

AMENDMENT NO. 1
TO AGREEMENT
BETWEEN CITY OF REDLANDS
AND
KRIEGER AND STEWART ENGINEERS
FOR
CONSTRUCTION ENGINEERING OF LUGONIA AVENUE
AND SAN BERNARDINO AVENUE TRUNK SEWERS

REASON FOR AMENDMENT:

To provide construction engineering services in accordance with Article 2.2, additional services, of agreement dated November 18, 1987.

SCOPE OF WORK:

The Engineer shall perform the services as defined per Attachment A of this Amendment.

PERIOD OF SERVICE:

The services shall be during the construction period for the Lugonia Avenue and San Bernardino Avenue Trunk Sewers.

PAYMENTS TO THE ENGINEER:

1. The payments to the Engineer will be in accordance with Section 5.1, 5.2, and 5.3 of the 1987 Agreement except that Attachment B, 88/89 Fee Schedule, will apply to this Amendment.
2. Engineer agrees that total compensation for this Amendment shall not exceed \$59,800 without the OWNER'S prior written approval. The breakdown of estimated hours, labor fee and expenses is contained in Attachment C to this Amendment.

ENGINEER'S KEY PERSONNEL:

The Engineer's key personnel for this project are:

Mark E. Messersmith - Project Manager
John S. Hurlburt - Construction Inspector

The Engineer and Owner agree that all provisions in their Agreement dated November 18, 1987 remain in effect, except those outlined in this Amendment. In WITNESS WHEREOF, duly authorized representatives of the parties have signed in confirmation of this AMENDMENT.

CITY OF REDLANDS

KRIEGER & STEWART

By Carol Desautels

Mayor

By M. E. Markus

Vice President

Attest Dorinda Egan

City Clerk

Date December 6, 1988

ATTACHMENT A
SECTION I
SCOPE OF WORK

We envision our services to consist of the following components:

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

Each of the components is discussed in the following paragraphs:

1. Attend Preconstruction Meeting and Provide Memorandum of Same

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

2. Attend Meeting with City Staff

We will discuss the project and construction of same. In particular, we will review procedures to be used by the Project Manager and Construction Inspector. We will also review items that will be checked during construction.

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, casing materials, and trench protection plans. Once submittals are approved, they will be signed, dated, and distributed to Contractor, Owner, and Construction Inspector.

4. Review and Approve Partial Payment Requests

Each month, partial payment requests submitted by the Contractor will be reviewed with the Construction Inspector 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 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. 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.

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, we will review same with City Staff. If extra work requests appear warranted, said requests will be reviewed with Construction Inspector 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, and Contractor 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. 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.

7. Provide Construction Inspection

The Construction Inspector 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 and Contractor will review the work sites and photograph or video tape existing improvements as a record of pre-existing conditions.

During construction, Construction Inspector will review and check the below listed items. He 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 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 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 will observe backfill and compaction procedures for compliance with the Contract Documents. Construction Inspector will schedule compaction tests and determine locations for same.

g. Pipe Testing

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

h. Connections to Existing Sewer Facilities

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

KRIEGER & STEWART

INCORPORATED • ENGINEERING CONSULTANTS

3602 University Av • Riverside, CA 92501 • 714-684-6900

FEE SCHEDULE 88/89

<u>CLASSIFICATION</u>	<u>RATES</u> \$/Hr.
<u>Engineering Services</u>	
Consulting Engineer	85.00
Principal Engineer	77.00
Senior Engineer	71.00
Staff Engineer	65.00
Associate Engineer	57.00
Assistant Engineer	50.00
Junior Engineer	44.00
Senior Designer	52.00
Staff Designer	48.00
Junior Designer	42.00
Senior Drafter	46.00
Staff Drafter	40.00
Junior Drafter	36.00
Senior Construction Inspector	38.00
Staff Construction Inspector	34.00
Junior Construction Inspector	30.00
Utility Technician	25.00
<u>Surveying Services</u>	
Principal Surveyor	71.00
Senior Surveyor	65.00
Staff Surveyor	58.00
Associate Surveyor	50.00
Survey Technician	40.00
3 Man Crew and Equipment	145.00
2 Man Crew and Equipment	116.00
1 Man Crew and Equipment	66.00
<u>Support Services</u>	
Senior Secretary	29.00
Staff Secretary	27.00
Junior Secretary	23.00
Utility Clerk	19.00
<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)	0.50/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.

Attachment C

CITY OF REDLANDS
18" LUGONIA AVENUE AND 21" SAN BERNARDINO AVENUE
TRUNK SEWERS
CONSTRUCTION ENGINEERING SERVICES
COST ESTIMATE

ELEMENTS OF WORK	MEM		ASSOCIATE ENGINEER		INSPECTOR		CLERICAL		SURVEY CREW		ELEMENTS OF WORK TOTALS \$
	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	HOURS	\$	
ATTEND PRECONSTRUCTION MEETING	6	462			4	152	4	116			730
ATTEND MEETING WITH CITY STAFF	6	462									462
REVIEW SUBMITTALS	16	1,232	16	912			8	232			2,376
REVIEW PARTIAL PAYMENT REQUESTS	16	1,232									1,232
PROVIDE CORRESPONDENCE AND CONFERENCES DURING CONSTRUCTION	162	12,474	40	2,280			60	1,740			16,494
PROVIDE CONSTRUCTION STAKING	8	616	12	684					60	6,960	8,260
PROVIDE CONSTRUCTION INSPECTION					720	27,360					27,360
SUBTOTAL	214	16,478	68	3,876	724	27,512	72	2,088	60	6,960	56,914
											INCIDENTALS (5%):
											2,846
											TOTAL:
											59,760
											CONSTRUCTION ENGINEERING SERVICES TOTAL (ROUNDED):
											59,800

MEM = MARK E. MESSERSMITH @ \$77.00/hr
ASSOCIATE ENGINEER @ \$57.00/hr
INSPECTOR @ \$38.00/hr
CLERICAL @ \$29.00/hr
2-MAN SURVEY PARTY @ \$116.00/hr