

RESOLUTION NO. \_\_\_\_\_

A RESOLUTION AUTHORIZING THE APPROVAL OF CHANGE ORDER NO. 1 FOR CIVIC ENGINEERING AND INFORMATION TECHNOLOGIES, INC. RELATIVE TO CONTRACT NO. S-09-008-201, NORTH ST. ELMO DRAINAGE STUDY UPGRADE, FOR AN INCREASED AMOUNT OF ONE HUNDRED TWENTY-FOUR THOUSAND ONE HUNDRED THIRTY-TWO DOLLARS (\$124,132.00), FOR A REVISED CONTRACT AMOUNT NOT TO EXCEED FOUR HUNDRED THIRTY-NINE THOUSAND SIX HUNDRED THIRTY-TWO DOLLARS (\$439,632.00).

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BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, it is hereby authorizing the approval of Change Order No. 1 for Civic Engineering and Information Technologies, Inc. relative to Contract No. S-09-008-201, North St. Elmo Drainage Study Upgrade, for an increased amount of \$124,132.00, for a revised contract amount not to exceed \$439,632.00.

ADOPTED: \_\_\_\_\_, 2015

/mem

# City of Chattanooga



## Resolution/Ordinance Request Form

Date Prepared: June 18, 2015

Preparer: Dennis Malone

Department: Public Works

Brief Description of Purpose for Resolution/Ordinance:

Res./Ord. # \_\_\_\_\_ Council District # 7

A City Council resolution is requested to approve the Change Order No. 1, for Civic Engineering and Information Technologies, Inc., relative to Contract No. S-09-008-101, North St. Elmo Drainage Study Upgrade, for an increased amount of \$124,132.00, for a revised contract amount not to exceed \$439,632.00.

Name of Vendor/Contractor/Grant, etc.	<b>Civic Engineering and Information Technologies, Inc.</b>	New Contract/Project? (Yes or No)	No
Total project cost \$	439,632.00	Funds Budgeted? (YES or NO)	Yes
Total City of Chattanooga Portion \$	439,632.00	Provide Fund	6031
City Amount Funded \$	439,632.00	Provide Cost Center	K80116
New City Funding Required \$	0	Proposed Funding Source if not budgeted	
City's Match Percentage %		Grant Period (if applicable)	
<b>List all other funding sources and amount for each contributor.</b>			
Amount(s)	Grantor(s)		
\$			
<b>Agency Grant Number</b>			
<b>CFDA Number if known</b>			
<b>Other comments: (Include contingency amount, contractor, and other information useful in preparing resolution)</b>			
<b>Funds budgeted in FY15.</b>			
Approved by: _____			
Reviewed by: FINANCE OFFICE		DESIGNATED OFFICIAL/ADMINISTRATOR	
Please submit completed form to @budget, City Attorney and City Finance Officer			

Revised: 1/26/09

RESOLUTION NO. 26451

A RESOLUTION AUTHORIZING THE ADMINISTRATOR OF THE DEPARTMENT OF PUBLIC WORKS TO ENTER INTO AN AGREEMENT WITH CIVIC ENGINEERING AND INFORMATION TECHNOLOGIES, INC., FOR PROFESSIONAL SERVICES, RELATIVE TO CONTRACT NO. S-09-008-101, NORTH ST. ELMO DRAINAGE STUDY AND UPGRADE, IN AN AMOUNT NOT TO EXCEED THREE HUNDRED FIFTEEN THOUSAND FIVE HUNDRED DOLLARS (\$315,500.00).

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BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHATTANOOGA, it is hereby authorizing the Administrator of the Department of Public Works to enter into an agreement with Civic Engineering and Information Technologies, Inc., for professional services, relative to Contract No. S-09-008-101, North St. Elmo Drainage Study and Upgrade, in an amount not to exceed \$315,500.00.

ADOPTED: September 28, 2010.

