VILLAGE OF DOWNERS GROVE REPORT FOR THE VILLAGE COUNCIL MEETING OCTOBER 8, 2013 AGENDA

SUBJECT:	TYPE:		SUBMITTED BY:
	✓	Resolution	
		Ordinance	
		Motion	Nan Newlon, P.E.
SCADA System Improvements		Discussion Only	Director of Public Works

SYNOPSIS

A resolution has been prepared authorizing the execution of a contract for SCADA System Improvements with Baxter & Woodman Control Systems Integration (BWCSI) of Crystal Lake, Illinois in the amount of \$119,570.

STRATEGIC PLAN ALIGNMENT

The strategic goals include *Top Quality Infrastructure*.

FISCAL IMPACT

The approved FY13 budget includes \$120,000 in the Water Fund for this contract.

RECOMMENDATION

Approval on the October 8, 2013 consent agenda

BACKGROUND

Project Description

This work represents the second phase of a two phase effort to modernize the Village's Supervisory Control and Data Acquisition (SCADA) system. SCADA is the control system for monitoring, recording and controlling the operations of the water system. This project will expand the capabilities of the Village's SCADA system, making it a more useful tool for managing Village infrastructure.

The upgrades to the system will have the following benefits:

- Optimize real-time knowledge of what is occurring on the system increase ability to compare to historical data,
- Leverage the overall SCADA system by incorporating stormwater, weather and pavement condition data, and
- Automates data collection processes currently performed manually.

Specifically, the proposed work under this contract for 2013 can be broken down as follows:

- 1) Instrumented Weather Station and Pavement Monitoring Site
 - Install a pavement temperature sensor and tie sensor into SCADA for live trending.
 - Provide weather station and configure SCADA to display weather data.
- 2) Project Management, Preliminary Design and Professional System Integration Services
 - Configure the new software and integrate the new hardware and existing Village administrative network.

- 3) SCADA Mobile Access
 - Upgrade the existing SCADA alarm management software to support mobile access to the system.
 - Configure three tablet computers for remote SCADA system access.
- 4) Instrumented SCADA-data Stormwater Sites
 - Supply remote site control panels and hardware.
 - Program SCADA for stormwater station status and alarms, and configure alarm software to dial out alarms
- 5) Pilot-test Wireless Video and Stormwater Level Monitor Site
 - Provide control panel and hardware, cellular radio, fixed dome outdoor camera and ultrasonic level transducer to monitor stormwater level.
- 6) Water Temperature Sensors
 - Furnish two water temperature sensors to monitor incoming water from the DuPage Water Commission.
 - Connect sensors to existing hardware, and provide programming to display and trend water temperature data.

Vendor Selection

The contract being presented is the result of a multi-step process involving the proposed consultant and Village staff from the Public Works and Information Services Departments. Staff has worked with BWCSI on a variety of SCADA projects as well as ongoing non-contract service and support since 2007. Within that time frame, BWCSI has provided consistently superior service and highly trained staff to the Village.

As tasks for the project were identified, an evaluation was completed to determine whether Village staff may be able to assist or supply materials for implementation to reduce costs. Through this process, staff and the consultant identified savings in excess of \$30,000.

BWSCI works with the Village of Woodridge and the Downers Grove Sanitary District. The firm also offers the following benefits:

- 1) The only water/wastewater systems integrator in Illinois certified in the critical technologies used in Downers Grove
- 2) Guaranteed customer service response 24 hours per days
- 3) Uniquely skilled in information technology security. Recognizing the sensitivity of water utility data, BWCSI employs a "Certified Information System Security Professional" (CISSP) who is responsible for the security and network architecture of their projects. This is important because SCADA systems are increasingly seen as extremely vulnerable to cyberterrorism.
- 4) One of the few technology consulting firms that focus exclusively on government. They possess a unique knowledge of how government technology applications work with government business processes.

Pursuant to the Municipal Code, the Village Manager has the authority under the definition of "professional service" to negotiate a contract given that the contract requires a high degree of skill or expertise which is unique in nature.

