

**SUBMITTAL TO THE BOARD OF DIRECTORS OF THE  
REDEVELOPMENT AGENCY  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

536



**FROM:** Redevelopment Agency

**SUBMITTAL DATE:**  
January 11, 2012

**SUBJECT:** El Cerrito Road Improvement Project – Fourth Amendment to Engineering Services Agreement

**RECOMMENDED MOTION:** That the Board of Directors ratify and authorize the Chairman to execute the Fourth Amendment to the Engineering Services Agreement between Krieger and Stewart, Incorporated and the Redevelopment Agency for additional design and engineering services and construction administration in the amount of \$581,698.

**BACKGROUND:**

On March 26, 2002, the Board of Directors entered into an Engineering Services Agreement with Krieger and Stewart, Incorporated for engineering and design of the El Cerrito Road and Storm Drain Improvement Project.

(Continued)

*Lisa Brandl for*

Robert Field  
Executive Director  
by Lisa Brandl, Managing Director

<b>FINANCIAL DATA</b>	Current F.Y. Total Cost:	\$ 581,698	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2011/12

**COMPANION ITEM ON BOARD OF SUPERVISORS AGENDA:** No

<b>SOURCE OF FUNDS:</b> I-1986 Redevelopment Project Area Capital Improvement Funds - El Cerrito Sub Area 70% and Riverside County Flood Control and Water Conservation District 30%	Positions To Be Deleted Per A-30	<input type="checkbox"/>
	Requires 4/5 Vote	<input type="checkbox"/>

**C.E.O. RECOMMENDATION:** APPROVE

BY: *Jennifer L. Sargent*  
Jennifer L. Sargent

**County Executive Office Signature**

FISCAL PROCEDURES APPROVED  
 PAUL ANGULO, CPA, AUDITOR-CONTROLLER  
 BY: *Samuel Wong* 1/17/12  
 DATE: 1/17/12  
 SAMUEL WONG  
 FORM APPROVED COUNTY COUNSEL  
 BY: *Marsha L. Victor* 1/17/12  
 MARSHA L. VICTOR

Dept's Recomm.:  Consent  Policy   
 Per Exec. Ofc.:  Consent  Policy

Prev. Agn. Ref.: 3.47 of 6/28/11, 4.1 of 5/3/11

District: 2

Agenda Number: **4.3**

ATTACHMENTS FILED  
WITH THE CLERK OF THE BOARD

**BACKGROUND:** (Continued)

The original project design consisted of street and storm drain improvements between Interstate 15 and Temescal Canyon Road in the unincorporated community of El Cerrito. The street improvements included curb, gutter, and sidewalks. The storm drain improvements included 10-year storm facilities accomplished through replacing the existing open channel with closed conduit of equal capacity.

The Redevelopment Agency for the County of Riverside has entered into three previous Amendments to the Engineering Services Agreement with Krieger and Stewart, Incorporated for the El Cerrito Road Improvement project. The First Amendment, entered into on October 31, 2003, extended the contract duration to allow adequate time to complete the original scope of work. The Second Amendment, entered into on January 27, 2004, increased the contract value to provide additional design services to include: a Marilyn Drive Storm Drain, Street Light Plans, LMD Formation Consulting, and Street Cross Sections. The Third Amendment, entered into on September 4, 2007, increased the contract to provide design engineering services necessary to increase the storm facilities from 10-year to regional 100-year flood requirements (including re-design of street improvement to accommodate same) together with engineering services related to: securing all project-related environmental and regulatory compliance and permits; preparing and processing all project-related rights-of-way; and preparing all hydrology and hydraulic studies for all evaluated storm facility options.

The Fourth Amendment is made necessary and is in connection with the construction of the El Cerrito Road Street Improvement Project, as being constructed by Riverside Construction Company, Inc. Services rendered within the Krieger & Stewart Fourth Amendment are for services not included within the original Consulting Services Agreement and subsequent amendments, but for services required to maintain the construction contract with Riverside Construction Company, Inc. The Fourth Amendment to the Agreement is an enforceable obligation as the construction agreement with Riverside Construction Company, Inc. was awarded on June 28, 2011, a date prior to the enactment of ABx1 26 and ABx1 27, the Assembly bills regarding redevelopment that were signed by Governor Brown on June 29, 2011. The Agency obligated itself to cooperate with the contractor as appropriate to facilitate, without undue delay, the work to be performed under the agreement for the construction of the El Cerrito Road Street Improvement Project. The construction agreement provides that the Agency will take actions needed on its part for the performance of the work, including, but not limited to, engineering, construction inspection and administration as needed.

Agency staff recommends that the Board approve the Fourth Amendment to the Engineering Services Agreement between Krieger and Stewart, Incorporated and the Redevelopment Agency for the additional services required to complete the project. The Agency will be partially reimbursed for the additional costs from Flood Control.



1           **WHEREAS**, further modifications to the scope of the project to meet Riverside County  
2 Flood Control and Water Conservation District and Riverside County Transportation and Land  
3 Management Agency requirements were required, and the project improvements will now  
4 include a traffic signal at Evelyn Street. Additional engineering services were required to revise  
5 street improvement plans, create street signage and striping plans, provide additional  
6 hydrology studies for evaluating alternative construction materials for storm facilities, and make  
7 modifications to the construction drawings per Riverside County Flood Control and Water  
8 Conservation District for funding compliance. The changes to the original scope requires  
9 additional construction administration services for an additional 52 weeks; and

10           **WHEREAS**, the additional fee for those services are Five Hundred Eighty One  
11 Thousand, Six Hundred Ninety Eight Dollars (\$581,698); and

12           **WHEREAS**, the Fourth Amendment is made necessary and is in direct connection to the  
13 construction of the El Cerrito Road Street Improvement Project, as being constructed by  
14 Riverside Construction Company, Inc. Services rendered within the Krieger & Stewart Fourth  
15 Amendment are for services not included within the original Consulting Services Agreement and  
16 subsequent amendments, but includes services required to complete the construction of the  
17 project by Riverside Construction Company, Inc.; and

18           **WHEREAS**, the Fourth Amendment to the Agreement is an enforceable obligation, as  
19 the construction agreement with Riverside Construction Company, Inc. was awarded on June  
20 28, 2011, a date prior to the enactment of ABx1 26 and ABx1 27, the Assembly bills regarding  
21 redevelopment that were signed by Governor Brown on June 29, 2011, wherein the Agency  
22 obligated itself to cooperate with the contractor as appropriate to facilitate, without undue delay,  
23 the work to be performed under the agreement for the construction of the El Cerrito Road Street  
24 Improvement Project. The construction agreement provides that the Agency will take actions  
25 needed on its part for the performance of the work, including, but not limited to, engineering,  
26 construction inspection and administration as needed.

