap / (206) 505-6607 / asestrap@tcco.com		

Project Description: Demolition by implosion of the Seattle Kingdome, the largest concrete-domed structure in the world. The 10-week, pre-implosion schedule included removal of 476,000 square feet of roofing material, soft demolition of all interior building finishes, drilling of 5,200 holes for explosives placement, installation of protective cover materials for explosives containment, protection of surrounding buildings and utilities, and coordination with various city, county, and

state agencies. The 12-week post-implosion schedule included the processing and on-site recycling of 60,000 cubic yards of concrete and 8,000 tons of reinforcing.

Project Responsibilities: As Project Manager, Rich was in charge of the entire demolition, abatement, and implosions plans, project execution, and scheduling activities. Rich managed the blasting subcontractor, Controlled Demolition, Inc., and worked with the General Contractor, Turner Construction, in conjunction with the Washington Public Stadium Authority, to obtain permits and coordinate the day-of-blast activities with the Puget Sound Air Quality Board, the Department of Labor and Industry, the Seattle Fire and Police Departments, the Washington State Police, and Amtrak, as well as adjacent building owners and residents.

<u>Project Name:</u>	Geneva Towers, San Francisco, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	March 1998-August 1998
<u>Project Role:</u>	Project Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Danny Dadios / (415) 489-6609		

Project Description: Demolition by implosion and supplemental removal of two 20-story, post-tensioned concrete apartment buildings in San Francisco. The project included drilling of 2,000 holes for explosives placement, removal of select portions of shear walls to allow for controlled collapse, and protection of surrounding buildings. Post-implosion work included the processing and recycling of 42,000 cubic yards of concrete. The work was completed on time and on budget, and is still considered the largest high-rise building implosion in California history.

Project Responsibilities: Aman Environmental Construction Project Manager/Estimator. As Project Manager, Rich was responsible for all demolition activities, and oversaw the blasting subcontractor Controlled Demolition, Inc. Rich worked with the owner, the U.S. Department of Housing and Urban Development, and all concerned agencies (BAAQMD, City of San Francisco Police and Fire Departments, Cal-OSHA -Blasting Division, FAA and CHP), as well as neighboring building owners and residents to coordinate all permitting and day-of-blast activities.

<u>Project Name:</u>	Maxwell Bridge, Napa, California		
<u>Project Number:</u>	04-253804	<u>Project Dates:</u>	October 2005-February 2006
<u>Project Role:</u>	Project Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Darin Kishiyama / (707) 252-5858		

Project Description: C.C. Myers contracted Silverado to remove the 50-year-old Maxwell Bridge in Napa, California. With traffic rerouted to one of the new bridge spans, it was necessary to accomplish the demolition without damaging the nearby structure. Silverado cut the bridge into five large pieces, lowered the sections utilizing a barge-mounted crane, and transported the steel down the Napa River by barge to a local steel recycling facility.

The demolition work occurred over one of only five navigable waterways in California, and, as such, special care had to be taken when other vessels were required to cross the channel spanned by the bridge.

Cofferdams were installed around the bridge piers, and the concrete pier removal was accomplished

using long-reach excavators equipped with hydraulic hammers.

Project Responsibilities: As Project Manager, Rich was responsible for all demolition activities. Rich coordinated all marine activities with our subcontractor, Manson Construction, and ensured we followed the requirements identified in all applicable project permits.

<u>Project Name:</u>	PG&E Towers, Martinez, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	1998
<u>Project Role:</u>	Project Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Doug Loizeaux / (410) 336-0851 / jml@controlled-demolition.com		

Project Description: Explosives and conventional demolition of three transmission towers spanning the Carquinez Straits. Work included the preparation for implosion of one tower, and removal by conventional demolition methods of two others.

Project Responsibilities: As Project Manager, Rich was responsible for all demolition activities, including the preparation of the towers for blasting by the prime contractor, Controlled Demolition, Inc. In addition, he coordinated with all relevant agencies to obtain permissions and the permits required for the implosion.

<u>Project Name:</u>	Russian River Bridge, Geyserville, California		
<u>Project Number:</u>	04-2S8404	<u>Project Dates:</u>	April 2006 – May 2006
<u>Project Role:</u>	Project Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Ramses Sargiss / (707) 566-3956/ ramses_sargiss@dot.ca.gov		

Project Description: In the New Years' Eve flood of 2006 the 74 year old Russian River Bridge on Route 128 was severely damaged. The swollen Russian River scoured the ground surrounding the pilings, causing a section of the bridge to shift and slide downstream. The Department contracted with C.C. Myers and Silverado under an emergency contract to remove the damaged bridge and expedite the construction of the new bridge. Silverado was uniquely qualified to quickly mobilize the equipment necessary to complete the damaged bridge removal and in particular had the certifications and trained personnel required to remove the concrete bridge deck which contained naturally occurring asbestos in the serpentine aggregate. Demolition was completed 7 days ahead of the 25 day calendar schedule, allowing the new construction to begin ahead of schedule.

Project Responsibilities: As Project Manager, Rich worked with C.C. Myers and the Department to design the demolition methods that could be safely utilized on the damaged structure in conjunction with Foothills Bridge, our structural engineer. Rich worked to ensure that all field personnel were able to perform the demolition safely and as quickly as possible.

Mark Loizeaux: Controlled Blasting Specialist

Mark Loizeaux is Chairman of the Loizeaux Group of Companies and President of Controlled Demolition Incorporated (CDI). Mark has worked in the conventional and explosives demolition trades since a very early age, starting as an apprentice working for his father, John Loizeaux. Mark worked his way up through the company, starting out as a field laborer, Labor Foreman, Field Superintendent, General Superintendent, Vice President, and Executive Vice President. He began running the company in 1976, and became President of CDI and Chairman of The Loizeaux Group of Companies in 1986.