ATTACHMENTS

Contract Documents Resolution

RESOLUTION NO. ____

A RESOLUTION AUTHORIZING EXECUTION OF AN AGREEMENT BETWEEN THE VILLAGE OF DOWNERS GROVE AND B&W CONTROL SYSTEMS INTEGRATION, LLC

BE IT RESOLVED by the Village Council of the Village of Downers Grove, DuPage County, Illinois, as follows:

- 1. That the form and substance of a certain Agreement (the "Agreement"), between the Village of Downers Grove (the "Village") and B&W Control System Integration, LLC ("Consultant"), for improvements to the supervisory control and data acquisition (SCADA) system associated with the Village's water distribution remote facilities, as set forth in the form of the Agreement submitted to this meeting with the recommendation of the Village Manager, is hereby approved.
- 2. That the Village Manager and Village Clerk are hereby respectively authorized and directed for and on behalf of the Village to execute, attest, seal and deliver the Agreement, substantially in the form approved in the foregoing paragraph of this Resolution, together with such changes as the Manager shall deem necessary.
- 3. That the proper officials, agents and employees of the Village are hereby authorized and directed to take such further action as they may deem necessary or appropriate to perform all obligations and commitments of the Village in accordance with the provisions of the Agreement.
- 4. That all resolutions or parts of resolutions in conflict with the provisions of this Resolution are hereby repealed.
- 5. That this Resolution shall be in full force and effect from and after its passage as provided by law.

Doggod			Mayor	
Passed:				
Attest:				
	Village Clerk			

 $1\wp8\res.13\H2O\-Dist-SCADA$

AGREEMENT

This Agreement is made this	day of	2013 by and	d between B&W	/ Control
Systems Integration, LLC ("Consul	ltant") and the	e Village of Downers C	Grove, Illinois, a	n Illinois
municipal corporation with offices	at 801 Burli	ngton Avenue, Downe	rs Grove, Illino	is 60515,
("Village").				

WHEREAS, the Village wishes to retain the services of the Consultant to perform Phase II SCADA improvements; and

WHEREAS, the Consultant is willing to perform these services for compensation and in accordance with the terms and conditions described in this Agreement.

NOW, THEREFORE, in consideration of the mutual benefits that will result to the parties in carrying out the terms of this Agreement, it is agreed as follows:

I. Scope of Services

See attached Proposal dated October 1, 2013 attached hereto and incorporated herein by reference as Exhibit B.

II. Term of Agreement

The term of this Agreement shall be until March 31, 2014 or until the services as set forth in Exhibit B have been completed, whichever shall occur first.

III. Compensation

A. Basic Fees:

Fees for these services shall not exceed \$119,570.00. Any additional work performed that will increase the agreement price in excess of this amount must be approved in writing by both parties.

B. Consultant Invoices:

The Consultant shall prepare invoices that contain a reference number, the billing period, the classifications and/or names of staff, numbers of hours billed to the project (with clear itemization for hours spent), all reimbursable expenses and a total reimbursable amount for the billing period including receipts therefor, amounts billed to date, and amounts received to date.

C. Prompt Payment Act:

The Village will comply with the Local Government Prompt Payment Act, 50 ILCS 505/1 et seq., in that any bill approved for payment must be paid or the payment issued to the Consultant within 60 days of receipt of a proper bill or invoice. If payment is not issued to the Consultant within this 60 day period, an interest penalty

of 1.0% of any amount approved and unpaid shall be added for each month or fraction thereof after the end of this 60 day period, until final payment is made.

The Village shall review in a timely manner each bill or invoice after its receipt. If the Village determines that the bill or invoice contains a defect making it unable to process the payment request, the Village shall notify the Consultant requesting payment as soon as possible after discovering the defect pursuant to rules promulgated under 50 ILCS 505/1 et seq. The notice shall identify the defect and any additional information necessary to correct the defect.

IV. General Terms and Conditions

A. Relationship Between the Consultant and the Village

The relationship between the Village and the Consultant is that of a buyer and seller of professional services and it is understood that the parties have not entered into any joint venture or partnership with the other.

B. Equal Employment Opportunity

In the event of the Consultant's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the Consultant may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this Agreement, the Consultant agrees as follows:

- 1. That it will not discriminate against any employee or applicant for employment because of race, color religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- 2. That, if it hires additional employees in order to perform this Agreement or any portion thereof, it will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- 3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service.