/mms



**CITY OF CHATTANOOGA  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION**

Development Resource Center  
1250 Market Street, Suite 2100  
Chattanooga, TN 37402  
Phone: (423) 643-6033  
Fax: (423) 643-6027

## CHANGE ORDER

Contract No.:	<u>S-09-008-101</u>	Change Order No.:	<u>1</u>
Engineer:	<u>Civic Engineering and Information Technologies, Inc.</u>	Date:	<u>6/17/2015</u>
Project Name:	<u>North St. Elmo Drainage Study and Upgrade</u>	Council Res. #'s: (Attach Copies)	<u>26451</u>
		Purchase Order #	_____

Check Reason for Change Order <input type="checkbox"/> Error/Omission <input type="checkbox"/> Field Condition <input type="checkbox"/> Field Dispute Settlement <input type="checkbox"/> Owner Request <input type="checkbox"/> Value Engineering <input checked="" type="checkbox"/> Other: <u>Various additions to the contract scope as outlined in CRF E2 (attached).</u>	Contract Days Changed: _____ Revised Completion Date: _____	Original Contract Amount     \$ <u>315,500.00</u> Net Change by Previous C.O.s     \$ _____ Contract Amount Prior to this C.O.     \$ <u>315,500.00</u> Total Amount of this C.O.     \$ <u>124,132.00</u> <b>NEW CONTRACT AMOUNT     \$ <u>439,632.00</u></b>
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Description / Justification (Add more pages if necessary)  
 Revised Cost Per CRF - E2 (attached) = \$ 124,132.00

The terms and conditions of this Change Order, including the cost and time contained herein, constitute a full accord and complete satisfaction for all costs and time of performance related to the work described or referenced herein, including but not limited to, all delay and impact costs for the entire Project resulting from this Change Order. Except as amended herein, all provisions of the Contract remain in full force and effect.

### APPROVALS

CONTRACTOR		ENGINEER / ARCHITECT	
<u>NA</u>		<u>[Signature]</u>	<u>6/17/2015</u>
Signature	Date	Signature	Date
CITY PROJECT MANAGER		CITY ENGINEER	
<u>[Signature]</u>	<u>6/18/15</u>	<u>[Signature]</u>	<u>6/18/15</u>
Signature	Date	Signature	Date
ADMINISTRATOR OF PUBLIC WORKS		CITY FINANCE OFFICER	
Signature	Date	Signature	Date



**CHANGE REQUEST FORM (CRF)**

City Contract No. S-09-008-101  
 Project Name: North St. Elmo Drainage Study and Upgrade  
 Engineer: Civic Engineering and Information Technologies, Inc.  
 Contractor: \_\_\_\_\_

Requested By: City  
 Drawing: \_\_\_\_\_  
 Problem Desc: Additional design fees are required for this contract to accommodate scope changes related to additional contractor options for conveyance types in order to give bid options for better pricing, address contaminated soil discoveries and subsequent environmental considerations and provide several overall design changes related to Right-of-Way and easement negotiations.

**Revised Scope Description/Details**

Attached is an agreed upon revised payment plan for this project.

