THE CITY OF WATERTOWN

Fire Department

To: Public Works Committee

From: Chief Reynen

Date: 9/30/2024

Subject: New Fire Station Owner Provided Purchases

Background

The Fire Department has worked with vendors to provide quotes for essential equipment in the fire department infrastructure. Quotes were provided with an eye towards future sustainability for the following areas: Paging/Alerting system, Station Radio, Access Control, AV Equipment, and Security Cameras. The city has an agreement in place with Digicorp as our sole source for general IT work that needs to be done to prepare for the systems below.

Paging/Alerting:

Paging/Alerting is how personnel know there is a call for service. Technology has evolved significantly and can provide much more information visually to ensure a safe and proper response. The Fire Department has worked closely with the Phoenix G2 system to design a system that has improved interoperability in the future and improved data recovery. Phoenix G2 has a sole source in our are for purchase, through Gencom. Recommendation to approve this bid.

Phoenix G2 Alerting System via Gencom	$292,213.00

Station Radios

Station Radios allow for staff to communicate immediately with dispatch or others via radio after being tone for a call. These are radios that are in offices, work space and living areas of the station that allow for hearing incident updates and monitoring while in house. Quotes were obtained from two companies that install radio systems. This system was designed to be flexible enough to support Emergency Operations Center and daily operations. These are not fixtures as they can be moved to a new location if necessary. The radio system is designed to have functionality and flexibility built in that will support future needs of the station and department and is the recommended bid for the station needs.

| Gencom Station Radios | $62,813.22 |
| Baycom Station Radios | $92,009.82 |

Access Control

Modern access control in buildings an essential aspect in security and safety of not only personnel but the information and equipment within the building. Most new construction buildings have gone keyless in all aspects of access control security.   Three companies were contacted for bids and assessments of the systems they provide, one did not meet our needs so is not listed here. Baycom is the recommended bid for access control due to the annual cost to utilize the system, warranty and product design.

| Baycom | $39,929.93 | $2,700 annual cost 2026 |
| LaForce | $57,663.88 | $6,614 annual cost 2026 |

AV Equipment Training Room

The scope of this work includes TV's, podium, microphones and speakers in the Training Room which will also function as the EOC. This equipment is not a fixture as it could be moved into a new station. There were multiple bids obtained with the recommendation to award the bid to Camera Corner.

| Camera Corner | $70,223.46 |
| Majic Productions | $82,208.10 |

Security Cameras

The scope of this work includes cameras on both the interior and exterior of the building in strategic areas to ensure security and reduce liability.   The exterior of the building has full coverage aside from the area of the baby box drop off. The medication room where narcotics are stored, lobby and vestibule are the three cameras inside the building. There is an added budgetary quote of $3,134 which would add a camera in an area that would cover the rear of the training tower if possible. This would protect the entrance into the back lot and allow for a 360 monitoring the training tower. DigiCorp is considered a sole source provider for this work as every city camera is on this same system.

Digicorp Cameras	$29,702.00
Added Camera	$3,134.00

Phones

The scope of this work includes desktop and wall mounted phones throughout the building. This is an initial quote for budgetary planning. Convergent is considered a sole source provider for this work as every city phone is on this same system.

Convergent Solutions	$13,954.46

Budget Goal

1. Maintains a safe and healthy community, with an eye toward future needs and trends.
2. Supports employee retention and growth, while also evaluating operations and the associated staffing.
3. Fosters community growth by assessing opportunities, stakeholder input, environmental needs and modern code and policy priorities.

