#### AGREEMENT TO FURNISH CONSULTING SERVICES

#### **FOR**

# DESIGN OF BRIDGES OVER THE SANTA ANA RIVER AT ORANGE STREET AND AT ALABAMA STREET PHASE I

This Agreement is made and entered into this 4th day of November, 1997, by and between the City of Redlands, a municipal corporation ("City") and McDaniel Engineering Company ("Consultant").

In consideration of the mutual promises contained herein, City and Consultant agree as follows:

### **ARTICLE 1 - ENGAGEMENT OF CONSULTANT**

- 1.1 City hereby engages Consultant to perform engineering design services, which are more particularly described in Exhibit "A" attached hereto and incorporated herein by this reference (the "Engineering Services"), for the design of Bridges over the Santa Ana River, Phase I (the "Project").
- 1.2 All work performed by Consultant under this Agreement shall be done in a professional manner, and Consultant represents that it is skilled and has the professional expertise necessary to provide high quality Engineering Services to City.
- 1.3 The Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the consultant, to solicit or secure this agreement and the he/she has no paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or formation of this agreement. For breach or violation of this warranty, the Local Agency shall have the right to annul this agreement without liability, or at its discretion to deduct from the agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

#### **ARTICLE 2 - RESPONSIBILITIES OF CITY**

- 2.1 City shall place at the disposal of Consultant all available information in its possession pertinent to the Project.
- 2.2 City will provide access to and make all provisions for Consultant to enter upon property as required by Consultant to perform the Engineering Services under this Agreement.

City will designate in writing a person to act as City's representative with respect to the Engineering Services to be performed under this Agreement, and such person shall have complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to materials, equipment, elements, and systems pertinent to the Engineering Services covered by this Agreement.

# ARTICLE 3 - RESPONSIBILITIES OF CONSULTANT

3.1 Consultant shall perform the Engineering Services promptly and shall prosecute them diligently in accordance with the schedule attached hereto and incorporated herein as Exhibit "B."

# ARTICLE 4 - PAYMENTS TO CONSULTANT

- 4.1 For the performance of the Engineering Services, City will pay Consultant on a time and materials basis, and, in any event, a fee not to exceed \$160,704.44. The Federal Acquisition Regulations in Title 48, CFR 31 are the governing factors regarding allowable elements of cost.
- 4.2 Payments by City to Consultant shall be made within 30 days after receipt and approval of Consultant's hereinabove invoice, by warrant payable to Consultant.

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:

City

City of Redlands

Public Works Department

P.O. Box 3005

Redlands, CA 92373

Consultant

Gary Antonucci, P.E.

McDaniel Engineering Company 1535 South D Street, Suite 120 San Bernardino CA 92408

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.

4.3 The Consultant shall comply with all Federal, State and local laws and ordinances applicable to the work, including compliance with prevailing wage rates and their payment in accordance with California Labor Code, Section 1775.

# **ARTICLE 5 - INSURANCE AND INDEMNIFICATION**

- Consultant shall maintain workers' compensation insurance and, in addition shall maintain insurance to protect City 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 the Agreement. Said public liability and property damage insurance shall be in a minimum combined single limit of \$1,000,000 per occurrence. The City shall be named an additional insured on the insurance coverage for public liability and property damage, and such insurance shall be primary and non-contributing to any insurance or self-insurance maintained by City. The Consultant shall provide City with a certificate evidencing such insurance coverage.
- Consultant agrees to maintain professional liability insurance pursuant to this paragraph to protect City from negligent acts, errors, or omissions of a professional nature; the total aggregate of Consultant's professional liability insurance coverage shall be a minimum of \$1,000,000.
- Consultant shall indemnify, hold harmless and defend City and its elected officials, agents, and employees from and against any and 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 Consultant, its contractors, its suppliers, anyone directly or indirectly employed by it or anyone for whose acts or omissions it may be liable in the performance of the Engineering Services described in this Agreement.

