Charles Gojer & Associates, Inc.
CIVIL AND STRUCTURAL ENGINEERS

January 5, 2012

Mr. Jeff Durham, Special Projects Manager
Collin County Special Projects
825 N. McDonald Street, Ste. 145
McKinney, Texas 75069

Re: Civil Engineering Services for Bridge Replacement CR 601

Dear Mr. Durham:

Charles Gojer and Associates (CGA) is pleased to submit this proposal for Civil Engineering Services for the above referenced project. Our understanding of the project and the scope of services are outlined below.

I. PROJECT DESCRIPTION

This project is for the replacement of two existing culverts located on County Road No. 601, approximately 260 ft. north of CR 566, north of Nevada, TX.

II. SCOPE OF BASIC SERVICES

Charles Gojer and Associates will provide Civil and Structural Engineering services to replace the existing structures and coordinate the services of subconsultants who will be providing surveying and geotechnical information. Design and Construction Services will also conform to the Scope of Services provided to us by Collin County (See Exhibit A)

In association with a Professional Surveyor registered in the State of Texas, we will provide Topographic Surveys, locate existing R.O.W.s, 1,000 foot cross sections (500' upstream and 500' downstream) of the creeks and set permanent control points for the purpose of construction staking.

A. Preliminary Design Phase

During the preliminary design phase, CGA will work closely with the Collin County Engineering Department to identify design and construction alternatives for the replacement of the existing bridges.

Once the spans and elevations of the proposed structure is determined, we will prepare a preliminary bridge layout for your review and comments. Roadway transitions will be designed in accordance with AASHTO and TXDOT criteria. The bridge will be designed as a low volume County road and traffic rails will conform for TXDOT Type T6 or similar. Bridge structures will be designed for AASHTO H20-S16 loading.

Erosion potential in the vicinity of the proposed bridges will be studied per TxDOT's Texas Secondary Evaluation and Analysis for Scour if drilled shafts are used. If this analysis predicts that scour must be considered, erosion control measures will be implemented no more than a distance of 150 feet upstream and downstream of the structure.

B. Design Phase

Upon receipt of review comments on the Preliminary Phase documents, our office will proceed with the preparation of final engineering drawings and bidding documents for the proposed improvements. At 90% completion we will submit another set of drawings and an estimate of probable construction cost for your review and comments.

III. SURVEYING SERVICES

With the exception of property "metes and bounds" and right-of-way monumentation, surveying services shall consist of the items as outlined in Exhibit A.

IV. GEOTECHNICAL SERVICES

Geotechnical services shall consist of the items as outlined in Exhibit A.

V. EXCLUSIONS

The following tasks are specifically excluded from the Basic Scope of Services. However, if any of those tasks are required, CGA will be pleased to furnish the necessary services as Additional Services:

a) Any erosion control measure a distance greater than 150 feet upstream and downstream of the proposed structure.
b) Other than the hydraulic runoff calculations for the design of the bridge , any stream analysis a distance greater than 150 feet upstream and downstream of the proposed structure.
c) Construction Layout.

VI. ADDITIONAL SERVICES

Additional Services are all other services not included in the Scope of Basic Services described above or as outlined in Exhibit A. Minor revisions shall be performed at no additional cost. Extensive revisions to the drawings due to changes made after the completion and acceptance of the Preliminary Design Phase shall be considered additional services.

VII. COMPENSATION

A. Basic Services: Charles Gojer and Associates agree to provide the Civil and Structural Engineering design services for the fees as summarized below:

Topographic Survey	$ 7,525.00
Right-of-Way Exhibits	$ 2,400.00
Geotechnical	$ 4,895.00
Civil/Structural Design Phase	$ 21,470.00
Bidding Phase	$ 1,080.00
Civil/Structural Construction Phase	$ 3,420.00
Reimbursable Expenses	$ 800.00
Total fee	$ 41,590.00

We estimated the level of effort that will take to provide the Civil/Structural services as follows:

Principal	8.0	hours
Sr. Engineer	16.0	"
Project Engineer	150.0	"
CADD Technician	120.0	"
Clerical	30.0	"

Billings shall be issued on a monthly basis for work performed during the previous month, with the aggregate of all invoices not to exceed the following limits:

At the completion of Preliminary Design Phase 40%
At the completion of Final Design Phase (90%) 90%
At the completion of Final Construction Documents 100%

B. Additional Services: Compensation for Additional Services will be billed on an hourly basis with the billing rates as defined below

Principal	$120.00/hr
Sr. Engineer	$110.00/hr
Project Engineer	$ 90.00/hr
Technician	$ 70.00/hr
Clerical	$ 45.00/hr

We appreciate the opportunity of providing these services to the Collin County Engineering Department and look forward to working with you on this project. If this Proposal is acceptable, please prepare the required contract documents for our signature.