Basic Services:		Original Cost	Additional Cost	Revised Cost
Basic Design Services:	LS	\$ 158,700.00	\$ -	\$ 158,700.00
Bidding/Award Phase Services:	LS	\$ 7,200.00	\$ -	\$ 7,200.00
Construction Administration Phase Services:	LS	\$ 48,000.00	\$ (48,000.00)	\$ -
		<b>\$ 213,900.00</b>	<b>\$ (48,000.00)</b>	<b>\$ 165,900.00</b>
<b>Supplemental Services:</b>				
Hydrologic Analysis/Capacity Study	CP	\$ 22,000.00	\$ 7,692.00	\$ 29,692.00
Permit Applications (SWPPP, NOI, ARAP, USACE)	CP	\$ 8,500.00	\$ 4,656.00	\$ 13,156.00
Field Storm Drainage Data Collection	CP	\$ 4,000.00	\$ -	\$ 4,000.00
Detailed Topographic Survey	CP	\$ 19,000.00	\$ 4,460.00	\$ 23,460.00
Insp of Gillespie Springs Storm Sewers	CP	\$ 3,900.00	\$ -	\$ 3,900.00
Easement Document Preparation	CP	\$ 6,000.00	\$ 4,252.00	\$ 10,252.00
Permit Applications (Railroad, TDOT)	CP	\$ 4,000.00	\$ 1,176.00	\$ 5,176.00
Non-Dest Geotech Investigation	CP	\$ 9,500.00	\$ (1,916.00)	\$ 7,584.00
Geotechnical Borings/Investigation	CP	\$ 4,700.00	\$ -	\$ 4,700.00
Additional Supplemental Services (Soil Assessment)	CP	\$ 20,000.00	\$ -	\$ 20,000.00
Survey/Design Force Main/Utility Relocation - Tract 2	CP		\$ 6,180.00	\$ 6,180.00
Survey/Design SS Main in 36th St. R.O.W.	CP		\$ 6,500.00	\$ 6,500.00
Allowance for Additional Scope	CP		\$ 15,000.00	\$ 15,000.00
		<b>\$ 101,600.00</b>	<b>\$ 48,000.00</b>	<b>\$ 149,600.00</b>
<b>Total Cost Contract:</b>		<b>\$ 315,500.00</b>	<b>\$ -</b>	<b>\$ 315,500.00</b>

<b>Contractor Acknowledgement:</b>	
No Change in Contract Amount is required.	A Change in Contract Amount is required: <u>\$0.00</u>
No Change in Contract Time is required.	A Change in Contract Time is required: <u>0 days</u>
 _____ Architect / Engineer / Inspector / RPR	_____ Contractor
Change in Contract Amount is within the Contingency Amount authorized under Resolution No. _____ Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <u>ERIC Booker</u>  _____ Engineer / Architect Project Manager	<b>Proceed with Execution</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  _____ City Project Manager
_____ Public Works Administrator	

Distribution: City Engineer; Central Files

June 17, 2015

Mr. Eric Booker  
City of Chattanooga – Dept. of Public Works  
1250 Market Street, Suite 2100  
Chattanooga, Tennessee 37402-2713

**RE: Proposal for Additional Services for City of Chattanooga Contract No. S-09-008  
North St. Elmo Drainage System Study and Upgrade Supplemental Design Services  
– Supplement No. 1**

Dear Mr. Booker:

Civic Engineering and Information Technologies, Inc. (Civic) is pleased to provide this proposal to the City of Chattanooga – Department of Public Works to furnish supplemental professional surveying and engineering services for the North St. Elmo Drainage System Study and Upgrade. The project began in November 2010. The additional work is related to a prolonged design schedule, plans revisions to accommodate multiple conveyance realignments, hydraulic analysis for additional options, additional surveying services and coordination with the Riverwalk Project and plans revisions to incorporate erosion control plans. The additional work is broken down by the original contract tasks as outlined below.

### **Supplemental Services**

#### **Task D – Hydrologic Analysis and Hydraulic Capacity Study**

1. Additional hydraulic analysis after 50% design milestone and coordination with Contech to include the additional structural plate options for Conveyance 1
2. Revisions to hydraulic model due to plans revisions requested after 90% design milestone

#### **Task E – Permit Applications (SWPPP, NOI, ARAP, USACE, TVA, etc.)**

1. Multiple revisions to permits applications due to plans revisions after 90% design milestone (SWPPP, ARAP, USACE/TVA, TDOT)

#### **Task F – Field Storm Drainage Data Collection (Maximum of 90 Structures)**

- None

#### **Task G – Detailed Topographic Surveys**

1. The initial proposal assumed a conveyance length 4,100 linear feet for all conveyances, however, the final conveyance length is 4,700 linear feet for an increase in length of approximately 13%

2. Survey for potholing utilities at Old Wauhatchie / Church Street intersection and subsequent plans revisions based on actual utility locations (performed after 90% design milestone)

**Task H – Inspection of Gillespie Springs Branch Storm Sewer to Remain**

- None

**Task I – Easement Document Preparation (Maximum of 15 Easements)**

1. Additional easement document revisions to reflect changes as negotiated during the easement acquisition process for Tracts 2 (Linde), 6 (Mt. Vernon), and 8 (Walgreens).

