

AMENDMENT NO. 1
TO THE
AGREEMENT TO FURNISH ENGINEERING SERVICES
FOR
DESIGN OF CITRUS AVENUE AND ROOSEVELT ROAD
TRUNK SEWERS

This AMENDMENT is made to our AGREEMENT, dated February 21, 1989 and is entered into as of this 18th day of July, 1989,

by and between	City of Redlands Municipal Utilities Department herein after referred to as "OWNER"
and	Krieger & Stewart, Inc., hereinafter referred to as "ENGINEER"

In consideration of the mutual promises, covenants and conditions hereinafter set forth, the parties do hereby agree to amend the designated articles and sections of the Agreement to read as follows:

ARTICLE 1 - ENGAGEMENT OF THE ENGINEER

- 1.1 The OWNER hereby engages the ENGINEER and the ENGINEER hereby accepts the engagement to perform, as provided for in Section 2.2 of the AGREEMENT, Construction Engineering Services during the construction of the Citrus Avenue and Roosevelt Road Trunk Sewers, hereinafter called the Project.
- 1.2 All work under AMENDMENT shall be done in a professional manner, and ENGINEER represents that he is skilled in the professional expertise necessary to provide high quality services under this AMENDMENT.
- 1.3 The ENGINEER shall be responsible, to the level of competency presently maintained by other practicing professional engineers performing the same type of work for the professional and technical soundness, accuracy and adequacy of all designs, drawings, specifications, and other work and materials furnished under this AMENDMENT.

ARTICLE 2 - SERVICES OF THE ENGINEER

- 2.1 The ENGINEER will perform the services in connection with the Project as defined in Attachment A, Scope of Work.
- 2.2 The following additional services may be provided by the ENGINEER when requested and approved by the OWNER:
 1. Construction survey
 2. Additional copies of plans and specifications
 3. Bidding Services
 4. Construction services
 5. Construction Inspection services
 6. Miscellaneous services not specified elsewhere in the AMENDMENT.

ARTICLE 3 - RESPONSIBILITIES OF THE OWNER

- 3.1 The OWNER will place at the disposal of the ENGINEER all available information pertinent to the Project, including previous reports and any other data relative to the Project.
- 3.2 The OWNER will provide access to and make all provisions for the ENGINEER to enter upon public and private lands as required for the ENGINEER to perform his work under this AMENDMENT.
- 3.3 The OWNER will provide all environmental assessments or impact reports required for this project.
- 3.4 The OWNER will designate in writing a person to act as the OWNER's representative with respect to the work to be performed under this Agreement, such person to have complete authority to transmit instructions, receive information, interpret and define the Owner's policies and decisions with respect to materials, equipment, elements and systems pertinent to the work covered by this AMENDMENT.

ARTICLE 4 - PERIOD OF SERVICE

- 4.1 The ENGINEER shall proceed with the engineering services set forth in Article 2. The period of service shall be the construction period as defined in the contract documents and any change orders executed therein.
- 4.2 The ENGINEER shall proceed with the services under this AMENDMENT promptly and will prosecute them diligently.

ARTICLE 5 - PAYMENTS TO THE CONSULTANT

- 5.1 For the services performed under Article 2, OWNER will pay the ENGINEER on a time and materials basis at the hourly rates shown in Attachment B, Rate Schedule. The manhour estimates and total budgets are shown on Attachment C, Fee Proposal.
- 5.2 Payment for additional services requested by the OWNER per Article 2.2 will be in accordance with a separately negotiated fee or in accordance with the hourly fees shown in Attachment B, Rate Schedule.
- 5.3 ENGINEER agrees that at the point 75-percent of budgeted costs have been expended, the ENGINEER will notify the OWNER in writing, including a brief report on job status, percent complete, analysis of budget, and envisioned expenses to complete the contractual effort. Budgets shall not be exceeded except if previously approved by OWNER.
- 5.4 The ENGINEER shall bill the OWNER each month by submitting an invoice indicating the work performed, who performed the work, and the detailed cost of all work including backup material, if requested.

Payments by OWNER to the ENGINEER shall be made within 30 days after receipt and approval of ENGINEER'S invoice, by warrant payable to KRIEGER & STEWART.