27 *///*

28 *///*

1           **NOW, THEREFORE**, in consideration of the foregoing and providing that all other  
2 sections not amended remain intact, the parties hereto do hereby agree as follows effective  
3 July 2008:

4           **A.** Section 1 of the Agreement is hereby amended in its entirety to read as follows:

- 5           1. **SCOPE OF WORK.** Consultant will provide complete engineering services, full-time  
6 construction management, and administration services for the design and  
7 construction along El Cerrito road from Interstate 15 to Temescal Canyon through  
8 the completion of Project construction. Consultant's services shall include those  
9 detailed within the Agreement, First Amendment, Second Amendment, Third  
10 Amendment, and all exhibits thereto, and the Fourth Amendment, including "Exhibit  
11 A-2" attached thereto and incorporated therein.

12           **B.** Section 2 of the Agreement is hereby amended in its entirety to read as follows:

- 13           2. **COMPENSATION AND METHOD OF PAYMENT.** Consultant's compensation for  
14 work associated with the Agreement, First Amendment, Second Amendment, Third  
15 Amendment, and Fourth Amendment shall be an amount for actual work performed  
16 not-to-exceed One Million, Sixty Nine Thousand, Six Hundred Ninety Eight Dollars  
17 (\$1,069,698). Consultant will bill monthly for actual work performed.

18           **C.** Section 3 of the Agreement is hereby amended in its entirety to read as follows:

- 19           3. **TIME OF PERFORMANCE.** The Consultant agrees that it will diligently and  
20 responsibly pursue the performance of the services required of it by this Agreement  
21 and subsequent Amendments, and will deliver the work product and services  
22 aforementioned through completion of construction, or March 31, 2013 whichever  
23 occurs first.

24 ///

25 ///

26 ///

27

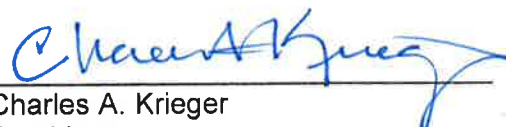
28

1           **IN WITNESS WHEREOF**, the Consultant and the Agency have executed this Fourth  
2 Amendment as of the date first above written.

3  
4 **REDEVELOPMENT AGENCY FOR**  
5 **THE COUNTY OF RIVERSIDE**

**KRIEGER AND STEWART, INC.**

6  
7 \_\_\_\_\_  
8 John Tavaglione, Chairman  
9 Board of Directors

10   
11 \_\_\_\_\_  
12 Charles A. Krieger  
13 President

14  
15 **APPROVED AS TO FORM:**  
16 Pamela J. Walls  
17 County Counsel

18   
19 \_\_\_\_\_ 1/17/12  
20 Deputy

21  
22 **ATTEST:**  
23 Kecia Harper-Ihem  
24 Clerk of the Board

25  
26 \_\_\_\_\_  
27 Deputy

June 14, 2011

**EXHIBIT A-2** 807-30.1A

Dane Winkelman, Facilities Project Manager III  
Redevelopment Agency for the County of Riverside  
3403 Tenth Street, Suite 500  
Riverside, CA 92501

Subject: El Cerrito Road Improvement Project  
Fourth Amendment to Agreement for Engineering Services

Dear Mr. Winkelman:

Pursuant to discussions with the Redevelopment Agency for the County of Riverside (Agency), we have prepared the attached **Exhibit A2** that outlines our proposed amendment to our existing Engineering Services Agreement for the El Cerrito Road Improvement Project related to supplemental design engineering services and revised construction engineering services. We understand that **Exhibit A2** will be used in preparation of a fourth amendment to our original engineering services agreement. A discussion of the supplemental design engineering services and construction engineering services is set forth below.

**Supplemental Services**

Krieger & Stewart has provided supplemental design engineering services resulting from modification of the project's requirements to integrate subject project with the Agency's adjacent El Cerrito Sports Park Facilities Improvement Project, including coordination with the Agency's park design engineer; addition of traffic signal, interim signage, and striping plans; and update of street improvement plans.

Krieger & Stewart has also provided supplemental design engineering services related to Riverside County Flood Control & Water Conservation District (RCFC&WCD) requests for Krieger & Stewart to provide bulking studies; cost estimates for alternative storm drain facilities; preparation, coordination, and inclusion of RCFC&WCD Special Provisions into the Project Specifications; and participation in development of a cooperative agreement between the Agency, RCFC&WCD, and Riverside County Transportation Department (RCTD).

Specific work related to these supplemental design engineering services is set forth in **Exhibit A2**. The total associated fee for the described supplemental services is \$246,000.

**Construction Engineering Services**

Our original Engineering Services Agreement included construction engineering services which were estimated to be required over a 12-week construction period. Based on the increase in scope and complexity of the project, the contract documents now specifies a 52-week construction period. An amended description of the specific work related to construction engineering services (including full

Dane Winkelman  
June 14, 2011  
Page 2

time inspection) is set forth in **Exhibit A2**. The total associated fee for the described construction engineering services is \$413,000. Krieger & Stewart's current agreement includes a budget amount of \$77,302. Therefore, the amended fee for construction services is \$335,698 (\$413,000-\$77,302).

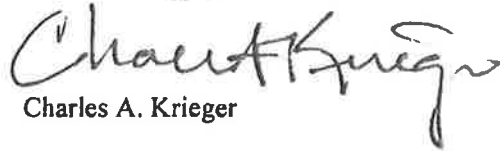
We look forward to executing an amendment to our existing professional services agreement for said project. Please call if you have any questions or require any additional information.

Sincerely,

KRIEGER & STEWART



Daniel K. Jagers



Charles A. Krieger

DKJ:JRB/blt/jcb  
807-30P1-ADD SVCS

Attachments: Exhibit A2- Amendment to Engineering Services Agreement  
Table 1A - Estimated Fee for Supplemental Engineering Services (Amendment 4)  
Table 1B - Estimated Fee for Construction Engineering Services (Amendment 4)  
Appendix A - Description of Supplemental Engineering Services  
2011 Fee Schedule



**EXHIBIT A-2**

**FOURTH AMENDMENT TO  
ENGINEERING SERVICES AGREEMENT FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

The El Cerrito Road Improvement Project consists of the construction of storm drain and street improvements along El Cerrito Road, between Interstate 15 and Temescal Canyon Road/Ontario Avenue. Said improvements generally include sidewalks, curb and gutter, traffic signal modifications, storm drain improvements, street re-construction, and asphalt concrete overlays for existing street widths.