**Task J – Permit Applications (Railroad, TDOT)**

1. Revisions to the Norfolk Southern railroad permit to reflect installation of the drainage culvert under the tracks by tunneling rather than pipe jacking.

**Task K – Non-Destructive Geotechnical Investigation of Proposed Alignment**

- None

**Task L – Geotechnical Borings/Investigation**

- None

**Task M – Additional Supplemental Services As Required**

1. Survey and design to relocate the force main that serves Tract 2 (Linde) – utility relocation was not included in the original contract.
2. Survey and design to replace the sanitary sewer main within the 36<sup>th</sup> Street right-of-way or install additional sanitary sewer infrastructure on the Linde property as necessary.
3. Allowance for as-needed additional services prior to construction.

**Total Estimated Fee**

Supplemental Services (Not-to-Exceed):     **\$ 49,916**

Civic appreciates this opportunity to provide our proposal for services for this project. A detailed breakdown of man-hours can be found in "Attachment A". If you have any questions or comments, please contact us.

Sincerely,  
**Civic Engineering and  
Information Technologies, Inc.**



Philip Nelson, P.E.  
Project Manager

**North St. Elmo Drainage System Study and Upgrade Supplemental Design Services- Supplement No. 1**  
**Attachment A**

**Supplemental Services (Not-to-Exceed)**

**Task D - Hydrologic Analysis and Hydraulic Capacity Study**

	Project Manager	Project Engineer	Engineer	Admin	Totals
Conveyance 1 Additional Hydraulic Analysis (after 50% design milestone)	2	24	24	2	\$4,816.00
Revisions to Hydraulic Model due to Revisions requested after 90% design milestone (See Basic Design Services)	2	8	20	2	\$2,876.00
<b>Total Design Hours</b>	4	32	44	4	84
<b>Billing Rate by Labor Category</b>	\$140.00	\$100.00	\$85.00	\$48.00	
<b>Total Estimated Fee</b>	\$560.00	\$3,200.00	\$3,740.00	\$192.00	\$7,692.00

**Task E - Permit Applications (SWPPP, NOI, ARAP, USACE, TVA, etc.)**

	Project Manager	Project Engineer	Engineer	Admin	Totals
Multiple Revisions from Plans Revisions after 90% Design Milestone	4	40	0	2	\$4,656.00
<b>Total Design Hours</b>	4	40	0	2	46
<b>Billing Rate by Labor Category</b>	\$140.00	\$100.00	\$85.00	\$48.00	
<b>Total Estimated Fee</b>	\$560.00	\$4,000.00	\$0.00	\$96.00	\$4,656.00

**Task G - Detailed Topographic Surveys**

	Project Manager	Project Engineer	Engineer	Lead Surveyor	Survey Tech	Admin	Totals
Additional Conveyance Length (4,100 If proposed vs. 4,700 If actual)	0	0	0	16	12	0	\$2,068.00
Survey for Pot-Holed Utilities at Old Wauhatchie / Church Street Intersection	0	2	0	16	16	0	\$2,488.00
<b>Total Design Hours</b>	0	2	0	32	28	0	62
<b>Billing Rate by Labor Category</b>	\$140.00	\$100.00	\$85.00	\$85.00	\$55.00	\$48.00	
<b>Total Estimated Fee</b>	\$0.00	\$200.00	\$0.00	\$2,720.00	\$1,540.00	\$0.00	\$4,460.00