- 4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the consultant's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the consultant in its efforts to comply with such Act and Rules and Regulations, the consultant will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- 5. That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 6. That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 7. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subconsultant. In the same manner as with other provisions of this Agreement, the consultant will be liable for compliance with applicable provisions of this clause by such subconsultants; and further it will promptly notify the contracting agency and the Department in the event any subconsultant fails or refuses to comply therewith. In addition, the Consultant will not utilize any subconsultant declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivision or municipal corporations.

C. Sexual Harassment

Consultant, as a party to a public contract, has a written sexual harassment policy that:

- 1. Notes the illegality of sexual harassment;
- 2. Sets forth the State law definition of sexual harassment;
- 3. Describes sexual harassment utilizing examples:
- 4. Describes the Consultant or supplier's internal complaint process including penalties;
- 5. Describes the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission and how to contact these entities, and:
- 6. Describes the protection against retaliation afforded under the Illinois Human Rights Act.

D. Drug Free Work Place

Consultant, as party to a public contract, certifies and agrees that it will provide a drug free workplace by:

- 1. Publishing a statement: (1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance, including cannabis, is prohibited in the grantee's or Consultant's workplace. (2) Specifying the actions that will be taken against employees for violations of such prohibition. (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will: abide by the terms of the statement; and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- 2. Establishing a drug free awareness program to inform employees about: (1) the dangers of drug abuse in the workplace; (2) the grantee's or consultant's policy of maintaining a drug free workplace; (3) any available drug counseling, rehabilitation, and employee assistance programs; (4) the penalties that may be imposed upon employees for drug violations.
- 3. Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- 4. Notifying the contracting or granting agency within ten (10) days after receiving notice of a criminal drug statute conviction from an employee or otherwise receiving actual notice of such conviction.
- 5. Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee who is so convicted as required by Section 5 of the Drug Free Workplace Act.
- 6. Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.
- 7. Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

E. Non-Discrimination

Consultant, its employees and subconsultants, agree not to commit unlawful discrimination and agree to comply with applicable provisions of the Illinois Human Rights Act, the Public Works Employment Discrimination Act, the U.S. Civil Rights Act and Section 504 of the Federal Rehabilitation Act, and rules applicable to each. The equal opportunity clause of the Department of Human Rights rules is specifically incorporated herein.

The Americans with Disabilities Act (42 U.S.C. 12101) and the regulations thereunder (28 CFR 35.130)(ADA) prohibit discrimination against persons with disabilities by the State, whether directly or through contractual arrangements, in the provision of any aid, benefit or service. As a condition of receiving this Agreement, the undersigned vendor certifies that services, programs and activities provided under this Agreement are and will continue to be in compliance with the ADA.

F. Campaign Disclosure Certificate

The Consultant shall comply with the Campaign Disclosure Certificate attached hereto and incorporated herein by reference as Exhibit A.

G. Patriot Act Compliance

The Consultant represents and warrants to the Village that neither it nor any of its principals, shareholders, members, partners, or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Consultant further represents and warrants to the Village that the Consultant and its principals, shareholders, members, partners, or affiliates, as applicable are not, directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as a Specially Designated National and Blocked Person. The Consultant hereby agrees to defend, indemnify and hold harmless the Village, and its elected or appointed officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities and expenses(including reasonable attorney's fees and costs) arising from or related to any breach of the foregoing representations and warranties.

H. Cooperation with FOIA Compliance

Consultant acknowledges that the Freedom of Information Act may apply to public records in possession of the Consultant. Consultant shall cooperate with the Village in its efforts to comply with the Freedom of Information Act. 5 ILCS 140/1 et.seq.

I. Copyright or Patent Infringement

The Consultant agrees to indemnify, defend, and hold harmless the Village against any suit, claim, or proceeding brought against the Village for alleged use of any equipment, systems, or services provided by the Consultant that constitutes a misuse of any proprietary or trade secret information or an infringement of any patent or copyright.

J. Standard of Care

Services performed by Consultant under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. No other representations express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinions, and documents or otherwise.

If the Consultant fails to meet the foregoing standard, Consultant will perform at its own cost, and without reimbursement from the Village, the professional services necessary to correct errors and omissions caused by Consultant's failure to comply with the above standard and reported to Consultant within one (1) year from the completion of Consultant's services for the Project.

