

AGREEMENT TO FURNISH ENGINEERING SERVICES
FOR THE ENVIRONMENTAL ASSESSMENT
AND DESIGN OF THE
CALIFORNIA STREET LANDFILL GAS COLLECTION SYSTEM

This AGREEMENT is made and entered into as of this 4th day of September, 1990,

by and between

City of Redlands Municipal
Utilities Department herein
after referred to as "OWNER"

and

Kleinfelder, Inc.
hereinafter referred to as
"ENGINEER"

In consideration of the mutual promises, covenants and conditions hereinafter set forth, the parties do hereby agree 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 engineering services in connection with the preparation of the Environmental Assessment and for the design of the California Street Landfill Gas Collection System.
- 1.2 All services under this AGREEMENT shall be done in a professional manner, and ENGINEER represents that the firm employs those with the demonstrated skill and the professional expertise necessary to provide high quality services under this AGREEMENT.
- 1.3 The ENGINEER shall be responsible, to the level of competency presently maintained by other practicing professional engineers providing the same type of services for the professional and technical soundness, accuracy and adequacy of all reports, designs, drawings, specifications, and other services and materials furnished under this AGREEMENT.

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 AGREEMENT.

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 services under this AGREEMENT.
- 3.3 The OWNER will provide all environmental assessments or impact reports required for this project and not otherwise specifically required to be provided by the ENGINEER.
- 3.4 The OWNER will designate in writing a person to act as the OWNER's representative with respect to the services 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 services covered by this AGREEMENT.

ARTICLE 4 - PERIOD OF SERVICE

- 4.1 The ENGINEER shall proceed with the engineering services set forth in Article 2 in accordance with the schedule defined in Attachment B: Schedule.
- 4.2 The ENGINEER shall proceed with the services under this AGREEMENT 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 D: Schedule of Fees. The manhour estimates and total budgets are shown on Attachment C: Project Budget.
- 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 D: Schedule of Fees.
- 5.3 ENGINEER agrees that at the point 75-percent of budgeted costs have been expended for each scope project, 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 monthly by submitting an invoice indicating the services performed, who performed the services, and the detailed cost of all services including backup material, if requested.

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

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 ENGINEER: KLEINFELDER, INC.
1370 Valley Vista Drive
Suite 150
Diamond Bar CA 91765

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 AGREEMENT. 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 \$50,000 or the Engineer's total estimated fee, as shown in Attachment C: Project Budget, whichever is greater.
- 6.3 ENGINEER agrees to indemnify, hold harmless and defend OWNER and any and all of their elected officials, officers, agents, engineers, 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 misconduct 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 AGREEMENT.

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 services covered by this AGREEMENT, except with the prior written approval of the OWNER and in strict compliance with the terms, provisions, and conditions of the AGREEMENT.

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

Thomas E. Bailey, P.E. - Principal in Charge
Douglas M. Isbell, P.E. - Project Director/Manager
Gary Glasser - Mechanical Design
Lenda Doane - Testing Manager
Michael R. Perry - Environmental Assessments

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 AGREEMENT shall become the property of OWNER and shall be delivered to OWNER 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 AGREEMENT 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 services 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.

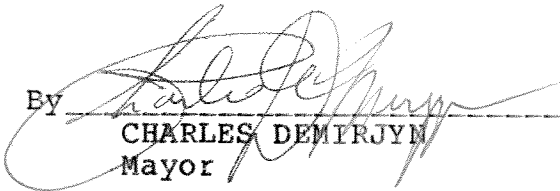
- 7.9 Upon receipt of a termination notice, the ENGINEER shall (1) promptly discontinue all services affected (unless the notice directs otherwise), and (2) deliver or otherwise make available to the OWNER, copies of data, design calculations, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the ENGINEER in performing services under this AGREEMENT.
- 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 AGREEMENT, 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 AGREEMENT. Any supplement or amendment to this AGREEMENT to be effective shall be in writing and signed by the OWNER and ENGINEER.
- 7.12 This AGREEMENT 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 AGREEMENT.

CITY OF REDLANDS

KLEINFELDER, INC.

BY


CHARLES DEMTRJYN
Mayor

BY


DOUGLAS M. ISBELL,
Engineering Manager

ATTACHMENT A

SCOPE OF WORK

PHASE I-A DESIGN

Task 1 Preliminary Design

1.1. Conceptual Design

Kleinfelder will prepare conceptual designs for two alternative gas collection and condensate system layouts. The first alternative will include an above ground system with the header lines installed on the landfill side slopes. The second alternative will include an underground system with the header lines installed at a newly created bench on the existing landfill. Preliminary cost estimates will be prepared for both alternatives. A meeting will be held with the City to discuss the alternatives and to determine which alternative will be pursued.