Krieger & Stewart's original agreement with the Agency provided construction engineering services for an estimated construction timeline of 12 weeks. The current estimated construction period (due to project phasing and complexity) is now estimated to be 52 weeks.

Construction engineering services required by the Agency consist of conducting preconstruction meeting, reviewing contractor's materials submittals, providing construction staking, processing requested payments by contractor, and evaluating change order requests. Construction engineering services will also include contract administration services to ensure the project proceeds in accordance with the Contract Documents, including: conducting weekly progress review meetings with Agency staff and the contractor; resolving complaints, concerns and questions from businesses, residents, and affected agencies; performing daily construction inspections (including weekly site visits by the Project Engineer); and performing final inspection. Finally, construction engineering services will include preparing record drawings.

In addition to requesting an amendment related to the scope of our construction engineering services, we have also provided supplemental engineering services during the course of preparing construction documents for the El Cerrito Road Improvement Project and request that our existing agreement be amended to include said services. These supplemental engineering services are described in **Section A**, hereafter.

**A. SUPPLEMENTAL ENGINEERING AND CONTRACT DOCUMENT PREPARATION SERVICES**

Krieger & Stewart provided supplemental engineering services during the course of the project necessary to support project changes over the course of the project. These services are generally related to multiple Contract Document revisions necessary to incorporate project phasing schemes (three separate revisions) identified by the Agency to accommodate the proposed (and subsequently constructed) El Cerrito Sports Park improvements which resulted in three extensive revisions to street improvement, street signing and striping plans, and storm drain plans; preparation of construction drawings for Evelyn Street Traffic Signal; preparation of a technical memorandum related to storm water debris study and cost estimates for alternative storm drain construction materials (i.e. three storm drain height alternatives); modifications to Contract Documents to satisfy Riverside County Flood Control & Water Conservation District (RCFC&WCD) requirements (precipitated by RCFC&WCD funding participation); modifications to project street improvement, signing and striping, and storm drain drawings

**EXHIBIT A-2**

**FOURTH AMENDMENT TO  
ENGINEERING SERVICES AGREEMENT FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

necessary to incorporate Agency agreements with property owners in return for right-of-way acquisition; and preparation for and attendance of meetings with Agency staff, RCTD staff, and RCFC&WCD staff regarding cost sharing and project MOU agreement preparation.

Supplemental engineering services components are generally described hereafter, as listed in **Table 1A**, and as specifically described in **Appendix A**.

1. Revision of Street Improvement, Signing and Striping, and Storm Drain Construction Drawings to Include Offsite El Cerrito Sports Park Facilities Improvements
2. Preparation of Evelyn Street Traffic Signal Construction Documents (Plans and Specifications)
3. Preparation of Tributary Drainage Area Debris Production and Storm Water Bulking Study Technical Memorandum
4. Preparation of Project Cost Estimates for Three Storm Drain Construction Alternatives for RCFC&WCD Use in Determining Revised Storm Drain Construction Requirements (Storm Drain Height)
5. Revision of Hydrology and Hydraulics Report to Incorporate Additional Drainage Areas and to Separate Report into Multiple Volumes as Requested by RCFC&WCD
6. Revision of Approved Street Improvement, Signing and Striping, and Storm Drain Construction Drawings and Specifications to Provide for Phasing of Project Work to Accommodate Park Facilities Improvements Construction Schedule
7. Revision of Approved Street Improvement Construction Drawings and Storm Drain Construction Drawings to Address Elevation Conflicts Between Existing Storm Drain and Park Facilities Improvements
8. Revision of Storm Drain Improvement Construction Drawings Due to Conflicts Between Existing Storm Drain and Park Facilities Improvements
9. Revision of Approved Street Improvement Construction Drawings Required by RCFC&WCD (Subsequent to Approval) to Show Catch Basin Construction on Storm Drain Construction Drawings
10. Revision of Storm Drain Improvement Construction Drawings, Revision of Specifications, and Preparation of Cost Estimates Related to Use of Precast Reinforced

**EXHIBIT A-2**

**FOURTH AMENDMENT TO  
ENGINEERING SERVICES AGREEMENT FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

Concrete Box Storm Drain and Connection to Proposed RCFC&WCD Ontario Avenue Storm Drain Project

11. Additional Revision of Approved Street Improvement Construction Drawings and Revision of Specifications Due to Agreements with Private Property Owners to Acquire Right-of-Way
12. Revision of Storm Drain Improvement Construction Drawings and Specifications Due to Addition of Future Traffic Signal Project at the Intersection of El Cerrito Road and Temescal Canyon Road
13. Revision of Specifications Due to RCFC&WCD Requests to Incorporate RCFC&WCD Special Provisions into the Contract Documents
14. Participate in Preparation of Cost Sharing and Maintenance Agreement Between Agency, RCFC&WCD, and RCTD

**B. CONSTRUCTION ENGINEERING SERVICES**

The following section details the scope of our proposed construction services:

1. Bidding Services
2. Submittals Review
3. Preconstruction Meeting
4. Construction Survey and Staking
5. Payment Requests
6. Contract Administration
7. Compaction Testing (to be performed by others)
8. Final Inspection
9. Record Drawings
10. Warranty Inspection

Each component is discussed in greater detail as follows:

**1. Bidding Services**

It is our understanding that the Agency will provide all bidding services related to bid advertising and bid document distribution. Krieger & Stewart will provide bid phase support services related to answering all questions and preparation of any required addenda.

**EXHIBIT A-2**

**FOURTH AMENDMENT TO  
ENGINEERING SERVICES AGREEMENT FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

**2. Submittals Review**

We will review and approve all materials submittals related to the street and storm drain improvements. We expect submittal documents to be received for the construction schedule, storm water pollution prevention plan, traffic control plans, concrete, asphalt concrete pavement, base material, street light appurtenances, slurry seal materials, street striping materials, and storm drain materials. A submittal log will be maintained indicating when submittals were received, when submittals were returned, and status of each submittal. Once submittals are approved, they will be signed, dated, and returned to Contractor. Copies of all submittals will be provided to the Agency.

**3. Preconstruction Meeting**

We will attend the preconstruction meeting which will be conducted by Agency staff, Krieger & Stewart's Project Manager and key team members, the Contractor, representatives of the Riverside County Transportation Department (RCTD), Riverside County Flood Control and Water Conservation District (RCFC&WCD), City of Corona (Corona), and affected utilities. The preconstruction meeting will provide all parties with the opportunity to review the Contract Documents prior to starting work. Following said meeting, we will prepare a memorandum record of the meeting minutes to be distributed to all parties that attended the meeting.

