COUNCIL WORKSHOP ITEM

ITEM: 67th St. Elevated Tank – SCADA revisions
DATE: October 1, 2001
PREPARED BY: John J. Bajor, Jr., Director of Public Works
David Conley, Water Manager II
PURPOSE: Provide SCADA control for the new elevated water storage tank.

BID AMOUNT: **$19,900.00** **ACCOUNT:** 481.551.0000.5711
BUDGET AMOUNT: **$(included in Main/67th St Water Tower)**

DISCUSSION:

The construction of the new water storage facility did not include the adaptation of the Village SCADA system to provide monitoring and control of the facility. At the time of the design of the facility and for cost efficiency, the decision was made to implement the SCADA at the new tower through a separate contract from the tank construction. The consultant who originally designed and implemented the SCADA system was requested to provide a quotation to adapt the new tower to the existing SCADA. Due to the complexity of the system, the unique characteristics of our software and data, it was determined that the original consultant was best suited to update and conform the system to include the new tower.

The proposal of Woodard & Curran includes all design, drawings, assembly, software upgrades, and start up activities. Funds for this project are available in 481.551.0000.5711.

ATTACHMENT:

Attached for information purposes is the quotation of Woodard and Curran for revisions to the existing SCADA and implementing the system at 67th elevated tank.

See also '01/'02 spreadsheet for Program 551 (Water – Capital), which shows availability of funds in the current budget year.

RECOMMENDATION:

To place award of and authorize execution of a contract to Woodard & Curran, Inc., in the amount of $19,900.00 on the October 16, 2001 consent agenda.

ICCS
a unit of Woodard & Curran

CORPORATE OFFICES: Maine, Massachusetts, New Hampshire, Connecticut, Illinois, Florida
Operational offices throughout the U.S.

September 10, 2001

Mr. David Conley
Director of Engineering
Village of Downers Grove
5101 Walnut Avenue
Downers Grove, IL 60515-4074

Dear Mr. Conley:

Thank you for the opportunity to submit a proposal for the design and implementation of SCADA for the new elevated tank.

The proposed scope of work for this project includes the following:

- Panel Design - The panel design will utilize an Allen-Bradley Programmable Logic Controller (PLC), and an Adtran modem that will seamlessly integrate with your existing SCADA system.
- Panel Drawings – Panel drawings will be provided on 11 x 17 sheets.
- Panel Assembly – ICCS engineers shall purchase the equipment and assemble the control panel (including the pressure transmitter).
- PLC Programming – ICCS engineers will program the PLC to allow for monitoring of the elevated tank level.
- HMI/SCADA Development – ICCS engineers shall upgrade the existing FIX software from a 150 point to a 300 point HMI system. The engineers shall also develop an operator screen for the new elevated tank and link the screen to the existing HMI/SCADA operator screens.
- Start-up/Commissioning – ICCS engineers shall start-up, test, and commission the new components of the system.
- Communications – Downers Grove shall work with the Ameritech representatives to establish reliable communications between the existing SCADA data concentrator and the new elevated tank control panel.
- The Village of Downers Grove shall be responsible for the installation of a level transmitter, and the installation of the control panel.
- Downers Grove shall provide electrical installation supervision services.

ICCS proposes to perform this scope of work for the lump sum amount of $19,900 (Equipment and software - $8,250; Engineering services - $11,650). If you have questions or comments regarding this proposal, please contact me in our Savoy, Illinois office by calling 217-352-1115.

Sincerely,

Christopher Wolverton
Project Manager

Fund 481 Program 551 Water		2000/01	2000/01 Estimate	2001/02	2001/02 Estimate	2002/03	2003/04	2004/05	2005/06	2006/07
5100										
Personal Services										
Water Tech.(AMR)		$55,112	$56,223	$67,085	$67,085	$70,547	$74,259	$78,192	$82,361	
5707										
Engineering and Architectural Fees		$100,000	$100,000	$75,000	$75,000	$75,000	$75,000	$25,000	$25,000	
Survey for North Belmont Park					$11,000					
5731										
Fleet Services										
One(1) Pick-up Truck		$15,000	$21,427	$2,719	$2,719	$2,787	$2,856	$2,928	$3,001	
5917										
Other Uses (Transfer to CBD TIF)		$442,000	$442,000	$330,000	$377,700	$0	$0	$0	$0	
	Sub-Total	$612,112	$619,650	$474,804	$533,504	$148,334	$152,115	$106,120	$110,362	
5711 Improvements										
Park Dist. Satellite Maint. Facility					$475,000					
McCollum Park Parking Lot Improvements (South Tank)					$30,550					
South Tank--SCADA revisions					$19,900					
South Tank		$1,700,000	$1,700,000							
Automated Meter Read		$250,000	$0	$500,000	$1,000,000	$2,200,000	$1,000,000	$0	$0	
Interconnects:	Lake (West End-Douglas,150')					$30,000				
	Brookbank (59th-Blan.,1000')	$85,000	$0	$120,000			$195,000			
	Hillcrest (61st-62nd,250')					$0	$50,000			
Hydrants		$100,000	$100,000	$100,000	$60,000	$100,000	$100,000	$100,000	$100,000	
67th St. Well		$15,000	$0	$15,000	$15,000					
Finley Well Refurbish				$36,250	$36,250					
71st Street Tank						$900,000				
Highland Tank							$465,000			
Replacements	Brookbank (1783')	$175,000	$0	$240,000	$320,000					
	Fairmount/	$429,000								
	Oxford	$221,000	$927,000							
	Prairie (Fairview-Douglas,750')			$120,000	$135,000					
	Glendenning (Ogden-36th+Woodland,5500')			$765,000		$1,030,000				
	Fairview (N of Ogden-39th,2200')			$396,000			$429,000			
	Pershing (Grant-Ogden,969')			$135,000			$189,000			
	Grand (61st-59th,1300')					$0	$254,000			
	55th (County)						$0	$760,000		
	Gierz (Fairview-Linden,1710')									
	Wilson (Fairview-Linden,1600')+200'=3510' total							$0	$741,000	
	59th (Brookbank-Main,670')									
	Carpenter (59th-62nd,1690')=2360'total								$0	515,000
Well House & Rate Station Improvements		$40,000	$0	$30,000	$30,000	$30,000	$15,000	$15,000	$15,000	15,000
Total 5711		**$3,015,000**	**$2,727,000**	**$2,457,250**	**$2,121,700**	**$4,290,000**	**$2,697,000**	**$875,000**	**$856,000**	**$530,000**
Total Program		**$3,627,112**	**$3,346,650**	**$2,932,054**	**$2,655,204**	**$4,438,334**	**$2,849,115**	**$981,120**	**$966,362**	**$530,000**
NOTE:	Estimated Cost/Ft WM (4% inflation)				$180	$187	$195	$203	$211	$219