1.2 Landfill Gas Quantification

The landfill gas quantity and availability will be estimated by reviewing the site's fill history and utilizing Kleinfelder's landfill gas generation computer modeling program.

1.3 Piping and Instrumentation Diagram

A piping and instrumentation diagram (P&ID) will be prepared for the gas flare station to show the method of gas disposal including the necessary pipeline controls and instruments for safe operation.

1.4 Collection System Layout

A preliminary gas collection system layout of the selected alternative design (Task 1.1) will be prepared showing approximate well location, header location and flare station location. The City will provide an appropriate topographic base map. This drawing will be submitted to SCAQMD as part of the application for permit to construct.

1.5 Basis of Design

Kleinfelder will prepare a basis of design report. This report will describe the components and design objectives for the landfill gas collection system and flare station, including the P&ID and collection system layout. This report will be submitted to SCAQMD as part of the application for permit to construct.

1.6 SCAQMD Application

This task includes the preparation and coordination with the SCAQMD for the SCAQMD application for the permit to construct.

1.7 Condensate Handling

Develop a preliminary design of a condensate removal and disposal system, assuming collection, tank storage, and hauling offsite. The design will allow for future modification of the condensate system to provide for condensate pretreatment which may be required, for direct disposal at the City's wastewater treatment plant, pending determination of the Santa Ana RWQCB and the Municipal Utilities Department.

1.8 Wastewater Treatment Plant Digester Gas

Although the disposal of wastewater treatment plant digester gas is not included in this project, Kleinfelder will design the flare station to accommodate future disposal of this gas.

1.9 Cost Estimate

Preparation of a preliminary cost estimate for the selected LFG collection system and flare station.

Task 2 Project Design

2.1 Collection System Design

Kleinfelder will prepare all construction drawings for the proposed landfill gas collection system to include all system piping, well locations and associated details.

2.2 Flare Station Design

Kleinfelder will prepare construction drawings for a landfill gas flare station to include the flare, blower, inlet separator, valves and necessary process control system. The flare station will be designed utilizing a prefabricated skid set on a concrete pad. Since the flare is to be located with the wastewater treatment plant enclosure, no additional financing is anticipated.

2.3 Flare Station Structural

Kleinfelder will prepare a soils report and design the foundation under the flare station.

2.4 Flare Station Electrical

Kleinfelder will prepare electrical construction drawings required for the flare station. It is assumed that the City of Redlands will supply power to the flare. Cost of any utility/flare station interface design is not included.

2.5 Condensate Handling

Kleinfelder will prepare construction drawings for a condensate collection system. This system does not include pretreatment design. The design will allow for collection from underground tanks.

Task 3 Specifications and Bid Package

3.1 Flare Bid Package

Due to the long lead time associated with the purchase of landfill gas flares, Kleinfelder will prepare separate special provisions specifications for the flare skid assembly to allow the City to competitively bid the flare skid fabrication prior to the construction contract.

3.2 Flare Station and LFG Collection System Specification

Kleinfelder will prepare special provisions and technical specifications for the landfill gas collection system and condensate handling system. The City will provide the basic bid documents including the general provisions, and will assemble and print the combined bid package.

3.3 Bidding Assistance

Kleinfelder will provide assistance to the City during the bidding phase of the contract to include the clarification or resolution of questions regarding the bid documents, the preparation and issuance of addenda to the bid documents and a pre-bid conference at the project site.

Kleinfelder will review bids and make recommendations to the City on contract award.

PHASE II CEQA INITIAL STUDY

The City of Redlands seeks assistance in the preparation of a CEQA Initial Study, assessing the potential environmental impacts associated with the construction and operation of a Landfill Gas Collection and Control System at the California Street Landfill. This proposal presents the scope of work and estimated costs to provide the City of Redlands with this preliminary CEQA documentation in compliance with the CEQA guidelines.

Task 1 Project Kick-Off

Task 1 will consist of discussions between Kleinfelder and the City's Planning and Engineering staff. The purpose will be to assess the scope of this study which will focus upon those aspects of the project that qualify as potential environmental impacts.

Task 2 Field Investigation

Kleinfelder will conduct two site visits to gather information regarding the existing site conditions and the surrounding land uses. Based upon evaluation of this information, we will assess the potential environmental impacts at the site.

Task 3 Maps and Graphics Preparation

Task 3 will entail the development of site maps and graphics based upon the preliminary design and estimates provided in Phase I of this project. Kleinfelder will develop a preliminary site map denoting the proposed locations of the landfill gas collection system and associated headers. We will examine alternative locations for the gas flare and provide up to four alternative locations to assess their potential impact.

