MEMO

APPROVED
1/17/2023

TULSA COUNTY
PROCUREMENT
DEPARTMENT

DATE: January 4, 2023

FROM: Matney M. Ellis
Procurement Director

TO: Board of County Commissioners

SUBJECT: Amendment 4 – Guy Engineering Services, Inc

Submitted for your approval and execution is the attached amendment 4 to the engineering services agreement between the Board of County Commissioners on behalf of the Tulsa County Engineering Department and Guy Engineering Services, Inc., originally approved July 30, 2018, CMF 245534

This supplemental and modification agreement is to modify an existing storm box crossing E 51st Street, West of the 193rd East Avenue Roundabout increasing the contract amount by $89,938.00 bringing the total contract sum amount to $881,186.00.

Respectfully submitted for your approval and execution.

MME / jdf

SUBMITTED FOR: The January 9, 2023 BOCC meeting agenda.

CMF# 20230067

APPROVED
1/17/2023

SUPPLEMENTAL AND MODIFICATION AGREEMENT NO. 4
193rd EAST AVENUE ROUNDABOUTS
TULSA COUNTY PROJECT 40700630
SCOPE OF SERVICES

This Supplemental Agreement No. 4 entered into by and between Tulsa County, hereinafter referred to as the COUNTY, and Guy Engineering Services, Inc., hereinafter referred to as the CONSULTANT, said parties being the same who executed the original contract July 30, 2018;

WITNESSETH:

WHEREAS, it is deemed necessary by the COUNTY to modify the contract.

WHEREAS, investigations of the Explorer Pipeline facility indicate construction will impact the pipeline without major modifications to the pipeline.

WHEREAS, it has been determined that it is more cost effective to modify an existing storm box and the proposed extensions than to relocate the existing pipeline.

WHEREAS, the County has deemed it necessary to have the CONSULTANT revise the proposed storm system as necessary to avoid pipeline conflicts.

The Engineering Design shall be adjusted through this Supplemental Agreement No. 4:

BASE CONTRACT AMOUNT		$646,412
ADDITIONAL SERVICES AUTHORIZATION NO. 1		20,000
ADDITIONAL SERVICES AUTHORIZATION NO. 2		9,830
ADDITIONAL SERVICES AUTHORIZATION NO. 3		22,000
SUPPLEMENTAL AGREEMENT NO. 1		17,962
SUPPLEMENTAL AGREEMENT NO. 2		64,610
SUPPLEMENTAL AGREEMENT NO. 3		10,434
SUPPLEMENTAL AGREEMENT NO. 4		
Field investigation (Subcontractor) (Time and Expense)	$ 6,600	
Structural Design & Modifications (Subcontractor) (LS)	8,300	
Survey, Design and Coordination (Hourly Not to Exceed)	75,038	
		89,938
TOTAL CONTRACT AMOUNT		$881,186

WHEREAS, under the terms of Section 17.0 Integration and Modification, it was agreed that terms of the contract shall be modified by written Supplement Agreement executed with the same formality as the original contract prior to the changes becoming effective.

WHEREAS, the CONSULTANT is directed to make the necessary changes noted above.

NOW THEREFORE, it is mutually agreed by and between the parties hereto:

CMF# 20230067

A. The following scope shall be added to the contract:

3.14 The CONSULTANT shall reconfigure the existing 10' x 3' storm box, crossing E 51st Street west of the roundabout, to avoid crossing the pipeline and realign the existing, upstream drainageway (ditch) to flow into the realigned storm box. A broken-back design is anticipated for the new storm box, with the downstream headwall located south of the existing box, and the upstream headwall located north and east of the existing box, outside of the existing pipeline easement. The existing 10' x 3' storm box is anticipated to be completely removed.

3.14.1 The CONSULTANT shall conduct up to four (4) additional potholes of the existing pipeline as deemed necessary and perform surveying of the exposed pipeline.

3.14.2 The CONSULTANT shall provide all surveyed data to Explorer Pipeline and coordinate with Explorer Pipeline, and other impacted utilities on behalf of the County.

3.14.3 The CONSULTANT shall adjust the plans, cross-sections and summary tables to reflect changes due to the storm box revision.