## **ARTICLE 6 - GENERAL CONSIDERATIONS**

- In the event any action is commenced to enforce or interpret any of the terms or conditions of this Agreement the prevailing party shall, in addition to any costs and other relief, be entitled to recover its reasonable attorneys' fees.
- 6.2 Consultant shall not sublet or assign any of the Engineering Services to be performed under this Agreement, except with the prior written approval of the City and in strict compliance with the terms, provisions, and conditions of this Agreement.
- 6.3 The key Consultant's personnel/sub-consultants proposed for this project are as follows:

Gary Antonucci, P.E.

David Williams, P.E.

Project Manager, McDaniel Engineering
Project Engineer, Wes Consultants
Project Engineer, Wes Consultants

Jim Godfredsen, P.E. Project Engineer, John Egan and Associates

Consultant agrees that these key people/sub-consultants will be made available and assigned to City's Project, and that they will not be replaced without concurrence from the City.

- All documents, records, drawings, designs and specifications, cost estimates, and other Project documents developed by Consultant pursuant to this Agreement shall become the property of City and shall be delivered to City at City's request. Any reuse of such documents for other projects and any use of incomplete documents will be at City's sole risk.
- The responsible engineer(s) shall sign and stamp with the appropriate registration number all plans, specifications, estimates (PS&E) and engineering data furnished by the Consultant.
- Consultant is for all purposes under this Agreement an independent contractor and not an employee of City. All qualified personnel provided by Consultant pursuant to the provisions of this Agreement are to be employed by Consultant for its account only, and in no event shall Consultant or any personnel retained by him be deemed to have been employed by City or engaged by City for the account of or on behalf of City.
- 6.7 Unless earlier terminated as stipulated below, this Agreement shall terminate upon completion and acceptance by City of the Engineering Services.
- 6.8 Upon receipt of a termination notice, Consultant shall (1) promptly discontinue all services and (2) deliver or otherwise make available to City, copies of data, design calculations, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by Consultant in performing this Agreement.
- This Agreement, including the 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 City and Consultant.
- 6.10 This Agreement shall 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

McDANIEL ENGINEERING COMPANY

Mayor

by /

Mayor

President

Date November 4, 1997

Date November 21, 1997

ATTEST:

5

# EXHIBIT "A" SCOPE OF SERVICES

#### SCOPE OF WORK

for

# Orange and Alabama Street Bridges at the Santa Ana River

#### PHASE I - Preliminary Engineering September 5, 1997

- Task I.1 Field Review. Conduct a detailed review of the project site. The review will include site photography, assessment of approach roadway conditions, evaluation of existing hydraulic characteristics of the river channel, and identification of general locations and limits of endangered habitat areas. The results of the field review will be compiled in a brief summary memo.
- Task I.2 Data Collection. Obtain and review available as-built drawings, record maps, environmental documents, hydrologic/hydraulic information, streamgage data, and FEMA or other similar studies. Corps of Engineers' documentation related to Seven Oaks Dam, streambed degradation, and sediment transport will also be obtained.
- Task I.3 Topographic Mapping. Establish field control and obtain aerial topographic mapping, in metric format, for the project area. Limits will extend from one mile upstream of the Orange Street Bridge to one-half mile downstream of the Alabama Street Bridge, and 1000 feet each side of the approximate low-flow channel.
- Task I.4 Hydraulic Model. Obtain Corps of Engineers' existing HEC-2 model of the Santa Ana River and utilize it to develop a HEC-RAS model for 10-, 25-, 50-, and 100-year discharges. The HEC-RAS model will assume that Seven Oaks Dam is online, and will be used to establish base conditions and velocity contours for each of the four discharges.

This data will be presented in a meeting with the US Fish and Wildlife Service (USFWS) to gain consensus on base conditions.

Task I.5 - Hydraulic Evaluation. In consultation with City staff and Tom Dodson & Associates (TDA), two "buildable" bridge alternatives for each street will be selected for initial detailed analysis. The HEC-RAS model will be used to determine bridge hydraulic characteristics (hydraulic opening and backwater), pier scour, and contraction scour. Temporary impacts of construction will be included in the analysis.

Velocity contours and other significant hydraulic parameters for the river will be presented for evaluation by the project team, City, and TDA. This data will be used to quantify changes in the base conditions due to the bridge alternatives.