Task 4 Draft Report Preparation

Task 4 will involve preparation of a Draft Initial Environmental Assessment Report based upon the City's Local Guidelines for Implementing the California Environmental Quality Act (1989 Revision). This report will consist of an Initial Environmental Checklist, summarized project description, and a discussion of the landfill history. Additionally, the report will assess the potential impacts of the project and will include applicable non-impact substantiation. A

generalized discussion of the environmental evaluation procedures utilized and references cited will also be included in the Draft Report. Suggested mitigation measures that will reduce the level of impacts will be discussed within the Draft Initial Environmental Assessment Report. These suggested mitigation measures will focus upon means to affect a reduction of the potential impacts identified within the Initial Study Checklist.

This Draft Initial Environmental Report will be submitted to the City of Redlands Municipal Utilities Department for submittal to the Planning Department and appropriate scheduling of the public hearings.

Task 5 Meetings and Hearings

This task will entail attendance at the City of Redlands Technical Advisory Committee (TAC) Meeting and Environmental Review Committee (ERC) Meeting for approval of a Negative Declaration or Mitigated Negative Declaration as determined by the City of Redlands Planning Department acting as the Local Lead Agency.

Task 6 Final Report Preparation

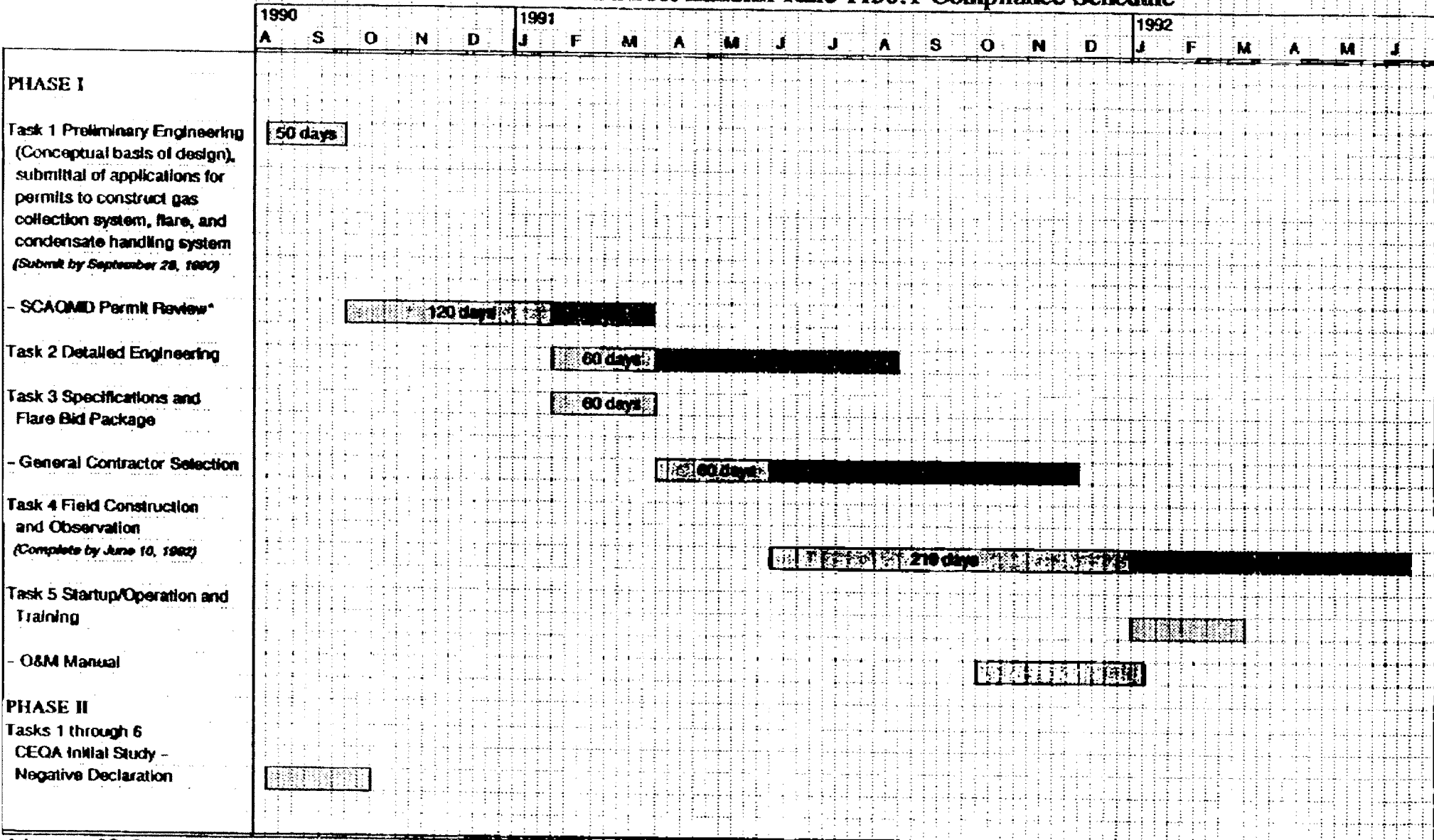
Based upon the comments received at the TAC meeting, Kleinfelder will revise the draft report as prepared under Task 4 and prepare a final report for presentation at the ERC Meeting scheduled for September 10, 1990.