As a consultant both to the public and private sectors on an international basis, Mark provides consulting for demolition and site clearance, rock removal and vibration control, anti-terrorist projects involving mitigation of the effects of attacks on structures, and forensic analysis of failed structures to aid in determining the cause of the failures. This work has taken Mark all over the world to all kinds of physical environments, including those involving highly sensitive environmental and site conditions.

Mark is internationally recognized and has been honored as a leading professional in the demolition industry. He is considered the leading active professional in the explosives demolition field. He has acted as an expert technical witness on legal claims cases and on technical research committees where such expertise and hands-on experience is required. In keeping with CDI's traditional commitment of personal service to its clients, Mark works in the field regularly, personally handling both conventional and explosives demolition projects as the Principal-in-Charge for CDI and The Loizeaux Group of Companies. He has been personally responsible for the supervision of the demolition of thousands of structures worldwide, and has worked on an additional 3,000 structures while mastering the various design, engineering and estimating services provided by the group.

Education:

B.S. Business Administration/
Architectural Engineering Studies,
University of Tennessee

Licensing & Registration:

California Class C-21 Contractors License
#279855

Industry Experience:

40 Years

Similar Experience:

40 Years

RELEVANT PROJECT EXPERIENCE

Project Name: Sunshine Skyway Bridge, St. Petersburg/Bradenton, Florida

Project Number: N/A

Project Dates: 2001 - 2003

Project Role: Principal-in-Charge

Time on Job: 100%

Owner Contact: Thomas Boyle / (813) 623-5877 / Tom.Boyle@gcinc.com

Project Description: Removal of the parallel spans and causeways of the Florida Department of Transportation's Sunshine Skyway Bridge over Tampa Bay between Bradenton and St. Petersburg. This project was the largest, most complex bridge demolition contract ever issued by the State. The collisions of oceangoing vessels with the old channel piers prompted construction of a new cable suspension bridge within a much wider channel. Working as a specialty subcontractor for The Hardaway Company, CDI designed, prepared and demolished 9,000 tons of steel in eight deck trusses and four approach thru-trusses and towers on either side of one of the most heavily trafficked shipping lanes in the Gulf of Mexico region. Steel removal was followed by the drilling and flawless fragmentation of 200,000 cubic yards of reinforced concrete in 80 pile bents, 48 hammerhead piers, 8

shaft bents, and 4 massive channel piers, one of which contained 4,000 cubic yards of steel H-pile and sheet-pile reinforced counter-fort. As there was no pier conflict with future development, the concrete piers were fragmented to within three feet of the bottom of the bay, without the need for secondary blasting, and in full compliance with the Florida Department of Environmental Protection (DEP) and the Florida Fish and Wildlife Conservation Commission (FWC) regulations that protect endangered/protected species in the area.

Project Responsibilities: As Principal-in-Charge, Mark was responsible for obtaining all permits, designing all blast plans, reviewing and approving the blast preparation work, and overseeing the blasting operations. Mark coordinated closely with the DEP and FWC to ensure that all care was taken to protect the marine environment.

<u>Project Name:</u>	Ft. Steuben Bridge, Steubenville, Ohio		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2012
<u>Project Role:</u>	Blasting Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Clint Filges / (724) 265-4600 / cfilges@jbfayco.com		

Project Description: Joseph B. Fay Company (JB Fay) was contracted by the Ohio Department of Transportation to demolish the Ft. Steuben Bridge, a 1,254-foot-long, structural steel suspension bridge. One week prior to the demolition, CDI, acting as JB Fay's selected explosives subcontractor, commenced their explosives placement and covering operations.

During the weeks prior to the blast date, JB Fay crews removed the approach spans using a barge-mounted crane. The bridge span over the railroad was removed using conventional demolition techniques, and the entire existing concrete deck then was removed. Steel sections were pre-burned, enabling the effective placement of the CDI's linear-shaped charges. Intensive pre-planning and engineering dictated the overall sequence of operations.

On February 21, 2012, the bridge was explosively segmented into 22 manageable pieces through CDI's placement and detonation of 490 linear-shaped charges in approximately 136 locations (using a total of 153 pounds of explosive), dropping the bridge into the Ohio River. The truss sections and 9-inch-diameter, parallel-strand main suspension cable were severed at four locations to allow the center portion of the cable/stiffening truss to rotate toward the shore. As they began to fall, the tower on the West Virginia side of the river was shot in three locations to ensure ease of removal from the river, while the tower on the Ohio side of the river was shot in only one location. Using delayed initiators, the demolition was performed in one explosive event, with the entire implosion happening in just seconds. A 1,000-foot safety zone was required for the safety of the general public, and was enforced by JB Fay employees, and local authorities. As a safety precaution, roadways, railroads, and waterways were temporarily interrupted for 15 minutes during the event.

Pieces of the bridge, some weighing as much as 120,000 pounds, were lifted, on schedule, from the Ohio River by crane and loaded onto several barges operated by River Salvage Co. of Pittsburgh, a project subcontractor. *The U.S. Coast Guard required the navigational channel to be opened within 24 hours after the blasting occurred; the JB Fay/ CDI team opened the channel in less than 12 hours.*

Project Responsibilities: As Principal-in-Charge, Mark was responsible for obtaining all permits, designing the blast plan, reviewing and approving the blast preparation work, and overseeing the blasting operations. Mark coordinated closely with the DEP and FWC to ensure that all necessary

care was taken to protect the marine environment.

<u>Project Name:</u>	Kingdome, Seattle, Washington		
<u>Project Number:</u>	N/A	<u>Project Date:</u>	2000
<u>Project Role:</u>	Blasting Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Tom Gerlach / (206) 505-6610 / tgerlach@tcco.com		

Project Description: First & Goal and Turner Construction Company (TCC) retained the services of the Loizeaux Group International to consider demolition options for the removal of the Kingdome, the world's largest thin-shelled concrete dome. After more than a year and a half of structural analysis, investigation of the site conditions/adjacent improvements that would remain in place, and consideration of all the political and public relations aspects of the project, implosion was selected as the best and safest means of demolishing the structure.