**4. Construction Survey and Staking**

We will provide construction staking for Contractor to properly locate the horizontal position of all driveways, streetlights, and angle points of proposed sidewalks as shown on the Construction Drawings. In addition, we will provide construction staking (alignment and elevation) for curb returns, concrete gutters, and storm drain facilities at offsets requested by Contractor. We will place construction stake information on the cut sheets and mark it in the field, and will then provide copies of the cut sheets to Agency staff and the Contractor.

Other surveying services that may be required include locating/staking right-of-way and existing utility surveying (potholing) and relocation staking.

In addition, we will reference (tie out) any monuments (that may be damaged or disturbed during construction) to existing permanent facilities to facilitate their replacement. Should these monuments be destroyed or disturbed during construction, we will advise the Agency of the actual number of monuments requiring resetting (filing of

**EXHIBIT A-2**

**FOURTH AMENDMENT TO  
ENGINEERING SERVICES AGREEMENT FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

corner records upon resetting of the monuments must be performed in accordance with the Professional Land Surveyors Act and the Riverside County Surveyor's requirements).

**5. Payment Requests**

Each month, we will review the construction payment requests submitted by the contractor for work completed. We will review the work completed and payment requests with Contractor and RCFC&WCD staff (as necessary) to ensure that the quantities and amounts requested reflect the actual work completed. After each request has been reviewed (and revised if necessary), we will approve it and send it to Agency and RCFC&WCD staffs for approval and payment. We will also submit a monthly status report with each payment request.

**6. Contract Administration**

**a. Office Related Services**

Throughout the course of construction, we will respond to inquiries regarding the Contract Documents in order to ensure that the storm drain and street improvements and related facilities are constructed in compliance with same. Our construction manager will work closely with our field inspector, the Contractor, Agency, RCTD, RCFC&WCD, and Corona to promptly address all matters arising during construction. Our construction engineering activities will include progress reviews to ensure that the project is proceeding according to schedule, progress reviews with Agency staff, and related services.

We will review any change order request received to determine if said request is warranted. If the change order request is not warranted, we will reject same in writing; prior to sending rejection letters to the Contractor, we will review same with Agency staff. If the change order request is justified, we will review it with Agency staff and RCFC&WCD staff (if related to storm drain work), and receive Agency approval, and RCFC&WCD (as necessary) approval, prior to preparing and processing the contract change order in a timely manner.

Project progress and any changes during construction will be noted on a set of the project's Contract Documents maintained in our office. If a problem occurs requiring an Agency or RCFC&WCD decision, we will consult with Agency and RCFC&WCD staffs. We will attempt to resolve complaints, concerns, and questions from residents and other affected agencies as they arise.

**EXHIBIT A-2**

**FOURTH AMENDMENT TO  
ENGINEERING SERVICES AGREEMENT FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

Please note that our fee proposal is predicated on a number of specific understandings regarding project details and services required, and that our fees and/or schedule may have to be adjusted in the event that certain additional services are required in order to successfully complete the project. Said understandings include the following:

1. We have estimated the required duration for providing Krieger & Stewart's construction engineering services (i.e. administration period) at 52 weeks or about 12 months. It is anticipated that street improvement construction, storm drain improvement construction, and project closeout will require 27 weeks, 22 weeks and 3 weeks respectively.
2. Construction staking will be scheduled to allow a minimum of one full day of construction staking for each trip to the site. Additional trips have been allocated to account for the proposed phasing of storm drain construction that is necessary to ensure the existing storm drain remains functional during construction. Construction staking will be required for all proposed curb and gutter and for storm drain improvements; our estimate is based on limited street grade stakes being required. Our estimate is based on providing construction staking at 25-foot intervals for the proposed curb and/or curb and gutter, and at 25-foot intervals (for flow line) and at all manholes, junction structures, and catch basins for the proposed storm drains.

If directed, we will reset the disturbed monuments and file an associated corner record with the Riverside County Surveyor for a lump sum fee of \$1,000 each. These costs are not included in our fee estimate, but can be deducted from the Contractor's work as specified in the Contract Documents.

3. Contract administration by Krieger & Stewart's project manager will require a maximum (average) of 2 hours per week for the 52-week administration period. Contract administration by Krieger & Stewart's project engineer/assistant will require a maximum (average) of 10 hours per week for the 52-week administration period.
4. Construction inspection and site meetings by Krieger & Stewart's project engineer/assistant and construction inspector will require a maximum (average) of 4 hours and 40 hours per week respectively for the 27-week administration period required for the street improvements.

For the 22-week storm drain construction period, construction inspection and site meetings by Krieger & Stewart's project engineer and construction inspector will require a maximum (average) of 4 hours and 40 hours per week respectively.

**EXHIBIT A-2**

**FOURTH AMENDMENT TO  
ENGINEERING SERVICES AGREEMENT FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

For the 3-week project closeout period, construction inspection and site meetings by Krieger & Stewart's project engineer/assistant and construction inspector will require a maximum (average) of 4 hours and 8 hours per week respectively.

5. Final inspection will require a maximum of 8 hours.

For our construction engineering services, our fee estimates are based on our experience with similar projects; however, our actual fee for construction engineering services will depend on the efficiency, competence, and diligence of the Contractor.

**TABLE 1A  
ECONOMIC DEVELOPMENT AGENCY FOR THE COUNTY OF RIVERSIDE  
EL CERRITO ROAD IMPROVEMENT PROJECT  
ESTIMATED FEE FOR SUPPLEMENTAL ENGINEERING SERVICES (AMENDMENT 4)**

COMPONENT	TOTAL \$
<b>A. SUPPLEMENTAL ENGINEERING SERVICES</b>	
1. Revision of Street Improvement, Signing and Striping, and Storm Drain Construction Drawings to Include Offsite El Cerrito Sports Park Facilities Improvements	20,000
2. Preparation of Evelyn Street Traffic Signal Construction Documents (Plans and Specifications)	30,000
3. Preparation of Tributary Drainage Area Debris Production and Storm Water Bulking Study Technical Memorandum	22,500
4. Preparation of Project Cost Estimates for Three Storm Drain Construction Alternatives for RCFC&WCD Use in Determining Revised Storm Drain Construction Requirements (Storm Drain Height)	22,000
5. Revision of Hydrology and Hydraulics Report to Incorporate Additional Drainage Areas and to Separate Report into Multiple Volumes as Requested by RCFC&WCD	17,000
6. Revision of Approved Street Improvement, Signing and Striping, and Storm Drain Construction Drawings and Specifications to Provide for Phasing of Project Work to Accommodate Park Facilities Improvements Construction Schedule	16,000
7. Revision of Approved Street Improvement Construction Drawings to Address Elevation Conflicts Between Existing Storm Drain and Park Facilities Improvements	19,000
8. Revision of Storm Drain Improvement Construction Drawings Due to Conflicts Between Existing Storm Drain and Park Facilities Improvements	10,000
9. Revision of Approved Street Improvement Construction Drawings Required by RCFC&WCD (Subsequent to Approval) to Show Catch Basin Construction on Storm Drain Construction Drawings	3,000
10. Revision of Storm Drain Improvement Construction Drawings, Revision of Specifications, and Preparation of Cost Estimates Related to Use of Precast Reinforced Concrete Box Storm Drain and Connection to Proposed RCFC&WCD Ontario Avenue Storm Drain Project	26,000
11. Additional Revision of Approved Street Improvement Construction Drawings and Revision of Specifications Due to Agreements with Private Property Owners to Acquire Right-of-Way	21,000
12. Revision of Storm Drain Improvement Construction Drawings and Specifications Due to Addition of Future Traffic Signal Project at the Intersection of El Cerrito Road and Temescal Canyon Road	13,000
13. Revision of Specifications Due to RCFC&WCD Requests to Incorporate RCFC&WCD Special Provisions into the Contract Documents	21,000
14. Participate in Preparation of Cost Sharing and Maintenance Agreement Between Agency, RCFC&WCD, and RCTD	5,000
<b>NOT TO EXCEED TOTAL (ROUNDED):</b>	<b>\$246,000</b>



**TABLE 1B**  
**ECONOMIC DEVELOPMENT AGENCY FOR THE COUNTY OF RIVERSIDE**  
**EL CERRITO ROAD IMPROVEMENT PROJECT**  
**ESTIMATED FEE FOR CONSTRUCTION ENGINEERING SERVICES (AMENDMENT 4)**

COMPONENT	PROJECT MANAGER (1)		PROJECT ENGINEER (2)		PROJECT ASSISTANT (3)		CONSTRUCTION INSPECTOR (4)		CADD SERVICES (5)		CLERICAL (6)		SURVEYOR (7)		SURVEYING (8)		TOTAL	
	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$		\$
<b>B. CONSTRUCTION ENGINEERING SERVICES</b>																		
1. Bidding Phase	8	1,384	30	4,290	20	2,660											8,982	
2. Submittals Review			20	2,860	60	7,980											11,488	
3. Preconstruction Meeting			8	1,144			8	816									2,284	
4. Construction Staking																		
a. Street Improvements																		
b. Storm Drain Improvements																		
c. Prepare Cut Sheets																		
5. Payment and Change Order Requests					40	5,320							46	7,498	128	33,920	41,418	
6. Contract Administration													28	4,564	56	14,840	19,404	
a. Street Improvements	52	8,996	130	18,590	24	3,192											37,258	
b. Storm Drain Improvements	40	6,920	120	17,160	32	4,256											31,576	
c. Project Closeout	6	1,038	12	1,716	16	2,128											5,206	
7. Construction Inspection and Site Meetings																		
a. Street Improvements			70	10,010	24	3,192	1,080	110,160									124,668	
b. Storm Drain Improvements			50	7,150	24	3,192	880	89,760									103,342	
c. Project Closeout			12	1,716			24	2,448									4,164	
8. Final Inspection	2	346	8	1,144	4	532	8	816									3,162	
9. Record Drawings	2	346	12	1,716	40	5,320			40	4,660							12,062	
10. Warranty Inspection			8	1,144	4	532	4	408									2,246	
<b>SUBTOTAL:</b>	110	19,030	480	68,640	288	38,304	2,004	204,408	40	4,660	206	16,686	74	12,062	184	49,760	\$412,570	

**INCLUDED IN CONTRACT ADMINISTRATION**

UNIT FEE SCHEDULE		TOTAL (ROUNDED):	
(1) SENIOR ENGINEER III	@ \$173 /Hr	74	12,062
(2) ASSOCIATE ENGINEER III/ SURVEYOR II	@ \$143 /Hr	184	49,760
(3) STAFF ENGINEER III	@ \$133 /Hr		
(4) CONSTRUCTION INSPECTOR	@ \$102 /Hr		
(5) SENIOR OPERATOR III	@ \$117 /Hr		
(6) SENIOR SECRETARY II	@ \$81 /Hr		
(7) SENIOR SURVEYOR II	@ \$163 /Hr		
(8) 2-MAN CREW (W/ GPS EQUIPMENT)	@ \$265 /Hr		
<b>CURRENT AGREEMENT BUDGET AMOUNT:</b>			<b>\$413,000</b>
<b>ADJUSTED CONSTRUCTION SERVICES TOTAL (NOT TO EXCEED):</b>			<b>(\$77,902)</b>
			<b>\$336,898</b>

RESETTING OF STREET CENTERLINE MONUMENTS  
(Lump Sum Fee of \$1,000 each)

**APPENDIX A**

**DESCRIPTION OF SUPPLEMENTAL  
ENGINEERING SERVICES FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

**1. Revision of Street Improvement, Signing and Striping, and Storm Drain Construction Drawings to Include Offsite El Cerrito Sports Park Facilities Improvements**

Services provided by Krieger & Stewart relate to review and coordination of work prepared by KWC Engineers for the El Cerrito Sports Park Facilities and modifications to the Contract Drawings and Specifications for the El Cerrito Road Improvement Project as follows:

- a. General conferences, correspondence, and coordination with the Agency and KWC Engineers related to proposed improvements of El Cerrito Sports Park and impacts to the El Cerrito Road Improvement Project.
- b. Specific conferences, correspondence, and coordination with the Agency and KWC Engineers for coordination and review of park storm drain improvements and associated connections to the existing El Cerrito Road Storm Drain and future connection to the proposed storm drain improvements.
- c. Specific conferences, correspondence, and coordination with the Agency and KWC Engineers for coordination and review of park sewer improvements and associated connections to the existing El Cerrito Road sewer facilities and effects of possible deepened storm drain improvements to accommodate RCFC&WCD's request for a 7' high storm drain system.
- d. Specific conferences, correspondence, and coordination with the Agency, Riverside County Transportation Department (RCTD), and KWC Engineers for coordination and review of park street improvements and impacts to the El Cerrito Road Improvement Project, including coordination of street improvement plans and preparation of interim signing and striping plans.
- e. Revisions to Street Improvement Construction Drawings to incorporate El Cerrito Sports Park Facilities Improvements.
- f. Revisions to Storm Drain Improvement Construction Drawings and preparation of structural calculations to accommodate connection of a 42" storm drain outlet from El Cerrito Sports Park Facilities to El Cerrito Channel Stage 5. Structural calculations were required to support a connection that did not meet RCFC&WCD Standard Drawings.

**APPENDIX A**

**DESCRIPTION OF SUPPLEMENTAL  
ENGINEERING SERVICES FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

**2. Preparation of Evelyn Street Traffic Signal Construction Documents (Plans and Specifications)**

Services provided by Krieger & Stewart relate to review and coordination of work prepared by Albert A. Webb Associates, Inc. (Webb Associates) and subconsultant fees as follows:

- a. Specific conferences, correspondence, and coordination with the Agency, RCTD, and Webb Associates for preparation of permanent traffic signal plans.
- b. Specific conferences, correspondence, and coordination with the Agency, RCTD, and Webb Associates for revision to approved permanent traffic signal plans.
- c. Webb Associates' preparation of a permanent traffic signal plan for the intersection of El Cerrito Road and Evelyn Street and preparation of an interconnect plan between the existing traffic signal at the intersection of El Cerrito Road and Interstate 15 and the proposed traffic signal at the intersection of El Cerrito Road and Evelyn Street.
- d. Webb Associates' revision of RCTD approved traffic signal plan prepared per **Item 2.c.** to reflect new RCTD standards adopted after El Cerrito Park Project was completed.

**3. Preparation of Tributary Drainage Area Debris Production and Storm Water Bulking Study Technical Memorandum**

Services provided by Krieger & Stewart relate to RCFC&WCD requirement for Krieger & Stewart to perform a study of the El Cerrito Road tributary drainage area for analysis of debris production and storm water bulking to the storm drain system as follows:

- a. Preparation of El Cerrito Road drainage basin analysis for debris production potential and preparation of storm water bulking calculations for upstream (City of Corona) drainage area per RCFC&WCD's direction.
- b. Preparation of Technical Memorandum presenting bulking study information.

**APPENDIX A**

**DESCRIPTION OF SUPPLEMENTAL  
ENGINEERING SERVICES FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED**

**4. Preparation of Project Cost Estimates for Three Storm Drain Construction Alternatives for RCFC&WCD Use in Determining Revised Storm Drain Construction Requirements (Storm Drain Height)**

Services provided by Krieger & Stewart relate to RCFC&WCD requests for cost estimates associated with three alternative storm drain systems (sizes) to allow for RCFC&WCD to determine final storm drain sizing requirements as follows:

- a. Preparation of hydraulic calculations for three reinforced concrete box (RCB) storm drain alternatives consisting of: a 4'-high RCB system; a 4'- to 7'-high RCB system with varying height, and a 7'-high RCB system. Hydraulic calculations were necessary to provide preliminary sizes and lengths for each alternative storm drain system in order to prepare RCFC&WCD requested construction cost analyses.
- b. Assessment of preliminary utility interferences and associated relocation work necessary for installation of each storm drain alternative.
- c. Coordination and witnessing potholing activities of utilities and analyze results to determine actual utilities requiring relocation for each storm drain height alternative. This work was necessary to prepare accurate cost estimates for the alternatives required by RCFC&WCD due to the increased cost associated with utility conflict based on the height of said alternatives.
- d. Preparation of preliminary construction cost estimates for the three alternative storm drain systems outlined above.
- e. Preparation of Technical Memorandum presenting preliminary construction cost analyses for the three alternative storm drain systems outlined above.

**5. Revision of Hydrology and Hydraulics Report to Incorporate Additional Drainage Areas and to Separate Report into Multiple Volumes as Requested by RCFC&WCD**

Services provided by Krieger & Stewart relate to RCFC&WCD requests for additional analysis related to inclusion of additional drainage areas in the hydrology and hydraulic studies for the El Cerrito Channel Stage 5 Improvements, and restructuring of the Hydrology and Hydraulics Report as follows:

- a. Modification of hydrology study and hydraulic study subsequent to Krieger & Stewart's completion of drainage area study and hydraulic calculations to

## APPENDIX A

### DESCRIPTION OF SUPPLEMENTAL ENGINEERING SERVICES FOR EL CERRITO ROAD IMPROVEMENT PROJECT KRIEGER & STEWART, INCORPORATED

accommodate new (out of area) drainage areas added by RCFC&WCD to their Ontario Avenue Storm Drain Project, which is tributary to the El Cerrito storm drain system. Specifically, subsequent to submittal of our hydrology study to RCFC&WCD for review and acceptance, RCFC&WCD added new drainage areas to their proposed storm drain that are not historically tributary to the El Cerrito Storm Drain. RCFC&WCD directed Krieger & Stewart to update the hydrology and hydraulic studies to reflect this addition.

**6. Revision of Approved Street Improvement, Signing and Striping, and Storm Drain Construction Drawings and Specifications to Provide for Phasing of Project Work to Accommodate Park Facilities Improvements Construction Schedule**

Services provided by Krieger & Stewart relate to review and coordination of work prepared by KWC Engineers, Baxter Miller Landscape Architects (BMLA), and Webb Associates for the El Cerrito Sports Park Facilities and modifications to the Contract Documents for the El Cerrito Road Improvement Project as follows:

- a. Coordination with Webb Associates related to modification of traffic signal and interconnect plans (described in **Item 2.c.** above) to accommodate phased construction (required for park project).
- b. Preparation of interim signing and striping plan required to accommodate signal installation with park construction. Signal was proposed to be installed with park project and not with El Cerrito Road Improvement Project as previously directed by the Agency. It should be noted that the signal was not installed with the park project due to conflicts between existing storm drain and proposed park facilities improvements (see **Item 7.** below).
- c. Revisions to street improvement plans to provide phased construction of the El Cerrito Road Improvement Project. Creation of Street Improvement Drawing Sheet 4A detailing the construction of the south side of El Cerrito Road between the 15 Freeway and the east side of Evelyn. Said improvements were required by RCTD for the Park Improvement Project and agreed to by the Agency at a meeting on December 11, 2008. It should be noted that phased construction of the El Cerrito Road Improvement Project was subsequently not constructed due to conflicts between existing storm drain and proposed park facilities improvements (see **Item 7.** below) which prohibited street improvement construction.