3.14.4 The CONSULTANT shall adjust the proposed sidewalk in coordination with the storm box revision.

3.14.5 The Consultant shall revise the alignment of the existing open channel, upstream of the storm box revision, to provide a smooth transition to the new upstream headwall.

3.14.6 The CONSULTANT shall revise as necessary the structural detailing for the new storm box and headwalls, including cast-in-place bends for the broken-back design.

3.14.7 The CONSULTANT shall provide up to two (2) right of way documents for a Permanent Easement and a Temporary Construction Easement, on the property located on the north side of E 51st Street. The Permanent Easement is for the upstream headwall to be within an easement. The Temporary Easement is for grading the existing drainageway to the new storm box.

3.14.8 The CONSULTANT shall revise the City of Tulsa water line relocation plans in the vicinity of the revised drainageway.

3.14.9 The CONSULTANT shall revise the construction sequencing sheets for the reconfigured storm box.

B. An amount of Eighty-Nine Thousand Nine Hundred Thirty-eight dollars ($89,938) shall be added to the contract. This amount shall not be exceeded without further approval of the COUNTY.

C. The contract is hereby modified as above described, said Contract in all other aspects be unchanged and in full force and effect.

THE REMAINDER OF THIS SHEET LEFT BLANK

IN WITNESS HEREOF: This Supplemental Agreement No. 4 is executed by the Consultant on the 21st day of December, 2022, and the County on the 17th day of January, 2023.

ATTEST (SEAL)

TULSA COUNTY, OKLAHOMA
Board of County Commissioners

County Clerk

Chairman

APPROVED AS TO FORM:

Assistant District Attorney

ATTEST: (SEAL)

GUY ENGINEERING SERVICES, INC.

Rebecca A. Alvarez, President

STATE OF OKLAHOMA)
) §
COUNTY OF TULSA)

Attest:

Michael Twyman, Corporate Secretary

Subscribed and sworn to before me on the 21st day of December, 2022.

My Commission Expires:

August 3, 2023

Notary Public

LORI ACREE
Notary Public in and for
STATE OF OKLAHOMA
Commission #07007418
Expires: August 3, 2023

CONTRACT NO. | PROJECT NO. 40700630 | JOB PIECE NO. **NA**

COUNTY **TULSA** | CITY **Tulsa & Broken Arrow** | COUNTY RD. NO. **E. 51st STREET & 193rd EAST AVENUE**

CONSULTING FIRM SUBMITTING PROPOSAL: **GUY ENGINEERING SERVICES, INC.**

PROJECT DESCRIPTION:

Additional engineering services to pothole (hydro-vac) and survey up to four locations on the existing Explorer Pipeline. Design the relocation of the existing storm box crossing on E. 51st Street, so that it does not extend above the Explorer pipeline. Realign the storm drainageway, upstream of the realigned storm box, to provide current flow capabilities to the new storm box alignment. Re-design the City of Tulsa waterline along 51st Street where the storm box is realigned. Revise sidewalk alignment as necessary. Revise the Construction Sequencing sheets to include the storm box and drainageway revisions. Coordinate with Explorer and review other utility relocation plans, previously submitted, to confirm clearance with the realigned storm box and drainageway. Provide updated cost figures.

Environmental studies, DEQ applications and permits, public meetings, right-of-way acquisition, construction administration and inspection services are excluded, unless included in a future supplement.

