

**TO:** James L. App, City Manager  
**FROM:** Meg Williamson, Interim Public Works Director  
**SUBJECT:** Award of Design Contract for Union Road Improvements - Riverglen to Kleck Road  
**DATE:** April 20, 2004

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**NEEDS:** For the City Council to consider awarding the design services to improve Union Road from Riverglen to Kleck Road.

- FACTS:**
1. Within the 2000 Circulation Element, Union Road is planned to be a 4-lane arterial. Due to its proximity to State Route 46, the potential to divert significant traffic from State Route 46 to this street is high. This was evident in testing alternative circulation improvements within the Citywide traffic model.
  2. Although there is sufficient right-of-way for widening Union Street to 4-lanes, greater diversion of traffic from State Route 46 would create a significant traffic congestion problem at the 13<sup>th</sup> Street Bridge.
  3. The City is, therefore, committed to maintaining a configuration for Union Road that will help avoid unacceptable congestion at the 13<sup>th</sup> Street Bridge. The City will improve Union Road by providing a 3-lane configuration, enhanced pavement edge (concrete curb and gutter), safe pedestrian paths, multi-purpose trails, and additional landscaping.

**ANALYSIS  
AND**

**CONCLUSION:** A Request for Proposal (RFP) was issued to fourteen (14) firms to prepare construction plans, specifications and estimates to improve Union Road. Six firms responded with fee proposals ranging from \$35,040 to \$87,925.

Staff reviewed the proposals and rated them based on project understanding and approach, technical knowledge, and experience in performing similar work and fees.

The proposal from North Coast Engineering received the highest rating using these criteria. Their fee proposal is \$72,523. Their fee included a comprehensive drainage report, soils engineering, and striping plans prepared by a traffic engineer. Without these services, their basic fee would be about \$50,000. Firms who submitted fees in the mid-\$40,000 range did not include drainage report, soils engineering, or a traffic engineer on their team. It is recommended that the City Council direct staff to engage the services of North Coast Engineering for all services in their proposal in the amount of \$72,253.

A detailed summary of the proposals received is attached.

**POLICY**

**REFERENCE:** 2000 Circulation Element adopted by the City.  
Adopted Capital Improvement Program

**FISCAL**

**IMPACT:** A budget of \$950,000 has been adopted for this project per Budget Account No. 225.910.5452.507.

- OPTIONS:**
- a. Authorize the City Manager to engage the services of North Coast Engineering to prepare plans, specifications, and estimates (PS&E) to improve Union Road from Riverglen to Kleck Road in the amount of \$72,523.
  - b. Amend, modify or reject the above option.

Attachments

- 1) Scope of Work and Fee Proposal

Report prepared by:

Ditas Esperanza, P.E.

Capital Projects Engineer

**Detail Summary of  
Proposals Received  
Union Road Improvements**

1. R. Thompson Engineering

A. Pre-design Phase	\$ 3,610
B. Survey/Base Mapping	\$17,260
C. Preliminary Design	\$17,465
D. Final Plans and Specifications	\$33,350
E. Bid Phase	\$ 2,815
F. Bidding Assistance	<u>\$ 6060</u>

Total \$80,560

2. North Coast Engineering

A. Preliminary Engineering plus Survey and Base Map	\$18,274
B. Final Design plus Drainage Report	\$35,054
C. Soils Engineering	\$ 4,895
D. Aerial Topography	\$ 8,030
E. Traffic Engineering	<u>\$ 6,270</u>

Total \$72,523

3. Cannon Associates

A. Project Orientation	\$ 984
B. Topography and Base Map	\$11,540
C. Conceptual Alignment Study	\$ 8,200
D. Design Documents	\$15,088
E. Construction Plans and Specifications	<u>\$ 4,528</u>

