

**VILLAGE OF WINDSOR  
VILLAGE BOARD RESOLUTION 2020-62**

**AUTHORIZE LW ALLEN TO PERFORM A RADIO SURVEY FOR WELL 3 AND  
NEW DPW FACILITY**

**WHEREAS**, the Utility Department desires to have our Supervisory Control and Data Acquisition (SCADA) system expanded for the new Well No. 3, new water tower, and potential move of entire SCADA system from existing Water Utility office location near Well No. 1 on Park Street to the new Public Works building at 4160 CTH V; and

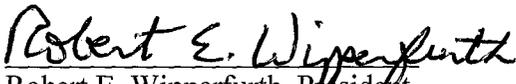
**WHEREAS**, LW Allen (our SCADA provider) has provided a plan for this expansion which would begin with a radio survey;

**WHEREAS**, staff recommends engaging LW Allen to perform a radio survey in an amount not to exceed \$900.00.

**NOW THEREFORE, BE IT RESOLVED**, by the Village Board of the Village of Windsor that it hereby authorizes entering into an agreement with LW Allen perform a radio survey for Well #3 and the new DPW Facility in the amount of \$900.00. The Village President, Village Attorney and Staff are authorized to execute an agreement on behalf of the Village in accordance therewith.

The above and foregoing Resolution was duly adopted at a regular meeting of the Village Board of the Village of Windsor on August 6, 2020, by a vote of 5 in favor and 0 opposed.

**VILLAGE OF WINDSOR**

  
Robert E. Wipperfurth, President

*Attested by:*

  
Christine Capstran, Clerk

**Incorporated by Reference:**  
LW Allen email

LW Allen email

**From:** Mark Kane <[mkane@lwallen.com](mailto:mkane@lwallen.com)>  
**Sent:** Tuesday, June 30, 2020 11:08 AM  
**To:** Gerald D. Groth <[ggroth@baxterwoodman.com](mailto:ggroth@baxterwoodman.com)>  
**Subject:** RE: Village of Windsor SCADA Thoughts for Upcoming Projects

Jerry,

The site survey would be \$900 to verify communications. Let me know when you want to meet out there as information becomes available.

Thanks,

Mark

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**From:** Gerald D. Groth <[ggroth@baxterwoodman.com](mailto:ggroth@baxterwoodman.com)>  
**Sent:** Tuesday, June 30, 2020 7:30 AM  
**To:** Mark Kane <[mkane@lwallen.com](mailto:mkane@lwallen.com)>  
**Subject:** RE: Village of Windsor SCADA Thoughts for Upcoming Projects

Mark,

Thanks.

Can you provide a quote for the radio survey for Well No. 3 and the DPW sites?

It will be at least a few years before we start looking at the tower.

I am going to ask a few questions regarding the potential move to DPW site. Will likely want to do this in steps you outlined, but too many moving parts at this moment.

I agree it would be good to have you visit the sites again. I think we should schedule this when we find out more about any move to DPW site.

Jerry

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**From:** Mark Kane <[mkane@lwallen.com](mailto:mkane@lwallen.com)>  
**Sent:** Monday, June 29, 2020 8:51 PM  
**To:** Gerald D. Groth <[ggroth@baxterwoodman.com](mailto:ggroth@baxterwoodman.com)>  
**Subject:** RE: Village of Windsor SCADA Thoughts for Upcoming Projects

Jerry,

Sorry for the delayed response.

1. Most of the SCADA equipment was installed in 2000 so the PLCs, OIT and radios are all obsolete already, this includes the 3 lift stations. Since its 20 years old, it really should have all of this equipment replaced.

2. Well 3 would require a radio survey and we would want to survey the new water utility office at the same time. We would need to do this site survey before Labor Day so we still have full foliage.
  1. New RTU panel and sensors, need to discuss what is needed for flowmeters, pressure sensors, chemical scales, drawdown sensor, security etc.
  2. MCC/Motor control equipment, what HP, VFDs or SS starters etc.
3. New water tower
  1. New RTU panel and sensors. This is pretty much standard stuff, most panels are similar. Stainless steel, level transducer, PLC and radio.
  2. Repeater capability for new radio system. We would want to find out how long before this tower comes online.
4. New Village Hall Complex
  1. We would want to replace the Master SCADA Panel in its entirety.

The new Well can be added to the existing system as a step one, but we should get the budgets setup to move to replacing all of the sites. The best option of course is to replace it all with the new Well 3 project, but that may not be feasible.

If it cannot all be replaced at once, I would recommend the following:

1. Step 1 – Well 3 and Older PLCs
  1. Well 3 Project
  2. Replace the existing ML1000 PLCs since they are the oldest. (The MTU SCC received a PLC processor upgrade with the Well 1 system upgrades in 2009.)
    1. ET1
    2. Well 2
    3. Gold Rd LS
    4. County CV LS
    5. Windsor Rd LS
2. Step 2 – Radio Project
  1. Replace the radios at all locations with new Ethernet based radios, convert *communications to Ethernet for all sites.*
    1. Well 1 PSCP
    2. MTU SCC
    3. ET1
    4. Well 2
    5. Gold Rd LS
    6. County CV LS
    7. Windsor Rd LS
3. Step 3 -
  1. Replace the SLC505 PLC and OIT at Well 1 PSCP
  2. Replace the entire control panel for MTU SCC, this will be either installed at existing location or new Village Hall Complex.

We should probably meet onsite, go to each existing location so I can take photos and we can discuss options based on panel/site conditions.

Thanks,  
Mark

**From:** Gerald D. Groth <[ggroth@baxterwoodman.com](mailto:ggroth@baxterwoodman.com)>  
**Sent:** Tuesday, March 31, 2020 5:03 PM  
**To:** Mark Kane <[mkane@lwallen.com](mailto:mkane@lwallen.com)>  
**Cc:** Jeff Bartosiak <[Jeff@windsorwi.gov](mailto:Jeff@windsorwi.gov)>; Jon Claas <[Jon@windsorwi.gov](mailto:Jon@windsorwi.gov)>  
**Subject:** Village of Windsor SCADA Thoughts for Upcoming Projects

Mark,

The Village of Windsor will be adding a new well to their system, Well No. 3. The well will be located on the north side of the Village in Cradle Hill Park as shown on attached Google Earth KMZ file. I also put stick pins at the location of the SCADA Master location, across from Well No. 1 and the booster station and reservoir. (Note that this Well No. 3, is not the same as Morrisonville Well No. 3, which we integrated into the system.)

1. The Village will need a plan from you to highlight what steps we should take to integrate Windsor's "South" Well No. 3 into the SCADA system. As I recall from the latest booster station project we did a radio path survey to verify what was needed and you came up with a list of items that would need to be performed along with costs to allow the booster station to be added to the system.
2. The Village is also looking at adding a future elevated tank on the east side of Windsor as shown on attached KMZ file. The tank will be 120' in the air, so likely no issues with radio path, but we will still need to come up with a list of items that would need to be performed along with costs to allow the elevated tank to be added to the system.
3. The Village is also contemplating building a new Village Hall complex that would tear down the Utility Building housing the Master SCADA. In doing so they want the Water Utility to move to the new DPW facility at 4160 CTH V, west of Village Hall, east of 51 where generally shown with stick pin. Ultimately the Master SCADA will move to that location. Similar to the other projects we will need a plan with costs to perform that move.

We would be happy to meet on site or on phone to discuss in more detail.

Jerry

Gerald D. Groth, P.E.  
Madison Office Regional Manager