	LOADED HOURLY RATES by Labor Category													
Labor Description	Principal Engineer	Sr PE II	SR PE I	PE I	Engineer Intern II	Engineer Intern I	Tech II	Tech I	Utilities Inspector	Utilities Coord. II				
Loaded Hourly Labor Rate	$418.54	$290.50	$244.78	$160.28	$129.65	$118.59	$142.33	$96.51	$126.73	$131.20				
PROJECT DEVELOPMENT ACTIVITIES	**HOURS**										**Sub-Task**	**Task**	**Activity**	**Cost**
1.0 Prepare Preliminary Plan to Realign Storm Box and Upstream Drainage	**2**	**19**	**41**	**68**	**62**	**40**	**0**	**0**	**16**	**8**			**256**	**$43,151.00**
1.1 Create Title Sheet And Generate Location Map - NA												**0**		
1.2 Create Summary Sheet(s) - NA												**0**		
1.3 Develop revised alignment for 51st Street RCB crossing and upstream ditch	**2**	**19**	**41**	**68**	**62**	**40**	**0**	**0**	**16**	**8**		**256**		
1.3.1 Cordination with subconsultants (structural and hydro-vac)		2	2						16	8	28			
1.3.2 Generate Horizontal Alignment of proposed storm RCB crossing		2	4	2							8			
1.3.3 Revise alignment and profile of existing drainageway to flow into RCB		2	4	4							10			
1.3.4 Revise City of Tulsa Water Line relocation due to drainage change		2	4		2						8			
1.3.5 Revise Construction sequencing plans for replacment of RCB		2	16	16	16	8					58			
1.3.6 Draft revisions to Plans (sidewalks, storm sewers, storm tables. etc)			8	24	32	32					96			
1.3.7 Update cross sections; provide construction details				8	8						16			
1.3.8 QA/QC checks	2	8	2	12							24			
1.3.9 Update cost estimates		1	1	2	4						8			
2.0 Public Involvement - NA	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**			**0**	**$0.00**
3.0 Preliminary Plan Review Process	**0**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**			**6**	**$1,560.00**
3.1 Attend Preliminary Plan Field Review and Prepare Meeting Minutes		**2**	**3**									**5**		
3.2 Update Estimate of Probable Cost if requested			**1**									**1**		
4.0 Prepare Final Plan to Realign Storm Box and Upstream Drainage	**0**	**10**	**14**	**34**	**28**	**36**	**0**	**0**	**0**	**0**			**122**	**$19,681.00**
4.1 Finalize All Design Elements per Preliminary Review comments	**0**	**10**	**14**	**34**	**28**	**36**	**0**	**0**	**0**	**0**		**122**		
4.1.1 Finalize all Plan Details including to combine with roadway project		4	8	24	24	32					92			
4.1.2 Update summary tables; quantities and Summary of Pay Items				2	4	4					10			
4.1.3 Update Estimate of Probable Costs		1	2	2							5			
4.1.4 QA/QC check		4	4	4							12			
4.1.5 Submit Final Plans & Estimate														
4.1.6 Respond and address Final Plan comments from City/County		1		2							3			
5.0 Field surveys to locate exposed pipe line - See separate attachement	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**			**0**	**$0.00**
6.0 Prepare Record Drawings - N/A	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**			**0**	**$0.00**
Sub-Total Estimated DIRECT Loaded Hourly Costs	**2**	**31**	**59**	**102**	**90**	**76**	**0**	**0**	**16**	**8**			**384**	**$64,392.00**

7.0 Estimated Sub-Consultant Contract Costs (Attach Sub-Consultant cost proposal sheets as applicable)		**$25,546.00**
7.1 Survey - see separate attachment (Includes 2 separate trips in case Hydro-vac Company has to go out two times)	**$8,169.00**	
7.2 DEQ submittal - Not part of scope		
7.2 Right-of-Way Documents	**$959.00**	
7.4 Right-of-Way Staking	**$1,518.00**	
7.5 Inspection of Water Line Construction - Not part of scope		
7.6 Geotechnical - Not Part of scope		
7.7 Hydro-vaccuuming to locate water lines - See separate proposal - includes an estimated 10 vertical feet extra depth at $30/VF (Estimate includes 2 separate trips)	**$6,600.00**	
7.8 Structural Engineering - Detailing Cast-in-place bends, headwalls for RCB	**$8,300.00**	
7.9 Environmental Document Development & Specialist Studies - Not Applicable		

PROJECT DEVELOPMENT COST SUMMARY SECTION

ESTIMATED TOTAL DIRECT PROJECT DEVELOPMENT COSTS		**$89,938.00**
DIRECT NON-PAYROLL COSTS		
Materials & Supplies		
Reproduction		
Data Processing		
Travel Expenses		
Equipment Rental		
Other (specify)		
Subtotal		**$0.00**
TOTAL SUPPLEMENT #4 DESIGN FEE		**$89,938.00**

Prepared by: *Russell E. Dixon* Date: December 21, 2022

Badger Hydrovac Service Proposal

United States

Prepared By:	Jimmie Alberty Jr.
Email:	jalberty@badgerinc.com
Date	2022/10/07

Badger Daylighting Corp

31680 I-40 Service Rd
Hinton, OK 73047
"An equal opportunity employer"

ESTIMATE

DATE:	2022/10/07
Reference #:	QT-100722-120094
PREPARED BY:	Jimmie Alberty Jr.