V. Insurance and Indemnification of the Village

A. Insurance

The Consultant shall be required to obtain, from a company or companies lawfully authorized to do business in the jurisdiction in which the project is located, such general liability insurance which, at a minimum, will protect the Consultant from the types of claims set forth below which may arise out of or result from the Consultant's operations under this Contract and for which the Consultant may legally liable:

Claims under workers compensation, disability benefit and other similar employee benefit acts which are applicable to the operation to be performed;

Claims for damages resulting from bodily injury, occupational sickness or disease, or death of the Consultant's employees;

Claims for damages resulting from bodily injury, sickness or disease, or death of any person other than the Consultant's employees;

Claims for damages insured by the usual personal injury liability coverage which are sustained: (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Consultant, or (2) by another person;

Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;

Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;

Claims for damages as a result of professional or any other type of negligent action by the Consultant or failure to properly perform services under the scope of the agreement between the Consultant and the Village.

The Consultant shall demonstrate having insurance coverage for a minimum of \$2 million for professional liability (errors and omissions).

As evidence of said coverages, Consultant shall provide the Village with certificates of insurance naming the Village of Downers Grove as an additional insured and include a provision for cancellation only upon at least 30 days prior notice to the Village.

B. Indemnification

The Consultant will indemnify and hold harmless the Village and its officers, employees and agents from any and all liability, losses or damages the Village may suffer as a result of claims, demands, suits, actions or proceedings of any kind or nature in any way resulting from or arising out of negligent action on the part of the Consultant under this Agreement. This indemnification does not apply to liability caused by the Village's own negligence. The paragraph survives the termination/expiration of this Agreement.

VI. Miscellaneous Provisions

A. Termination

In the event of the Consultant's nonperformance, breach of the terms of the Agreement, or for any other reason, including that sufficient funds to complete this Agreement are not appropriated by the Village, the Agreement may be canceled, in whole or in part, upon the Village's written notice to the Consultant. The Village will pay the Consultant's costs actually incurred as of the date of receipt of notice of termination. Upon termination, the Consultant will deliver all documents and products of whatever kind, and their reproducible originals related to the project, which have been produced to the date of the notice of termination.

B. Governing Law

This Agreement will be governed by and construed in accordance with the laws of the State of Illinois. Venue is proper only in the County of DuPage.

C. Successors and Assigns

The terms of this Agreement will be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided, however, that neither party will assign this Agreement in whole or in part without the prior written approval of the other.

D. Waiver of Contract Breach

The waiver by one party of any breach of this Agreement or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof will be limited

to the particular instance and will not operate or be deemed to waive any future breaches of this Agreement and will not be construed to be a waiver of any provision except for the particular instance.

E. Amendment

This Agreement will not be subject to amendment unless made in writing and signed by all parties.

F. Severability of Invalid Provisions

If any provisions of this Agreement are held to contravene or be invalid under the laws of any state, country or jurisdiction, contravention will not invalidate the entire Agreement, but it will be construed as if not containing the invalid provision and the rights or obligations of the parties will be construed and enforced accordingly.

G. Assignment

The Consultant will not assign or subcontract any portion of this Agreement, unless the Village agrees to the assignment or subcontract in writing. Any assignment will not relieve the Consultant from its obligations or change the terms of this Agreement.

H. Notice

Any notice will be in writing and will be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed, and addressed to the party at the party's place of business. Notices shall be addressed to designated representatives of both parties as follows:

Village Manager Village of Downers Grove 801 Burlington Ave. Downers Grove, IL 60515

B&W Control Systems Integration, LLC 8678 Ridgefield Road Crystal Lake, IL 60012

I. Village Ordinances

The Consultant will strictly comply with all ordinances of the Village of Downers Grove and laws of the State of Illinois.

J. Use of Village's Name

The Consultant is specifically denied the right of using in any form or medium the name of the Village for public advertising unless express permission is granted by the Village.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date indicated above.

B&W Control Systems Integration, LLC	Village of Downers Grove
By: Christopher J. Sosnowski	
	By:
Christopher T. Sosnowski	
Title: President	Title:
Date: September 20, 2013	Date:

Exhibit A Campaign Disclosure Certificate

The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.

