

## EXHIBIT E -Work Authorization

# HIDALGO COUNTY

Professional Engineering Services

Contract # C-13-044-03-20

Work Authorization Form

## WORK AUTHORIZATION NO. 01

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between HIDALGO COUNTY, action herein by and through the Commissioner's Court, hereinafter called the "Owner," and, Half Associates, Inc., professional engineers of McAllen, Texas, Texas, hereinafter called "Engineer".

### PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the Engineer to provide **Electrical, Mechanical, and Structural Engineering for Modifications to incorporate Motorola and 911 equipment at Hidalgo County Sherriff's Office.**

The scope of services to be provided by the Owner is identified in EXHIBIT "A" – Scope of Services to be Provided by the Owner attached hereto.

The scope of services to be provided by the Engineer is identified in EXHIBIT "B" – Scope of Services to be Provided by the Engineer attached hereto.

### PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is \$ **47,000.00**. This amount is based upon the costs outlined in the Estimated Cost Proposal attached hereto as EXHIBIT "D".

### PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section 6 of the Agreement.

### PART 4. FUNDING

This Work Authorization No. 1 shall be funded through funding source: Account No. 3-1100-421-00-280-001-0-431 Requisition Number \_\_\_\_\_

(MUST BE INCLUDED AFTER CC APPROVAL)  
(funding pending approval under AI-39563)

**PART 5. PERIOD OF SERVICE**

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

**PART 6. RESPONSIBILITIES AND OBLIGATIONS**

This Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

**PART 7. ACKNOWLEDGEMENT AND CONFIRMATION**

Acknowledgement and confirmation by Hidalgo County Precinct #4, Commissioner Joseph Palacios as to content and detail of this Work Authorization No. 1.

HIDALGO COUNTY PRECINCT No. 4

\_\_\_\_\_  
BY: Joseph Palacios, Commissioner

**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on \_\_\_\_\_ as indicated below and effective as of 3 day of July, 2013.

THE ENGINEER:  
HALFF ASSOCIATES INC.

  
\_\_\_\_\_  
By: Menton J. Murray, III, P.E., LEED AP

THE OWNER:  
HIDALGO COUNTY

\_\_\_\_\_  
By: Ramon Garcia, County Judge

ATTEST:

By: \_\_\_\_\_  
Arturo Guajardo, Jr., County Clerk

**LIST OF ATTACHMENTS**

ATTACHMENT "A" -Service to be Provided by the Owner  
ATTACHMENT "C" -Work Schedule

ATTACHMENT "B" -Services to be Provided by the Engineer  
ATTACHMENT "D" -Cost Proposal

# **EXHIBIT A**

## **-Scope of Services to be Provided by the Owner**

The following provides an outline of the services to be provided by the **OWNER** in the development of the Project.

The **OWNER** will provide to the **ENGINEER** the following:

- (1) Authorization to the **ENGINEER** to begin work in accordance with Section 3 of this Agreement.
- (2) Payment for work performed by the **ENGINEER** and accepted by the **OWNER** in accordance with Section 6 of the Agreement.
- (3) Assistance to the **ENGINEER**, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies that the **ENGINEER** cannot easily obtain.
- (4) Provide any available relevant data the **OWNER** may have on file concerning the project.
- (5) Provide timely review and decisions in response to the **ENGINEER'S** request for information and/or required submittals and deliverables, in order for the **ENGINEER** to maintain the agreed-upon work schedule prepared in accordance with Attachment "C" of this Agreement.
- (6) Attend and participate in progress meetings as required and as coordinated and conducted by the **ENGINEER**.
- (7) Assist the **ENGINEER** in the preparation of the project mailing list; provide representation, a site and stenographer for all public meetings; additionally:  
  
*Public Meetings*
  - (a) Approve agenda and all exhibits prior to public meeting.
  - (b) Approve date and location of the meeting.
  - (c) Review/approve Public Meeting Report.
- (8) Attend the Preliminary Concept Conference coordinated and conducted by the **ENGINEER** and more particularly identified in Attachment "B" of the Agreement.
- (9) Assist the **ENGINEER** as required in the coordination with the USACE and the Federal Emergency Management Agency (FEMA) and any other coordinating agency or entity.
- (10) Review and approve the Project design criteria.
- (11) Review and approve change orders as required and prepared by the **ENGINEER**.