ATTACHMENT "B"-SCHEDULE

City of Redlands California Street Landfill Rule 1150.1 Compliance Schedule

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P02



* Assumes SCAQMD requires 120 days to review/approve applications for permits to construct

Dark Shading denotes maximum time frame for task completion allowed by SCAQMD

ATTACHMENT "C"-PROJECT BUDGET AND MANHOUR ESTIMATES

CITY OF REDLANDS - CALIFORNIA STREET LANDFILL GAS COLLECTION SYSTEM AND FLARE STATION

PROJECT COST SUMMARY

ACTIVITY	TASK COSTS	PHASE COST
PHASE IA DESIGN		
TASK 1 PRELIMINARY DESIGN	22215	
TASK 2 PROJECT DESIGN	39452	
TASK 3 SPECIFICATIONS & BID PACKAGE	17797	79464
PHASE IB FIELD ACTIVITIES		
TASK 4 CONSTRUCTION AND OBSERVATION		
TASK 5 START-UP OPERATIONS AND TRAINING		
TASK 6 PERMITTING ASSISTANCE		
PHASE II INITIAL CEQA STUDY		9590
PHASE III RULE 1150.1 MONITORING		
NOTE: PHASE IB AND PHASE III SHALL BE CONDUCTED BY SEPARATE AGREEMENT OR BY AMENDMENT TO THIS AGREEMENT. A SEPARATE NOTICE TO PROCEED WILL BE ISSUED IF APPROPRIATE, OTHERWISE NO WORK ON THESE ITEMS IS TO BE CONDUCTED ON THESE ITEMS.		
TOTAL PROJECT ESTIMATE		300065

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P02

City of Redlands Landfill Gas Collection System CEQA Initial Study

PROJECT COST SUMMARY

TASK	DESCRIPTION	ESTIMATED		LABOR COSTS	MISC. OFFICE EXPENSES	SUB- CONSULTANTS	TOTAL COSTS
		LABOR HOURS	MAN DAYS				
Task 1	PROJECT KICK-OFF	4	0	\$300	\$30		\$330
Task 2	FIELD INVESTIGATION	9	1	\$800	\$40		\$840
Task 3	MAPS AND GRAPHICS PREPARATION	6	1	\$500	\$30		\$530
Task 4	DRAFT REPORT PREPARATION	60	7	\$5,300	\$270		\$5,570
Task 5	MEETINGS AND HEARINGS	17	2	\$1,500	\$80		\$1,580
Task 6	FINAL REPORT PREPARATION	8	1	\$700	\$40		\$740
PHASE TOTALS		103	13	\$9,100	\$490		\$9,590
Estimated Total							\$9,590

City of Redlands Landfill Gas Collection System CEQA Initial Study

Kleinfelder Team Staff Distribution

TASK	DESCRIPTION	Principal Eng.	Sr. Proj Mgr.	Proj Mgr.	Staff Prof.	Staff	Graphics	Tech.	Word Procs.	Editing
Task 1	PROJECT KICK-OFF		2	2						
Task 2	FIELD INVESTIGATION		4	3	2					
Task 3	MAPS AND GRAPHICS PREPARATION			1			5			
Task 4	DRAFT REPORT PREPARATION	3	9	9	18	13			6	3
Task 5	MEETINGS AND HEARINGS			8	8					
Task 6	FINAL REPORT PREPARATION		1	1	2	2			1	
Staff Totals by Category		3	16	25	30	15	5		7	3

Notes: Estimates assume 16 hrs. for meetings with City Staff and 6 Public Agencies
Additional meetings if required will be charged on a Time and Material basis