TCC negotiated with CDI to design the implosion of the Kingdome to mitigate the demolition's impact on the community while supporting the fast-track construction of the replacement stadium for the Seattle Seahawks. CDI spent four and a half months designing the demolition and working with TCC to generate implosion preparation and demolition specifications, which TCC put out to competitive bid to a short-listed group of demolition contractors, managed by CMGC team members Rich Riggs and Joe Capriola. CDI's implosion contract with TCC was then assigned directly to the prime demolition contractor. The greatest technical challenges of the project were to control the 15 million cubic feet of air rushing out of the arena during its collapse, and to control the vibration generated by the fall of 125,000 tons of concrete debris onto a reclaimed section of Seattle where the water table was just three feet below grade. This vibration-sensitive geotechnical stratum was situated under critical Seattle infrastructure, as well as adjacent historic, commercial, and residential structures as near as 95 feet away. The free-fall felling of the 25,000-ton concrete dome alone would have created over 9 billion foot-pounds of energy, sufficient to do widespread damage given the soil conditions in the area. To control vibration, CDI designed a program that would involve detonating small explosives charges to soften the roof structure so it would crush on impact, rather than letting it fall to grade intact. The explosives detonations were performed into two distinct phases, creating a sequential collapse to spread out the impact of debris at grade and channel the air displaced by the fall of the structure away from the remaining improvements. Seating elements and ramps were pre-crushed and placed as windrows across the playing surface, below the dome, to further assist in controlling vibration from the fall of the structure. The drilling subcontractor, Pacific Blasting, drilled 5,905 holes for CDI's explosive placements in the tension and compression rings, roof ribs, columns, and support structure under the Kingdome. During loading operations, CDI laid 21.6 miles of detonating cord and placed more than 4,700 pounds of explosives in critical locations to control the fall of the structure and reduce vibration. More than 60 primary and 900 micro delays were used to control the fall of the structure, mitigate air overpressure, and enhance fragmentation of resultant debris.

Project Responsibilities: As Principal-in-Charge, Mark was responsible for obtaining all permits, designing the blast plan, reviewing and approving the blast preparation work, and overseeing the blasting operations. Mark worked closely with the regulatory agencies to ensure a safe and successful project.

Rick Gusman: Lead Estimator

Rick Gusman has more than 34 years of experience in the demolition industry, and is an expert project manager and estimator on large, complicated demolition projects. He spent 24 years of his career at the Oakland-based demolition and salvage company, ICONCO, working summers as a laborer, then after college as a superintendent, project engineer, assistant project manager, project manager, senior project manager and estimator. When LVI Services Inc. (LVI) acquired ICONCO in 2005, Mr. Gusman spent two more years there as an estimator. During his tenure at ICONCO/LVI, his thorough analytical, management, and estimating skills were a valuable asset to the company.

Education:

B.A. Business
Western Washington University,
Bellingham, Washington

Licensing & Registration:

N/A

Industry Experience:

34 Years

Similar Experience:

34 Years

In 2008, Mr. Gusman joined Silverado Contractors, Inc., (Silverado) where, since that time, he has successfully estimated and managed numerous projects. Mr. Gusman serves as Silverado's Chief Estimator, which involves reviewing bids, performing oversight and training activities, as well as producing estimates for complex industrial, power, and implosion projects. As many of Silverado's projects are in the private sector, he works with clients early on in the design process preparing initial budgets, value engineering, alternate pricing scenarios, and, ultimately, upon completion of design, preparing the final fixed pricing. He performs detailed reviews of all contract documents and then uses on-screen take-off software to accurately quantify the work. Estimates are built one activity at a time, applying crew statistics and proven production rates, and paying special attention to site access and permit constraints. As a Senior Project Manager, his responsibilities include many pre-construction services, specifically creating work plans and schedules.

RELEVANT PROJECT EXPERIENCE

Project Name: South Bay Power Plant, Chula Vista, California

Project Number: N/A

Project Dates: July 2012 – May 2013

Project Role: Estimator/SPM

Time on Job: 30%, 100% (Bid Phase)

Owner Contact: Lawrence Randel / (925) 819-2146 / Lawrence.S.Randel@dynegy.com

Project Description: Implosion of the 750-megawatt, 4-unit natural gas-fired steam turbine electrical generation facility owned by Dynegy and operated, for most of its life, by the San Diego Gas and Electric Company (SDG&E). During preparation for the implosion, work included hazardous materials abatement, administration building demolition, and turbine generator removal, as well as all ground-level equipment removal. Imploding an industrial plant located adjacent to San Diego Bay and its adjacent active SDG&E high-voltage switching station required coordination and approval of numerous agencies, including the California Coastal Commission, City of Chula Vista,



SDG&E, the Port of San Diego, and the San Diego County Air Pollution Control District. Mr. Gusman worked with the Coastal Commission and Dynege’s environmental staff to write the work plan and the application for the Coastal Development Permit to allow for the demolition of the power plant and approval of the involved agencies (Coastal Commission, City of Chula Vista, SDG&E, Port of San Diego, and San Diego County Air Pollution Control District).

Project Responsibilities: Prepared the entire detailed cost estimate and preliminary schedule for the implosion of the four boilers, drafted work plans, and met with the owner’s environmental staff and regulatory

agencies during the permit application process. As Senior Project Manager, Rick assembled a team of subcontractors, interfaced with the client on a weekly, and sometimes daily, basis, and worked as the liaison to ensure that the implosion of the boiler structures occurred in accordance with the work plan. The implosion of the facility was successfully performed in February 2013.