## APPENDIX A

### DESCRIPTION OF SUPPLEMENTAL ENGINEERING SERVICES FOR EL CERRITO ROAD IMPROVEMENT PROJECT KRIEGER & STEWART, INCORPORATED

- d. Creation of Street Improvement Drawing Sheet 4B detailing Phase 2 construction of the El Cerrito Road Improvement Project (see **Item 7.** below).
  - e. Coordination with both KWC Engineers and BLMA regarding interconnection of park facilities with the El Cerrito Road Improvement Project.
7. **Revision of Approved Street Improvement Construction Drawings to Address Elevation Conflicts Between Existing Storm Drain and Park Facilities Improvements**

During construction of the proposed park improvements, the top of the existing RCB storm drain was found to be less than one foot below existing grade in front of the park improvements. The depth of the existing storm drain prevented the construction of the proposed street improvements in front of the park site. Subsequent to meetings with the Agency, RCTD, RCFC&WCD, KWC Engineers, BMLA, and the park site improvements contractor, it was concluded that the permanent street improvements in front of the park site would be constructed after the storm drain improvements. Consequently, the approved street improvement plans were revised again to eliminate the phased construction of the street improvements in El Cerrito Road.

Services provided by Krieger & Stewart relate to review and coordination of work prepared by KWC Engineers for the El Cerrito Sports Park Facilities and modifications to the Drawings and Specifications for the El Cerrito Road Improvement Project as follows:

- a. Specific conferences, correspondence, and coordination with the Agency, RCTD, RCFC&WCD, and KWC Engineers to prepare required revisions to the street improvement plans to address conflicts between existing storm drain and proposed Park facilities improvements.
- b. Creation of Street Improvement Drawing Sheets 3A and 4C (and voiding of Street Improvement Drawing Sheets 3, 4A and 4B) to remove phasing of El Cerrito Road Improvements and to show construction of north and south sides of El Cerrito Road between the 15 Freeway and the east side of Evelyn Street to be constructed with the El Cerrito Road Improvement Project
- c. Revision to the approved signing and striping plans for the El Cerrito Road Improvement Project to include signing and striping that was originally intended to be constructed with the proposed Park facilities improvements.

APPENDIX A

DESCRIPTION OF SUPPLEMENTAL  
ENGINEERING SERVICES FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED

**8. Revision of Storm Drain Improvement Construction Drawings Due to Conflicts Between Existing Storm Drain and Park Facilities Improvements**

Services provided by Krieger & Stewart relate to specific conferences, correspondence, and coordination with the Agency and RCFC&WCD and preparation of an additional sheet in the storm drain improvement plans to show the addition of approximately 150 lineal feet of 4'x8' RCB storm drain and removal of 150 lineal feet of existing 4'x8' RCB storm drain to lower storm drain enough to clear proposed street improvements in front of the El Cerrito Park. Work also included revising the Storm Drain Hydraulic Study to reflect the revised storm drain vertical alignment.

**9. Revision of Approved Street Improvement Construction Drawings (Mylars) Directed by RCFC&WCD to Show Catch Basin Construction on Storm Drain Construction Drawings**

Services provided by Krieger & Stewart relate to specific conferences, correspondence, and coordination with the Agency, RCFC&WCD and RCTD to show the construction of proposed catch basins on storm drain improvement plans and to revise the approved street improvement plans to reflect same.

**10. Revision of Storm Drain Improvement Construction Drawings, Revision of Specifications, and Preparation of Cost Estimates Related to Use of Precast Reinforced Concrete Box Storm Drain and Connection to Proposed RCFC&WCD Ontario Avenue Storm Drain Project**

Services provided by Krieger & Stewart relate to multiple revisions to storm drain plans and specifications necessary to address Agency direction to quickly construct storm drain improvements which impact local development (school and church).

- a. Specific conferences, correspondence, and coordination with the Agency and RCFC&WCD related to the use of precast RCB storm drain to construct upstream connections to existing storm drain and installation of pre-cast sections to provide quick access to existing developments (school and church) on the north side of El Cerrito Road during construction.
- b. Specific conferences, correspondence, and coordination with the Agency and RCFC&WCD related to downstream connection with proposed RCFC&WCD Ontario Avenue Storm Drain Project.

APPENDIX A

DESCRIPTION OF SUPPLEMENTAL  
ENGINEERING SERVICES FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED

- c. Revisions to Storm Drain Construction Drawings and Specifications to include Caltrans standard precast RCB as requested by RCFC&WCD.
  - d. Subsequent revisions to Storm Drain Construction Drawings and Specifications to allow RCFC&WCD to select cast-in-place or precast RCB after contract award (alternative bid item).
  - e. Subsequent revisions to Storm Drain Construction Drawings and Specifications to remove precast RCB storm drain from project after completion of **Item d.**, above (delete Bid Schedule IIA).
  - f. Coordination of storm drain downstream connection with RCFC&WCD's Ontario Avenue Storm Drain Project, including review of RCFC&WCD plans and preparation of connection detail drawing.
  - g. Revisions to Storm Drain Construction Drawings and Specifications to incorporate revised downstream connection to proposed RCFC&WCD Ontario Avenue Storm Drain Project, to accommodate revisions made by RCFC&WCD to Construction Drawings for said area.
  - h. Preparation of cost comparison for construction of pre-cast and cast in place RCB storm drain.
11. **Additional Revision of Approved Street Improvement Construction Drawings and Revision of Specifications Due to Agreements with Private Property Owners to Acquire Right-of-Way**

Services provided by Krieger & Stewart relate to specific conferences, correspondence, and coordination with the Agency, RCTD, Olive Branch Church officials, and El Cerrito Middle School officials, and modifications of the Contract Documents for the El Cerrito Road Improvement Project as follows:

- a. Specific conferences, correspondence, and coordination with the Agency, RCTD, Olive Branch Church officials, and El Cerrito Middle School officials for coordination and review of revisions to Contract Documents based on Agency agreements with property owners to acquire right of way, and specific schedule and access restrictions from school and church.
- b. Revisions to approved street improvement plans to show improvements negotiated by the Agency with local property owners as part of the right-of-way



## APPENDIX A

### DESCRIPTION OF SUPPLEMENTAL ENGINEERING SERVICES FOR EL CERRITO ROAD IMPROVEMENT PROJECT KRIEGER & STEWART, INCORPORATED

acquisition process. Improvements include: tubular steel fencing to be constructed on private property; removal/protection of existing private improvements, removal of proposed retaining walls along south side of El Cerrito Road; and a 16' drive approach from El Cerrito Road to APN 277-141-001 instead of the 32' drive approach originally shown on the approved street improvement plans.