CITY OF REDLANDS - CALIFORNIA STREET LANDFILL

PHASE 1A

TASK 1 PRELIMINARY DESIGN

	PRIN PROF	SR PROF	PROJ PROF	STAFF PROF	SR DESIGN	DRAFTER	WORD PROC	CLERICAL
CONCEPTUAL DESIGN ALTERNATIVES	3				8		2	1
LFG QUANTITY & AVAILABILITY		2	3		4			2
PIPING & INST DIAGRAM		3		4	4	8		
COLLECTION SYSTEM LAYOUT	1	8	8	4		16		
PRELIM BASIS OF DESIGN	2	22	8	16	8	8	16	4
PRELIM CONSTRUCTION EST	1	12	6		4			
CONDENSATE HANDLING	1	2			4			
WWTP GAS		4	4					
FACILITY TOUR	1	6			6	3		
MEETING WITH CITY	3	6			3			
FINAL BASIS OF DESIGN	1	4	8			4	4	6

SUBTASK TOTAL HOURS	13	69	37	24	41	39	22	13
BILLING RATE, DOLLARS	125	110	95	83	72	55	50	42
LABOR SUBTOTAL	1625	7590	3515	1992	2952	2145	1100	546
ESTIMATED LABOR COSTS	21465		HOURS	258				
OTHER INTERNAL CHARGES								
REPRODUCTION	500							
MILEAGE .45/MILE 555 MILES	250							
TASK SUBTOTAL	22215							

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P03

CITY OF REDLANDS - CALIFORNIA STREET LANDFILL

PHASE IA

TASK 2 PROJECT DESIGN

	PRIN PROF	SR PROF	PROJ PROF	STAFF PROF	SR DESIGN	DRAFTER	WORD PROC	CLERICAL
COLLECTION SYSTEM DESIGN	4	32	10	40	50	60		
FLARE STATION ASSEMBLY	2	10		10	34	10		
FLARE STATION STRUCTURAL	1	16	8			12		
FLARE STATION ELECTRICAL		8		4	52	8		4
CONDENSATE HANDLING	1	8		4	24	24		
SITE VISIT	3			3	6	3		
MEETING W/ CITY	3	9			9		4	

SUBTASK TOTAL HOURS	14	83	18	61	175	117	4	4
BILLING RATE, DOLLARS	125	110	95	83	72	55	50	42

LABOR SUBTOTAL	1750	9130	1710	5063	12600	6435	200	168
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ESTIMATED LABOR COSTS	37056	HOURS	476					
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OTHER INTERNAL CHARGES

REPRODUCTION	0
MILEAGE .45/MILE 880 MILES	396

OTHER DIRECT CHARGES

SOILS REPORT	2000
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TASK SUBTOTAL	39452
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P04

CITY OF REDLANDS - CALIFORNIA STREET LANDFILL

PHASE IA

TASK 3 SPECIFICATION & BID PACKAGE

	PRIN PROF	SR PROF	PROJ PROF	STAFF PROF	DESIGN	DRAFTER	WORD PROC	CLERICAL
FLARE BID PACKAGE	1	8			4	2	2	1
FLARE & COLLECTION SYSTEM	7	34	26	16	32		24	5
MEETING W/ CITY		6			3			
BIDDING ASSISTANCE	3	20					4	2

SUBTASK TOTAL HOURS
BILLING RATE, DOLLARS

11	68	26	16	39	2	30	8
125	110	95	83	72	55	50	42

LABOR SUBTOTAL

1375	7480	2470	1328	2808	110	1500	336
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ESTIMATED LABOR COSTS

17407

HOURS

200

OTHER INTERNAL CHARGES

REPRODUCTION

300

MILEAGE .45/MILE 200 MILES

90

TASK SUBTOTAL

17797

ATTACHMENT "D"-SCHEDULE OF FEES



1990 FEE SCHEDULE FOR ENVIRONMENTAL SERVICES

Kleinfelder is a consulting firm that provides services in hydrogeology, environmental engineering, geochemistry, industrial health and safety, geotechnical engineering, engineering geology, mining engineering, water resources, solid waste engineering and planning, air quality, agricultural engineering, and materials engineering and testing. Since 1961, the firm has provided consulting services to industries, governmental agencies, commercial firms, developers, financial institutions, and other design professionals.