<u>Project Name:</u>	Morro Bay Power Plant - Fuel Oil Tank Farm, Morro Bay, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2011
<u>Project Role:</u>	Estimator/SPM	<u>Time on Job:</u>	15%, 100% (Bid Phase)
<u>Owner Contact:</u>	Tom Roe/ (815) 343-1493 / Tom.Roe@dynegey.com		

Project Description: The Morrow Bay Power Plant - Fuel Oil Tank Farm decommissioning project consisted of the demolition of six aboveground steel fuel oil tanks, one of which included a secondary containment unit with a floating lid. Five of the tanks had a capacity of 159,000 bbls and consisted of fixed roofs; the sixth tank had a capacity of 54,000 bbls and consisted of a floating lid. Each tank was 200 feet in diameter and up to 50 feet tall. The tank farm was located in very environmentally sensitive site with concerns for Native American artifacts, endangered species, and asbestos. Silverado used care not to endanger the local habitat and ensured that the environment surrounding the tanks was not disturbed in any way. To accomplish these goals, Rick devised a work plan where Silverado placed more than 100 8-foot by 20-foot steel plates to create a roadway through the tank farm basin to protect the environmentally sensitive sand dunes. The tanks were

demolished on site and the associated metal scrap was processed for recycling.

Project Responsibilities: Prepared the entire detailed cost estimate for the removal of six fuel oil storage tanks. Performed all pre-construction planning, authored the work plans and safety plans, conducted numerous meetings with stakeholders, and trained Silverado’s crew regarding the project objectives and constraints. Mr. Gusman worked with the Coastal Commission and Dynegey’s environmental staff to write the work plan for the Coastal Development Permit for the tank removal.

<u>Project Name:</u>	Montgomery Ward and Company Building Demolition, Oakland, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2000-2001
<u>Project Role:</u>	Estimator	<u>Time on Job:</u>	20%
<u>Owner Contact:</u>	2825 Realty Corporation / (925) 819-2146		

Project Description: Demolition by controlled blasting of a nine-story reinforced concrete structure located on a 10-acre site near the 880 Freeway in Oakland. The building area was 720,000 square feet, and 33,000 cubic yards of concrete were processed and crushed during the demolition process. The pre-implosion activities included abating hazardous materials abatement, disconnecting and relocating utilities, and preparing street closure, traffic control, and vibration monitoring plans. All work was performed safely, on time, and within budget, including the successful implosion performed by CDI.

Project Responsibilities: Prepared work plans, obtained regulatory permits, performed site utility coordination activities, conducted team partnering meetings, and managed cost and schedule functions.

Additional Projects: Mr. Gusman has worked on hundreds of other projects during his long career. Notably, from 2006 to 2008, he was Estimator for the **Hunter’s Point Power Plant Decommissioning project** in San Francisco. The work, performed for PG&E, included complete asbestos abatement and demolition of seven boilers, turbine houses, administration buildings, and six boiler stacks ranging in height from 200 to 250 feet. He was Project Manager for the **Wahlquist Library, San Jose State University project**, overseeing the demolition of 300,000+ square feet of multi-story reinforced concrete buildings. He was the Assistant Project Manager (APM) on the **Tacoma Blair Bridge Demolition for the Port of Tacoma**. This project involved the demolition of a 300-foot turn-table bridge and concrete pier spanning the Blair River. Mr. Gusman also was APM for the demolition portion of the **Golden Gate Bridge Deck Replacement, San Francisco**, a project that required sawcutting the concrete bridge deck and removing the deck in a sequential manner to facilitate the replacement decks. The removed decks were transported off site for further processing. Lastly, the **Charles P. Howard Terminal Demolition at the Port of Oakland**, where partial demolition of a concrete and 55,000 sf steel wharf dock transit shed, including the under structure pier and piling.

Greg Demetrulias, PSP: Scheduler

Greg Demetrulias is a certified planning and scheduling professional with 30 years of experience providing comprehensive project management, scheduling and project controls services for program planning throughout construction completion, including delay claim analysis. Mr. Demetrulias is skilled in developing and implementing program- and project-level control systems such as Prolog Manager, Primavera Contract Manager/Scheduler, Microsoft Project, SureTrak, Constructware, and Buzzsaw. Mr. Demetrulias has produced detailed cost and resource schedules for program planning, construction, claims resolution, and change management analysis. He is an expert in using Primavera 3.1 and 6, as well as Microsoft Project, with extensive experience in Earned Value Analysis with resource- and cost-loaded schedules.

Education:

Civil Engineering, Southern Illinois University, Edwardsville, 1978

Licensing & Registrations:

Certified Planning and Scheduling Professional (PSP), 2004

Certified Planning and Scheduling Professional Association for the Advance of Cost Engineering (AACE), 2005

Health Care Construction Certificate Program American Society for Healthcare Engineering (ASHE), 2006

Industry Experience:

30 years

Similar Experience:

30 Years

Mr. Demetrulias has extensive experience in the public and private sector scheduling large complex multi-year projects involving multiple stakeholders. His work experience as a Project Manager and Project Controls Manager gives him the ability to understand the job in its entirety, and completely comprehend all time and cost impacts in the schedule development process.

RELEVANT PROJECT EXPERIENCE

Project Name: Earthquake Safety and Emergency Response Bond Program (ESER), City and County of San Francisco Department of Public Works
Project Number: N/A Project Dates: 2013 - Present
Project Role: Scheduler Time on Job: 100%
Owner Contact: Gabriella Judd Cirrelli / (415) 279-4395

Project Description/Responsibilities: Currently providing construction schedules and updates for seismic improvements and repairs to firefighting facilities and infrastructures throughout the City.

Project Name: Lake Oswego – Tigard, Finish and Raw Water Piping Project, Lake Oswego, Oregon
Project Number: N/A Project Dates: 2011 - 2013
Project Role: Scheduler Time on Job: 100%
Owner Contact: Brad Moore / (503) 423-4000

Project Description/Responsibilities: Project components included rail, infrastructure, stations, and terminals. Responsible for preparing schedules and updates, and providing detailed earned value analyses relative to the baseline schedule.