Financial Impact

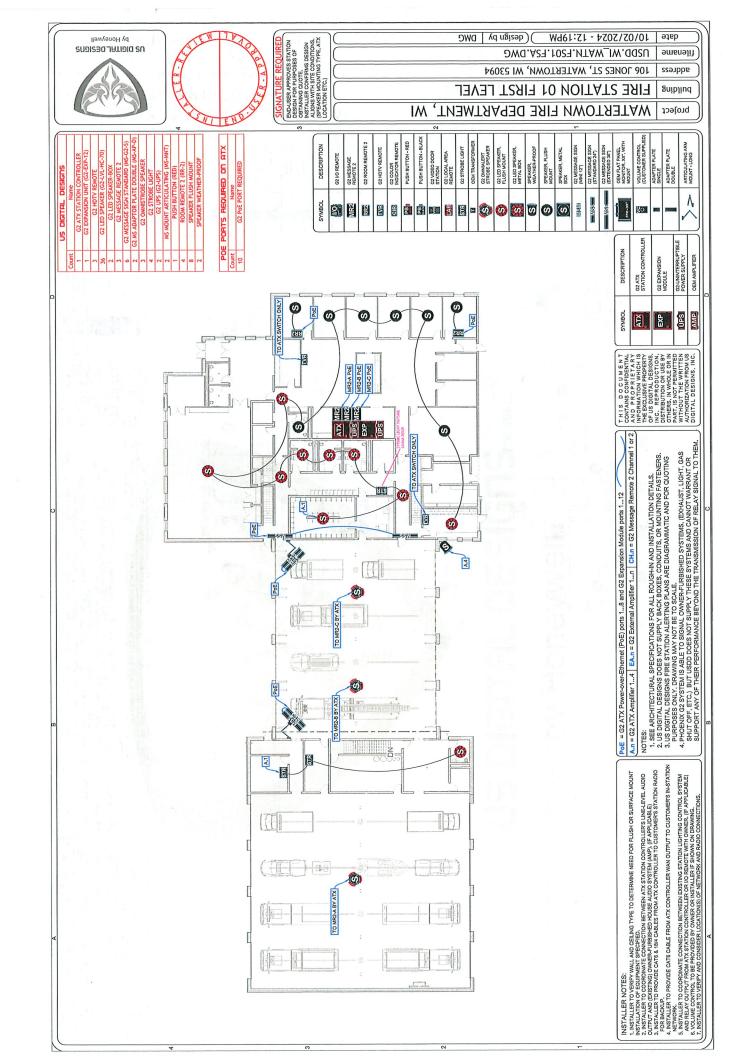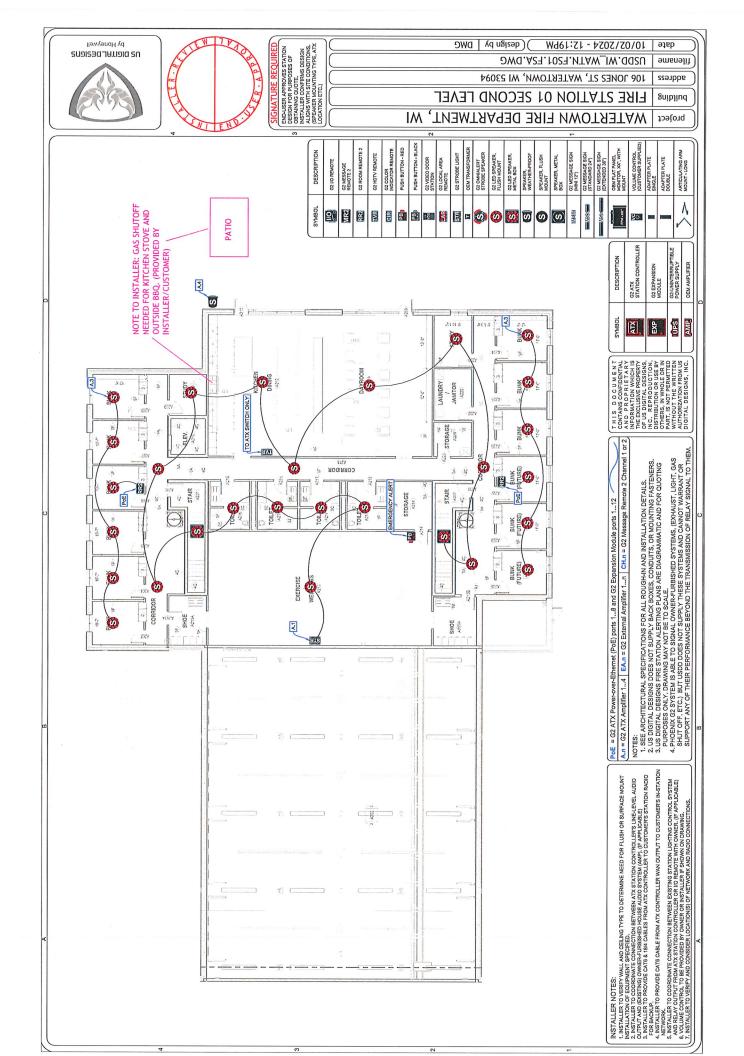See below for financial impact on the Fire Station project budget.
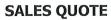
Recommendation

Recommend approval of the following quotes to sign into contract:

Phoenix G2 Alerting System via Gencom	$292,213.00
Gencom Station Radios	$62,813.22
Baycom Access Control	$39,929.93
Camera Corner AV Equipment	$70,223.46
Digicorp Cameras	$29,702.00
	$3,134.00
Convergent Solutions	$13,954.46

project	WATERTOWN FIRE DEPARTMENT, WI
building	FIRE STATION 01 FIRST LEVEL
address	106 JONES ST, WATERTOWN, WI 53094
filename	USDD_WI_WATN_FS01_FSA.DWG
date	10/02/2024 - 12:19PM
design by	DMG
	DWG

US DIGITAL DESIGNS

Count	Name
1	G2 ATX STATION CONTROLLER
1	G2 EXPANSION UNIT (G2-EXP-12)
3	G2 HDTV REMOTE
36	G2 LED SPEAKER (G2-LVL-HC-70)
3	G2 LED SPEAKER-BOX
2	G2 MESSAGE REMOTE 2
6	G2 MESSAGE SIGN STANDARD (MS-G2-S)
2	G2 MS ADAPTOR PLATE DOUBLE (MS-AP-D)
3	G2 OMNISTROBE SPEAKER
3	G2 STROBE LIGHT
4	G2 UPS (G2-UPS)
2	MS MOUNT ARTICULATING (MS-MNT)
1	PUSH BUTTON (RED)
4	ROOM REMOTE 2 (RR-2)
8	SPEAKER FLUSH MOUNT
2	SPEAKER WEATHER-PROOF

POE PORTS REQUIRED ON ATX

Count	Name
10	G2 PoE PORT REQUIRED

DESCRIPTION

SYMBOL	DESCRIPTION
I/O	G2 I/O REMOTE
MR2	G2 MESSAGE REMOTE 2
RR2	G2 ROOM REMOTE 2
TVR	G2 HDTV REMOTE
CIR	G2 COLOR INDICATOR REMOTE
PB	PUSH BUTTON - RED
PB	PUSH BUTTON - BLACK
VDS	G2 VIDEO DOOR STATION
LAR	G2 LOCAL AREA REMOTE
STR	G2 STROBE LIGHT
T	OEM TRANSFORMER
S	G2 OMNIALERT STROBE SPEAKER
S	G2 LED SPEAKER, FLUSH MOUNT
S	G2 LED SPEAKER, METAL BOX
S	SPEAKER, WEATHER-PROOF
S	SPEAKER, FLUSH MOUNT
S	SPEAKER, METAL BOX
MSSM	G2 MESSAGE SIGN (MINI 12")
MSS	G2 MESSAGE SIGN (STANDARD 24")
MSE	G2 MESSAGE SIGN (EXTENDED 36")
	OEM FLAT PANEL MONITOR, XX", WITH MOUNT
VC	VOLUME CONTROL (CUSTOMER SUPPLIED)
	ADAPTER PLATE SINGLE
	ADAPTER PLATE DOUBLE
	ARTICULATING ARM MOUNT - LONG

SYMBOL	DESCRIPTION
ATX	G2 ATX STATION CONTROLLER
EXP	G2 EXPANSION MODULE
UPS	G2-UNINTERRUPTIBLE POWER SUPPLY
AMP	OEM AMPLIFIER

PoE = G2 ATX Power-over-Ethernet (PoE) ports 1...8 and G2 Expansion Module ports 1...12
A.n = G2 ATX Amplifier 1...4   EA.n = G2 External Amplifier 1...n   CH.n = G2 Message Remote 2 Channel 1 or 2

NOTES:
1. SEE ARCHITECTURAL SPECIFICATIONS FOR ALL ROUGH-IN AND INSTALLATION DETAILS.
2. US DIGITAL DESIGNS DOES NOT SUPPLY BACK BOXES, CONDUITS, OR MOUNTING FASTENERS.
3. US DIGITAL DESIGNS FIRE STATION ALERTING PLANS ARE DIAGRAMMATIC AND FOR QUOTING PURPOSES ONLY. DRAWING MAY NOT BE TO SCALE.
4. PHOENIX G2 SYSTEM IS ABLE TO SIGNAL OWNER-FURBISHED SYSTEMS, (EXHAUST, LIGHT, GAS SHUT OFF, ETC.) BUT USDD DOES NOT SUPPLY THESE SYSTEMS AND CANNOT WARRANT OR SUPPORT ANY OF THEIR PERFORMANCE BEYOND THE TRANSMISSION OF RELAY SIGNAL TO THEM.

INSTALLER NOTES:
1. INSTALLER TO VERIFY WALL AND CEILING TYPE TO DETERMINE NEED FOR FLUSH OR SURFACE MOUNT INSTALLATION OF EQUIPMENT SPECIFIED.
2. INSTALLER TO COORDINATE CONNECTION BETWEEN ATX STATION CONTROLLER'S LINE-LEVEL AUDIO OUTPUT AND (EXISTING) OWNER-FURNISHED HOUSE AUDIO SYSTEM (AMP). (IF APPLICABLE)
3. INSTALLER TO PROVIDE CAT6 & 18/4 CABLES FROM ATX CONTROLLER TO CUSTOMERS STATION RADIO FOR BACKUP.
4. INSTALLER TO PROVIDE CAT6 CABLE FROM ATX CONTROLLER WAN OUTPUT TO CUSTOMERS INSTATION NETWORK.
5. INSTALLER TO COORDINATE CONNECTION BETWEEN EXISTING STATION LIGHTING CONTROL SYSTEM AND RELAY OUTPUT FROM ATX STATION CONTROLLER OR I/O REMOTE WITH OWNER. (IF APPLICABLE)
6. VOLUME CONTROL TO BE PROVIDED BY OWNER OR INSTALLER IF SHOWN ON DRAWING.
7. INSTALLER TO VERIFY AND CONSIDER LOCATION(S) OF NETWORK AND RADIO CONNECTIONS.

project	WATERTOWN FIRE DEPARTMENT, WI
building	FIRE STATION 01 SECOND LEVEL
address	106 JONES ST, WATERTOWN, WI 53094
filename	USDD_WI_WATN_FS01.FSA.DWG
date	10/02/2024 - 12:19PM	design by	DMG

NOTE TO INSTALLER: GAS SHUTOFF NEEDED FOR KITCHEN STOVE AND OUTSIDE BBQ. (PROVIDED BY INSTALLER/CUSTOMER)

PATIO

SYMBOL	DESCRIPTION
I/O	G2 I/O REMOTE
MR2	G2 MESSAGE REMOTE 2
RR2	G2 ROOM REMOTE 2
TVR	G2 HDTV REMOTE
CIR1	G2 COLOR INDICATOR REMOTE
PB	PUSH BUTTON - RED
PB	PUSH BUTTON - BLACK
VDS	G2 VIDEO DOOR STATION
LAR	G2 LOCAL AREA REMOTE
STR	G2 STROBE LIGHT
XF	OEM TRANSFORMER
S	G2 OMNIALERT STROBE SPEAKER
S	G2 LED SPEAKER, FLUSH MOUNT
S	G2 LED SPEAKER, METAL BOX
S	SPEAKER, WEATHER-PROOF
S	SPEAKER, FLUSH MOUNT
S	SPEAKER, METAL BOX
MSMN	G2 MESSAGE SIGN (MINI 12")
MSSD	G2 MESSAGE SIGN (STANDARD 24")
MSXT	G2 MESSAGE SIGN (EXTENDED 36")
FM-XXX	OEM FLAT PANEL MONITOR, XX" WITH MOUNT (CUSTOMER SUPPLIED)
VC	VOLUME CONTROL
	ADAPTER PLATE SINGLE
	ADAPTER PLATE DOUBLE
	ARTICULATING ARM MOUNT - LONG

SYMBOL	DESCRIPTION
ATX	G2 ATX STATION CONTROLLER
EXP	G2 EXPANSION MODULE
UPS	G2 UNINTERRUPTIBLE POWER SUPPLY
AMP	OEM AMPLIFIER

PoE = G2 ATX Power-over-Ethernet (PoE) ports 1...8 and G2 Expansion Module ports 1...12
A.n = G2 ATX Amplifier 1...4   EA.n = G2 External Amplifier 1...n   CH.n = G2 Message Remote 2 Channel 1 or 2

NOTES:
1. SEE ARCHITECTURAL SPECIFICATIONS FOR ALL ROUGH-IN AND INSTALLATION DETAILS.
2. US DIGITAL DESIGNS DOES NOT SUPPLY BACK BOXES, CONDUITS, OR MOUNTING FASTENERS.
3. US DIGITAL DESIGNS FIRE STATION ALERTING PLANS ARE DIAGRAMMATIC AND FOR QUOTING PURPOSES ONLY. DRAWING MAY NOT BE TO SCALE.
4. PHOENIX G2 SYSTEM IS ABLE TO SIGNAL OWNER-FURNISHED SYSTEMS, (EXHAUST, LIGHT, GAS SHUT OFF, ETC.) BUT USDD DOES NOT SUPPLY THESE SYSTEMS AND CANNOT WARRANT OR SUPPORT ANY OF THEIR PERFORMANCE BEYOND THE TRANSMISSION OF RELAY SIGNAL TO THEM.

INSTALLER NOTES:
1. INSTALLER TO VERIFY WALL AND CEILING TYPE TO DETERMINE NEED FOR FLUSH OR SURFACE MOUNT INSTALLATION OF EQUIPMENT SPECIFIED.
2. INSTALLER TO COORDINATE CONNECTION BETWEEN ATX STATION CONTROLLER'S LINE-LEVEL AUDIO OUTPUT AND (EXISTING) OWNER-FURNISHED HOUSE AUDIO SYSTEM (AMP), (IF APPLICABLE)
3. INSTALLER TO PROVIDE CAT6 & 18/4 CABLES FROM ATX CONTROLLER TO CUSTOMER'S STATION RADIO FOR BACKUP.
4. INSTALLER TO PROVIDE CAT6 CABLE FROM ATX CONTROLLER WAN OUTPUT TO CUSTOMERS IN-STATION NETWORK.
5. INSTALLER TO COORDINATE CONNECTION BETWEEN EXISTING STATION LIGHTING CONTROL SYSTEM AND RELAY OUTPUT FROM ATX STATION CONTROLLER OR I/O REMOTE WITH OWNER. (IF APPLICABLE)
6. VOLUME CONTROL TO BE PROVIDED BY OWNER OR INSTALLER IF SHOWN ON DRAWING.
7. INSTALLER TO VERIFY AND CONSIDER LOCATION(S) OF NETWORK AND RADIO CONNECTIONS.

Room labels: STUDY · KITCHEN · DINING · ELEV. · DAYROOM · LAUNDRY · JANITOR · STORAGE · CORRIDOR · BUNK · STAIR · TOILET · EMERGENCY ALERT · STORAGE · SHOE · EXERCISE · WELLNESS · CORRIDOR · SHOE · TO ATX SWITCH ONLY

GENCOMM

Madison - (608)271-4848
Milwaukee - (262)439-2000
Eau Claire - (715)225-7604
WI Rapids - (715)424-3050
McHenry - (815)385-4224

2880 Commerce Park Drive
Madison, WI 53719

800-356-3200 | www.gencomm.com

SALES QUOTE

Sales Quote No: 34422
Date: 10/2/24
Account No: 2834

Bill To:
Watertown Fire Department
106 Jones Street
Watertown, WI 53094
USA

Ship To:
Watertown Fire Department
Attn: Tanya Reynen
106 Jones Street
Watertown, WI 53094
USA

LABORSERV-MF	Headend equipment installation and final testing	1.00	Each	$6,000.00	$6,000.00
LABORSERV-MF	Project Management	1.00	Each	$4,000.00	$4,000.00
SERVMISC	Installation materials including all cabling, cable management	1.00	Each	$2,000.00	$2,000.00
Dan Martin Enterprises	Cable Installation - