



CITY COUNCIL ACTION REPORT

February 23, 2010

TO: John Szerlag, City Manager

FROM: Mark F. Miller, Acting Asst. City Manager/Economic Development Services
Tim Richnak, Public Works Director
Steven J. Vandette, City Engineer

SUBJECT: Standard Purchasing Resolution #1: Award to Low Bidder – Contract 09-10
Supervisory Control and Data Acquisition (SCADA) System Improvements

Recommendation:

- It is recommended that City Council award a contract for the SCADA System Improvement project to Motor City Electric Technologies, Inc., 9440 Grinnell, Detroit, MI 48213, for their low bid amount of \$541,808.00. In addition, we are requesting authorization to approve additional work, if needed, not to exceed 25% of the original project cost due to varying site conditions at twenty-two (22) remote monitoring water vault and sewer pump station sites. This project is funded from the 2009-10 Water and Sewer budgets, which as enterprise funds can only be used for operation, maintenance and improvements to the water and sewer systems.

Background:

- Bids were received and publicly read on September 22, 2009. The low bid of \$541,808.00 was submitted by Motor City Electric Technologies, Inc., 9440 Grinnell, Detroit, MI 48213, as shown on the attached tabulation of bids.
- The top two bidders were further evaluated on performance and quality criteria set forth in the bidding documents. Motor City Electric scored highest with an average score of 22.1 out of 25 possible points.
- The Engineer's estimate at the time of bidding was \$652,085.00. The low bid is \$110,277.00 or 16.9% below the Engineer's estimate.
- The SCADA system is essentially a 24/7 alarm system that alerts DPW staff to various water and sewer system malfunctions; allowing for expeditious repairs and avoiding service disruptions or property damage.
- The project includes replacing the current 20 year old obsolete SCADA system with a wireless, remote data collection and alarm system. The current non-expandable system uses AT&T phone circuits for monitoring sites at an annual cost of approximately \$78,000. The new expandable system will use cell phone technology for 22 sites at an annual estimated cost of approximately \$12,000. The new system will monitor 11 water pressure reducing valves (PRV's), monitor 4 pressure monitoring points (PMP's) and monitor 7 sanitary sewer pump stations. The existing systems display board and control computer at DPW will be replaced to allow real-time, remote

alarms and collection of operations data on our water and sewer systems using handheld and portable computer based devices.

- Work is scheduled to begin in April 2010 and be complete by November 1, 2010.

Financial Considerations:

- Funds for this work are included in the 2009-10 Sewer Fund account number 590.527.535.7973.074015 and Water Fund account number 591.537.555.7972.075015. The budgeted amount includes funds for engineering, construction, inspection and contingencies.

Legal Considerations:

- Work was competitively bid and publicly opened with three (3) bidders responding.
- Award is contingent upon submission of proper proposal and bid documents, including insurance certificates, bonds and all specified requirements.

Policy Considerations:

- Troy has enhanced the health and safety of the community (Goal I)
- Troy adds value to properties through maintenance or upgrades of infrastructure and quality of life venues (Goal II).



HUBBELL, ROTH & CLARK, INC
Consulting Engineers

Principals
George E. Hubbell
Thomas E. Biehl
Walter H. Alix
Peter T. Roth
Michael D. Waring
Keith D. McCormack
Curt A. Christeson
Thomas M. Doran

Senior Associates
Gary J. Tressel
Lawrence R. Ancypa
Kenneth A. Melchior
Dennis M. Monsere
Randal L. Ford
David P. Wilcox
Timothy H. Sullivan

Chief Financial Officer
J. Bruce McFarland

Associates
Thomas G. Maxwell
Nancy M.D. Faught
Jonathan E. Booth
Michael C. MacDonald
Marvin A. Olane
Richard F. Beaubien
William R. Davis
Daniel W. Mitchell
Jesse B. VanDeCreek
Robert F. DeFrain
Marshall J. Grazioli
Thomas D. LaCross
Dennis J. Benoit

October 27, 2009

City of Troy
500 W. Big Beaver Road
Troy, Michigan 48084

Attn: Mr. Steven J. Vandette, P.E., City Engineer

Re: City of Troy
SCADA System Improvements

HRC Job No. 20080646

Dear Mr. Vandette:

Enclosed herewith is a Bid Tabulation of the three (3) bids received on Tuesday, September 22, 2009 for construction of the SCADA Improvements Project.

The low bid for the project of \$541,808.00 (\$345,918.00 Base Bid, plus \$188,308.00 for Alternate No. 1, plus \$7,852.00 for Alternate No. 2) was submitted by Motor City Electric Technologies, Inc., located at 9440 Grinnell, Detroit, Michigan 48213.

The bids as evaluated according to the proposal documents leave Motor City Electric Technologies, Inc. as the recommended supplier with a total evaluation score of 22.1 out of 25 possible points.

In our opinion, the low bid submitted conforms to the requirements of the Specifications and reflects the value of the work. Therefore, we recommend award of the Contract to Motor City Electric Technologies, Inc., in the amount of \$541,808.00 when the necessary financial arrangements have been made.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.

Michael MacDonald, P.E.
Associate

KLC/jjb
Enclosures: Bid Tab, Evaluation Summary
pc: HRC; W. Alix, File

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OCT 27 2009

ENGINEERING

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2001 Centerpoint Parkway, Suite 109
Pontiac, Michigan 48341
Telephone 248 454 6300 Fax 248 454 6359
www.hrc-engr.com

Engineering. Environment. Excellence.

Engineer's Estimate

Motor City Electric Tech., Inc.
 9440 Grinnell
 Detroit MI 48213-1151
 313-921-5300

Aggressive Systems, Inc.
 24361 Indoplex Circle
 Farmington Hills, MI 48335-2525
 248-477-5300

Commerce Controls, Inc.
 41069 Vincenti Court
 Novi, MI 48375
 248-476-1442

Item	Quantity	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost	Unit Price	Total Cost
BASE BID									
A. SCADA Computer System	1	LS	24,980.00	19,833.00	19,833.00	25,560.00	25,560.00	28,503.00	28,503.00
B. SCADA Software Package	1	LS	52,500.00	69,097.00	69,097.00	37,070.00	37,070.00	96,403.00	96,403.00
C. RTU Panels at 11 PRV Vault Sites	1	LS	150,355.00	128,557.00	128,557.00	171,280.00	171,280.00	141,895.00	141,895.00
D. RTU Panels at 4 PMP Sites	1	LS	67,240.00	40,388.00	40,388.00	52,120.00	52,120.00	53,936.00	53,936.00
E. RTU Panels at 7 Pump Station Sites	1	LS	102,970.00	81,515.00	81,515.00	82,100.00	82,100.00	98,361.00	98,361.00
F. Provide Service Technician for 12 site visits	1	LS	10,500.00	6,528.00	6,528.00	6,969.00	6,969.00	8,928.00	8,928.00
TOTAL AMOUNT OF BASE BID			\$408,545.00		345,918.00		375,099.00		428,026.00
ALTERNATE #1									
A. Provide, Install and Startup for MultiSmart Pump Controller at the 7 Pump Station Sites	1	LS	205,790.00	176,093.00	176,093.00	162,200.00	162,200.00	220,641.00	220,641.00
B. Provide Programming for Communication between Pump Station MultiSmart Controllers and SCADA System	1	LS	9,750.00	5,687.00	5,687.00	4,700.00	4,700.00	3,828.00	3,828.00
C. Provide Service Technician for 12 site visits	1	LS	10,500.00	6,528.00	6,528.00	6,969.00	6,969.00	8,928.00	8,928.00
TOTAL AMOUNT OF ALTERNATE #1 BID			\$226,040.00		188,308.00		173,869.00		233,397.00
ALTERNATE #2									
A. Disconnect and Demolish the existing Central Monitoring Panel within the DPW	1	LS	7,900.00	3,082.00	3,082.00	1,600.00	1,600.00	4,752.00	4,752.00
B. Provide and Install New Partition Wall at DPW where existing Central Monitoring Panel removed	1	LS	9,600.00	4,500.00	4,500.00	1,400.00	1,400.00	7,500.00	7,500.00
TOTAL AMOUNT OF ALTERNATE #2 BID			\$17,500.00		7,582.00		3,000.00		12,252.00
TOTAL AMOUNT OF BASE BID PLUS ALTERNATIVES #1 and #2			\$652,085.00		541,808.00		551,968.00		673,675.00

Item	Unit Price	Unit Price	Unit Price
<u>ADD/DEDUCT UNIT PRICING</u>			
A. PRV RTU, Provide and install, with PTIs	\$11,687.00	\$15,571.00	\$11,183.00
B. PRV RTU, SCADA Programming	\$1,254.00	\$438.00	\$158.00
C. PMP RTU, Provide and install, with	\$10,097.00	\$13,030.00	\$11,183.00
D. PMP RTU, SCADA Programming	\$1,254.00	\$290.00	\$158.00
E. PS RTU, Provide and install	\$11,645.00	\$11,729.00	\$11,183.00
F. PS RTU, SCADA Programming	\$1,254.00	\$438.00	\$158.00
G. PS MultiSmart, Provide, install,	\$22,490.00	\$23,171.00	\$31,520.00
H. PS MultiSmart, SCADA Programming	\$1,400.00	\$365.00	\$546.00
Additional Bidders: None			

ENGINEER:
 Hubbell, Roth & Clark, Inc.
 555 Hulet Drive
 P.O. Box 824
 Bloomfield Hills, MI 48083-0824