By signing this Agreement, Consultant agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

Under pena	lty of perjury, I declare:	
	last five (5) years.	uted to any elected Village position within th
	Christopher J. Sosnowski	Christopher T. Sosnowski
	Signature	Print Name
	Print the following information:	
	Print the following information: Name of Contributor:	(company or individual)
		(company or individual)
	Name of Contributor:	(company or individual)



B&W Control Systems Integration

8678 Ridgefield Road · Crystal Lake, IL 60012

815.788.3600 office · 815.455.0450 fax · www.bwcsi.com

October 1, 2013

Mr. Stan Balicki Assistant Director of Public Works Village of Downers Grove 5101 Walnut Avenue Downers Grove, Illinois 60515

Subject: Phase 2 SCADA Improvements BWCSI Job Number 130460.50-Rev 5

Dear Mr. Balicki:

Following is our proposal for your Phase 2 SCADA improvements project. The project consists of a number of smaller inter-related SCADA and technology projects as follows:

- Install pavement temperature sensors at one location. Tie the sensors into SCADA for live trending in SCADA.
- Install Win911 Mobile alarm software for mobile phones for alarm management.

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- Connect two storm water pumping stations to the SCADA system (Denburn Woods and the Ogden and Florence station).
- Install a storm water level sensor and video camera at the Hill/Grand storm water grate for live monitoring and alarming.
- Provide mobile applications to allow viewing of GIS and Lucity software through the Village's existing Terminal Server.
- Provide two (2) water temperature sensors for two rate station sites (one on the north side of the Village and the other on the south side).
- Provide weather station at Public Works.

Prior to starting work, we will provide a preliminary design to confirm our assumptions made preparing this proposal.



Scope of Services

Project Management

Plan, schedule, and coordinate the activities that must be performed to complete the project.

<u>Preliminary Design</u>

- Visit all sites to review existing field conditions to determine installation details.
- Solicit proposals from electrical contractors to install the pavement temperature sensors and level sensor/video camera at the Hill/Grand location.
- Present design details to the Village for approval before proceeding with project implementation.

Pavement Temperature Sensors

- Provide one (1) Vaisala model DSC111 non-invasive surface temperature sensor with mounting hardware.
- Install temperature pavement sensors at location of one existing SCADA remote site location and tie into existing SCADA system. Mounting detail for sensor will be developed during the design phase, and may require installation of a light pole on the site.
- Display and trend temperature values at the SCADA server and terminal server.

Mobile Win911

- Provide 10-user license of Specter Instruments Mobile 911 software (10-user license is the lowest number of users that can be purchased).
- Install software on up to five mobile devices (provided by the Village) and train Village staff on use.

SCADA Remote Access

- Configure Village-provided iPads to allow remote access to the SCADA system using the existing terminal server.
- Coordinate access to the terminal server with the Village's IT staff.



Storm Station Work (Denburn Woods and Ogden & Florence)

- Provide two (2) SCADA control panels consisting of the following components prewired inside a NEMA 4 steel enclosure:
 - Allen-Bradley MicroLogix 1400 PLC
 - CalAmp Integra-TR Radio
 - Uninterruptible Power Supply (UPS)
 - Miscellaneous components as required for a complete panel
- Install control panel at each of the two sites.
- Provide power and control signal wiring at each site. Signals to be monitored will include the following as available:
 - Pump Run
 - Pump Fail
 - Wet Well Level
 - High Level Alarm
 - Power Fail
- Provide programming of the existing SCADA master PLC and SCADA server to display the storm station status and alarms, and configure the alarm software to dial out on alarms.

Hill/Grand Level Monitor

- Provide SCADA control panel consisting of the following components pre-wired inside a NEMA 4 steel enclosure:
 - Allen-Bradley MicroLogix 1400 PLC.
 - CalAmp Fusion (Verizon 4g) cellular radio. Village is responsible for the required cellular contract estimated at \$20-80/month depending on data needs.
 - Uninterruptible Power Supply (UPS).
 - Miscellaneous components as required for a complete panel.
- Provide Axis Model P3364-LVE fixed dome outdoor camera (or similar).
- Provide Siemens ultrasonic level transducer and level transmitter to monitor stormwater level. Village to assist in locating and mounting equipment.
- Provide aluminum street light pole for mounting control panel, camera, and level sensor.
- Provide power and control signal wiring at each site (120VAC service is required at the site). If power is not available, we will work with Village staff to develop a solar-powered/battery based solution.