Customer Information			
Company:	GUY ENGINEERING SERVICES INC	Contact Name	Russell Dixon
Contact Phone #	(539) 424-5044	E-mail:	russell@guyengr.com
Billing Address:	6910 E 14TH ST	Title:	Senior Civil Engineer
Bill City/State	Tulsa,OK 74112	Account #	94212
Service Address	TULSA , Tulsa, OK, 74134		

Scope of Work

Potholing for pipeline in 4 locations including backfill.

BADGER WILL PROVIDE 1- HYDRO TRUCK W/ 1 OPERATOR, REQUIRED PPE, AND APPROPRIATE TRAINING Cancellations with less than 12 hours' notice will also result in a 4hr minimum charge. All work is done within 20' of the truck with ideal weather and ground conditions. If work is further than 20', Remote hose and an additional operator will be required for an additional charge. Any delays onsite outside of Badger's control will be in addition to total. Water fills to be provided by Badger and charged per load. Disposition will be provided by Badger. Billing is port to port by the hour unless otherwise noted. OT applies after 10 hours. Operators adhere to D.O.T. regulations, limited to 14 hours per day/operator (rotation available upon request). This estimate is for budgetary purposes all work will be billed at T&M.

Service Item	Item Description	Price	UOM	Qty	Amount
Badger Hydrovac With Operator		$ 225.00	HR	10	$ 2,250.00
Badger Hydrovac With Operator Overtime		$ 245.00	HR	0	$ 0.00
Consumable Materials		$ 15.00	EA	1	$ 15.00
Backfilling		$ 500.00	JOB	1	$ 500.00
Supply Water		$ 50.00	EA	1	$ 50.00
3rd Party Service (DISPOSITION)		$ 150.00	EA	1	$ 150.00
Fluctuating Fuel Recovery					$ 323.48
				Total:	**$ 3,288.48**

This proposal contains the budgetary estimate to complete the work as described above under the heading "Scope of Work".
If any part of the work varies from that described in Scope of Work, or if unexpected digging conditions are encountered (eg rocks, rubble, roots, etc...), then additional charges shall apply. All work will be done on a time and material basis. All work will be done in accordance with the terms and conditions contained in Badger Daylighting Corp.'s standard terms and conditions (USA) attached hereto.

Company: _____ PO#: _____

Name (please print): _____ Title: _____

Signature: _____ Date: _____

I am authorized to bind the Company

General Notes, Conditions, & Badger Responsibilities:
1. Travel rates apply when traveling from the closest Badger Operation to the client's project site.
2. Badger will off load material at contracted facility. Travel to and from a designated facility is considered part of the work day and charged at the hourly rate.
3. Any additional third party services provided by Badger Daylighting outside of our typical Hydrovac activities shall be charged out at cost + .
4. With any Hydrovac project, there are possible additional charges that are application and site specific. For example, items such as water trucks, specialized equipment and attachments (remote hose, etc.), crew trucks, and other items may be required. Rather than provide an extensive listing of all possible considerations, this is best implemented on a project-by-project basis and evaluated at the field operations level. The information presented in this document represents the complete proposal.
5. This proposal is valid for 30 days from the date posted on this proposal document.
6. Any and all quotes, offers and transactions are pending Credit Approval by Badger.
7. Terms of Payment - Net 30 days from date of invoice. Late invoices are subject to service fees.
8. Zero (0) % retainage is withheld
9. Taxes – tax will be added to quote pricing as required by State/Local governments.
10. All invoices will be assessed a Fluctuating Fuel Recover Fee on the entire amount of the invoice. This fee is reviewed regularly and is subject to change. Badger utilizes information from the US Department of Energy and the Canadian Department of Natural Resources when calculating the fee.