- 5.5 All notices, bills and payments shall be made in writing and may be given by personal delivery or by mail. Notices, bills and payments sent by mail should be addressed as follows:

TO OWNER: CITY OF REDLANDS
Municipal Utilities Department
P. O. Box 3005
2 E. Citrus Avenue
Redlands CA 92373

TO CONSULTANT: KRIEGER & STEWART, INC.
3602 University Avenue
Riverside CA 92373
Attention: Mark Messersmith

When so addressed, such notices shall be deemed given upon deposit in the United States Mail. In all other instances, notices, bills and payments shall be deemed given at the time of actual delivery. Changes may be made in the names and addresses of the person to whom notices, bills and payments are to be given by giving notice pursuant to this paragraph.

ARTICLE 6 - INSURANCE AND INDEMNIFICATION

- 6.1 ENGINEER shall maintain worker's compensation insurance and, in addition shall maintain insurance to protect OWNER from claims for damage due to bodily injury, personal injury, or death and claims for injury to or destruction of tangible property while performing the services covered by this AMENDMENT. Said public liability and property damage insurance shall be in a minimum combined single limit of \$1,000,000 per occurrence. The OWNER shall be named a primary additional insured on insurance coverage for public liability and property damage. The ENGINEER shall provide OWNER with a certificate evidencing such insurance coverage.
- 6.2 ENGINEER agrees to maintain professional liability insurance pursuant to this paragraph to protect OWNER from negligent acts, errors or omissions of a professional nature; the total aggregate of ENGINEER'S professional liability insurance coverage shall be a minimum of \$1,000,000.
- 6.3 ENGINEER agrees to indemnify, hold harmless and defend OWNER and any and all of their officers, agents and employees from and against all claims, loss, damage, charge or expense, to which they or any of them may be put or subjected to arising out of or resulting from any willful or negligent act or actions, omission or failure to act on the part of the ENGINEER, his contractors, his suppliers, anyone directly or indirectly employed by any of them or anyone for whose acts or omissions any of them may be liable in the performance of the services described in this AMENDMENT.

ARTICLE 7 - GENERAL CONSIDERATIONS

- 7.1 In the event of any legal action brought by either party against the other to enforce any of the obligations hereunder or arising out of any dispute concerning the terms and conditions hereby created, the losing party shall pay the prevailing party such reasonable amounts for fees, costs, expenses, including attorney's fees, as may be set by the Court.
- 7.2 The ENGINEER shall not sublet or assign any of the work covered by this AMENDMENT, except with the prior written approval of the OWNER and in strict compliance with the terms, provisions, and conditions of the CONTRACT.
- 7.2.1 The OWNER authorizes the ENGINEER to sublet Geotechnical Testing to John R. Byerly, Inc.

- 7.3 The key ENGINEER'S personnel proposed for this project are as follows:

Mark E. Messersmith, P.E. - Project Manager
Michael P. Thornton, P.E. - Construction Inspector
Larry R. Gonzales - Construction Inspector

ENGINEER agrees that these key people will be made available and assigned to the OWNER'S project, and that they will not be replaced without concurrence from the OWNER.

- 7.4 It is understood and agreed by and between the parties that all documents, records, drawings, designs and specifications, cost estimates, and other project documents developed by the ENGINEER pursuant to this AMENDMENT shall become the property of OWNER and shall be delivered to OWNER if and when requested upon completion of services. Any reuse of such documents for other projects and any use of incomplete documents will be at the OWNER's sole risk.
- 7.5 ENGINEER is for all purposes an independent contractor. All qualified personnel provided by ENGINEER pursuant to the provisions of this AMENDMENT are to be employed by ENGINEER for his account only, and in no event shall ENGINEER or any personnel retained by him be deemed to have been employed by the OWNER or engaged by the OWNER for the account of or on behalf of the OWNER.
- 7.6 Unless earlier terminated as stipulated below, this agreement shall terminate upon completion and acceptance by the OWNER of all work approved for performance under Article 2 of this AGREEMENT.
- 7.7 This AGREEMENT may be terminated in writing by either party in the event of failure by the other party to fulfill its obligations under this AGREEMENT through no fault of the terminating party: PROVIDING, that no such termination may be effected unless the other party is given (1) not less than thirty (30) calendar days written notice (delivered by certified mail, return receipt requested) of intent to terminate, and (2) an opportunity for consultation with the terminating party prior to termination.
- 7.8 If this AGREEMENT is terminated by the OWNER for reasons of default by the ENGINEER, an adjustment to ENGINEER'S compensation shall be made, but (1) no amount shall be allowed for anticipated profit or unperformed services,

and (2) any payment due to the ENGINEER at the time of termination may be adjusted to the extent of any additional costs to the OWNER occasioned by the ENGINEER'S default. If termination for default is effected by the ENGINEER, the adjustment in compensation shall provide for payment to the ENGINEER to include a reasonable profit for services rendered and reimbursement for expenses incurred prior to the termination, in addition to termination settlement costs reasonably incurred by the ENGINEER relating to commitments which had become firm and approved by OWNER prior to the termination.

- 7.9 Upon receipt of a termination notice, the ENGINEER shall (1) promptly discontinue all services affected (unless the notice directs otherwise), and (2) deliver or otherwise make available to the OWNER, copies of data, design calculations, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the ENGINEER in performing this AMENDMENT.
- 7.10 ENGINEER shall maintain books and accounts of all project related payroll costs and all expenses and incidental expense. Books shall be available at all reasonable times for examination by the OWNER at the office of the ENGINEER.
- 7.11 This AMENDMENT, including attachments incorporated herein by reference, represents the entire agreement and understanding between the parties and any negotiations, proposals or oral agreements are intended to be integrated herein and to be superseded by this written AMENDMENT. Any supplement or amendment to this AMENDMENT to be effective shall be in writing and signed by the OWNER and ENGINEER.
- 7.12 This AMENDMENT is to be governed by and construed in accordance with the laws of the State of California.

IN WITNESS WHEREOF, duly authorized representatives of the parties have signed in confirmation of this AMENDMENT.

CITY OF REDLANDS

KRIEGER & STEWART, INC.

By Carl C. Desrosier
Mayor

By M. L. Stewart
Vice President

ATTEST Marie Rayer
City Clerk

Date 7/12/89

ATTACHMENT A

KRIEGER
-& STEWART INCORPORATED

SECTION I
SCOPE OF WORK

We envision our services to consist of the following components:

1. Attend Prebid Conference.
2. Attend Preconstruction Meeting and Provide Memorandum of Same.
3. Review and Approve Submittals.
4. Review and Approve Partial Payment Requests.
5. Provide Correspondence and Conferences with City Staff and Contractor(s) During Construction.
6. Provide Construction Staking.
7. Provide Construction Inspection.
8. Provide Geotechnical Testing

Each of the components is discussed in the following paragraphs:

1. Attend Prebid Conference

The Prebid Conference will be attended by Krieger & Stewart's project manager. He will address questions regarding the project during said conference. If required, an addendum will be issued to clarify any issues not resolved in the Prebid Conference.

2. Attend Preconstruction Meeting and Provide Memorandum of Same

This meeting will be attended by Krieger & Stewart's Project Manager and Construction Inspector(s). After said meeting, we will prepare a memorandum of same to be distributed to City and Contractor(s).

3. Review and Approve Submittals

Project Manager will review and approve all submittals. We expect submittals to be required for pipe materials, bedding materials, manholes, concrete, asphalt concrete pavement, and trench protection. Once submittals are approved, they will be signed, dated, and distributed to Contractor(s), Owner, and Construction Inspector(s).

4. Review and Approve Partial Payment Requests

Each month, partial payment requests submitted by the Contractor(s) will be reviewed with the Construction Inspector(s) to assure quantities and amounts requested reflect work completed. After the requests are reviewed (and revised if necessary), they will be approved by the Project Manager and sent to City Staff for payment.

5. Provide Correspondence and Conferences with City Staff and Contractor(s) During Construction

Project progress and any changes during construction will be noted on a set of Construction Drawings maintained in our office. Problems or questions during construction will be resolved by Project Manager and Construction Inspector(s). If a problem occurs requiring a City decision, City Staff will be consulted. Project Manager will attempt to resolve complaints, concerns, and questions from residents and other affected agencies. The Project Manager will visit the work site at least once a week and review the project with the Construction Inspector(s).

All extra work requests will be reviewed to determine if said requests are warranted. If extra work requests are not warranted, we will reject same in writing. Prior to sending letter to Contractor(s), we will review same with City Staff. If extra work requests appear warranted, said requests will be reviewed with Construction Inspector(s) and compared to the field reports for confirmation of materials, equipment, and labor involved. Thereafter, we will review same with City Staff prior to approving extra work and preparing Change Orders.

The Project Manager will keep City Staff informed of project progress, problems that have occurred during construction, and any changes. Whenever possible, Project Manager will review any required changes with City Staff prior to making same.

Telephone numbers for the Project Manager, Construction Inspector(s), and Contractor(s) to be used outside normal business hours will be provided to City Staff for use in emergencies.

6. Provide Construction Staking

Cut sheets will be prepared with sewer flow line elevations at 25 foot intervals, at manholes, and at connections to existing manholes. Cut sheets will be checked by Project Manager prior to performing field work.

The survey crew will set the construction stakes at an offset distance determined by Contractor(s). Construction stake information will be placed on the cut sheets and marked in the field.

The completed cut sheets will be checked by the Project Manager. Thereafter, copies will be delivered to the City and Contractor(s).

7. Provide Construction Inspection

The Construction Inspector(s) will fill out daily field reports. Said reports will be reviewed by Project Manager and thereafter copies will be sent to City Staff.

Prior to construction, the Construction Inspector(s) and Contractor(s) will review the work sites and photograph or video tape existing improvements as a record of pre-existing conditions.

During construction, Construction Inspector(s) will review and check the below listed items. They will also be provided with a car phone to facilitate communication with Project Manager.

a. Materials

All materials delivered to the site will be checked for conformance with approved submittals.

b. Traffic Control

Traffic control will be checked to ensure full compliance with the Contract Documents. Contractor shall be required to provide adequate traffic control prior to proceeding with construction.

c. Utilities

All utilities marked by the various utility companies will be reviewed to determine if there are any changes from the Construction Drawings.

d. Trench Protection

Trench protection will be reviewed for conformance with the submitted Trench Protection Plan.

e. Pipe Installation

Construction Inspector(s) will check for proper unloading, stringing, placement, storing, and installation of pipe. Pipe joints and pipe bedding will be checked for conformance with Contract Documents. Construction Inspector(s) will measure sewer flow line elevations at regular intervals to confirm that elevations are in accordance with tolerances specified in Contract Documents.

f. Backfill and Compaction

Construction Inspector(s) will observe backfill and compaction procedures for compliance with the Contract Documents. Construction Inspector(s) will schedule compaction tests and determine locations for same.

g. Pipe Testing

Construction Inspector(s) will observe pipe testing to ensure leakage is within the tolerances specified in the Contract Documents.

h. Connections to Existing Sewer Facilities

Construction Inspector(s) will check to ensure bypass of wastewater flow is adequate and that all connections are constructed in accordance with the Contract Documents, including plugging existing sewers and removing existing manholes.

i. Restoration of Work Sites

Construction Inspector(s) will check work sites to ensure all improvements, including pavement, are restored to pre-existing conditions and in conformance with the Contract Documents.

8. Provide Geotechnical Testing

John R. Byerly Incorporated will provide geotechnical testing for the project. Compaction tests will be taken at different trench depths at approximately 300 foot intervals. In addition, compaction tests will be taken in the pavement subgrade just prior to paving. Construction Inspector(s) will coordinate the testing schedule with John R. Byerly staff.

SECTION III
PROJECT COST

We estimate our fee for providing construction engineering services to be \$68,800. The estimated fee is shown on Table I by components of service.

Our estimate was based on a 85 working day construction period. We have assumed that we will provide one full time Construction Inspector for 10 hours per day and that the Project Manager will require 9 hours per week for the project. Construction Inspector's time includes 9 hours actual inspection (7 a.m. to 4 p.m. for the Roosevelt Road Trunk Sewer and 9 p.m. to 6 a.m. for the Citrus Avenue Trunk Sewer) plus one hour per day for preparation of notes and field reports.