Scope of Work
Orange and Alabama Street Bridges
PHASE I - Preliminary Engineering
September 5, 1997
Page 2

After the initial evaluation, up to three additional alternatives will be jointly selected and evaluated in the same manner as described above. The overall analysis effort will be used to satisfy environmental documentation requirements and determine a recommended alternative for each site.

Task I.6 - Bridge Advance Planning Studies. Concurrent with Task I.5, prepare bridge advance planning studies for each agreed-upon alternative. The bridge studies will be prepared in accordance with Caltrans' Bridge Memo to Designers 1-8, and will establish span lengths, structure depth, support dimensions, and other critical data needed for inclusion in the hydraulic models. Cost estimates will be prepared for the bridge and roadway improvements required for each proposed alternative.

Task I.7 - Determination of Effects and Summary Report. In consultation with TDA, utilize results of the hydraulic and bridge studies to quantify the significant effects of each alternative.

With TDA's assistance, probable costs of mitigation will be determined for each alternative. These will be utilized to determine total estimated costs for each alternative, to aid in selecting the recommended alternative for construction at each site.

A brief report will be prepared summarizing the results of the engineering studies, and tabulating estimated costs.

Task I.8 - Environmental Assistance. Provide consultation with TDA as needed for interpretation of the engineering studies and inclusion in the environmental document. Assistance will also be provided for coordination and negotiation of permits with USFWS, California Department of Fish and Game, and Corps of Engineers.

EXHIBIT "B"

SCHEDULE

# Project Schedule Santa Ana River Bridges

Phase I ~ Preliminary Engineering

#### Weeks from Notice-to-Proceed

		1	2	3	4	5	6	7	8	9	10	) 11	12	2 13	14	4 15	1	6 1	7	18 1	9	20	21	22	23	24	25	26	2	7 2	28	29	30	31	32	33	34	35
Task	Duration																				_							<u> </u>					***************************************					
0. Notice-to-Proceed	0d																		-																			
1. Field Review	3d																_																					
2. Data Collection	5d																									-					1							
3. Topographic Mapping	15d				and the second s																																	-
4. Hydraulic Model	25d													automatic Control									a suprementation															
5. Hydraulic Evaluation	20d																									-		.,,,,						-				
6. Bridge Studies	20d																	somethic .												-								
7. Effects / Summary Report	10d								and the second											100															-			-
8. Environmental Assistance	60d																																Light and the second					

Legend

**Engineering Activity** 

Agency Review

#### EXHIBIT "C"

#### FEE PROPOSAL

Consultant proposes to perform the engineering services for the design of Bridges over the Santa Ana River, Phase I, in accordance with the Scope of Services as listed on Exhibit "A", Scope of Services for the not to exceed fee of \$160,704.44, as follows:

# **Cost Proposal**

## Alabama Street Bridge - Phase I

Firm: McDaniel Engineering Company

abor	Hours		Rate		Total		
Principal-in-Charge	0	\$	52,00	\$	•		
Project Manager	92	\$	54.00	\$	4,968.00		
Project Engineer	64	\$	47.75	\$	3,056.00	ė,	
Design Engineer	84	\$	33.39	\$	2,804.76		
CADD Technician	60	\$	22.74	\$	1,364.40		
Clerical	16	\$	14.47	\$	231.52		
				Sut	ototal Labor:	\$	12,424.68
Indirect Costs (Over	rhead)						
Overhead Rate	165.00%	6					
_			s	ubtot	al Overhead:	\$	20,500.72
			Total Lat	or an	d Overhead:	\$	32,925.40
Subconsultants							
MEST Consultants						\$	32,600.67
WEST Consultants	****					\$	10,225.10
John Egan & Associa						\$	-
Converse Consultan						\$	
W. Koo & Associates	5		Total	al Guib	consultants:	s	42,825.77
			100	ai Jul	00110011001	•	,
Direct Costs	Quantity	T	Unit Cost		Total		
Ferrinment	1	\$	150.00	\$	150.00		
Equipment	1	\$	250.00	1	250.00		
Supplies	1	+ <del>*</del>	250.00	+	250.00		
Others	<u> </u>				Direct Costs:	\$	650.00