<u>Project Name:</u>	San Francisco Public Utilities Commission, Biodigester Facilities Project, San Francisco, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2014 - Present
<u>Project Role:</u>	Scheduler	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Bryce Danker / (714) 429-2000		

Project Description/Responsibilities: Project involves upgrading the City's 16 million-gallon-per-day (mgd) water system to a 32-mgd system. The raw water pipeline will be 14,000 linear feet, and approximately 42 inches in diameter, and will involve one river crossing. The finished water pipeline will be 36,000 linear feet, and approximately 24 inches to 48 inches in diameter, and will involve one bay crossing. Responsible for developing and maintaining a resource and cost schedule to monitor engineering costs and key deliverables.

<u>Project Name:</u>	SFPUC Peninsula Pipelines Seismic Upgrade, Multiple Bay Area Locations		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2013
<u>Project Role:</u>	Scheduler	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Deborah C. Cohen, P.E. / (415) 243-2150		

Project Description/Responsibilities: Responsible for providing scheduling services for four different schemes to assist the Owner in the final selection of the design for this project.

<u>Project Name:</u>	California High-Speed Rail, Central Valley Segments, Altamont and Sacramento to Merced		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2010 - 2013
<u>Project Role:</u>	Scheduler	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Robert Hertz, AECOM VP Transportation / (858) 300-8032		

Project Description/Responsibilities: Responsible for providing schedule review, and baseline and final review for seismic improvements, including replacing pipes at four different sites.

<u>Project Name:</u>	Santa Clara Valley Medical Center, San Jose, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2007-2008
<u>Project Role:</u>	Scheduler	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Rob Robinson / (415) 774 - 2700		

Project Description/Responsibilities: Projects Controls Manager and Senior Scheduler responsible for the first phase of a \$350 million, multi-phased replacement hospital.

<u>Project Name:</u>	California Prison Receivership Project, Sacramento, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2008
<u>Project Role:</u>	Scheduler	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Bill Proctor / (916) 951-8521 / Bill.Proctor@parsons.com		

Project Description/Responsibilities: Served as Assistant Project Controls Manager in drafting cost and schedule management procedures for this \$7 billion expansion program.

<u>Project Name:</u>	Washington Healthcare System Expansion Program, Fremont, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2006 - 2008
<u>Project Role:</u>	Scheduler	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Robert Alfieri / ROBERT_ALFIERI@whhs.com		

Project Description/Responsibilities: This project was a \$500 million multi-phase replacement hospital expansion and renovation project. Served as Project Manager/ Project Controls Manager, and Senior Planner.

<u>Project Name:</u>	Kaiser Permanente Los Angeles Medical Center Sunset Hospital Replacement Project, Los Angeles, California		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2004
<u>Project Role:</u>	Scheduler	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Kenneth Route / Kenneth.L.Routt@kp.org		

Project Description/Responsibilities: As Senior Planner and Scheduler, performed a detailed cost analysis of the contractor's progress payments, developed a cost-loaded schedule using the contractor's non-loaded schedule, produced progress payment cash flow reports, and compared the contractor's completed and forecast costs.

Jeff Root: Environmental/Permit Manager

Jeff Root has more than 35 years of environmental consulting experience with an emphasis in project management, regulatory compliance and environmental due diligence. Mr. Root's professional experience gives him an in-depth perspective of the environmental regulatory landscape, and an expansive knowledge of how the different environmental specialties work together to accomplish a stated objective. His areas of expertise include strategic planning and analysis, risk mitigation, remediation, and agency negotiations. He has considerable experience in working with California environmental regulatory agencies in land use planning, entitlements, and permitting. Mr. Root is the Founder of Ecotech Resources, a local Berkeley based DVBE Environmental Consulting firm.

Education:

M.S. Wildland Resource Sciences,
University of California, Berkeley
B.S. Naval Engineering,
U.S. Naval Academy

Licensing & Registration:

N/A

Industry Experience:

35 Years

Similar Experience:

35 Years

RELEVANT PROJECT EXPERIENCE

Project Name: Berkeley Marine Center, Berkeley, California

Project Number: N/A

Project Dates: September 2010 - Present

Project Role: Environ. Permitting, Reg. Compliance Time on Job: 100%

Owner Contact: Cree Partridge / (510) 843-8195

Project Description/Project Responsibilities: Berkeley Marine Center (BMC), a family owned and operated company since 1999, is a custom boat building and repair facility. Ecotech was retained to assist BMC with regulatory compliance and agency relations. Ecotech conducted a review of the company's operations and waste management practices, historical site conditions, regulatory issues and agency communications. Working with the client and regulatory agencies, Ecotech developed operational improvement recommendations to address regulatory requirements and to improve efficiency of daily work and waste management practices. These included hazardous waste identification and characterization studies, hazardous waste treatment methods and permits, air emissions, and general housekeeping.

Ecotech conducted a study of the boat wash operations at BMC to determine if boat wash waste water was hazardous. Representative samples of waste waters were collected prior to entering a settling and filtration tank system upstream of the discharge point to the sanitary sewer. Ecotech's analysis demonstrated 1) that the waste waters are not a California Hazardous Waste, and 2) that management of the waste waters did not require a treatment permit.

As an active boat yard for several decades, historical operations primarily related to copper-based anti-fouling paint resulted in investigation of soil conditions. Ecotech evaluated soil impacts and developed a work plan to address the site conditions. Our toxicologist developed risk based cleanup levels based on potential exposures for the recreational and industrial users of the site, and determined that further site investigations or soil removal activities were not warranted.

Project Name: ENPLAN/California Department of General Services, Albany, California
Project Number: 129014 Project Dates: July 2009 - September 2009
Project Role: Environ. Permitting Time on Job: 100%
Owner Contact: Don Burk / (530) 221-0440

Project Description/Project Responsibilities: The California Department of General Services completed improvements to its Center for the Blind, which included construction of a new exterior elevator and subsurface utilities. Ecotech's subcontracted professional geologist provided geotechnical foundation design recommendations and an accompanying environmental investigation. Our engineers conducted soil borings and collected soil and ground water samples to determine the geotechnical properties of the soil and to identify any potential environmental liabilities from off-site sources. Due to overhead obstructions in the fully developed site, Ecotech used specialized mobile drilling equipment to access the elevator location. The Ecotech team provided geotechnical foundation data and recommendations for the improvements. Environmental samples indicated that low levels of petroleum and solvent contaminants were present in soils and groundwater from an existing release on adjacent property. Ecotech staff provided recommendations to the prime contractor and client for managing contaminated soils and groundwater during the construction. Ecotech also conducted a modified Phase I site assessment and determined that historical operations at the site could not have contributed to the soil and groundwater contamination that was detected.