The estimated fees for the other components (see Table I) 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.

We propose to invoice the City on a monthly basis for services performed in accordance with our fee schedule. A copy of our fee schedule is included in the appendix of our proposal.

KRIEGER & STEWART

INCORPORATED • ENGINEERING CONSULTANTS

3602 University Av • Riverside, CA 92501 • Tel 714-684-6900 • Fax 714-369-5026

FEE SCHEDULE89/90

<u>CLASSIFICATION</u>	<u>RATES</u> <u>\$/HOUR</u>
<u>Engineering Services</u>	
Consulting Engineer	90.00
Principal Engineer	81.00
Senior Engineer	75.00
Staff Engineer	68.00
Associate Engineer	60.00
Assistant Engineer	53.00
Junior Engineer	46.00
Senior Designer	55.00
Staff Designer	50.00
Junior Designer	44.00
Senior Drafter	48.00
Staff Drafter	42.00
Junior Drafter	38.00
Senior Construction Inspector	40.00
Staff Construction Inspector	36.00
Junior Construction Inspector	32.00
Utility Technician	26.00
<u>Surveying Services</u>	
Principal Surveyor	75.00
Senior Surveyor	68.00
Staff Surveyor	61.00
Associate Surveyor	53.00
Survey Technician	42.00
3 Man Crew and Equipment	152.00
2 Man Crew and Equipment	122.00
1 Man Crew and Equipment	69.00
<u>Support Services</u>	
Senior Secretary	30.00
Staff Secretary	28.00
Junior Secretary	24.00
Utility Clerk	20.00
<u>Outside Services</u>	
Special Consultants and Purchased Services	Cost + 15%
<u>Reimbursable Expenses</u>	
Mileage	
Automobile and Truck (2WD)	0.35/Mile
Truck (4WD)	0.55/Mile
Subsistence, where applicable (Field Services)	Cost
Copies, prints, telephone, delivery charges	Cost

The above rates are subject to change on or about July 1 each year due to salary and cost increases.

A FINANCE CHARGE of one and one half percent (1-1/2%) per month (18% per year) will be added to any unpaid amount commencing thirty (30) days from date of invoice. A mechanic's lien may be filed for any invoice remaining unpaid after thirty (30) days from date of invoice.

ATTACHMENT C

TABLE I

CITY OF REDLANDS
 18" CITRUS AVENUE AND 12" ROOSEVELT ROAD
 TRUNK SEWERS
 CONSTRUCTION ENGINEERING SERVICES
 COST ESTIMATE

COMPONENTS	MEM		ASSOCIATE ENGINEER		INSPECTOR		CLERICAL		SURVEY CREW		JOHN R. BYERLY INC.		COMPONENTS TOTALS \$
	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	
PREBID CONFERENCE	2	162											162
ATTEND PRECONSTRUCTION MEETING	6	486			4	160	4	120					766
REVIEW SUBMITTALS	16	1,296	16	960			8	240					2,496
REVIEW PARTIAL PAYMENT REQUESTS	8	648											648
PROVIDE CORRESPONDENCE AND CONFERENCES DURING CONSTRUCTION	153	12,393	40	2,400			60	1,800					16,593
PROVIDE CONSTRUCTION STAKING	8	648	12	720					40	6,080			7,448
PROVIDE CONSTRUCTION INSPECTION					850	34,000							34,000
PROVIDE GEOTECHNICAL TESTING												3,400	3,400
SUBTOTAL	193	15,633	68	4,080	854	34,160	72	2,160	40	6,080	0	3,400	65,513
INCIDENTALS (5%):													3,276
TOTAL:													68,789
CONSTRUCTION ENGINEERING SERVICES TOTAL (ROUNDED):													68,800

MEM = MARK E. MESSERSMITH @ \$81.00/hr
 ASSOCIATE ENGINEER @ \$60.00/hr
 INSPECTOR @ \$40.00/hr
 CLERICAL @ \$30.00/hr
 3-MAN SURVEY PARTY @ \$152.00/hr

MEM/KDC
 C497/48P9-T1
 6/21/89