Client responsibilities include:
1. Access to the Hydrovac site, including permits and permission from property owners, utilities, and government agents.
2. Surface locates, survey marks and traffic control, if needed unless agreed to in writing prior.
3. Breaking, removal, and restoration of asphalt and or concrete unless agreed to in writing prior.
4. Establish, maintain and remediate accessible water source and disposal site.
5. Specific direction and locations for Hydrovac excavation.
6. Backfill and site restoration unless agreed to in writing prior to completing work.
7. Materials to secure and cover the excavation unless agreed to in writing prior.
8. Shoring, maintenance and barricading.
9. Ownership of the soil and debris removed by the Hydrovac including any soils or material contaminated or suspect.
10. Any project delays caused by others that result in downtime of Badger Hydrovac units will be billed at the hourly rates.
11. Pay for all specialized training that is required by contractor/owner/Badger to be on the site to work.
12. Notify Badger of all billing requirements and any appropriate purchase orders, job numbers, AFE, etc. that would be necessary to release payment to Badger. This must be done prior to the first day of work.
13. Notify Badger of any of the following: Certified payrolls, OCIP requirements, prevailing wages.
14. Additional insurance requirements over what Badger already has in place.

Client Representative

Printed Name: _____
Signature: _____
Date: _____
I am authorized to bind the Company

Badger Representative

Printed Name: _____
Signature: _____
Date: _____

COLLINS
Structural Design

Collins Structural Design, PLLC
6608 N. Western Ave. #542
Okla. City, OK 73116
Tel. 405.430.9279
tcollins@csd-ok.com

Client: GUY Engineering Services, Inc.
Contact: Russell Dixon, P.E.
Date: October 5th, 2022

RE: Bridge Structural Consultation – North 193rd East Ave RCB's
– Supplement for 10x3 RCB Modification

Scope of Work:
Services shall be rendered in accordance with the following statement and provided by Collins Structural Design, PLLC (CSD) to GUY Engineering Services, Inc. (Client). If additional services or modifications to the scope outline below are required, they may be authorized in writing only as an additional proposal. It is anticipated that this work would proceed under the Master Service Agreement between the Client and CSD, and if not, this agreement will be amended to include additional terms of service.

The following is our understanding of the project. The previously designed 10x3 RCB extensions will be modified to completely replace the structure instead of building extensions to an existing structure. The RCB will be constructed as previously designed in the original contract, but will now include two identical cast-in-place RCB bends such that the end sections are more precisely located. It is possible that straight segments of RCB could be constructed with precast sections whereas bent sections of RCB must be constructed of cast-in-place concrete. Therefore, details to construct splices between cast-in-place concrete segments and precast segments will be included. End section structural design (design of headwall, wing walls, and apron) has been completed as part of the original contract, however, geometrical modifications to the existing detailing will be required. Bar bends, bar lists, and quantities for all components of the RCB will be calculated and detailed.

The work in this proposal includes the following:

1. Provide additional structural design for the two identical cast-in-place RCB bends. Structural design for straight segments of RCB and end sections has been previously provided and is omitted from this proposal.
2. End section details will be modified to meet new geometric requirements.
3. Produce detail sheets for the RCB. Detail sheets include Structural Notes, Barrel Plans and Details, End Section Details, and Miscellaneous Details. No General Plan and Elevation Sheets will be required for these RCB's.
4. Participation in Field Review Meetings is not anticipated. Participation in Field Construction Meetings will be provided when necessary.
5. Deliverables will include the following: bridge details for the 90% and final submittals, final structural design calculations, quantity calculations, and final stamped detail sheets.