Project Name: Ecology & Environment, Inc. / California Public Utilities Commission, Riverside County, California
Project Number: N/A Project Dates: May 2011 - May 2014
Project Role: Environ. Permitting Time on Job: 100%
Owner Contact: Nick Figone / (415) 398-5326 x4706

Project Description/Project Responsibilities: Ecotech Resources was tasked with the responsibility to provide compliance monitoring of the CEQA mitigation, monitoring and reporting (MMR) requirements developed for Southern California Edison's general contractor in the construction of a new electrical substation in the southwest of Riverside County.

Ecotech's subcontracted biologist provided on-site monitoring and inspection of the construction area and activities for compliance with the approved MMR developed for the project over a seven-month period. The MMR developed for the project included identification of sensitive plant and animal species and protection of threatened and endangered species and habitat during the construction period. The MMR also included protection of nesting raptors and floral seed banks, cultural and paleontology monitoring during grading, storm water pollution prevention, fugitive dust suppression, carbon emissions from vehicle and construction equipment, and hazardous materials management. Following construction of the substation, Ecotech will monitor the construction of a 25-mile high power transmission corridor.

Project Name: Turk Island Landfill, Union City, California
Project Number: N/A Project Dates: 2003
Project Role: Redev. Project Mngt. Time on Job: 100%
Owner Contact: N/A

Project Description/Project Responsibilities: Ecotech Resources, as the Redevelopment Project Manager, prepared a design package to convert the closed Class III landfill into a sports complex. Jeff and Ecotech acted as the lead negotiator with RWQCB, BAAQMD, CIWMB, DTSC, Alameda County, and Union City. The project management duties including the management of five subcontractors to complete the site assessment, geotech survey, and plans for RCRA cap, gas and leachate as well as site design, construction and landscape plans.

Project Name: Richmond Sanitary, Richmond, California
Project Number: N/A Project Dates: 1992
Project Role: Environ. Permitting Time on Job: 100%
Owner Contact: N/A

Project Description/Project Responsibilities: Ecotech Resources assisted the client with obtaining operating permits for a RCRA leachate treatment system at the former Class I landfill on the San Francisco Bay. This required extensive agency negotiations to allow operations under CEQA and to permit the facility including BAAQMD permit to operate, Contra Costa County industrial pretreatment permits and DTSC operations permit to treat RCRA hazardous waste.

Ron Woolf: Drilling Specialist

Ron Woolf has over 40 years in the mining industry, with extensive expertise in drilling and blasting. In addition to mining and quarrying, over the last 15 years at Pacific Blasting & Demolition Limited Ron has learned the art of demolition of structures including underwater drilling and blasting of piers. Ron became the Vice President of the Blasting Division in 2013 and is responsible to oversee all blasting engineering, cost estimating and review, blast design for all mining quarrying and marine applications. Ron has developed software for marine blasting applications to calculate explosive loads and blast energy distribution in environmentally sensitive areas where blast overpressures are a concern.

Ron believes in training and education, he is responsible for the recruitment and development of personnel including Pacific's Blaster Apprenticeship Training Program.

Ron has served as President of both the Pacific Canada and Western Canada Chapters of the International Society of Explosives Engineers (ISEE). In addition Ron has presented numerous talks and technical papers about the blasting and mining industries, including the following:

- Demolition Blasting of Reinforced Concrete Structures
By: R.J. Elliott and R.L. Woolf
Presented at 1st World Conference on Explosives & Blasting Technique
Munich, Germany September 2000
- Rock Slope Remediation on the Pennsylvania Turnpike
By: R.L. Woolf and C. Goumans
Presented at the International Society of Explosives Engineers
Orlando, Florida, USA, February 2001
- Strategy, Innovation and Change – Challenging the Future at the Gregg River Mine
By: R.L. Woolf and E.W. Bellenic
Presented at the Twentieth Annual Conference on Explosives and Blasting
Technique, International Society of Explosives Engineers
Austin, Texas, USA, March 1994

Education:

B.S. Mining Engineering
Montana Tech, Butte Montana

Licensing & Registration:

N/A

Industry Experience:

40 Years

Similar Experience:

40 Years

Project Name: Underwater Blasting at Centerm Port, Vancouver, British Columbia, Canada
Project Number: N/A Project Dates: 2006
Project Role: Project Manager Time on Job: 50%
Owner Contact: James Webb / (604) 219-0052

RELEVANT PROJECT EXPERIENCE

Project Description: Underwater blasting of conglomerate and other sedimentary rocks in a reef, in an environmentally sensitive area. Removal of reef was required for port expansion for berthing of large ships. Blast overpressures had to be maintained at 30kPa and specialized bubble curtains were employed. Blast loading was complex and required electronic detonators for supreme accuracy.

Project Responsibilities: Design, project management, quality control.

Project Name: The Woodward Building, Vancouver, British Columbia, Canada
Project Number: N/A Project Dates: 2006
Project Role: Blasting Manager Time on Job: 100%
Owner Contact: Wayne Rawluk / (604) 291-1255

Project Description: The Woodward Building at the corner of Hastings and Abbott Streets in Vancouver has been a historical landmark since its construction in 1903. The most noticeable feature that graced the skyline was a large revolving 'W' sign. The building sat vacant until 2006, when Pacific Blasting and Demolition Ltd. was contracted by ITC Construction to demolish most of the buildings, while maintaining the original 1903 wood structure. The site would be prepared for a new development that would restore the Woodward's name and heritage, and revitalize the downtown eastside.

