

TO: James L. App, City Manager
FROM: Meg Williamson, Interim Director of Public Works
SUBJECT: Union Road Improvements - Riverglen to Kleck Road
DATE: May 18, 2004

NEEDS: For the City Council to award a contract for the preparation of construction plans and specifications for the improvement of Union Road between Riverglen and Kleck.

- FACTS:**
1. Union Road is planned as an arterial road.
 2. The City's traffic engineers, Omni Means, have forewarned that improvement to a 4-lane arterial will encourage significant cut-through traffic from Highway 46 E.
 3. Omni Means indicates that more cut-through of traffic from State Route 46 would create a significant traffic congestion problem at the 13th Street Bridge.
 4. The City may achieve greater and safer traffic flow, but not unduly encourage Highway 46 cut-through traffic, by using a 3-lane arterial configuration (like Charolais Road). The 3-lane configuration will include concrete curb and gutter, pedestrian paths, multi-purpose trails, and additional landscaping.
 4. This item was continued from the April 20, 2004 meeting. Council members Gary Nemeth and George Finigan were appointed to review all the proposals received.

**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, 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 \$72,523. Staff has determined that an extensive drainage report, traffic engineering and soils engineering services would be beneficial to the overall project.

Council members Nemeth and Finigan reviewed the proposals and concur that the project be awarded to North Coast Engineering. Also, attached is a matrix of the criteria that staff used in evaluating the Requests for Proposals.

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. For the City Council to 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
- 2) Matrix of Scope of Work Comparisons

Score Sheet

Union Road Widening - Riverglen to Kleck

| | North Coast Engr. | John Wallace | Omni-Design Group | Penfield & Smith | Cannon Association | R. Thompson Engr. |
|--|-------------------|--------------|-------------------|------------------|--------------------|-------------------|
| A. Project understanding and approach (45 points max.) | 45 | 40 | 20 | 30 | 35 | 40 |
| B. Similar experience (20 points max.) | 20 | 20 | 10 | 15 | 20 | 20 |
| C. Project schedule (20 points max.) | 20 | 20 | 20 | 20 | 20 | 20 |
| D. Project fee (10 points max.) | 5 | 3 | 8 | 10 | 10 | 5 |
| E. Miscellaneous (5 points max.) | 5 | 3 | 0 | 3 | 3 | 3 |
| TOTAL POINTS | 90 | 86 | 58 | 78 | 88 | 88 |

Comments: _____

Rater: _____

Date: _____

**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.
7250 Preston Road, Suite 100
Paso Robles, California 93426
www.northeastengineering.com**

In Association

With

**Earth Systems Partners
Golden State Aerial Survey
McCarthy Engineering, Inc.**

February 6, 2003



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.

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 13th 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 13th 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 13th 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:

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: jsaUnion RoadUnion Rd Pro

| TASK | PRIN | SR | RCE | PROJ | PROJ | RLS | AE | SET | ET | SEC | CI | 2SR | TOTAL |
|--|----------------|-----|-----------------|------|------|----------------|----------------|----------------|-----------------|----------------|------|----------------|-----------------|
| | RATE | 125 | 105 | 85 | MGR | ENG | 90 | 70 | 60 | 45 | 40 | 65 | |
| II. Preliminary Engineering & Mapping | | | | | | | | | | | | | |
| A. Topographic Mapping (Golden State) | | | | | | | | | | | | | |
| 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. Soils Investigation (Earth Systems) | 1.0 | | 2.0 | | | | | | | 4.0 | | | \$555 |
| 1. Obtain Exploratory Soils Borings | | | | | | | | | | | | | |
| 2. Prepare Prelim. Soils Report | | | | | | | | | | | | | |
| C. Base Maps/Conceptual Alignments | | | | | | | | | | | | | |
| 1. Prepare Base Maps to include: | 1.0 | | 4.0 | | | | | | | 28.0 | | | \$1,765 |
| 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 |
| III. FINAL DESIGN SERVICES | | | | | | | | | | | | | |
| A. Union Road Profile/Design | 1.0 | | 16.0 | | | | | | | 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 |
| I. Prepare 70% Plan Submittal | | | | | | | | | | | | | |
| 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 80% Plan Submittal | 4.0 | | 16.0 | | | | | | | 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 |
| N. Meetings and Quality Control | | | | | | | | | | | | | |
| 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 |
| TOTAL HOURS | 34.0 | | 113.0 | | | 40.0 | 21.0 | 40.0 | 225.0 | 185.0 | | 26.0 | |
| TOTAL BILLING (\$) | \$4,250 | | \$10,735 | | | \$3,600 | \$1,890 | \$2,800 | \$13,500 | \$8,325 | | \$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 | \$8,270.0 |
| TRAVEL (MILES) | | 0.4 | |
| MAIL | | 1.0 | |
| | | 1.0 | |
| | | 1.0 | |
| | | 1.0 | |
| TOTAL EXPENSES | | | \$19,195.0 |

| | |
|--------------------|-----------------|
| TOTAL | \$48,480 |
| 10% CONTINGENCY | \$4,848 |
| SUBTOTAL | \$53,328 |
| EXPENSES | \$19,195.0 |
| GRAND TOTAL | \$72,523 |

COMMENTS

2013



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 |

2014

Union Road
Request for Proposal Comparison

| Scope of Work | R. Thompson Engr. | North Coast Engr. | Cannon Associates | Omni Design | Penfield & Smith | John Wallace |
|--------------------------------|-------------------|-------------------|-------------------|-------------|------------------|--------------|
| Preliminary Engineering | Yes | Yes | Yes | Yes | Yes | Yes |
| Aerial Topo Base Map | Yes | Yes | Yes | Yes | Yes | Yes |
| Final Plans and Specifications | Yes | Yes | Yes | Yes | Yes | Yes |
| Drainage Calculations | No | Yes | No | No | No | No |
| Soils Engineer Services | No | Yes | No | No | No | No |
| Traffic Engineer Services | No | Yes | No | No | No | No |
| TOTAL FEE | \$80,560 | \$72,523 | \$40,340 | \$35,040 | \$59,947 | \$87,925 |

Note: The first three items on the scopes of work are basic tasks offered by all firms.