Total \$40,340

4. Omni Design Group

A. Phase I	\$ 1,600
B. Phase II	\$ 8,240
C. Phase III	\$24,400
D. Phase IV	<u>\$ 800</u>

Total \$35,040

5. Penfield & Smith

A. Initial Project Meeting	\$ 4,176
B. Aerial Topography and Data Retrieval	\$ 7,000
C. Preliminary Design	\$18,208
D. Final Design	\$16,172
E. Bidding Assistance	\$ 1,336
F. Project Administration	\$ 5,925
G. Mapping	<u>\$ 7,130</u>

Total \$59,947

6. John Wallace Associates

A. Surveying and Mapping	\$15,755
B. Project Initialization and Investigation	\$ 5,470
C. Conceptual Alignment Study	\$ 5,380
D. Construction Documents	<u>\$61,320</u>

Total \$87,925



**PROPOSAL  
FOR  
PROFESSIONAL ENGINEERING SERVICES**

**PREPARATION OF  
PLANS, SPECIFICATIONS AND ESTIMATES  
FOR  
UNION ROAD IMPROVEMENTS,  
RIVERGLEN TO KLECK  
PASO ROBLES, CALIFORNIA**

**DPW Project No. 03-24**

**City of Paso Robles  
Department of Public Works**

**Submitted By**

**North Coast Engineering, Inc.  
725 Creston Road, Suite B  
Paso Robles, California 93446  
[www.northcoastengineering.com](http://www.northcoastengineering.com)**

**In Association  
With  
Earth Systems Pacific  
Golden State Aerial Surveys  
McCarthy Engineering, Inc.**

**February 6, 2004**



February 6, 2004

City of Paso Robles  
Department of Public Works  
1000 Spring Street  
Paso Robles, California 93446

Attention: Ditas Esperanza, P.E.  
Capital Projects Engineer

Subject: Request for Proposals, Preparation of Plan Specifications and Estimates for  
Union Road Improvements, Riverglen to Kleck Road  
DPW Project No. 03-24

Dear Ms. Esperanza:

Thank you for the opportunity to submit our proposal for professional engineering services for the preparation of plan specifications and estimates for the improvements of Union Road from Riverglen Drive to Kleck Road. This proposal has been prepared based upon discussions with the City of Paso Robles Public Works staff and the Request for Proposal.

North Coast Engineering (NCE) has extensive experience in this area, having successfully planned, designed and overseen construction of numerous road reconstruction projects for the cities of Atascadero, Morro Bay, Paso Robles, Pismo Beach, and San Luis Obispo County. In addition to our technical design expertise, our project team has a solid understanding of the financing, planning, and permitting aspects of public street and bikeway facilities.

Our previous experience with this section of Union Road, which has included the design of several residential tracts that front on the street, as well as preparation of a Union Road drainage study, has placed us in the unique position of being able to offer a clear understanding of the City's goals and requirements for this project. We have also been intimately involved with the development and implementation of the Union/46 Specific Plan, and are keenly aware of Specific Plan issues regarding Union Road and its connecting streets.


We possess the necessary experience and personnel required to deliver an outstanding design which would be a complementary extension of the City's planned improvements at the Union Road/River Road intersection as a part of the 13<sup>th</sup> Street bridge project.

We have enlisted the services of Earth Systems Pacific for a geotechnical investigation, Golden State Aerial Survey to provide the aerial topographic mapping, and McCarthy Engineering to provide traffic engineering services. All have provided services to NCE for many years on numerous projects. We feel confident in the proven quality of product and professionalism demonstrated by all of these firms.

We are prepared to begin working on this project immediately. We understand your requirements and specific concerns and are prepared to comply with them fully.

All work will be performed in our Paso Robles office, except for work of our subconsultants. This proposal will remain valid for a period of 60 calendar days from the date of submittal. We are not aware of any conflict of interest in the proposed provision of these services.

Sincerely,

  
Steven J. Sylvester, P.E.  
President



SJS/jms  
Attachment

### **3. PROJECT UNDERSTANDING**

The City of Paso Robles proposes to reconstruct Union Road from Riverglen Drive to Kleck Road, a distance of approximately 2400 feet. The project will be a companion project to the 13<sup>th</sup> Street bridge widening project, which will complete the reconstruction of Union Road from North River Road to Riverglen Drive. It is anticipated that construction of the bridge widening project will commence in the summer of 2004, followed by the remaining construction of Union Road the following year.