Fee (profit - 12%)

**Total Cost** 

3,951.05

80,352.22

# **Cost Proposal**

# Orange Street Bridge - Phase I

### McDaniel Engineering Company

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Labor	Hours	T	Rate	Total			
Directed in Charge	0	\$	52.00	\$	•		
Principal-in-Charge	92	s	54.00	\$	4,968.00		
Project Manager	64	\$	47.75	\$	3,056.00		
Project Engineer	84	s	33.39	\$	2,804.76		
Design Engineer	60	\$	22.74	\$	1,364.40		
CADD Technician	16	\$	14.47	\$	231.52		
Clerical	10				handal I abor:		

12,424.68 Subtotal Labor: \$

Indirect Costs (Overhead)

Overhead Rate

165.00%

Subtotal Overhead: \$

20,500.72

Total Labor and Overhead: \$

32,925.40

Subconsultants

**WEST Consultants** 

John Egan & Associates

Converse Consultants

W. Koo & Associates

32,600.67 10,225.10

\$

Total Subconsultants:

42,825.77

#### **Direct Costs**

Diloct cocca	Quantity		Unit Cost		Total
F	1	S	150.00	\$	150.00
Equipment	1	\$	250.00	\$	250.00
Supplies	1	S	250.00	\$	250.00
Others				<u> </u>	

Total Direct Costs: \$

650.00

Fee (profit - 12%)

3,951.05

**Total Cost** 

80,352.22

#### EXHIBIT "D"

#### DISADVANTAGED BUSINESS ENTERPRISE (DBE) CONSULTANT CONTRACT REQUIREMENTS

The provisions of Title 49, Part 23, Code of Federal Regualtions (49 CFR 23) and the City of Redlands' adopted DBE Program require that Disadvanbtaged Business Enterprises (DBE's) have the opportunity to participate in federally-funded, transportation projects.

In order to meet these requirements, the following criteria have been established:

- 1. Participation by City of Redlands' certified DBE's as prime consultants or sub-consultants in this contract or
- 2. A good faith effort by the prime consultant in trying to secure participation by DBE's prior to award of this contract. Documentation of a good-faith effort will be submitted in writing and will consist of the following:
  - a) A list of City of Redlands' certified DBE's solicited.
  - Description of efforts to use the services of available minority community organizations; minority contractor groups, women contractor groups; and local, State and Federal minority business assisstance centers in the recruitment and placement of DBE's including name of contact, date of contact, and information they provided.
  - c) Identification of the portions of work to be performed by DBE's including type of work and dollar value.
  - d) Documentation of good-faith negotivations between sub-contractoprs and interested DBE's including names and dollar-values of all bids.

#### EXHIBIT "E"

#### CERTIFICATION OF LOCAL AGENCY

I HEREBY CERTIFY that I am the Public Works Director of the City of Redlands, and that the consulting firm of McDaniel Engineering Company or its representatives has not been required (except as herein expressly stated), directly in indirectly, as an express or implied condition in connection with obtaining or carrying out this Agreement to:

- (a) employ, retain, agree to employ or retain, any firm or person; or
- (b) pay or agree to pay, to any firm, person or organization, any fee, contribution, donation, or consideration of any kind.

I acknowledge that this Certificate is to be made available to the California Department of Transportation (Caltrans) in connection with this Agreement involving participation of Federal-aid Highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

Date	Signature	

#### EXHIBIT "F"

#### CERTIFICATION OF CONSULTANT

I HEREBY CERTIFY that I am the Project Manager and duly authorized representative of the firm of McDaniel Engineering Company whose address is 1535 South D Street, Suite 120, San Bernardino CA 92408, and that, except as hereby expressly stated, neither I nor the above firm that I represent have:

- (a) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above consultant) to solicit or secure this agreement; nor
- (b) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the agreement; not
- (c) paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above consultant) any fee, contribution, donation, or consideration of any kind, or in connection with, procuring or carrying out this agreement.

I acknowledge that this Certificate is to be made available to the California Department of Transportation (Caltrans) in connection with this Agreement involving participation of Federal-aid Highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

17/97 Signature Signature