**Task I - Easement Document Preparation (Maximum of 15 Easements)**

	Project Manager	Project Engineer	Engineer	Lead Surveyor	Survey Tech	Admin	Totals
Multiple Easement & Exhibit Revisions	0	0	8	32	12	4	\$4,252.00
<b>Total Design Hours</b>	0	0	8	32	12	4	56
<b>Billing Rate by Labor Category</b>	\$140.00	\$100.00	\$85.00	\$85.00	\$55.00	\$48.00	
<b>Total Estimated Fee</b>	\$0.00	\$0.00	\$680.00	\$2,720.00	\$660.00	\$192.00	\$4,252.00

**Task J - Permit Applications (Railroad, TDOT)**

	Project Manager	Project Engineer	Engineer	Lead Surveyor	Survey Tech	Admin	Totals
Railroad Permit Application Revisions to Reflect Installation by Tunneling	0	4	8	0	0	2	\$1,176.00
<b>Total Design Hours</b>	0	4	8	0	0	2	14
<b>Billing Rate by Labor Category</b>	\$140.00	\$100.00	\$85.00	\$85.00	\$55.00	\$48.00	
<b>Total Estimated Fee</b>	\$0.00	\$400.00	\$680.00	\$0.00	\$0.00	\$96.00	\$1,176.00

**Task M - Additional Supplemental Services As Required**

	Project Manager	Project Engineer	Engineer	Lead Surveyor	Survey Tech	Admin	Totals
Survey and Design for Force Main Utility Relocation at Tract 2 (Linde)	2	32	8	16	12	0	\$6,180.00
Survey and Design for Sanitary Sewer Main in 36th Street R.O.W. or additional design on Tract 2	2	8	40	16	12	0	\$6,500.00
Allowance for Additional Scope							\$15,000.00
<b>Total Design Hours</b>	4	40	48	32	24	0	148
<b>Billing Rate by Labor Category</b>	\$140.00	\$100.00	\$85.00	\$85.00	\$55.00	\$48.00	
<b>Total Estimated Fee</b>	\$560.00	\$4,000.00	\$4,080.00	\$2,720.00	\$1,320.00	\$0.00	\$27,680.00

Total Supplement No. 1 **\$49,916.00**



**CHANGE REQUEST FORM (CRF)**

City Contract No. S-09-008-101  
 Project Name: North St. Elmo Drainage Study and Upgrade  
 Engineer: Civic Engineering and Information Technologies, Inc.  
 Contractor: \_\_\_\_\_

Requested By: City  
 Drawing: \_\_\_\_\_  
 Problem Desc: Additional design fees are required for this contract to accommodate scope changes related to additional contractor options for conveyance types in order to give bid options for better pricing, address contaminated soil discoveries and subsequent environmental considerations and provide several overall design changes related to Right-of-Way and easement negotiations.

**Revised Scope Description/Details**

1. Prolonged design schedule required additional time for stopping and starting design
2. The initial proposal assumed a conveyance length of 4,100 linear feet for all conveyances, however, the final conveyance length is 4,700 linear feet for an increase in project scope of approximately 13%
3. City requested plans and specifications revisions were required after 95% design milestone to realign Conveyance 1 to accommodate future 7'x7' box culvert extension at the Walgreens Property
4. City requested plans revision to include an option for Contech Structural Plate (after 50% design milestone)
5. City requested plans and specifications revisions after 50% design milestone to realign Conveyance 2 vertically to accommodate possible future vertical realignment of Cummings Highway
6. City requested plans revisions based on utility pot-holes at Old Wauhatchie / Church Street intersection after 90% milestone
7. City requested coordination with the Riverwalk Project and plans revisions to include the proposed erosion control plan to include the Riverwalk Project
8. City requested coordination with TDEC to write a specification for treatment of contaminated soil Additional plans revisions to traffic control plans from TDOT (received after 95% design milestone and after original comments were addressed)
9. City requested that the plans and specifications be revised to reflect installation by tunneling rather than pipe jacking under Norfolk Southern Railroad for Conveyances 2 and 3.
10. City requested that changes be made to the structural design of the junction boxes in accordance with the following:
  - a. An additional junction box was added to the plans with a 48" RCP stub to accommodate the outfall of a future drainage project along St. Elmo Avenue
  - b. The junction box at the outfall of Conveyance 2 into Conveyance 1 was redesigned to accommodate maintenance access to the box culvert.
  - c. The junction box at the beginning of Conveyance 1 at the Walgreens property was redesigned to accommodate the realignment of the 7'x7' box along the west property line of the Walgreens property.
11. City requested that the plans and specifications be modified to include a new asphalt entrance on the Linde property along with the removal of the existing fuel island.
12. City requested that the plans and specifications be modified to include an underground detention system on the Mt. Vernon property.
13. Final QA/QC of plans and specifications based on the revisions listed above