Union Road is classified as an arterial street according to the City's 2000 Circulation Element map. The road was originally built as a state highway and was originally constructed of concrete. Over the years, many sections have been overlaid and widened by developing properties, resulting in varying widths and thicknesses of pavement and structural sections. Drainage improvements have been completed on a project-by-project basis and a complete drainage system has never been planned or designed. The majority of street drainage is channeled into an existing open channel along the southerly portion of the road, which is proposed to be maintained in its existing condition. Several connecting streets along the south side of the road exhibit substandard geometry and will require reconstruction and drainage culvert improvements.

In 1989, the City adopted the Union/46 Specific Plan, which established design criteria and guidelines for properties developing along the north side of Union Road. All such properties between Riverglen Drive and Kleck Road have been developed to their final configuration. The Specific Plan required that these fronting properties grade the right-of-way to the ultimate width, but did not require street widening except to provide turn pockets and tapers to connecting streets. The excess area graded for the right-of-way has been temporarily landscaped. The City will be separately contracting with a landscape consultant for disposition of these improvements. The Specific Plan anticipated that Specific Plan fees would ultimately be used to widen and reconstruct the road to accommodate two lanes with turn pockets and intersection tapers, and an off-street Class I combined bicycle/pedestrian path to be located on the north side of the road.

The City's plans for the 13<sup>th</sup> Street bridge widening project are nearly complete and would provide reconstruction of Union Road from North River Road to Riverglen Drive. These improvements include traffic lanes, Class II bike lanes, and a detached multi-purpose path. The City wishes to continue this improvement with the development of the plans and specifications that are the subject of this Request for Proposal.

Development of this portion of the project will involve the preparation of two to three conceptual alignments and cross sections for review by the City. These concepts will apply different cross-sectional treatments to the extension of the improvements, including curb and gutter on both sides, concrete sidewalk on the north side only, a Class I bike path on the north side, and possibly Class II bike lanes within the roadway section. The ultimate approved cross section will likely be a function of the existing physical width available between the existing graded slope to the north and the existing drainage channel to the south. Elimination of the drainage swale to the south is not included in the scope of this project at this time.



The City has indicated that because many portions of the existing road are in varying states of failure, and due to the inconsistency in the structural sections and age of the underlying improvements that complete reconstruction of the existing roadway is indicated. Of course if some areas appear to be more competent than others and a savings in cost can be realized, that possibility will be evaluated during design.

Preliminary design of the project will also include a review of the horizontal and vertical geometric requirements for the easterly extension of the road from Kleck Road to a point approximately 500 feet east of Walnut Drive where the future alignment is fixed by recent subdivision improvements.

A complete scope of work necessary to accomplish the City's objectives for this project is contained in the following section.

#### **4. WORK PROGRAM**

An outline of our proposed work program is as follows:

##### **I. PRELIMINARY ENGINEERING & MAPPING**

##### **A. Topographic Mapping (Riverglen Drive to Walnut Drive)**

##### **1. Control**

- a. Horizontal and vertical control for this project will be tied to the control for the 13<sup>th</sup> Street Bridge project (converted from metric to imperial units).
- b. Locate centerline and right-of-way monuments along Union Road from Riverglen Drive to 500'± east of Walnut Drive.

##### **2. Topographic Survey**

- a. Set and tie in aerial targets for an aerial topographic survey at a scale of 1" = 40' with 1' contour intervals. (Aerial topographic survey will be 100' wide along Union Road and extend from Riverglen Drive to 500' ± east of Walnut Drive, and extend 100' up connecting streets.)
- b. Locate existing curbs, manholes, water valves, catch basins, utility vaults, oak trees, culverts, and other above ground features.

- c. Establish existing centerline and right-of-way for Union Road and connecting streets.

