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City of West Allis Matter Summary

7525 W. Greenfield Ave.
West Allis, WI 53214

File Number	Title	Status
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2009-0174 Communication In Committee

Request by the Director of Public Works to upgrade the Water Utility's SCADA System with budgeted Water Utility monies to fund the upgrade.

Introduced: 3/17/2009

Controlling Body: Administration & Finance
Committee + *Public Works*

COMMITTEE RECOMMENDATION

approval + POF

ACTION DATE:	MOVER	SECONDER		AYE	A+F	NO	PRESENT	EXCUSED
MAR 17 2009	<i>✓ -PW</i>		Barczak	<i>✓</i>				
			Czaplewski	<i>✓</i>				
	<i>✓ A+F</i>		Kopplin		<i>X</i>			
			Lajsic		<i>X</i>			
			Narlock		<i>X</i>			
			Reinke		<i>X</i>			
			Roadt	<i>✓</i>				
		<i>✓ PW</i>	Sengstock	<i>✓</i>				
		<i>X A+F</i>	Vitale		<i>X</i>			
			Weigel	<i>✓</i>				
		TOTAL		<i>5</i>	<i>5</i>	<i>-</i>		

SIGNATURE OF COMMITTEE MEMBER

[Signature] _____
Chair *[Signature]* _____ Vice-Chair _____ Member

COMMON COUNCIL ACTION

approve and place on file

ACTION DATE:	MOVER	SECONDER		AYE	NO	PRESENT	EXCUSED
3-17-09	<i>✓</i>		Barczak	<i>✓</i>			
			Czaplewski	<i>✓</i>			
			Kopplin	<i>✓</i>			
			Lajsic	<i>✓</i>			
			Narlock	<i>✓</i>			
			Reinke	<i>✓</i>			
			Roadt	<i>✓</i>			
			Sengstock	<i>✓</i>			
		<i>✓</i>	Vitale	<i>✓</i>			
			Weigel	<i>✓</i>			
		TOTAL		<i>10</i>			



DEPARTMENT OF PUBLIC WORKS

Michael Pertmer
Director

414/302-8888
414/302-8889 (Fax)

Municipal Yards
6300 West McGeoch Avenue
West Allis, Wisconsin 53219

www.ci.west-allis.wi.us

March 12, 2009

Mayor Devine & Members of the Common Council
7525 W. Greenfield Ave.
West Allis, WI 53214

Honorable Mayor & Common Council Members:

The Department of Public Works would like to proceed with the upgrade of our Water Utility's SCADA System. The SCADA System is used to control the water levels in the two water tanks and the reservoir. Kamp/Synergy, LLC, developed and installed this system in 1993. The performance of this system has been extremely reliable over that period of time and the Utility has enjoyed an excellent working relationship and, most importantly, excellent customer service with Kamp since the installation. The quality of the product and the service provided by Kamp was also reflected by a number of our neighboring communities that have this same system.

Despite the reliability of the system, after 15 years, it is time to either upgrade or replace the existing system with one provided by some other vendor. Given the quality of the existing product and the excellent service provided by Kamp, the Department recommends taking the far less expensive route of upgrading the existing system rather than replacing it with a different system. The cost to upgrade the system, as noted in the attached proposal, is \$30,600. The cost of installing a new and different system is estimated to be in excess of \$250,000.

As part of the proposed upgrade, the existing analog phone line used for communications will be replaced by radio communications. This one facet of the upgrade alone will save the utility \$1400 per month in costs associated with the existing dedicated phone line. In short, after two years, the cost savings from the elimination of the phone line will more than pay for this entire upgrade.

The Department respectfully requests permission to proceed with the upgrade of the SCADA System by this sole provider, Kamp/Synergy, as described in the attached proposal. Budgeted Water Utility monies will be used to fund this upgrade.

Respectfully submitted,

A handwritten signature in blue ink that reads "Michael F. Pertmer".

Michael F. Pertmer
Director of Public Works

cc: Dan Schwebke, Gene Baietto, Gary Schmid

Kamp | Synergy

9434 N. 107th Street
Milwaukee, WI 53224
Phone: 414-354-6700
Fax: 414-354-6701

Fax

To: Dan Schewetke**From:** Bill Treloar

City of West Allis

Fax: 414-302-8836**Date:** 3/11/09**Phone:****Pages:** 2**Re:** SCADA System Upgrade**CC:**

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

•Comments:

Hi Dan-

Kamp Synergy would like to offer this proposal to make improvements to your Water SCADA System:

1. Provide unlicensed spread spectrum radio communications to replace the existing telephone modems,
2. Provide (2) new PLC panels to monitor the (2) Milwaukee metering sites,
3. Provide a new SCADA computer and upgraded SCADA software.

The total cost for all the work would be **\$30,600.00**. Of this cost, **\$25,300.00** is for the radio system and new meter sites and **\$5,300.00** is for the computer and software upgrade.

As an option, we would also like to offer a software alarm dialer (Wonderware SCADAalarm) that will provide you with a unique voice message for each alarm. It can also be set up to give you a voice indication of the water levels (tower, reservoir) over the phone. I can provide more information on this if you are interested. The

cost to provide this and record voice messages would be an added cost of \$3,462.00.

Detailed Description of Work

Provide Radio System:

- Provide unlicensed 902-928MHZ radios, MDS Transnet 900, with antenna and surge protection for the 96th St. Pump Station, 84th St. Pump Station, 116th St. Tower, (2) Milwaukee Meter Sites, and a radio repeater located at the 84th St. tower,
- There will be an omni-directional antenna mounted on top of the 84th St. tower with 7/8" heliax cable running down to a small panel in the base of the tower. This panel will consist of:
 - Cabinet-Nema 4/12
 - Freewave FGR2 radio
 - 500VA UPS power backup
 - 24VDC-2A power supply
 - 120V and coax surge protection and grounding
 - Condensation heater
- Each remote site, including the 96th St. Pump Station, will have a radio, yagi (directional) antenna, and surge arrestor.
- Includes a site radio survey to measure signal strength of each path
- Communications for the PLCs will be changed to 9600 baud, RTU mode.
- The Modicon Bridgemux and Modicon 984-145 PLC will be removed at the 96th St. Pump Station and replaced with a Modicon 984-E265 PLC, which will have (2) serial ports and can conduct all the communications polling.

Provide new PLC Panels for the (2) Milwaukee Meter sites

- Provide a Nema 3R cabinet with condensation heater and thermostat
- Allen-Bradley Micrologix 1100 PLC connected to the (2) meter pulses
- Power Fail relay
- Freewave FGR2 radio, yagi antenna mounted on a 10' pole
- 500VA UPS power backup

Upgrade SCADA Computer and Software

- Provide a new Dell Optiplex 755 computer with 19" LCD monitor, Microsoft XP, Microsoft Office Basic
- Upgrade one Wonderware 500 tag license (serial number 488409). The second existing license would not be used anymore.
- Provide a new license for PC-Anywhere remote access software

Please call me if there are any questions or you have other thoughts on this.