Sincerely,

CHARLES GOJER AND ASSOCIATES, INC.

Darren Andrews, P.E.
Civil Engineering Department Manager

enc.

Bridge Projects
Scope of Services

EXHIBIT A

I. Preliminary Alignment and Design

A. Survey Services

1. Topographical survey should include all information necessary to establish the road alignment, bridge location, drainage needs and right-of-way limits.

2. Cross-section the creek channel at a minimum of 500 feet up stream and 500 feet down stream of bridge crossing for hydraulic studies. Consultant is advised to visit the site prior to beginning the project to determine if 500 feet is sufficient based on actual field conditions.

3. Locate and identify existing utilities (both overhead and underground). A plan sheet locating these utilities in relationship to the proposed right-of-way shall be provided to the county for review. When necessary for design, the depth of major utilities such as gas or water lines must be determined by the consultant. The county's intent is to avoid or minimize the relocation of major utilities. Existing easements, driveways, culverts, gates, fences, significant trees or other improvements within the project limits should also be located.

4. Locate property lines and provide a right-of-way strip map (11 x17 sheet size) with tracts identified by parcel number. A metes and bounds description with exhibit (8 ½ x 11 sheet size) will be required for each parcel. Exhibits will show the existing roadway and location of fences in relationship to the new right-of-way line. Indicate gross acreage to be acquired, less approximate acreage in prescriptive right-of-way, and reflect net acreage to be acquired.

5. Provide a minimum of two (2) permanent benchmarks (vertical). Benchmarks should not be set in telephone poles or trees located within the project limits.

6. Monument the new right-of-way line with iron rods and metal t-posts. Establish at minimum two (2) permanent control points (horizontal) for construction staking. A coordinate list describing monuments set for control or along the new right-of-way line should be incorporated into the plan set.

7. Prior to construction, verify and/or re-establish right-of-way monuments, control points and benchmarks.

B. Geo-technical Services

1. Obtain necessary information to identify geological features that will affect the engineering design for this project.

Bridge Projects
Scope of Services

C. Hydraulic Analysis

a. Provide hydrology study and analysis of through bridge discharges based upon HEC-1, Texas Department of Transportation (TxDOT) Regression Equations Hydraulics Manual and TxDOT Regression Equations from the U.S. Geological Survey Report 96-4307.

b. Provide hydraulic analysis to model both existing and proposed conditions utilizing the Corp of Engineers HEC-RAS River Analysis Computer model or HEC II, which performs one-dimensional hydraulic calculations to compute water surface profiles for a river or stream.

D. Permits

1. Obtain or prepare any permits necessary for construction of the project.

E. Preliminary Plans

1. Prepare schematic bridge layout plan, roadway plan and profile drawings for review by the county. Drawings should include stationing, horizontal and vertical geometric alignment data, the location of existing easements, improvements and the proposed right-of-way limits

F. Cost Estimate

1. Provide preliminary cost estimate.

G. Preliminary Submittal

1. Submit two (2) sets of preliminary plans (11 x 17) and outline specifications for review and comments.

II. Final Plans, Specifications and Estimates

A. Final Plans

1. Submit three (3) sets of Final Plans (11x17) and Specifications for review. Plans should include, but are not limited to, the following:

a. Roadway Plan and Profile Drawing

b. Traffic Control Plan

c. Storm Water Pollution Prevention Plan

d. Bridge Approach Road Grading Plans

e. Bridge Layout Plan and Detail Drawings

Bridge Projects
Scope of Services

B. Cost Estimate

1. Prepare final estimate of cost.

III. Bid Phase

A. Bidding

1. Provide bid documents, specifications and plans to the contractors for bidding.
2. Attend pre-bid conference
3. Evaluate bids and prepare bid tabulation summary.

IV. Construction Phase

H. Construction

1. Respond to RFI's.
2. Review material test reports.
3. Review sop drawings
4. Perform specific inspections at major stages of construction and periodic inspections for general observations to insure that construction conforms to the project specifications and plans.
5. Provide status reports as necessary.
6. Prepare change orders.
7. Conduct final walk-thru with county representative
8. Submit "as built" drawings to TxDOT.

TxDOT
P.O.Box 133067
Dallas, Texas 75313
Attn: Ibrahim Mousa
(214) 320-4423

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Scope of Services

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6. Monument the new right-of-way line with iron rods and metal t-posts. Establish at minimum two (2) permanent control points (horizontal) for construction staking. A coordinate list describing monuments set for control or along the new right-of-way line should be incorporated into the plan set.

7. Prior to construction, verify and/or re-establish right-of-way monuments, control points and benchmarks.

8. After construction is complete, establish two (2) GPS control points in accordance with the attached guidelines.

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