# **EXHIBIT B**

## **-Scope of Services to be Provided by the Engineer**

Through project award via work authorization, engineer shall provide professional services required to design and specify Building Repair and Renovation Projects. Type of services that may be included as dictated by the individual project requirements consist of: 1) Surveying, 2) Civil Engineering, 3) Mechanical/ Plumbing Engineering, 4) Electrical Engineering, 5) Structural Engineering, and or 6) Architecture. Upon Identification by the Owner of specific projects that require the professional services of the Engineer, a detailed scope of work and identification of professional service disciplines required shall be established.

**Half Associates, Inc. is please to submit this task order proposal under our existing Professional Service Agreement (C-13-044-03-20) with Hidalgo County to provide Electrical, Mechanical, and Structural Engineering design for Modifications to incorporate Motorola and 911 equipment at Hidalgo County Sherriff's Office.**

### **Electrical Engineering for Modifications to incorporate Motorola and 911 Equipment**

- 1. Review Existing Conditions**
- 2. Review Existing drawings and draft backgrounds**
- 3. Verify peak demand from MVEC**
- 4. Prepare demolition plans**
- 5. Meet Motorola to confirm layout**
- 6. Dry Fire Suppression Fire Suppression**
- 7. Conduit routing for Motorola and Telco**
- 8. Hardware and Security System integration**
- 9. Meet with AT&T to confirm layout**
- 10. Prepare floor plan with outlets shown**
- 11. Prepare panel schedules for circuiting**
- 12. Prepare transformers and panel mounting detail**
- 13. Prepare lighting plan**

### **HVAC Engineering for Modifications to incorporate Motorola and 911 Equipment**

- 1. Review Existing Conditions**
- 2. Prepare demolition plans**
- 3. Prepare ventilation additions to electrical room**
- 4. Fire Dampers for Dry Fire Protection**
- 5. Size new Comp Room AC (CRAC) unit**
- 6. Prepare new duct layout**
- 7. Prepare Plans and Specifications**

**Electrical, Mechanical, and Structural Engineering for Modifications to Incorporate Code Requirements to meet Critical Operating Power System Design (COPS)**

- 1. Electrical and Mechanical Engineering**
- 2. Structural Engineering**
- 3. Revision to Existing Electrical Systems**
- 4. Plan Revisions per NFPA**
- 5. Transfer Switch Modifications**
- 6. Coordination Study**
- 7. Commissioning**
- 8. Document Emergency Operations Plan**

**Bid Phase Services**

- 1. Prebid conference**
- 2. Received Bids**
- 3. Negotiation meeting**

**Construction Administration**

- 1. Pre-construction meeting (1 Visit)**
- 2. Field Observations (4 Field meetings)**
- 3. Response to RFI's**
- 4. Review Submittals**
- 5. Punch list and final observation**
- 6. Attendance at Commissioners Court Meeting (1)**

# EXHIBIT C

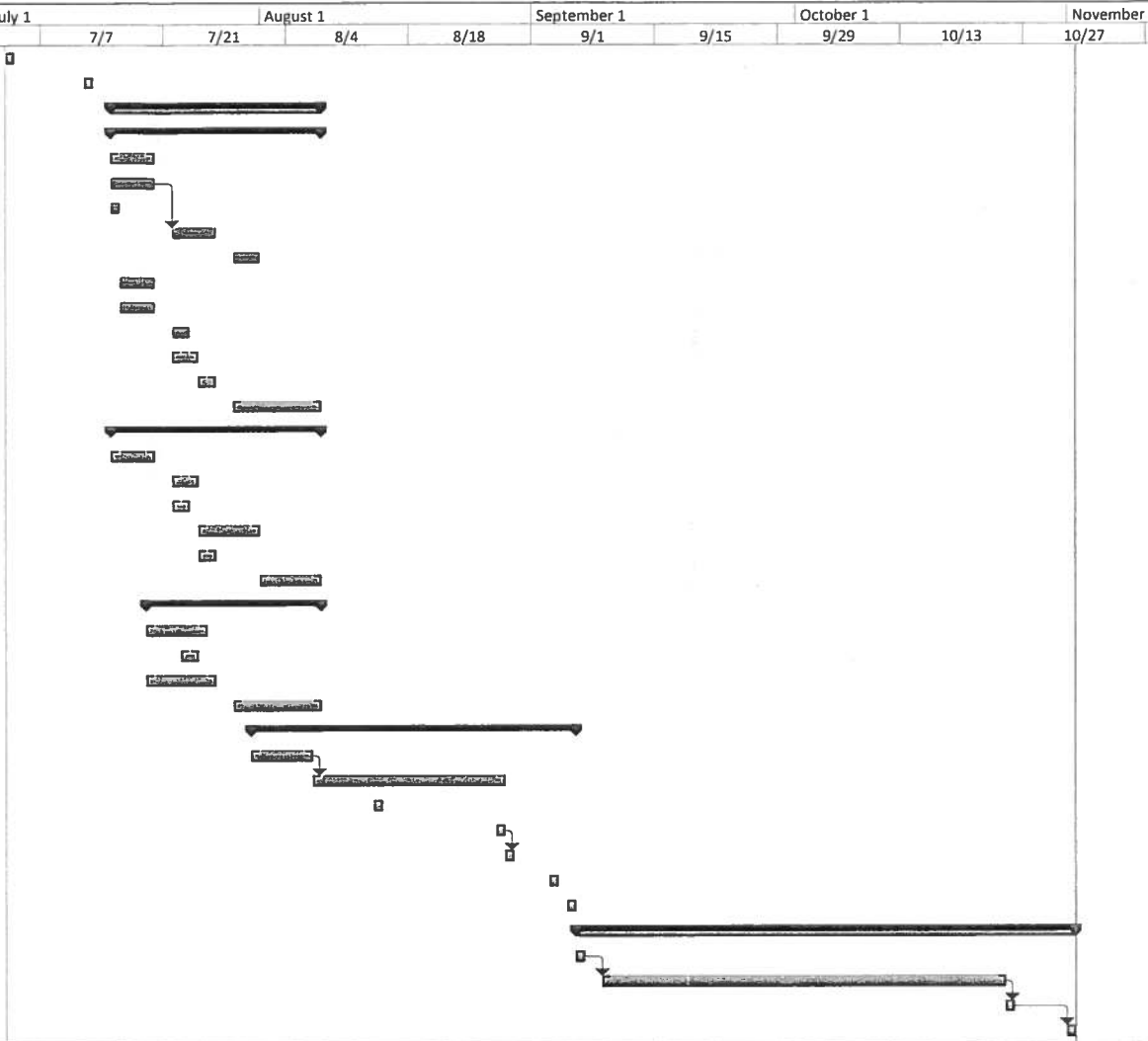
## -Work Schedule

A detailed work schedule for each **Work Authorization**, identified and more particularly described in Article 7 of this Agreement, shall be prepared by the **Engineer** to be submitted and approved by the Owner in writing for each **Work Authorization**. The work schedule will provide specific work sequence and definite review times by the **Owner** and the **Engineer** of the work performed.

The **Engineer** will diligently pursue the completion of each **Work Authorization** as defined by the milestones and deliverable due dates outlined in each **Work Authorization**'s associated work schedule.

The **Engineer** will inform the **Owner** (in reasonable advance of the delay) should the **Engineer** encounter delays that would prevent the performance of all work in accordance with the established work schedule.

ID	Task Name	Duration	Start	Finish	July 1		August 1		September 1		October 1		November
					6/23	7/7	7/21	8/4	8/18	9/1	9/15	9/29	10/13
1	Project Proposal	1 day	Wed 7/3/13	Wed 7/3/13									
2	Proposal Award	1 day	Fri 7/12/13	Fri 7/12/13									
3	Phase 1-Motorola/911 MEP Design	18 days	Mon 7/15/13	Wed 8/7/13									
4	Electrical Design	18 days	Mon 7/15/13	Wed 8/7/13									
5	Review Exist. Conditions	5 days	Mon 7/15/13	Fri 7/19/13									
6	Preliminary Dwgs	5 days	Mon 7/15/13	Fri 7/19/13									
7	MVEC Demand	1 day	Mon 7/15/13	Mon 7/15/13									
8	Demo Plans	5 days	Mon 7/22/13	Fri 7/26/13									
9	Circuit HVAC	3 days	Mon 7/29/13	Wed 7/31/13									
10	Motorola Outlets	4 days	Tue 7/16/13	Fri 7/19/13									
11	Security	4 days	Tue 7/16/13	Fri 7/19/13									
12	Transformer Details	2 days	Mon 7/22/13	Tue 7/23/13									
13	Lighting Plans	3 days	Mon 7/22/13	Wed 7/24/13									
14	Review with Owner	2 days	Thu 7/25/13	Fri 7/26/13									
15	Construction Documentation	8 days	Mon 7/29/13	Wed 8/7/13									
16	HVAC Design	18 days	Mon 7/15/13	Wed 8/7/13									
17	Review Exist. Conditions	5 days	Mon 7/15/13	Fri 7/19/13									
18	HVAC Load Calcs	3 days	Mon 7/22/13	Wed 7/24/13									
19	Demo Plans	2 days	Mon 7/22/13	Tue 7/23/13									
20	HVAC Design	5 days	Thu 7/25/13	Wed 7/31/13									
21	Review with Owner	2 days	Thu 7/25/13	Fri 7/26/13									
22	Construction Documentation	5 days	Thu 8/1/13	Wed 8/7/13									
23	Phase 2 - COPS Modifications	14 days	Fri 7/19/13	Wed 8/7/13									
24	Generator and ATS Design	5 days	Fri 7/19/13	Thu 7/25/13									
25	Fuel Tank Sizing	2 days	Tue 7/23/13	Wed 7/24/13									
26	Feeder Coordination & Design	6 days	Fri 7/19/13	Fri 7/26/13									
27	Electrical Coordination Study	8 days	Mon 7/29/13	Wed 8/7/13									
28	Project Procurement Phase	27 days	Wed 7/31/13	Thu 9/5/13									
29	Req. Approval to Procure Bids	5 days	Wed 7/31/13	Tue 8/6/13									
30	Solicit Bids	16 days	Wed 8/7/13	Wed 8/28/13									
31	Pre-Bid Conference	1 day	Wed 8/14/13	Wed 8/14/13									
32	Receive Bids	1 day	Wed 8/28/13	Wed 8/28/13									
33	Contractor Negotiation	1 day	Thu 8/29/13	Thu 8/29/13									
34	Request Approval to Award	1 day	Tue 9/3/13	Tue 9/3/13									
35	Award Contract	1 day	Thu 9/5/13	Thu 9/5/13									
36	Construction Phase	41 days	Fri 9/6/13	Fri 11/1/13									
37	Construction Kick-Off	1 day	Fri 9/6/13	Fri 9/6/13									
38	Construction	34 days	Mon 9/9/13	Thu 10/24/13									
39	Project Punchlist	1 day	Fri 10/25/13	Fri 10/25/13									
40	Project Back Punchlist	1 day	Fri 11/1/13	Fri 11/1/13									



Project: SCH130703_Pct4_911Cen Date: Wed 7/3/13	Task		Project Summary		Inactive Milestone		Manual Summary Rollup		Deadline
	Split		External Tasks		Inactive Summary		Manual Summary		Progress
	Milestone		External Milestone		Manual Task		Start-only		C
	Summary		Inactive Task		Duration-only		Finish-only		C

# **EXHIBIT D**

## **Cost Proposal**

**Provide Electrical, Mechanical, and Structural Engineering design for Modifications to incorporate Motorola and 911 equipment at Hidalgo County Sherriff's Office.**

### **Phase 1 Engineering for Motorola and 911 Equipment**

- **Electrical Engineering Design** \$14,530.00
- **Mechanical Engineering** \$ 8,240.00

### **Phase 2 Engineering Modifications for COPS Requirement**

- **Electrical & Mechanical Engineering** \$11,310.00
- **Structural Engineering** \$ 2,395.00
- **Bid Phase Services** \$ 3,660.00
- **Construction Phase Services** \$ 6,865.00

**Total Cost Proposal \$47,000.00**

Haiff Associates, Inc.  
 Fee Schedule- Communication System Hidalgo County Sheriffs- Additional Services  
 HIDALGO COUNTY 2013 On-Call Contract No: C13-044-0320

	Project Manager	PE	EIT	Designer	Const. Admin	CAD Tech	Clerical	2-Man Survey Crew	Sub-Consultant	TOTAL (HOURS)	TOTAL (\$)
<b>Contracted Rate:</b>	\$180	\$145	\$100	\$70	\$75	\$50	\$50	\$135			
<b>Phase 1 Engineering for Motorola &amp; 911 Equipment</b>											
<b>Task / Scope</b>											
<b>ELECTRICAL ENGINEERING DESIGN</b>											
Review Existing Conditions	2		1			4				7	\$660
Review existing drawings and draft background			4			8				12	\$800
Verify peak demand from MVEC	1		1							2	\$280
Prepare demolition plan	2			8		4				14	\$1,120
Review wire sizes to existing switchboard	4		2							6	\$920
Add circuiting to new HVAC unit	1		2			3				6	\$530
Meet with Motorola to confirm layout	4		4			3				11	\$1,270
Dry Fire Suppression\ Fire Suppression	2		0			1				3	\$410
Conduit routing for Motorola and Telco	4		4			1				9	\$1,170
Hardware and Security system integration	4		0	4						8	\$1,000
Meet with AT&T to confirm layout	4						1			5	\$770
Prepare floor plan with outlets shown			9	0		8				17	\$1,300
Prepare panel schedules for circuiting	1		3			3				7	\$630
Prepare transformer and panel mounting detail	1		3			3				7	\$630
Prepare lighting plan	0		3			2				5	\$400
Project Specs and Bid Docs	4		4				12			20	\$1,720
<b>Electrical Design Phase Sub-Total (Hours)</b>	<b>38</b>	<b>0</b>	<b>42</b>	<b>12</b>	<b>0</b>	<b>40</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>145</b>	
<b>Electrical Design Phase Sub-Total (\$)</b>	<b>\$6,840</b>	<b>\$0</b>	<b>\$4,200</b>	<b>\$840</b>	<b>\$0</b>	<b>\$2,000</b>	<b>\$650</b>	<b>\$0</b>	<b>\$0</b>		<b>\$14,530</b>
<b>MECHANICAL ENGINEERING DESIGN</b>											
Review Existing Conditions	2		5							7	\$860
Review existing drawings and prepare backgrounds	1		4			4				9	\$780
Determine if AHJ requires Facility is COPS (Critical op)	2									2	\$360
Calculate HVAC loads equipment, bldg. and people	2		8			2				12	\$1,260
Prepare demolition plan	2		8			4				14	\$1,360
Prepare ventilation additions to electrical room	1		2							3	\$380
Fire Dampers for Dry Fire Protection			2			2				4	\$300
Size new Comp Room AC (CRAC) unit	1		2							3	\$380
Prepare new duct layout	1		8			8				17	\$1,380
Prepare Plans and Specifications	1		8			4				13	\$1,180
<b>Mechanical Design Phase Sub-Total (Hours)</b>	<b>13</b>	<b>0</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>84</b>	
<b>Mechanical Design Phase Sub-Total (\$)</b>	<b>\$2,340</b>	<b>\$0</b>	<b>\$4,700</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,200</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		<b>\$8,240</b>

Halff Associates, Inc.  
 Fee Schedule- Communication System Hidalgo County Sheriffs- Additional Services  
 HIDALGO COUNTY 2013 On-Call Contract No: C13-044-0320

	Project Manager	PE	EIT	Designer	Const. Admin	CAD Tech	Clerical	2-Man Survey Crew	Sub-Consultant	TOTAL (HOURS)	TOTAL (\$)
Contracted Rate:											
	\$180	\$145	\$100	\$70	\$75	\$50	\$50	\$135			
<b>Phase 2 Engineering Modifications for COPS Requirements</b>											
<b>ELECTRICAL &amp; MECHANICAL ENGINEERING</b>											
Electrical Engineering	6						3.5			9.5	\$1,255
Revision to Existing Electrical System	8					8	2			18	\$1,940
Plan Revision per NFPA	8					8	2			18	\$1,940
Generator Disconnect	1					1				2	\$230
Portable Generator Connection	1					2				3	\$280
Transfer Switch Modifications	1					2				3	\$280
Over Current Device Revisions			4							4	\$400
Coordination Study			4							4	\$400
Commissioning					8					8	\$600
Security Revisions					3					3	\$225
Capacity Verification	4		4							8	\$1,120
Fuel System Evaluation			1							1	\$100
Tank Revision			2			2				4	\$300
Ground Fault & Time current coordination			2							2	\$200
Document Emergency Operations Plan	4		2							6	\$920
Specifications	4						8			12	\$1,120
<b>Electrical &amp; Mechanical Phase Sub-Total (Hours)</b>	<b>37</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>11</b>	<b>23</b>	<b>15.5</b>	<b>0</b>	<b>0</b>	<b>105.5</b>	
<b>Electrical &amp; Mechanical Phase Sub-Total (\$)</b>	<b>\$6,660</b>	<b>\$0</b>	<b>\$1,900</b>	<b>\$0</b>	<b>\$825</b>	<b>\$1,150</b>	<b>\$775</b>	<b>\$0</b>	<b>\$0</b>		<b>\$11,310</b>
<b>Structural Engineering</b>											
Fire Rated Enclosure	8		2	4	4		3.5			21.5	\$2,395
<b>Structural Phase Sub-Total (Hours)</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>3.5</b>	<b>0</b>	<b>0</b>	<b>21.5</b>	
<b>Structural Phase Sub-Total (\$)</b>	<b>\$1,440</b>	<b>\$0</b>	<b>\$200</b>	<b>\$280</b>	<b>\$300</b>	<b>\$0</b>	<b>\$175</b>	<b>\$0</b>	<b>\$0</b>		<b>\$2,395</b>
<b>Bid Phase Services</b>											
Printing Coordination	2					2	2			6	\$560
Prebid conference	5						2			7	\$1,000
Receive Bids	5						2			7	\$1,000
Negotiation meeting	5						4			9	\$1,100
<b>Bid Phase Sub-Total (Hours)</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>29</b>	
<b>Bid Phase Sub-Total (\$)</b>	<b>\$3,060</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$100</b>	<b>\$500</b>	<b>\$0</b>	<b>\$0</b>		<b>\$3,660</b>

Halff Associates, Inc.  
 Fee Schedule- Communication System Hidalgo County Sheriffs- Additional Services  
 HIDALGO COUNTY 2013 On-Call Contract No: C13-044-0320

	Project Manager	PE	EIT	Designer	Const. Admin	CAD Tech	Clerical	2-Man Survey Crew	Sub-Consultant	TOTAL (HOURS)	TOTAL (\$)
Contracted Rate:	\$180	\$145	\$100	\$70	\$75	\$50	\$50	\$135			
<b>Construction Phase Services</b>											
Pre construction meeting (1 Visit)	5						2			7	\$1,000
Response to RFI's	4					2	1			7	\$870
Review Submittals	4				2		4.5			10.5	\$1,095
Field Observations(4 Field meetings)	5				20		8			33	\$2,800
Punch List and final observation	1						4			5	\$380
Attendance at Commissioners Court Meeting (1)	4									4	\$720
Construction Phase Sub-Total (Hours)	23	0	0	0	22	2	19.5	0	0	66.5	
Construction Phase Sub-Total (\$)	\$4,140	\$0	\$0	\$0	\$1,650	\$100	\$975	\$0	\$0		\$6,865
<b>TOTAL HOURS (PRIME CONSULTANT)</b>											
	136	0	110	16	37	91	61.5	0	0	451.5	
<b>Contracted Rate</b>											
	\$180	\$145	\$100	\$70	\$75	\$50	\$50	\$135			
<b>TOTAL LABOR COSTS</b>											
	\$24,480	\$0	\$11,000	\$1,120	\$2,775	\$4,550	\$3,075	\$0	\$0		
<b>TOTAL EXPENSES</b>											
<b>TOTAL LABOR PLUS EXPENSES</b>											
											\$47,000