Collins Structural Design, PLLC
6608 N. Western Ave. #542
Okla. City, OK 73116
Tel. 405.430.9279
tcollins@csd-ok.com

Service Fee

Total (Lump Sum):	$ 8,300.00

Travis Collins

Travis A. Collins

Collins Structural Design, PLLC
PO BOX 721665
Oklahoma City, OK 73172
Date: October 5th, 2022

BRIDGE ENGINEERING CONTRACT FEE PROPOSAL
Sheet 1 of 4

E.C. NO. _____ **SWO NO.** _____ **JOB PIECE NO.** _____

COUNTY _____ **CITY** _____ **PROJECT NO.** _____

HIGHWAY NO. _____ **PROJECT DESCRIPTION** _____

BRIDGE DESIGNATION _____ **BRIDGE DESCRIPTION** _____

NAME OF ORGANIZATION SUBMITTING PROPOSAL Collins Structural Design, PLLC

DIRECT SALARY COSTS

	LABOR CATEGORY									
	1	2	3	4	5	6				
Labor Description	EOR	Sr. Bridge Eng.	Jr. Bridge Eng.	Des. Tech.	CAD Tech.	Admin				
Labor Rate	$175.00	$150.00	$125.00	$75.00	$50.00	$70.00				
BRIDGE PLAN DEVELOPMENT	HOURS						Sub-Task	Task	Activity	Cost
3.3 Perform Bridge Hydraulics										
3.3.1 Perform Hydraulic Analysis/Design										
3.3.2 Attend Hydraulic Conferences										
3.3.3 Produce Hydraulic Report										
3.4 Generate Bridge Finished Grade Requirements										
3.8 Prepare Preliminary Bridge Plans										
3.8.1 Compute Preliminary Geometrics										
3.8.2 Perform Preliminary Structural Design										
3.8.3 Perform Comparative Cost Estimates										
3.8.4 Draft Preliminary Bridge Plans										
3.8.4.1 Draft Preliminary General Plan & Elevation										
3.8.4.2 Draft Preliminary Sequence of Construction Sheets (If Necessary)										
3.8.4.3 Draft Preliminary Details (If Necessary)										
3.8.5 Check & Review Preliminary Bridge Plans										
3.8.6 Prepare Cost Estimate										
3.10 Attend Preliminary Plan Field Review										
3.11 Perform Post-Preliminary Field Review Process										
3.11.3 Prepare Preliminary Plan Field Review Report										
3.11.7 Make Changes From Preliminary Plan Field Review										
3.11.7.1 Make Changes to Bridge Plans										
3.11.7.3 Revise Cost Estimate Based Upon Square Foot Costs										
3.12 Generate Bridge Sounding Requirements										
3.12.1 Layout Boring Locations On GP&E										
3.14 Prepare Corps Permit Application										
3.16 Attend Right-of-Way & Utility Meeting										
3.17 Perform Railroad Process										
3.17.2 Bridge Drafts and Supplies Exhibit A										

Footnote: If an item is not applicable, leave the box blank.

BRIDGE ENGINEERING CONTRACT FEE PROPOSAL
Sheet 2 of 4

DIRECT SALARY COSTS

Bridge	LABOR CATEGORY									
	1	2	3	4	5	6				
Labor Description	EOR	Sr. Bridge Er	Jr. Bridge Er	Des. Tech.	CAD Tech.	Admin				
Labor Rate	$ 175.00	$ 150.00	$ 125.00	$ 75.00	$ 50.00	$ 70.00				
	HOURS						Sub-Task	Task	Activity	Cost
3.22 Prepare Bridge Structural Design	**1**	**4**	**5**						**10**	**$ 1,400**
3.22.1 Perform Structural Design of Components	**1**	**2**	**4**					**7**		
3.22.1.1 Design Superstructure										
3.22.1.2 Design Piers										
3.22.1.3 Design Abutment										
3.22.1.4 Design R.C. Box	1	2	4				7			
3.22.1.5 Design Retaining Walls/Sound Walls										
3.22.1.6 Design Miscellaneous Components										
3.22.2 Perform Structural Design Check of Components		**2**	**1**					**3**		
3.22.2.1 Check Superstructure										
3.22.2.2 Check Piers										
3.22.2.3 Check Abutment										
3.22.2.4 Check R. C. Box		2	1				3			
3.22.2.5 Check Retaining Walls/Sound Walls										
3.22.2.6 Check Miscellaneous Components										
3.23 Prepare Bridge Foundation Design										
3.23.1 Review Bridge Geotechnical Report										
3.23.2 Develop & Plot Foundation Report Sheets										
3.23.3 Develop Foundation Design Parameters										
3.23.4 Attend Foundation Conference										
3.24 Prepare Bridge Final Plan Field Review Plans	**1**	**3**	**2**						**6**	**$ 875**
3.24.1 Compute Final Bridge Geometry	**1**	**3**	**2**					**6**		
3.24.1.1 Compute Final Overall Geometry										
3.24.1.2 Compute Final Component Geometry	1	3	2				6			
3.24.2 Draft Proposed Bridge Plans										
3.24.2.1 Modify Proposed General Plan & Elevation										
3.24.2.2 Modify Proposed Sequence of Construction Sheets										
3.24.2.3 Draft Proposed Detail Sheets as Req. for Constructability Review										
3.24.3 Check & Review Proposed Bridge Plans										
3.24.4 Prepare Cost Estimate Based upon Preliminary Quantities										
3.27 Attend Final Plan Field Review										
3.28 Perform Post-Final Field Review Process										
3.28.1 Prepare Final Plan Field Review Report										
3.28.4 Make Changes From Final Plan Field Review										
3.28.4.1 Make Changes to Bridge Plans										
3.28.4.5 Revise Cost Estimate Based Upon Preliminary Quantities										