The famous revolving 'W' was also to be saved and be placed back on the new building. The 'W' sign was craned off the building, and the building was prepared for demolition's greatest spectacle – Controlled Explosive Demolition. Extensive shoring was completed in the wood structure, and parts of the building were demolished conventionally to clear the way for the implosion.

Project Responsibilities: Project management, design implementation.

Project Name: Ferry Terminal – Turning Dolphin Removal, Tsawwassen, British Columbia, Canada
Project Number: N/A Project Dates: 2005
Project Role: Project Manager Time on Job: 100%

Project Description: The project required the successful underwater blasting demolition of two ferry turning piers in close proximity of the Tsawwassen Ferry Terminal and active ferries in Vancouver, BC. These concrete pier structures required extremely accurate drilling to +60ft depths and through concrete. The area is environmentally sensitive and required blast designs to maintain an overpressure of 30kPa. Tight blast vibration control was also required to protect the Ferry infrastructure.

Project Responsibilities: Blast design, project management, quality control

<u>Project Name:</u>	Horseshoe Bay Ferry Terminal – Turning Dolphin Removal, Vancouver, British Columbia, Canada		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	2000
<u>Project Role:</u>	Blasting Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	N/A		

Project Description: Underwater blasting of ferry turning piers in close proximity of the Horseshoe Bay Ferry Terminal, public vehicle parking area, as well as active ferries in the area. These concrete pier structures required extremely accurate drilling to +50ft depths and through concrete. The area is environmentally sensitive and required blast designs to maintain an overpressure of 30kPa. Tight blast vibration control was also required to protect the Ferry infrastructure.

Project Responsibilities: Blast design, project management, quality control

<u>Project Name:</u>	Pitt River Bridge, Pitt Meadows, British Columbia, Canada		
<u>Project Number:</u>		<u>Project Dates:</u>	2010
<u>Project Role:</u>	Blasting Manager	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	Warren Penner / (604) 219-0052		

Project Description: The demolition blasting of 7 piers plus the swing span for the Pitt River Bridge. Blasting was carried out in a sensitive habitat for the protected white sturgeon. All blasts where less than 30 kPa overpressure.

Project Responsibilities: Blast design, project management, quality control

Mike Green: Marine Construction Manager

Mike Green has more than 45 years of experience in construction, 37 of which have been devoted to marine construction. Mike has work experience in California, the East Coast, and Canada. He is experienced in all aspects of planning, coordinating, and supervising marine construction and marine support operations, particularly pile driving and barge-supported construction. He has been responsible for managing divers, marine crane lifting operations, including erecting and dismantling complex steel structures, jetties, and overseeing other in-water structure construction and pipe laying activities, as well as submerged tunnel placement.

Education:
Alameda High School, Alameda, California

Licensing & Registration:
N/A

Industry Experience:
45 Years

Similar Experience:
37 Years

RELEVANT MARINE CONSTRUCTION EXPERIENCE

- Foundations
- Cofferdams
- New bridge structures
- Heavy lifts
- Demolition of wharves, cofferdams, bridge structures, etc.
- Pipe laying

RELEVANT PROJECT EXPERIENCE

Project Name: YBITS2 – Bay Bridge East Span Cantilever Truss Demolition and Yerba Buena Island Transition Structures Phase 2, San Francisco, California
Project Number: 04-0120T4 Project Dates: April 2014 to Present
Project Role: Marine Superintendent Time on Job: 100%
Owner Contact: Bill Howe / (510) 385-7084 / William_Howe@dot.ca.gov

Project Description: YBITS 2 – Demolition of cantilever truss and temporary bypass structure, construction of Yerba Buena Island transition structures Phase 2, including extension of bike path to island and permanent on-ramp structure.

Project Responsibilities: Duties included acquiring marine equipment for use on the project and pile driving, directing installing and removing temporary supports for main bridge span demolition.

Project Name: San Francisco-Oakland Bay SAS Bridge
Project Number: 04-0120F4 Project Dates: November 2006 – April 2013
Project Role: Marine Superintendent Time on Job: 100%
Owner Contact: Bill Casey / (510) 455-1798 / bill.casey@dot.ca.gov

Project Description: Construction of the self-anchored suspension bridge.

Project Responsibilities: Duties included overseeing the assembling of the crane barges, and preparing recommendations for all anchoring gear and spuds for mooring on the project. Supervised and managed assembly and subsequent disassembly of temporary supports and falsework for self-anchored suspension span. Assisted in constructing an American Bureau of Shipping (ABS)-certified 400-foot by 99-foot by 22-foot barge for the 1,750 MT shearleg (one of the largest floating cranes in the U.S.). Tasks also included the movement of all marine equipment in a fleet of 36 barges, including the piloting of the shearleg in San Francisco Bay.

Project Name: Retrofit Richmond-San Rafael Bridge
Project Number: 04-0438U4 Project Dates: 2001 - 2006
Project Role: General Marine Supt. Time on Job: 100%
Owner Contact: Inyang Usen / (916) 651-6894 / inyang_use@dot.ca.gov

Project Description: Seismic retrofit of Richmond-San Rafael Bridge (superstructure, towers, and foundations).

Project Responsibilities: Duties included supervision of marine construction activities, including removal and reconstruction of the access trestle, coordination of all barge and crane movements, transportation of crews, and the logistics of on- and off-site tug related supply deliveries. The project involved the use of 48 barges and 8 boats. Was the contact person for U.S. Coast Guard and Vessel Traffic, which involved writing correspondence for the Joint Venture out-of-channel and in-channel anchoring, work permits and design of mooring buoys for on-site supply barges. The on-site dive operation was coordinated through his office to organize crane needs. Four diving operations were performed daily. Managed site lay down yard and supervised 100 personnel on a 24-hour operation.