<b>Contractor Acknowledgement:</b>	
<input type="checkbox"/> No Change in Contract Amount is required.	<input checked="" type="checkbox"/> A Change in Contract Amount is required: <u>\$124,132.00</u>
<input type="checkbox"/> No Change in Contract Time is required.	<input checked="" type="checkbox"/> A Change in Contract Time is required: <u>Completion Date: September 25, 2015</u>
 Architect / Engineer / Inspector / RPR	Contractor
Change in Contract Amount is within the Contingency Amount authorized under Resolution No. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <u>Eric Booker</u> <u>E Booker 6/18/15</u> Engineer / Architect Project Manager	Proceed with Execution <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <u>6/18/15</u> City Project Manager

Distribution: City Engineer; Central Files



June 17, 2015

Mr. Eric Booker  
City of Chattanooga – Dept. of Public Works  
1250 Market Street, Suite 2100  
Chattanooga, Tennessee 37402-2713

**RE: Proposal for Additional Services for City of Chattanooga Contract No. S-09-008  
North St. Elmo Drainage System Study and Upgrade – Basic Services Supplement  
No. 1**

Dear Mr. Booker:

Civic Engineering and Information Technologies, Inc. (Civic) is pleased to provide this proposal to the City of Chattanooga – Department of Public Works to furnish supplemental professional surveying and engineering services for the North St. Elmo Drainage System Study and Upgrade. The project began in November 2010. The additional work is related to a prolonged design schedule, plans revisions to accommodate multiple conveyance realignments, hydraulic analysis for additional options, additional surveying services and coordination with the Riverwalk Project and plans revisions to incorporate erosion control plans. The additional work is broken down by the original contract tasks as outlined below.

### **Basic Services**

#### **Task A – Basic Design Services**

1. Prolonged design schedule required additional time for stopping and starting design
2. The initial proposal assumed a conveyance length of 4,100 linear feet for all conveyances, however, the final conveyance length is 4,700 linear feet for an increase in project scope of approximately 13%
3. City requested plans and specifications revisions were required after 95% design milestone to realign Conveyance 1 to accommodate future 7'X7' box culvert extension at the Walgreens Property
4. City requested plans revision to include an option for Contech Structural Plate (after 50% design milestone)
5. City requested plans and specifications revisions after 50% design milestone to realign Conveyance 2 vertically to accommodate possible future vertical realignment of Cummings Highway
6. City requested plans revisions based on utility pot-holes at Old Wauhatchie / Church Street intersection after 90% milestone
7. City requested coordination with the Riverwalk Project and plans revisions to include the proposed erosion control plan to include the Riverwalk Project

25 LINDSLEY AVENUE • NASHVILLE, TN 37210  
PHONE: (615) 425-2000  FAX: (615) 385-4834  
INFO@CIVICINC.COM • WWW.CIVICINC.COM