Footnote: If an item is not applicable, leave the box blank.

BRIDGE ENGINEERING CONTRACT FEE PROPOSAL
Sheet 3 of 4

DIRECT SALARY COSTS

	LABOR CATEGORY									
	1	2	3	4	5	6				
Labor Description	EOR	Sr. Bridge Er	Jr. Bridge Er	Des. Tech.	CAD Tech.	Admin				
Labor Rate	$ 175.00	$ 150.00	$ 125.00	$ 75.00	$ 50.00	$ 70.00				
Bridge	**HOURS**						**Sub-Task**	**Task**	**Activity**	**Cost**
3.30 Prepare Bridge Final Plans	**3**	**7**	**12**	**12**	**5**				**39**	**$ 4,225**
3.30.1 Prepare Final Bridge Detail Sheets	**2**	**4**	**4**	**8**	**4**			**22**		
3.30.1.1 Finalize General Plan & Elevation Sheet(s)										
3.30.1.2 Finalize Construction Phasing Sheet(s)										
3.30.1.3 Finalize Foundation Report Sheet(s)										
3.30.1.4 Prepare Staking Detail Sheets(s)										
3.30.1.5 Prepare Abutment Detail Sheets(s)										
3.30.1.6 Prepare Wingwall Detail Sheet(s)										
3.30.1.7 Prepare Substructure Excavation Detail Sheet(s)										
3.30.1.8 Prepare Pier Detail Sheet(s)										
3.30.1.9 Prepare Superstructure Detail Sheet(s)										
3.30.1.10 Prepare Beam Detail Sheet(s)										
3.30.1.11 Prepare Bearing Assembly Detail Sheet(s)										
3.30.1.12 Prepare Approach Slab Detail Sheets(s)										
3.30.1.13 Prepare Slope Wall Detail Sheet(s)										
3.30.1.14 Prepare Riprap Detail Sheet(s)										
3.30.1.15 Prepare Bridge Rehabilitation Detail Sheets(s)										
3.30.1.16 Prepare RCB Barrel Detail Sheet(s)	1	2	2	4	2		11			
3.30.1.17 Prepare RCB Wing/Apron Detail Sheet(s)	1	2	2	4	2		11			
3.30.1.18 Prepare Channel Modification Sheet(s)										
3.30.1.19 Prepare Retaining Walls/Sound Walls Layout Sheet(s)										
3.30.1.20 Prepare Retaining Walls/Sound Walls Detail Sheet(s)										
3.30.1.21 Prepare Miscellaneous Detail Sheet(s)										
3.30.2 Compute Quantities		2	8				10	**10**		
3.30.3 Prepare Bridge General Notes Sheet(s)	1	1		4	1		7	**7**		
3.30.4 Prepare Bridge Summary of Quantities Sheet(s)										
3.30.5 Prepare Bridge Special Provision(s)										
3.30.6 Check & Review Final Bridge Plans										
3.30.7 Prepare Final Bridge Construction Estimate										
5.1 Perform Plan Revisions	**4**	**2**	**2**	**4**	**4**	**2**			**18**	**$ 1,890**
5.1.1 Revise Plans per Review Comments	**4**	**2**	**2**	**4**	**4**	**2**		**18**		
5.1.2 Attend Pre-Bid Conference										
Sub-Total Direct Salary Costs	**9**	**16**	**21**	**16**	**9**	**2**			**73**	**$ 8,390**

Footnote: If an item is not applicable, leave the box blank.