Project Name: Retrofit San Mateo Bridge
Project Number: 04-0436V4 Project Dates: 1997 - 2001
Project Role: General Marine Supt. Time on Job: 100%
Owner Contact: Helena Culik Caro / (510) 286-5759 / Helena.Lenka.Culik-Caro@dot.ca.gov

Project Description: Seismic retrofit of San Mateo Bridge (high-rise section).

Project Responsibilities: Duties included supervision of marine construction activities, coordination of all barge movements and anchor placements, transportation of crews, and logistics of supply deliveries. Contact person for U.S. Coast Guard and Vessel Traffic and involvement in the high-work deck placements and coffer dam design. The San Mateo Bridge project involved the use of 26 pieces of marine equipment, including boats. All marine crews were under Mike's supervision.

<u>Project Name:</u>	Boston Third Harbor Tunnel Project		
<u>Project Number:</u>	N/A	<u>Project Dates:</u>	1992 - 1995
<u>Project Role:</u>	Marine Superintendent	<u>Time on Job:</u>	100%
<u>Owner Contact:</u>	No available contact		

Project Description: Construction for placement of 12 325-foot by 80-foot by 40-foot, 32,000-ton, twin-bore tunnel sections placed across the bottom of the Boston Inner Harbor. This was a joint venture project with Interbeton, J.F. White, and Morrison-Knudsen.

Project Responsibilities: Duties included planning and supervising all phases of marine operations in the construction and placement of the 12 twin bore tunnel sections; supervision of the lay barge crew and divers; and coordination of all tug and barge movements.

APPENDIX B

Legal Documents



STATE OF CALIFORNIA

Contractors State License Board

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code
and the Rules and Regulations of the Contractors State License Board,
the Registrar of Contractors does hereby issue this license to:

CALIFORNIA ENGINEERING CONTRACTORS INC / SILVERADO CONTRACTORS INC A JOINT VENTURE

License Number 973262

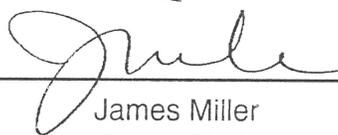
to engage in the business or act in the capacity of a contractor
in the following classification(s):

A - GENERAL ENGINEERING CONTRACTOR

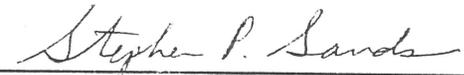
Witness my hand and seal this day,

May 25, 2012

Issued May 24, 2012



James Miller
Board Chair



Stephen P. Sands
Registrar of Contractors

This license is the property of the Registrar of Contractors,
is not transferrable, and shall be returned to the Registrar
upon demand when suspended, revoked, or invalidated
for any reason. It becomes void if not renewed.

Date of this notice: 10-24-2012

Employer Identification Number:
46-1257982

Form: SS-4

Number of this notice: CP 575 B

CALIF ENGINEERING CONTRACTORS
INC-SILVERADO CONTRACTORS INC A JV
WAHID TADROS GEN PTR
20 HAPPY VALLEY RD
PLEASANTON, CA 94566

For assistance you may call us at:
1-800-829-4933

IF YOU WRITE, ATTACH THE
STUB AT THE END OF THIS NOTICE.

WE ASSIGNED YOU AN EMPLOYER IDENTIFICATION NUMBER

Thank you for applying for an Employer Identification Number (EIN). We assigned you EIN 46-1257982. This EIN will identify you, your business accounts, tax returns, and documents, even if you have no employees. Please keep this notice in your permanent records.

When filing tax documents, payments, and related correspondence, it is very important that you use your EIN and complete name and address exactly as shown above. Any variation may cause a delay in processing, result in incorrect information in your account, or even cause you to be assigned more than one EIN. If the information is not correct as shown above, please make the correction using the attached tear off stub and return it to us.

Based on the information received from you or your representative, you must file the following form(s) by the date(s) shown.

Form 1065

04/15/2013

If you have questions about the form(s) or the due date(s) shown, you can call us at the phone number or write to us at the address shown at the top of this notice. If you need help in determining your annual accounting period (tax year), see Publication 538, *Accounting Periods and Methods*.

We assigned you a tax classification based on information obtained from you or your representative. It is not a legal determination of your tax classification, and is not binding on the IRS. If you want a legal determination of your tax classification, you may request a private letter ruling from the IRS under the guidelines in Revenue Procedure 2004-1, 2004-1 I.R.B. 1 (or superseding Revenue Procedure for the year at issue). Note: Certain tax classification elections can be requested by filing Form 8832, *Entity Classification Election*. See Form 8832 and its instructions for additional information.

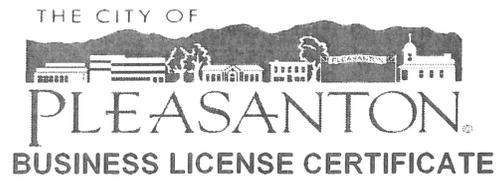
A limited liability company (LLC) may file Form 8832, *Entity Classification Election*, and elect to be classified as an association taxable as a corporation. If the LLC is eligible to be treated as a corporation that meets certain tests and it will be electing S corporation status, it must timely file Form 2553, *Election by a Small Business Corporation*. The LLC will be treated as a corporation as of the effective date of the S corporation election and does not need to file Form 8832.

To obtain tax forms and publications, including those referenced in this notice, visit our Web site at www.irs.gov. If you do not have access to the Internet, call 1-800-829-3676 (TTY/TDD 1-800-829-4059) or visit your local IRS office.

NON TRANSFERABLE

LICENSE NUMBER

1007979



BUSINESS ADDRESS

20 HAPPY VALLEY RD

TYPE OF BUSINESS

OWNER

GENERAL CONTRACTOR/ENGINEER

BUSINESS NAME

CA ENG CONTRACTORS/SILVERADO JOINT VENTURE

ATTN:

MAILING

20 HAPPY VALLEY RD

ADDRESS

PLEASANTON, CA 94566-9792

**EXPIRATION
12/31/2014**

POST IN CONSPICUOUS PLACE