OFFICES AND TESTING LABORATORIES

ARIZONA

4920 E. McDowell, Suite 101
Phoenix, AZ 85008
(602) 231-0992

CALIFORNIA

17100 Pioneer Blvd, Suite 350
Antesia, CA 90701
(213) 860-5559

125 A Grobic Court
Cordelia, CA 94525
(707) 864-1393

1975 E Street
Fresno, CA 93708
(209) 486-0750

526 Hofgaarden Street
City of Industry, CA 91744
(818) 369-2224

15375 Barranca Parkway, Suite J-101
Irvine, CA 92718
(714) 727-4466

123 Commerce Drive
Mammoth Lakes, CA 93546
(519) 934-8829
(Seasonal)

1575 West Main Street
Merced, CA 95340
(209) 384-7552

6680 Koll Center Parkway, Suite 200
Pleasanton, CA 94588
(415) 484-1700

4369 Caterpillar Road
Redding, CA 96003
(916) 244-7203

11731 Sterling Avenue, Suite E
Riverside, CA 92503
(714) 688-2513

5865 Labath Avenue, Suite 5
Rohnert Park, CA 94928
(707) 585-8608

601 Commerce Drive, Suite 130
Roseville, CA 95678
(916) 784-388

9795 Business Park Drive
Sacramento, CA 95827
(916) 386-1701

9771 Clairemont Mesa Blvd, Suite G
San Diego, CA 92124
(619) 541-1145

2825 East Myrtle Street
Stockton, CA 95205
(209) 948-1345

524 Weddell Drive, Suite 3
Sunnyvale, CA 94089
(408) 734-4950

2121 N. California Blvd, Suite 570
Walnut Creek, CA 94596
(415) 938-5810

NEVADA

6850 Paradise Road
Las Vegas, NV 89119
(702) 736-2636

3189 Mill Street
Reno, NV 89502
(702) 323-7182

UTAH

2605 East 3300 South
Salt Lake City, UT 84109
(801) 466-6769

212 North 1000 East
St. George, UT 84770
(801) 628-5231

WASHINGTON

1200 112th Avenue NE, Suite C-226
Bellevue, WA 98004
(206) 451-2677

BASIS OF CHARGES

1. Listed herein are typical prices for environmental services most frequently performed by Kleinfelder. Prices for other services provided by the firm or other environmental services not listed will be given upon request, as well as special quotations for programs involving volume work.
2. The client agrees to limit the consultant's liability to the client and to all contractors and subcontractors on the project due to professional negligent acts, errors or omissions of the consultant to the sum of \$50,000 or the consultant's fee, whichever is greater. AGREEMENT TERMS SHALL PREVAIL.
3. Invoices will be issued on a monthly basis, or upon completion of a project, whichever is sooner. The net cash amount of this invoice is payable on presentation of the invoice. If not paid within 30 days after the date of the invoice, the unpaid balance shall be subject to a FINANCE CHARGE of 1½% per month, which is an ANNUAL PERCENTAGE RATE of 18%. AGREEMENT TERMS SHALL PREVAIL.
4. A two-hour minimum charge will be made for all field services. A four-hour minimum charge will be made for field hours in excess of two hours. An eight-hour minimum charge will be made for field services in excess of four hours per day. A one-hour minimum charge per day will be made for any office services.
5. An overtime premium of \$15 per hour will be charged for all personnel services in excess of eight hours per day or Saturday, and \$30 per hour on Sundays or Holidays.
6. Per diem will be charged at a rate of \$75 per day per person or expenses plus 20%, whichever is greater.
7. Outside services will be charged at cost plus 20% unless otherwise noted.
8. We are protected by Worker's Compensation Insurance (and/or Employer's Liability Insurance), and by Public Liability Insurance for bodily injury and property damage, and will furnish certificates thereof upon request. We assume the risk of damage to our own supplies and equipment. If your contract or purchase order places greater responsibilities upon us or requires further insurance coverage, we, specifically directed by you, will take out additional insurance (if procurable) to protect us at your expense, but we shall not be responsible for property damage from any cause, including fire and explosion, beyond the amounts of coverage of our insurance.
9. All environmental samples may be returned to clients at Kleinfelder's discretion 30 days after submission of final report, unless prior arrangements are made.
10. Proper disposal or handling of soil boring cuttings, well development and purge waters, decontamination solutions, and other contaminated/potentially contaminated materials is the responsibility of the client. Kleinfelder can provide containers for onsite containment and can advise the client regarding proper handling procedures.

NOTE; PER DIEM WILL ONLY BE AUTHORIZED FOR EMPLOYEES ASSIGNED TO THIS PROJECT FROM OFFICES OTHER THAN THE DIAMOND BAR OR RIVERSIDE OFFICE, EXCEPT BY SPECIAL ARRANGEMENT WITH THE OWNER AND APPROVED IN WRITING.