8. City requested coordination with TDEC to write a specification for treatment of contaminated soil Additional plans revisions to traffic control plans from TDOT (received after 95% design milestone and after original comments were addressed)
9. City requested that the plans and specifications be revised to reflect installation by tunneling rather than pipe jacking under Norfolk Southern Railroad for Conveyances 2 and 3.
10. City requested that changes be made to the structural design of the junction boxes in accordance with the following:
  - a. An additional junction box was added to the plans with a 48" RCP stub to accommodate the outfall of a future drainage project along St. Elmo Avenue
  - b. The junction box at the outfall of Conveyance 2 into Conveyance 1 was redesigned to accommodate maintenance access to the box culvert.
  - c. The junction box at the beginning of Conveyance 1 at the Walgreens property was redesigned to accommodate the realignment of the 7'x7' box along the west property line of the Walgreens property.
11. City requested that the plans and specifications be modified to include a new asphalt entrance on the Linde property along with the removal of the existing fuel island.
12. City requested that the plans and specifications be modified to include an underground detention system on the Mt. Vernon property.
13. Final QA/QC of plans and specifications based on the revisions listed above

**Task B – Bid/Award Phase Services**

- None

**Task C – Construction Administration Phase Services**

- None

**Total Estimated Fee**

Basic Design Services (Lump Sum):           **\$124,132**

Civic appreciates this opportunity to provide our proposal for services for this project. A detailed breakdown of man-hours can be found in "Attachment A". If you have any questions or comments, please contact us.

Sincerely,  
**Civic Engineering and  
Information Technologies, Inc.**



Philip Nelson, P.E.  
Project Manager

# North St. Elmo Drainage System Study and Upgrade Basic Design Services- Supplement No. 1

## Attachment A

### Basic Design Services (Lump Sum)

#### Task A - Basic Design Services

	Project Manager	Project Engineer	Engineer	Admin	Totals
Prolonged Design Schedule - Stopping and Starting (November 2010 to January 2015)	20	80	140	40	\$24,620.00
Additional Conveyance Length (4,100 if proposed vs. 4,700 if actual)	20	60	120	20	\$19,960.00
Conveyance 1 Realignment for future 7'X7' Box at Walgreens property	4	50	80	2	\$12,456.00
Conveyance 1 Revision to Include Option for Contech Structural Plate	4	24	40	2	\$6,456.00
Conveyance 2 Vertical Realignment for Future Realignment of Cummings Hwy	4	20	40	2	\$6,056.00
Plans Revisions Based on Utility Pot-Holes at Old Wauhatchie / Church Street Intersection	2	8	40	2	\$4,576.00
Coordination with Riverwalk Project and Plans Revisions to Incorporate EPSC Plan	2	8	24	2	\$3,216.00
Coordinate with TDEC to Write Specification for Treatment of Contaminated Soil	8	40	0	8	\$5,504.00
Additional TDOT Traffic Control Plans Revisions	2	10	40	2	\$4,776.00
Plans and Specifications Revisions for Tunneling Under Railroad	2	8	40	0	\$4,480.00
Addition / Modifications for Junction Boxes	8	20	120	0	\$13,320.00
Plans and Specifications Revisions for New Entrance to Linde and Removal of Fuel Island	2	4	24	0	\$2,720.00
Plans and Specifications Revisions for an Underground Detention System on Tract 6 (Mt. Vernon)	2	2	80	0	\$7,280.00
Final QA/QC of Plans & Specifications	8	40	40	4	\$8,712.00
<b>Total Design Hours</b>	<b>88</b>	<b>374</b>	<b>828</b>	<b>84</b>	<b>1374</b>
<b>Billing Rate by Labor Category</b>	\$140.00	\$100.00	\$85.00	\$48.00	
<b>Total Estimated Fee</b>	<b>\$12,320.00</b>	<b>\$37,400.00</b>	<b>\$70,380.00</b>	<b>\$4,032.00</b>	<b>\$124,132.00</b>