BRIDGE ENGINEERING CONTRACT FEE PROPOSAL
Sheet 4 of 4

Bridge

DIRECT SALARY COSTS	73 hours		8,390
PAYROLL ADDITIVE **(Vacation, sick leave, retirement, FICA, etc.) Input percentage of Direct Salary Costs**		0	0
DIRECT NON-PAYROLL COSTS			
Materials & Supplies			
Reproduction			
Data Processing			
Travel Expenses			
Equipment Rental			
Outside Engr. Consultants			
Other (specify)			
Subtotal			
Subtotal - All Direct Costs			8,390
INDIRECT COSTS **(Administration, rent, utilities, telephone, etc.) Input percentage of All Direct Costs)**		0.00	0
Subtotal - Direct & Indirect			8,390
PROFIT		0.00%	0
TOTAL PROPOSED BRIDGE PLAN DEVELOPMENT FEE			8,390
Computed Aggregate Rate per Labor Hour		$ 114.93	per hour
MAXIMUM BRIDGE CONSTRUCTION SERVICES FEE			
TOTAL PROPOSED BRIDGE FEE			8,300

Prepared by: _____ Date: _____

Footnote: If an item is not applicable, leave the box blank.

CONSULTANT EFFORT SUMMARY AND INVOICE AMOUNTS

Survey Proposal
Guy Engineering Services, Inc.
6910 E 14th St
Tulsa, OK 74112
918-437-0282

Project #1146 - E. 51st St. & 193rd E. Ave.
Badger Pothole Groundshots

		Labor Category							
		Survey Manager	Survey Party Chief	Survey Field Tech	Survey Tech II				
		$194.97	$111.13	$96.51	$142.33				
		HOURS				Sub-Task	Task	Activity	Cost
1.0 Survey		**9**	**25**	**25**	**26**			**85**	**$10,646.00**
1.1	**Office Work**	**4**	**0**	**0**	**24**		**28**		
1.1.1	Preliminary Research				4	4			
1.1.2	~~Courthouse Research~~					0			
1.1.3	~~Utility Coordination & Reduction~~					0			
1.1.4	~~Section/Boundary Computation~~					0			
1.1.5	Topographic/Planimetric Reduction				16	16			
1.1.6	Right-of-Way Documents/Staking Preparation	2			4	6			
1.1.7	~~Certified Corner Records~~					0			
1.1.8	Project Management	2				2			
1.2	**Field Work**	**5**	**25**	**25**	**2**		**57**		
1.2.1	Site Control Establishment		4	4		8			
1.2.2	~~Section/Boundary Recon~~					0			
1.2.3	~~Topographic/Planimetric Collection~~					0			
1.2.4	~~Channel Collection~~					0			
1.2.5	Utility Collection		16	16		32			
1.2.6	Field Check					0			
1.2.7	Right-of-Way Staking (one time)	1	5	5	2	13			
1.2.8	Project Management	4				4			

2.0 Expenses		**$ -**
2.1 Travel Expenses		
	~~Project location is more than 75 miles from GUY Engineering.~~ ~~XX travel days per diem @ $XX.XX / X days per diem @ $XX.XX / XX hotels nights @ $XXX.XX - GSA rate~~	
2.2 Aerial Photogrammetry Survey		
	~~Digital Mapping & Digital Orthophotos~~	

Total: $ 10,646.00

SUMMARY:	Survey	1,169.82	2,222.60	1,930.20	2,846.60		$ 8,169.00
	Right-of-Way Documents	389.94	-	-	569.32		$ 959.00
	Right-of-Way Staking	194.97	555.65	482.55	284.66		$ 1,518.00
	Expenses						$ -
	Total	1,559.76	2,222.60	1,930.20	3,415.92		**$ 10,646.00**