1990 SCHEDULE FOR ENVIRONMENTAL SERVICES

PROFESSIONAL STAFF RATES*

Research Assistant	\$ 60/hour
Technical Writer	\$ 70/hour
Assistant Professional	\$ 72/hour
Staff Professional	\$ 83/hour
Project Professional	\$ 95/hour
Project Manager	\$100/hour
Senior Professional	\$110/hour
Senior Project Manager	\$115/hour
Principal Professional	\$125/hour
Senior Principal	\$150/hour
Special Consultant(s)	On Request

ADMINISTRATIVE/TECHNICAL STAFF RATES

Clerk/Typist	\$ 42/hour
Technical Typist	\$ 50/hour
Project Administrative Assistant	\$ 55/hour
Drafter	\$ 55/hour
Designer	\$ 62/hour
Senior Designer	\$ 72/hour
Field Technician	\$ 80/hour
Environmental Technician	\$ 80/hour
Senior Environmental Technician	\$ 85/hour

- * Applies to all professional rates including but not limited to civil, mechanical, chemical, electrical, geotechnical and environmental engineers; industrial hygienists; geologists; hydrogeologists; hydrologists; and computer specialists.

ENVIRONMENTAL SAMPLING AND TESTING EQUIPMENT

SOIL AND WATER

Acoustic Water Level Indicator	\$ 95/day
Air Compressor (3 - 10 cfm)	\$ 85/day
Analog Thermometer*	\$ 10/day
Bailers	\$ 35/day
Bed Load Samplers	
Hand-Held Low Flow	\$ 45/day
High Flow with Suspension System and Winch	\$ 75/day
Brunton Transit*	\$ 10/day
Centrifugal Water Pump*	\$ 10/day
Conductivity, pH, and Temperature Monitor	\$ 40/day
Conductivity-Based Water Level Indicator	\$ 40/day
Current Meter/Flow Measurement Equipment	\$ 75/day
Diaphragm Surface Pump	\$ 65/day
Digital Thermometer*	\$ 10/day
Groundwater Sampling Truck/Trailer	\$ 60/hour
(Complete with generator, air compressor, sample pump and reel assembly, steam cleaner and water tank, water level indicator, conductivity, pH and temperature monitor, bailer) 4-hour minimum	
Hand Auger and Soil Sampler	\$ 50/day
Hermit Hydrologic Monitor	\$440/day
Iscocomposite Water Sampler Unit	\$145/day
Iscocomposite Flow Recorder	\$100/day
Level or Transit and Rod	\$ 75/day
Line/Cable Locator	\$ 85/day
Measuring Wheel*	\$ 10/day
Metal Detector*	\$ 10/day
Peristaltic Pump	\$ 65/day
pH Meter*	\$ 20/day
Pipe Cutter and Threader*	\$ 20/day
Portable Air Compressor*	\$ 15/day
Portable Generator*	\$ 30/day
Portable Generator (1.5 to 4 kW)	\$ 75/day
Portable Generator (greater than 4 kW)	\$ 95/day
Power Inverter*	\$ 15/day
Pump Bladders	\$ 55 each
Range Finder*	\$ 10/day
Steam Cleaner (0.5 to 2 gpm)	\$ 95/day
Stevens Water Level Recorder*	\$ 40/day
Suspended Sediment Samplers	
DH48 Hand-Held Low Flow	\$ 45/day
D49, D74 High-Flow with Suspension System and Winch	\$ 75/day
Syringe Sampler	\$135/day
Trailer-Mounted 4" Submersible Pump and Reel Assembly	\$300/day
Transducer and SE1000 Recorder	\$195/day
Variable Voltage Supply*	\$750/week
Video Camera	\$ 20/day
Video Camera	\$ 55/day
Walkie Talkie Set*	\$ 15/day
Well Development Tool	\$ 45/day

* Weekly and monthly rates available upon request.

AIR AND GAS	Rate/Day	Rate/Week	Rate/Month
Absolute Pressure Transducer	\$ 20	\$ 65	\$ 200
Bacharach O ₂ Combustible Analyzer	30	100	330
Barhole Punch	15		
Barometer	10	35	110
Calibration Gas	5		
Calibration Gas Regulator	5	20	60
Combustible Gas Analyzer	50	175	550
Differential Pressure Transducer	20	75	220
Draeger Quantimeter	100	350	1,100
Draeger Tubes	10 each		
Dual Ambient Air Sampler	55	170	600
Field Gas Chromatograph	500	2,000	5,500
Fyrite CO ₂ Indicator	10	30	100
Fyrite O ₂ Indicator	10	30	100
Gas Chromatograph (office)			60 each run
Gas Production Curves			350 each run
Gastech GX-3N	50	175	550
Gastech NP-204 and IP-204	50	175	550
Gastech Toms	50	175	550
Integrated Surface Sampler	30	100	330
Irrrometer	5	20	55
Kurz Velocity Meter	20	75	220
Magnehelic Gauge	10	35	110
Mobile Emissions Laboratory	1,000	3,000	
Moisture Meter	10	35	110
Naigene Hand Pump	15	50	165
O ₂ Analyzer	55	200	600
Organic Vapor Analyzer	160	475	1,700
Organic Vapor Analyzer with Strip Chart Recorder	180	500	1,900
Orifice Plate*	20	60	220
Pitot Tubes	10	35	110
Portable Brailsford Pump or Equivalent	25	90	275
Slack Tube Manometer	5	20	60
Sound Level Meter	40		
Strip Chart Recorder (dual pen)	15	150	165
Strip Chart Recorder (single pen)	15	50	165
Test Skid	270	950	3,000
Test Trailer	325	1,200	3,600
Vibration Analyzer	55		
Voltmeter	5	20	55
Wind Speed and Direction Indicator (one system each)		325	1,200