- c. Preparation of new street improvement plans Construction Drawing Mylars to replace previously approved street improvement Construction Drawing Mylars necessary to accurately show final proposed street improvements.
  - d. Revisions to approved street improvement plans to eliminate right-of-way acquisition requirements from the private property owner at the southwest corner of the intersection of El Cerrito Road and Frances Street including redesign of the curb return and curb ramp to fit within the existing right-of-way. Said work was required to minimize impact to residential improvements at this location.
  - e. Specific conferences, correspondence with Agency and RCTD to provide recorded right-of-way documents to support the proposed right-of-way shown in the street improvement plans.
  - f. Revisions to Contract Specifications to detail tubular steel fencing improvements on private property and specific scheduling and access requirements of school and church.
12. **Revision of Storm Drain Improvement Construction Drawings Due to Addition of Future Traffic Signal Project at the Intersection of El Cerrito Road and Temescal Canyon Road**

Services provided by Krieger & Stewart relate to specific conferences, correspondence, and coordination with the Agency, RCFC&WCD, and RCTD and revisions to the storm drain improvement plans to reflect revisions to the catch basin at the intersection of El Cerrito Road and Temescal Canyon Road as needed to match the future traffic signal and street improvements proposed by RCTD for their future traffic signal project on Temescal Canyon Road.

APPENDIX A

DESCRIPTION OF SUPPLEMENTAL  
ENGINEERING SERVICES FOR  
EL CERRITO ROAD IMPROVEMENT PROJECT  
KRIEGER & STEWART, INCORPORATED

**13. Revision of Specifications Due to RCFC&WCD Request to Incorporate RCFC&WCD Special Provisions into the Contract Documents**

Services provided by Krieger & Stewart relate to specific conferences, correspondence, and coordination with the Agency and RCFC&WCD and revisions to the Bid Schedules, Special Requirements, and Basic and Technical Specifications sections of the Contract Specifications to incorporate the RCFC&WCD Special Provisions to describe storm drain work at the request of RCFC&WCD. RCFC&WCD originally directed Krieger & Stewart to follow the format of Specifications prepared for previous Agency projects that incorporated similar storm drain and street improvement work. Krieger & Stewart incorporated the relevant wording of the RCFC&WCD Special Provisions into the Special Requirements of the Contract Specifications. Subsequent to review of the Draft Specifications, RCFC&WCD directed Krieger & Stewart to revise the Contract Specifications to include the exact wording and format of the RCFC&WCD Special Provisions within the Basic and Technical Specifications section of the Contract Specifications, and required that the Bid Schedules for all storm drain work be revised to reflect the exact wording of the RCFC&WCD Special Provisions. We understand RCFC&WCD required Krieger & Stewart to revise the format of the Construction Specifications to ensure the clear understanding of work in a format they were familiar with due to their participation in project funding.

**14. Participate in Preparation of Cost Sharing and Maintenance Agreement Between Agency, RCFC&WCD, and RCTD**

Services provided by Krieger & Stewart include participation in additional meetings with Agency, RCFC&WCD, and RCTD; preparation of preliminary exhibits for use by RCFC&WCD to prepare final exhibits for Cost Sharing and Maintenance Agreement; and preparation of cost estimates for RCFC&WCD use in determining cost sharing between Agency and RCFC&WCD.

FEE SCHEDULE  
 2011

CLASSIFICATION	RATES \$/Hr.
<b>Consulting, Design, Construction, Engineering, Environmental, Geologic, and Surveying Services (Office)</b>	
Consultant	245.00
Principal III	224.00
Principal II	204.00
Principal I	184.00
Senior III	173.00
Senior II	163.00
Senior I	153.00
Associate III	148.00
Associate II	143.00
Associate I	138.00
Staff III	133.00
Staff II	117.00
Staff I	102.00
Technician III	87.00
Technician II	82.00
Technician I	77.00
<b>Forensic Services</b>	
Principal Expert:	
Testimony, Deposition, and Trial Investigation and Preparation	350.00
Investigation and Preparation	250.00
Associate Expert:	
Testimony, Deposition, and Trial Investigation and Preparation	325.00
Investigation and Preparation	225.00
<b>Computer Aided Design Services</b>	
Senior Operator III	117.00
Senior Operator II	111.00
Senior Operator I	105.00
Staff Operator III	100.00
Staff Operator II	91.00
Staff Operator I	86.00
<b>Surveying Services (Field)</b>	
2 Man Crew with Standard Equipment and Survey Truck	265.00
1 Man Crew with Standard Equipment and Survey Truck	230.00
3rd Man on Crew	117.00
<b>Construction Services (Field)</b>	
Engineer	133.00
Inspector	
Regular Time	102.00
Overtime	
Weekdays (8 hours to 12 hours)	123.00
Weekdays (More than 12 hours)	150.00
Saturday (12 hours or less)	123.00
Saturday (More than 12 hours)	150.00
Sunday and Holiday (Holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and the Day After, Christmas Day)	150.00

**FEE SCHEDULE  
2011  
(continued)**

<b>CLASSIFICATION</b>	<b>RATES \$/Hr.</b>
<b>Support Services</b>	
Senior Secretary II	81.00
Senior Secretary I	77.00
Staff Secretary II	71.00
Staff Secretary I	63.00
Utility Clerk II	59.00
Utility Clerk I	56.00
<b>Outside Services</b>	
Special Consultants and Purchased Services	Cost + 15%
<b>Reimbursable Expenses</b>	
Vehicle Mileage	0.72 \$/Mile
Travel and Subsistence, including Air Fare, Ground Fare, and Vehicle Parking	Cost
Specialized Rental Equipment	Cost
Copies, Delivery, Postage, Prints, Telephone, and Sundry Charges	Cost

The above rates are subject to change on or about January 1 each year due to salary and cost increases, except for Construction Inspector and Survey Crew rates which are also subject to change if California Department of Industrial Relations issues new prevailing wage determinations during the course of the year. A gasoline surcharge may be included in response to increased prices; no such surcharge will be included on project invoices without prior notification.

**TERMS OF PAYMENT:**

Unless charge accommodations have been established beforehand, all accounts shall be prepaid. For accounts having charge accommodations, payment in full shall be made within 30 days of date of invoice. Any amount unpaid within said 30 days will be assessed a service charge of 1-1/2% per month (18% annual percentage rate), with a minimum charge of \$1.00. Accounts with a past due balance of 30 days or more are subject, without notice, to credit discontinuance and mechanic's lien or stop notice. If it becomes necessary for Krieger & Stewart to initiate legal proceedings for the collection of any balance due, the action shall be brought and tried in the Judicial Districts wherein Krieger & Stewart offices are located. Client agrees that the court may award reasonable attorney's fees and costs of suit to the prevailing party.

2011-FEES (2/1/2011)