**B. Soils Investigation (Earth Systems, Inc.)**

- 1. Obtain five exploratory soils borings to identify existing pavement and soils conditions.
- 2. Prepare preliminary soils investigation report to include pavement sections and grading recommendations.

**C. Base Maps and Conceptual Alignments**

**1. Prepare base maps to include:**

- a. Topographic Data
- b. Existing Centerline and Right-of-Way Data
- c. Existing Utilities
- d. Existing subdivision improvements to remain.
- e. Existing Centerline Profile
- f. Existing Pavement Limits

**2. Prepare Conceptual Alignments**

- a. Prepare 2-3 schematic conceptual alignments for staff review.
- b. Extend alignments 500 ft. east of Walnut Drive to evaluate horizontal and vertical geometric requirements.
- c. Attend two meetings with staff.
  - 1. Kick-off meeting to review project parameters.
  - 2. Design review and selection of alternative.

**II. FINAL DESIGN SERVICES**

- A. Union Road Profile and Superelevation Design
- B. Design connections to existing intersecting streets.
- C. Curb Return Profiles
- D. Drainage calculation and design for culverts for cross streets on south side at drainage channel.
- E. Class 1 Bike Path Design
- F. Identify utility relocations required, coordinate with utilities.
- G. Roadside Design
- H. Earthwork Quantities
- I. Prepare 70% Plan Submittal consisting of:
  - 1. Title Sheet (1)
  - 2. Sheet Index (1)
  - 3. Plan and Profile (5) @ 1" = 20', Riverglen to Kleck Road
  - 4. Curb Returns (1)
  - 5. Storm Drain Details (1)
  - 6. Detail Sheets (2)
  - 7. Striping Plans (2)
- J. Prepare 90% Plan Submittal after City review.
- K. Prepare Special Provisions.
- L. Prepare Engineer's Estimate and Bid Sheet.
- M. Prepare 100% PS&E after final City review.
- N. Meetings and Quality Control:

***Proposal for Professional Engineering Services  
Union Road Improvements, Riverglen to Kleck, DPW Project No. 03-24***

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1. Attend two (2) design meetings with City (70% and 90% submittals).
2. Traffic Engineer review of horizontal and vertical geometry, roadside design and striping plan.
3. Internal Plan Checking

Final delivery to consist of one original set of mylar plans, one CD containing Autocad drawing files and Special Provisions in Microsoft Word format.

**Exclusions**

Landscaping Demolition or Design  
Drainage Ditch Improvements  
Subsurface Drainage Improvements (except at connecting streets on south side)  
Retaining Wall Design  
Permits  
Storm Water Pollution Prevention Plan (by contractor)

**5. WORK BUDGET**

See Estimate Worksheet on Page 20.

**6. SCHEDULE**

	<u>Duration</u>
Task 1 Project Start Up	2 weeks
Task 2 Data Collection and Aerial Mapping	8 weeks
Task 3 Base Sheet and Preliminary Concept Preparation	4 weeks
Task 4 City Review Process and Alignment Selection	4 weeks
Task 5 Final Design	<u>12 weeks</u>
Total:	<u>30 weeks</u>

## **7. SPECIAL QUALIFICATIONS**

North Coast Engineering is uniquely qualified to undertake this project. We have been involved in the planning and design of Union Road improvements since 1986, when Sunset Ridge (Tract 1463) was first proposed, approximately midway between Riverglen Drive and Kleck Road. Concurrently with the development of this tract, the City initiated the Union/46 Specific Plan, which involved numerous properties North Coast Engineering was involved with. Of the three residential tracts that front Union Road between Riverglen Drive and Kleck Road, NCE has designed two of them (Golden Hills Estates and Sunset Ridge), which comprise approximately 80% of the frontage length along this segment. In this segment we have designed all of the right-of-way improvements including street widening, grading, utilities and intersection improvements. We have existing survey and boundary control that was used for preparation of the final maps for each of these projects. We established the original centerline alignment that was used for construction of the various portions of Union Road including the Riverglen tract, from North River Road to Tract 1886 (The Summit), opposite Prospect Lane.

In addition to the design of these projects, we prepared the "Union Road Drainage Study" in September of 1989 in conjunction with the plans for Golden Hills Estates. This study analyzed the watershed that affects the Union Road corridor from Walnut Drive westerly to North River Road, and includes recommendations for channel improvements and culvert improvements at the various intersecting streets on the south side of the road. This information is still valid and is usable for design of the current project.

Our specific local knowledge of this roadway segment combined with our proven history in the design and construction management of significant municipal roadway improvements especially qualifies us for this project.

## **8. INSURANCE**

NCE maintains professional liability, general liability, automobile and workers compensation insurance in the amounts required for this contract.

Insurance providers for these policies are as follows:

Professional Liability:	Design Professionals Insurance Company (DPIC)
General Liability:	CNA Insurance Companies/ Transportation Insurance
Auto:	Allstate Insurance
Workers Compensation:	Fireman's Fund Insurance Company

# NORTH COAST ENGINEERING INC 2003 FEE ESTIMATE WORKSHEET

PAGE 1

PROJECT: Union Road  
 CLIENT: City of Paso Robles  
 DATE: 02/06/04  
 BY: SJS  
 FILE NAME: c:\sa\Union Road\Union Rd Prop

TASK	PRIN	SR RCE	RCE	PROJ MGR	PROJ ENG	RLS	AE	SET	ET	SEC	CI	2SRV	TOTAL
	RATE	125	105	85	95	80	90	70	80	45	40	65	
<b>I. Preliminary Engineering &amp; Mapping</b>													
<b>A. Topographic Mapping (Golden State)</b>													
1. Control													
a. Horizontal/Vertical Control						4.0		10.0				4.0	\$1,480
b. Locate Monuments						2.0						4.0	\$700
2. Topographic Survey	1.0					4.0		8.0					\$965
a. Set/Tie In Aerial Targets						2.0		2.0				6.0	\$1,080
b. Locate Exist. Curbs, Manholes						2.0		3.0				12.0	\$1,920
c. Establish Exist. Centerline						4.0		4.0					\$600
<b>B. Soils Investigation (Earth Systems)</b>	1.0		2.0					4.0					\$555
1. Obtain Exploratory Soils Borings													
2. Prepare Prelim. Soils Report													
<b>C. Base Maps/Conceptual Alignments</b>													
1. Prepare Base Maps to include:	1.0		4.0						28.0				\$1,785
a. Topographic Data						2.0		4.0					\$420
b. Existing Centerline/Right-of-Way						1.0		4.0					\$330
c. Existing Utilities			4.0						21.0				\$1,325
d. Existing Subdiv. Improv.								4.0	4.0				\$420
e. Existing Centerline Profile	1.0		2.0					4.0					\$555
f. Existing Pavement Limits			1.0						8.0				\$455
2. Prepare Conceptual Alignments													
a. Prepare Schematic Conceptual Alignments	2.0		8.0					16.0					\$1,970
b. Extend Alignments 500 ft. East of Walnut			2.0					4.0					\$430
c. Attend Two Meetings w/ Staff													
1. Kick-off Meeting	2.0		2.0										\$440
2. Design Review	2.0		2.0										\$440
<b>II. FINAL DESIGN SERVICES</b>													
A. Union Road Profile/Design	1.0		18.0					20.0					\$2,845
B. Design Connections			4.0					4.0	4.0				\$800
C. Curb Return Profiles			2.0				4.0						\$470
D. Drainage Calcs. & Design	1.0		4.0					8.0					\$985
E. Class I Bike Path Design	1.0		4.0					8.0					\$985
F. Identify Utility Relocations/coordination			2.0				4.0	16.0					\$1,430
G. Roadside Design	1.0		4.0					8.0					\$985
H. Earthwork Quantities			2.0				8.0						\$750
<b>I. Prepare 70% Plan Submittal</b>													
1. Title Sheet (1)			1.0						2.0				\$185
2. Sheet Index (1)			1.0						4.0				\$275
3. Plan and Profile (5)			4.0					20.0	20.0				\$2,480
4. Curb Returns (1)			2.0				4.0		4.0				\$650
5. Storm Drain Details (1)	1.0		2.0						8.0				\$675
6. Detail Sheets			4.0				4.0	4.0	4.0				\$1,080
7. Striping Plans (2) (McCarthy)			2.0						8.0				\$550
J. Prepare 90% Plan Submittal	4.0		18.0					30.0	30.0				\$5,170
K. Prepare Special Provisions	2.0				32.0								\$3,130
L. Prepare Engineer's Estimate/Bid Sheet	2.0				8.0			16.0					\$1,930
M. Prepare 100% PS&E	2.0		4.0				16.0		16.0				\$2,470
<b>N. Meetings and Quality Control</b>													
1. Attend Two Design Meetings	4.0		4.0										\$880
2. Traffic Engineer Review (McCarthy)	1.0												\$125
3. Internal Plan Checking	4.0		8.0					24.0	24.0				\$3,780
<b>TOTAL HOURS</b>	34.0		113.0		40.0	21.0	40.0	225.0	185.0			28.0	
<b>TOTAL BILLING (\$)</b>	\$4,250		\$10,735		\$3,600	\$1,890	\$2,800	\$13,500	\$9,325			\$3,380	\$48,480

EXPENSES/SUBCONSULTANTS	COST	M/U	TOTAL
SOILS INVESTIGATION	4450	1.1	\$4,895.0
AERIAL TOPOGRAPHIC MAPPING	7300	1.1	\$8,030.0
TRAFFIC ENGINEERING SERVICES	5700	1.1	\$6,270.0
TRAVEL (MILES)		0.4	
MAIL		1.0	
		1.0	
		1.0	
		1.0	
<b>TOTAL EXPENSES</b>			<b>\$19,195.0</b>

<b>TOTAL</b>	<b>\$48,480</b>
<b>10% CONTINGENCY</b>	<b>\$4,848</b>
<b>SUBTOTAL</b>	<b>\$53,328</b>
<b>EXPENSES</b>	<b>\$19,195.0</b>
<b>GRAND TOTAL</b>	<b>\$72,523</b>

**COMMENTS**



# NORTH COAST ENGINEERING, INC.

Civil Engineering ▪ Land Surveying ▪ Project Development

## FEE SCHEDULE

January 1, 2003

	<u>CLASSIFICATION</u>	<u>HOURLY RATE</u>
	Principal Engineer	\$125.00
	Senior Civil Engineer	\$105.00
O	Civil Engineer	\$ 95.00
F	Project Manager	\$ 95.00
F	Registered Land Surveyor	\$ 90.00
I	Project Engineer	\$ 90.00
C	Assistant Engineer	\$ 70.00
E	Senior Engineering Technician	\$ 60.00
	Engineering Technician	\$ 45.00
	Secretarial / Clerical	\$ 40.00
F	Construction Inspector	\$ 65.00
I	Construction Inspector - Prevailing Wage	\$ 80.00
E	Two-Man Survey Crew	\$130.00
L	Two-Man Survey Crew - Prevailing Wage	\$165.00
D	One-Man GPS Crew	\$155.00
	Two-Man GPS Crew	\$180.00

### REIMBURSABLE EXPENSES

- Actual cost of long distance telephone calls, express charges, postage, outside reproduction and survey supplies.
- Cost + 10% for outside professional consultants required for the work.
- Mileage at the rate of \$ .40/mile.
- In house reproduction and telecommunications costs as follows:

Ricoh 870 Prints	\$ .30 / Sq.Ft.	Mylar	\$3.00 / Sq.Ft.
Vellum	\$1.75 / Sq.Ft.	HP 1050C Color Plots	\$1.00 / Sq.Ft.
Photocopies	\$ .20 / each	Facsimile (transmit)	\$1.00 / Sheet