MONITORING WELL INSTALLATION MATERIALS*

	<u>2"</u>	<u>4"</u>
Casing, Blank Schedule 40, PVC with Threaded Joints 10-foot lengths	\$ 8.00/foot	\$12/foot
Casing, Blank Schedule 40, PVC with Threaded Joints 5-foot lengths	\$ 7.50/foot	\$16/foot
Casing, Screens, 0.02" Slots, Schedule 40 PVC with Threaded Joints, 10-foot lengths	\$ 7.50/foot	\$18/foot
Casings, Screens, 0.02" Slots, Schedule 40 PVC with Threaded Joints, 5-foot lengths	\$ 8.50/foot	\$27/foot
Casing, PVC Plug	\$ 6.00 each	\$21 each
Casing, PVC Cap	\$ 11.00 each	\$27 each
Sand, 100# bag	\$ 22.00/bag	
Bentonite Pellets, 50# bucket	\$ 95.00/bucket	
Drums	\$ 45.00 each	
Granulated Bentonite, 50# sack	\$ 40.00/sack	
Cement/Bentonite Slurry	\$110.00/cubic yard	
Security Tops	\$190.00 each	
Brass Tubes	\$ 6.50 each	
Dedicated Pumps	On Request	

* Quotations on prices for PVC well casings greater than 4-inch diameter and other materials (stainless steel, etc.) provided on request.

HEALTH AND SAFETY EQUIPMENT

Portable Personnel Decontamination Trailer	\$215/day
Personnel Air Sampling Pump	\$ 75/day
Borehole Ventilation System	\$160/day
Level A Protection	On Request
Level B Protection†	\$195/day/person
Level C Protection†	\$110/day/person
Level D Protection†	\$ 40/day/person
Limited Level D Protection†	\$ 30/day/person

† Charges for each protection level are based on dry work conditions and use of uncoated PVC/nitrile/neoprene gloves. A nominal charge for wet work conditions requiring coated or special chemical resistant coveralls (i.e., Saranex) and gloves (i.e., Viton) may be added.

SPECIAL MEDICAL SURVEILLANCE COSTS

Baseline physical costs are covered by the company; however, project-specific medical tests will be charged at cost plus 20%.

OTHER EQUIPMENT CHARGES

GEOPHYSICAL EXPLORATION EQUIPMENT

Seismograph, Single Channel Bison Model 1570C or Nimbus Model ES-125	\$160/day
Seismograph, Twelve Channel Nimbus Model ES121OF	\$420/day
Resistivity Meter, Bison Model #2390	\$140/day
Soil Test Model R-40C	\$110/day
Megger Earth Tester	\$ 90/day
Magnetometer, Portable Proton-Geometrics Model 6816	\$160/day
Electromagnetics	\$190/day
Ground Penetrating Radar	On Request

VEHICLES

Vehicle, 2 Wheel Drive	\$ 7/hour
Vehicle, 4 Wheel Drive	\$ 10/hour
Mileage, 2 Wheel Drive	\$ 0.45/mile
Mileage, 4 Wheel Drive	\$ 0.50/mile
Utility Trailer	\$ 30/day

OFFICE EQUIPMENT

Personal Computer, basic software systems	\$ 12/hour
Microcomputer, basic software systems and supporting hardware [†]	\$ 15/hour
Mainframe Computer Time-Sharing (per CPU minute) [†]	\$ 6/minute
Computer Connect Time [†]	\$ 5/hour
Disk Storage (per megabyte) [†]	\$ 55/month
Interactive Surface Modeling (ISM) Software Surcharge [†]	\$ 25/hour
Environmental Information Management System Software Surcharge [†]	\$ 10/hour
Project Management and CPM Software Surcharge	\$ 10/hour
Reproduction	\$ 0.24/page
Telephone	\$ 0.40/minute
Facsimile Copies	\$ 1.30/page
Report Surcharge	\$ 30/copy

[†] Discounts available for project-specific support services.