- Provide programming of the existing SCADA master PLC and SCADA server to display the level and video. Note that this proposal does not include recording of video at the site, but video recording can be added in the future if desired.
- Provide ability to check on the live video feed from a mobile (cell phone or tablet) device.

Mobile Apps

Install mobile apps as required on up to five (5) mobile devices to allow remote viewing of GIS and Lucity software. The Village will provide any required GIS or Lucity licenses.

Water Temperature Sensors

- Furnish two (2) Pyromation (or equal) RTD temperature sensors with thermowell and transmitter. The Village will be responsible for providing any piping/plumbing work and mounting the sensors.
- Provide conduit and wiring as required to connect the temperature sensors to the existing PLCs.
- Provide programming of the existing local PLC, SCADA master PLC, and SCADA server to display and trend the temperature information.

Weather Station

- Provide Campbell Scientific (or equal) weather station consisting of the following:
 - Vaisala temperature/humidity sensor with solar radiation shield
 - Heated Rain Gauge
 - Wind speed/direction
 - Barometer
 - Model CR1000 datalogger with Ethernet module and power supply mounted in an enclosure
 - 10-foot tripod and mounting hardware
- Mount weather sensor array with tripod on roof of Public Works building.
- Mount weather station datalogger in Public Works building near existing SCADA master PLC.
- Route sensor wiring from sensor array to datalogger.
- Provide Ethernet cabling from datalogger to SCADA server.
- Configure SCADA server to display weather data.









Fee

Our fee for the above scope of services is a lump sum of \$119,570.

The design portion of the fee is \$7,000, while the implementation portion of the fee is \$114,300. The implementation fee includes \$20,300 for electrical and antenna subcontractors.

This fee is valid for 90 days from the date of this proposal.

Very truly yours,

B&W CONTROL SYSTEMS INTEGRATION, LLC

Michael D. Klein, PE Operations Manager MDK

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B&W Control Systems Integration

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Village of Downers Grove • 130460.50-Rev 5

Standard Terms and Conditions

(REV 2)

1. The submitted proposal and these Standard Terms & Conditions constitute and are herein referred to as the Agreement.

- 2. B&W Control Systems Integration, LLC is herein referred to as BWCSI, and the party with whom BWCSI is entering into this Agreement with is herein referred to as DWNER
- 3. BWCSI may submit requests for periodic progress payments for services rendered. Payments shall be due and owing by the OWNER upon receipt of BWCSI's invoice for services. Payments to BWCSI after (60) consecutive calendar days from the date of BWCSI's invoice for services shall include an additional late payment charge computed at an annual rate of twelve percent (12%) from date of BWCSI's invoice; and BWCSI may, after giving seven (7) days written notice to the OWNER, suspend services under this Agreement until BWCSI has been paid in full all amounts due for services, expenses, and late payment charges.
- 4. This Agreement may be terminated, in whole or in part, by either party if the other party substantially fails to fulfill its obligations under this Agreement through no fault of the terminating party; or the OWNER may terminate this Agreement, in whole or in part, for its convenience. However, no such termination may be effected unless the terminating party gives the other party: (1) not less than ten (10) calendar days written notice by certified mail of intent to terminate, and (2) an opportunity for a meeting with the terminating party before termination. If this Agreement is terminated by either party, BWCSI shall be paid for services performed to the effective date of termination, including reimbursable expenses. In the event of contract termination, the OWNER shall receive reproducible copies of Drawings, Custom Developed Applications and other documents completed by BWCSI.
- 5. BWCSI agrees to hold harmless and indemnify the OWNER and each of its officers, agents and employees from any and all liability claims, losses, or damages, to the extent that that such claims, losses, or damages are caused by BWCSI's negligence in the performance of the services under this Agreement, but not including liability that may be due to the sole negligence of the OWNER or other consultants, contractors or subcontractors working for the OWNER, or their officers, agents and employees. In the event claims, losses, or damages are caused by the joint or concurrent negligence of BWCSI and the OWNER they shall be borne by each party in proportion to its negligence.
- The OWNER acknowledges that BWCSI is a Limited Liability Company and not a Professional Service Corporation, and further acknowledges that the corporate entity, as the party to this contract, expressly avoids contracting for individual responsibility of its officers, directors, or employees.
- 7. The OWNER and BWCSI agree that any claim made by either party arising out of any act of the other party, or any officer, director, or employee of the other party in the execution or performance of the Agreement, shall be made solely against the other party and not individually or jointly against such officer, director, or employees.
- 8. For the duration of the project, BWCSI shall procure and maintain insurance for protection from claims under worker's compensation acts, claims for damages because of bodily injury including personal injury, sickness or disease or death of any and all employees or of any person other than such employees, and from claims or damages because of injury to or destruction of property including loss of use resulting therefrom, alleged to arise from BWCSI's negligence in the performance of services under this Agreement. The OWNER shall be named as an additional insured on BWCSI's general liability insurance policy. The limits of liability for the insurance required by this Subsection are as follows:

Workers Compensation: Statutory Limits Excess Umbrella Liability: \$5,000,000 per claim and aggregate

General Liability: \$1,000,000 per claim Professional Liability: \$5,000,000 per claim

\$2,000,000 aggregate \$5,000,000 aggregate

Automobile Liability: \$1,000,000 combined single limit

Notwithstanding any other their officers, directors, em claims, losses, costs or damages macroever analog out on resonant months of the claims, losses, costs or damages macroever analog out on resonant months of the claims, losses, costs or damages macroever analog out on resonant months of the claims, losses, costs or damages macroever analog out on the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims, losses, costs or damages macroever analog out of the claims.

w, the total liability, in the aggregate, of BWCSI and g by, through or under the OWNER, for any and all to the project or the Agreement from any cause or

causes, including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract or warranty expressed or implied of BWCSI or their officers, directors, employees, agents or any of them, hereafter referred to as the "OWNER's Claims", shall not exceed the total insurance proceeds available to pay on behalf of or to BWCSI by their insurers in settlement or satisfaction of OWNER's Claims under the terms and conditions of BWCSI's insurance policies applicable thereto, including all covered payments made by those insurers for fees, costs and expenses of investigation, claims adjustment, defense and appeal.

- 10. BWCSI is responsible for the quality, technical accuracy, timely completion, and coordination of all Designs, Drawings, Custom Developed Applications and other services furnished or required under this Agreement, and shall endeavor to perform such services with the same skill and judgment which can be reasonably expected from similarly situated professionals.
- 11. The OWNER may, at any time, by written order, make changes within the general scope of this Agreement in the services to be performed by BWCSI. If such changes cause an increase or decrease in BWCSI's fee or time required for performance of any services under this Agreement, whether or not changed by any order, an equitable adjustment shall be made and this agreement shall be modified in writing accordingly. No service for which an additional compensation will be charged by BWCSI shall be furnished without the written authorization of the OWNER.
- 12. All Drawings, Custom Developed Applications, and other documents prepared or furnished by BWCSI pursuant to this Agreement are instruments of service in respect to the project, and BWCSI shall retain the right of reuse of said documents and electronic media by and at the discretion of BWCSI whether or not the project is completed. Electronic copies of BWCSI's documents for information and reference in connection with the use and occupancy of the project by the OWNER and others shall be delivered to and become the property of the OWNER; however, BWCSI's documents are not intended or represented to be suitable for reuse by the OWNER or others on additions or extensions of the project, or on any other project. Any such reuse without verification or adaptation by BWCSI for the specific purpose intended will be at the OWNER's sole risk and without liability or legal exposure to BWCSI, and the OWNER shall indemnify and hold harmless BWCSI from all claims, damages, losses and expenses including attorneys' fees arising out of or resulting therefrom.
- 13. BWCSI will make good any defect due to improper materials or workmanship supplied by BWCSI without expense to the Owner for one (1) year after the OWNER's acceptance of the installation. The warranty covers only defects in material and workmanship on products purchased and fully installed by BWCSI and does not cover defects caused by improper use, abuse, accident, acts-of-God (including but not limited to lightning), alteration, or other conditions beyond BWCSI's control, as determined by BWCSI.
- 14. Any provision or part thereof of this Agreement held to be void or unenforceable under any law shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the parties. The parties agree that this Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision which comes as close as possible to expressing the intention of the stricken provision.
- 15. This Agreement contains and embodies the entire and integrated agreement between parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral.