

Gray, Jeff

From: Workman, William B II
Sent: Friday, October 20, 2006 9:59 AM
To: Gray, Jeff
Cc: Pruitt, Terry L; Bagwell, J Robert
Subject: RE: KIF Ash Pond Alt Feed
Attachments: TVA Kingston Ammonia Bid Sheet.xls

Jeff,

I have attached our sub contractors preliminary price for the electrical work. This price does not include the ditch for the conduit since I don't know what the ditch spec will be. It does include 4" conduit instead of 2" due to the cable size. It also includes a spare conduit since the ditch will be open and it will be smart to put this in now for future needs (\$40,000). We would typically add 10% to the subs price for overhead / management of their work. Call if you have questions or comments.

Brad Workman

-----Original Message-----

From: Gray, Jeff
Sent: Tuesday, October 17, 2006 2:35 PM
To: Workman, William B II
Cc: Pruitt, Terry L; Gray, Jeff
Subject: FW: KIF Ash Pond Alt Feed

Brad,

Attached is the information for the preliminary estimate we discussed earlier today. Please contact Terry Pruitt if you have questions about the information furnished..

Thanks,
Jeff Gray
EDS Civil Engineering
423-751-7693 - office
423-751-6113

From: Cross, James (Chattanooga) [mailto:James.Cross@WorleyParsons.com]
Sent: Tuesday, October 17, 2006 2:03 PM
To: Gray, Jeff
Subject: KIF Ash Pond Alt Feed

Jeff, I have looked into what is required for re-feeding the Pond & Silo Board from the Ammonia facility. There is currently ample capacity at the facility to feed this entire board. There is a spare 4160V Circuit Breaker that could be used to feed the Pond & Silo Board. Based on the distance, a 4160V feed would need to be routed in order to not have any voltage drop issues. This feed would connect to a 4160/480V step down transformer that would then be connected to the pond and silo board. The following are assumptions I made for the estimate. All information would have to be verified.

Assumptions:

1) The Ammonia facility is approximately 6000 feet from the Pond & Silo Building. This is based on the

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drawing provided by the JPT.


2) The Pond and Silo MCC has a rating of 600A.

3) A 500 KVA 4160/480V transformer will be required at the Pond & Silo Building. This is based on getting full capacity of the 600A Pond & Silo Board.

The cost of the transformer will be approximately \$30K. The transformer and cable installation cost would need to be provided by the constructor. He can assume routing 3-#1/0 cables in a 2" conduit for his estimate. These numbers are on the conservative side but to get it any closer would require me to make another visit to the facility. Please call if you have any further questions.

J. Darrel Cross II, P.E.

Principal Electrical Engineer

 Adobe Systems

633 Chestnut Street, Suite 400
Chattanooga, TN 37450-0400
(423) 757-8092 (office), (423) 266-0922 (fax)
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10/30/2006

TVA-00006315

TVA IQT - FTA MANAGED TASK ESTIMATING FORMAT

PREPARED BY: Chris Jenkins

DATE:

PROJECT LOCATION: TVA Kingston Ammonia Purge

TVA PROJECT MANAGER: Robert Bagwell

SCOPE: Phase I Electrical

10/18/2006

MATERIAL: COST PLUS 10%	Enter Total Mat'l Cost Here	MATERIAL COST	EXTENDED COST
		\$247,091	\$271,800

LABOR:	CLASSIFICATION	Billing Rate Per IQT Contract	TOTAL HRS Here	EXTENDED COST
	General (Head) Foreman	\$45.32	0	\$0.00
	Foreman	\$41.96	448	\$18,798.08
	Journeyman	\$38.92	2968	\$115,514.56
	Appr 6th Period	\$35.87		\$0.00
	Appr 5th Period	\$33.73		\$0.00
	Appr 4th Period	\$31.60		\$0.00
	Appr 3rd Period	\$29.46		\$0.00
	Appr 2nd Period	\$27.63		\$0.00
	Appr 1st Period	\$25.80		\$0.00
	Groundman Maint	\$26.72		\$0.00
	Groundman Trainee - A	\$22.08		\$0.00
	Groundman Trainee - B	\$23.06		\$0.00
	SUB TOTAL		3416	\$134,312.64

INDIRECT LABOR:				
	Job Scheduling	\$48.00		\$0.00
	Project Management	\$48.00	168	\$8,064.00
	Estimating	\$48.00	8	\$384.00
	Scoping	\$48.00	8	\$384.00
	Proj. Close Out	\$37.17		\$0.00
	Site Meetings	\$40.10		\$0.00
	Material Handling	\$37.17		\$0.00
	SUB TOTAL		184	\$8,832.00

DIRECT JOB EXPENSES: (Examples)	10% MARK UP	ESTIMATED AMT	EXTENDED COST
	Temporary Power	\$1,875	2,062.50
	Rental Equipment (Items not shown in Rental Table below)	\$2,750	3,025.00
	Storage	\$425	467.50
	Truck Expense	845	929.50
			0.00
	Administrative Cost, Telephone, Computer & Fax Machine	\$325	357.50
	Site Office		0.00
	Sanitation (Field Toilet)		0.00
	Temporary Lighting		0.00
	Disposal (Dumpster)		0.00
	SUB TOTAL		\$6,842.00

TOOLS: (Examples)	10% MARK UP	ESTIMATED AMT	EXTENDED COST
	Lifting & Handling Equipment		\$0.00
	Safety Equipment	\$285	\$313.50
	Tools Storage		\$0.00
	Cable Installation Tools	\$225	\$247.50
	Splicing Tools		\$0.00
	Digging Tools		\$0.00
	Fiber Test & Splice Equipment		\$0.00
	Tele/Data Test Equipment		\$0.00
	Scaffolding		\$0.00
	Ladders		\$0.00
	SUB TOTAL		\$561.00

SUB - CONTRACTORS: (Examples)	5% MARK UP	ESTIMATED AMT ↓	EXTENDED COST
Excavation			\$0.00
Pole Bases			\$0.00
Concrete - Cut & Patch			\$0.00
Asphalt - Cut & Patch			\$0.00
Security			\$0.00
Fire Alarm			\$0.00
HVAC Controls			\$0.00
Energy Metering			\$0.00
Tele/Data Equipment			\$0.00
Sound Systems			\$0.00
Transformer Testing			\$0.00
Switchgear Modifications			\$0.00
Breaker Testing - Westinghouse Field Services		\$1,450	\$1,522.50
Engineering			\$0.00
Wireless			\$0.00
SUB TOTAL			\$1,522.50

**TVA IQT ESTABLISHED
RENTAL RATES**
(Additional items may be
added. TVA may furnish
equipment in lieu of
contractor renting)

ITEM	HOUR	DAY	WEEK	MONTH	YEAR
Bucket Truck	\$45	\$300	\$1,000	\$2,800	\$20,000
Splicing Truck	\$40	\$275	\$900	\$2,500	\$17,500
Crew Truck (1/2 Ton)	\$3	\$24	\$90	\$325	\$3,500
Manhole Equip. (Incl. Blower w/hose guard/rim, tent, pump, ladder, gas detector)	\$12	\$96	\$400	\$1,100	\$10,500
Cable Plow	\$15	\$100	\$475	\$1,400	\$13,000
Pipe Pusher/Directional Boring Machine	\$10	\$75	\$350	\$1,100	\$10,500
Backhoe	\$47	\$350	\$1,200	\$2,700	\$20,000
Cable Trencher	\$15	\$90	\$425	\$1,300	\$12,000

ADDITIONAL CONSIDERATIONS:
(TVA IQT Section 11-8
EXISTING SITE CONDITIONS)

Transportation of, access to, disposal of, handling of, and storage of materials.
Availability of quality of labor.
Availability to utilities, including water and electric power.
Site access and road conditions.
Climatic conditions, tides, and seasons.
River hydrology and river stages.
Physical conditions at the jobsite and the project area as a whole.
Topography and ground surface conditions.
Equipment and facilities needed for the performance of CONTRACTORS's work.
The quantity and nature of the work.

SUMMARY:

MATERIALS	\$271,800.10
LABOR	\$134,312.64
INDIRECT LABOR	\$8,832.00
DIRECT JOB EXPENSES	\$6,842.00
TOOLS	\$561.00
SUB CONTRACTORS	\$1,522.50
RENTAL RATES Enter Total Amt	650
ADDITIONAL ITEMS Enter Total Amt	

PROJECT TOTAL \$424,520.24

Clarifications:

1. We will provide and install approximately 6000' of 4" rigid conduit for the 5KV Feeder
2. We will provide and install 6 - 5' x 5' concrete pull boxes
3. We will provide and install approximately 18,500' of 5KV #1/0 awg LSZH cable
4. We will provide and install approximately 6,200' of #4/0 awg bare copper along the top of the ditch for 4" rigid
5. We will provide labor to install a TVA furnished 4160-480/277 500 KVA transformer
6. We will provide and install a 600 amp 480 volt Main breaker 3-section MCC
7. The 600 amp MCC will have 1 - incoming section and 2 - vertical sections for breakers/starters to be determined
8. We will provide and install 5KV terminations and kits at the Ammonia Plant switchyard
9. We will provide breaker testing and adjustments by Westinghouse Field Services
10. We will provide and install a 600 amp feed from the 500 KVA Transformer to the MCC in 2 - 3" conduits
11. We will provide 2 - sets of 3 - 350 MCM and 1 - #2 awg for the 600 amp feeder
12. We will provide all JSA and 6615 documentation required
13. We will provide labor that is TVA site certified
14. We do not include cost of digging or concrete for the conduit cover if required
15. We do not include concrete pads for the 500 KVA transformer or the 600 amp MCC
16. All labor, material, and equipment rates are per FTA IQT contract 00037266.

TVA IQT - FTA MANAGED TASK ESTIMATING FORM

PREPARED BY: Chris Jenkins/Todd Brown

DATE: 1/13/06

PROJECT

TVA PROJECT MANAGER: Jerry Fourroux

Kingston

SCOPE: Provide Phase I Data/Telecom for FGD Project

MATERIAL: COST PLUS 10%	
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Enter Total Mat'l Cost Here →

LABOR:	CLASSIFICATION	Billing Rate Per IQT Contract
	General (Head) Foreman	\$45.32
	Foreman	\$41.96
	Journeyman	\$38.92
	Appr 6th Period	\$35.87
	Appr 5th Period	\$33.73
	Appr 4th Period	\$31.60
	Appr 3rd Period	\$29.46
	Appr 2nd Period	\$27.63
	Appr 1st Period	\$25.80
	Groundman Maint	\$26.72
	Groundman Trainee - A	\$22.08
	Groundman Trainee - B	\$23.06
	SUB TOTAL	

INDIRECT LABOR:		
	Job Scheduling	\$48.00
	Project Management	\$48.00
	Estimating	\$48.00
	Scoping	\$48.00
	Proj. Close Out	\$37.17
	Site Meetings	\$40.10
	Material Handling	\$37.17
	SUB TOTAL	

DIRECT JOB EXPENSES: (Examples)	10% MARK UP
	Temporary Power
	Rental Equipment (Items not shown in Rental Table below)
	Storage
	Truck Expense
	Fuel Costs
	Administrative Cost, Telephone, Computer & Fax Machine
	Site Office
	Sanitation (Field Toilet)

Temporary Lighting
Disposal (Dumpster)
SUB TOTAL

TOOLS: (Examples)	10% MARK UP
	Rebar Benders & Cutters
	Safety Equipment
	Tools Storage
	Conduit Benders
	Splicing Tools
	Brady Label Machine & Markers
	Fiber Test & Splice Equipment
	Tele/Data Test Equipment
	Scissor Lifts
	Ladders
	SUB TOTAL

SUB - CONTRACTORS: (Examples)	5% MARK UP
	Excavation
	Pole Bases
	Concrete - Cut & Patch
	Asphalt - Cut & Patch
	Security
	Fire Alarm
	HVAC Controls
	Energy Metering
	Tele/Data Equipment
	Sound Systems
	Transformer Testing
	Switchgear Modifications
	Breaker Testing
	Engineering
	Wireless
	SUB TOTAL

TVA IQT ESTABLISHED RENTAL RATES
(Additional items may be added. TVA may furnish equipment in lieu of contractor renting)

ITEM	HOUR	DAY	WEEK	MONTH
Bucket Truck	\$45	\$300	\$1,000	\$2,800
Splicing Truck	\$40	\$275	\$900	\$2,500
Crew Truck (1/2 Ton)	\$3	\$24	\$90	\$325
Manhole Equip. (Incl. Blower w/hose guard/rim, tent, pump, ladder, gas detector)	\$12	\$96	\$400	\$1,100
Cable Plow	\$15	\$100	\$475	\$1,400
Pipe Pusher/Directional	\$10	\$75	\$350	\$1,100

Boring Machine				
Backhoe	\$ 47	\$ 350	\$ 1,200	\$2,700
Cable Trencher	\$ 15	\$ 90	\$ 425	\$1,300

ADDITIONAL CONSIDERATIONS:

(TVA IQT Section 11-8
EXISTING SITE CONDITIONS)

Transportation of, access to, disposal of, handling of, and storage of materials.
Availability of quality of labor.
Availability of utilities, including water and electric power.
Site access and road conditions.
Climatic conditions, tides, and seasons.
River hydrology and river stages.
Physical conditions at the jobsite and the project area as a whole.
Topography and ground surface conditions.
Equipment and facilities needed for the performance of CONTRACTOR
The quantity and nature of the work.

SUMMARY:

MATERIALS		\$224,775.10
LABOR		\$220,870.12
INDIRECT LABOR		\$26,069.22
DIRECT JOB EXPENSES		\$7,419.50
TOOLS		\$14,029.40
SUB CONTRACTORS		\$0.00
RENTAL RATES	Enter Total Amt	\$3,325.00
ADDITIONAL ITEMS	Enter Total Amt	

PROJECT TOTAL	\$496,488.34
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AT

ST LOCATION:

Fossil Plant

MATERIAL COST	EXTENDED COST
\$204,341	\$224,775

TOTAL HRS Here ↓	EXTENDED COST
502	\$22,750.64
1004	\$42,127.84
3667	\$142,719.64
	\$0.00
	\$0.00
420	\$13,272.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
5593	\$220,870.12

24	\$1,152.00
340	\$16,320.00
30	\$1,440.00
16	\$768.00
	\$0.00
24	\$962.40
146	\$5,426.82
580	\$26,069.22

ESTIMATED AMT ↓	EXTENDED COST
\$2,375	2,612.50
	0.00
\$845	929.50
	0.00
2340	2,574.00
\$635	698.50
\$550	605.00
	0.00

TVA IQT - FTA MANAGED TASK ESTIMATING FORMAT

PREPARED BY: Chris Jenkins/Todd Brown DATE: JAN 13, 2006 PROJECT LOCATION: Kingston Fossil Plant

TVA PROJECT MANAGER: Jerry Fourroux

SCOPE: FGD Fire Alarm/ENS Cabling Phase 1.

MATERIAL: COST PLUS 10%	Enter Total Mat'l Cost Here	MATERIAL COST
	↑	\$40,164
		EXTENDED COST
		\$44,180

LABOR:	CLASSIFICATION	Billing Rate		TOTAL HRS Here	EXTENDED COST
		Per IQT	Contract		
	General (Head) Foreman	\$45.32		62	\$2,809.84
	Foreman	\$41.96		132	\$5,538.72
	Journeyman	\$38.92		398	\$15,490.16
	Appr 6th Period	\$35.87			\$0.00
	Appr 5th Period	\$33.73			\$0.00
	Appr 4th Period	\$31.60			\$0.00
	Appr 3rd Period	\$29.46			\$0.00
	Appr 2nd Period	\$27.63			\$0.00
	Appr 1st Period	\$25.80			\$0.00
	Groundman Maint	\$26.72			\$0.00
	Groundman Trainee - A	\$22.08			\$0.00
	Groundman Trainee - B	\$23.06			\$0.00
				592	\$23,838.72

INDIRECT LABOR:	TOTAL HRS	EXTENDED COST
Job Scheduling	4	\$192.00
Project Management	32	\$1,536.00
Estimating	4	\$192.00
Scoping		\$0.00
Proj. Close Out	8	\$297.36
Site Meetings	4	\$160.40
Material Handling	8	\$297.36
SUB TOTAL	60	\$2,675.12

	ESTIMATED AMT	EXTENDED COST
10% MARK UP		
Temporary Power	\$0	0.00
Rental Equipment (Items not shown in Rental Table below)	\$486	534.60
Storage	\$0	0.00
Fuel Costs	186	204.60
		0.00
Administrative Cost, Telephone, Computer & Fax Machine	\$124	136.40
Site Office	\$136	149.60
Sanitation (Field Toilet)	\$0	0.00
Temporary Lighting	\$0	0.00
Disposal (Dumpster)	\$0	0.00
		\$1,025.20
SUB TOTAL		

DIRECT JOB EXPENSES:
(Examples)



	ESTIMATED AMT	EXTENDED COST
10% MARK UP		
Lifting & Handling Equipment		\$0.00
Safety Equipment	\$86	\$94.60
Tools Storage		\$0.00
Cable Installation Tools		\$0.00
Splicing Tools		\$0.00
Digging Tools		\$0.00
Fiber Test & Splice Equipment		\$0.00
Tele/Data Test Equipment		\$0.00
Scarfolding		\$0.00
Ladders		\$0.00
		\$94.60
SUB TOTAL		

TOOLS:
(Examples)



↓

SUB - CONTRACTORS:
(Examples)

5% MARK UP	ESTIMATED AMT	EXTENDED COST
Excavation		\$0.00
Pole Bases		\$0.00
Concrete - Cut & Patch		\$0.00
Asphalt - Cut & Patch		\$0.00
Security		\$0.00
Fire Alarm		\$0.00
HVAC Controls		\$0.00
Energy Metering		\$0.00
Tele/Data Equipment		\$0.00
Sound Systems		\$0.00
Transformer Testing		\$0.00
Switchgear Modifications		\$0.00
Breaker Testing		\$0.00
Engineering		\$0.00
Wireless		\$0.00
SUB TOTAL		\$0.00

↓

TVA IGT ESTABLISHED RENTAL RATES
(Additional items may be added. TVA may furnish equipment in lieu of contractor renting)

ITEM	HOUR	DAY	WEEK	MONTH	YEAR
Bucket Truck	\$45	\$300	\$1,000	\$2,800	\$20,000
Splicing Truck	\$40	\$275	\$900	\$2,500	\$17,500
Crew Truck (1/2 Ton)	\$3	\$24	\$90	\$325	\$3,500
Manhole Equip.	\$12	\$96	\$400	\$1,100	\$10,500
(Incl. Blower w/hose guard/rim, tent, pump, ladder, gas detector					
Cable Plow	\$15	\$100	\$475	\$1,400	\$13,000
Pipe Pusher/Directional Boring Machine	\$10	\$75	\$350	\$1,100	\$10,500
Backhoe	\$ 47	\$ 350	\$ 1,200	\$ 2,700	\$ 20,000
Cable Trencher	\$ 15	\$ 90	\$ 425	\$ 1,300	\$ 12,000

ADDITIONAL CONSIDERATIONS:

(TVA IQT Section 11-8
EXISTING SITE CONDITIONS)

- Transportation of, access to, disposal of, handling of, and storage of materials.
- Availability of quality of labor.
- Availability fo utilities, including water and electric power.
- Site access and road consitions.
- Climatic conditions, tides, and seasons.
- River hydrology and river stages.
- Physical conditions at the jobsite and the project area as a whole.
- Topography and ground surface conditions.
- Equipment and facilities needed for the performance of CONTRACTORS's work.
- The quantity and nature of the work.

SUMMARY:

MATERIALS	\$44,180.40
LABOR	\$23,838.72
INDIRECT LABOR	\$2,675.12
DIRECT JOB EXPENSES	\$1,025.20
TOOLS	\$94.60
SUB CONTRACTORS	\$0.00
RENTAL RATES	Enter Total Amt
ADDITIONAL ITEMS	Enter Total Amt

PROJECT TOTAL \$72,139.04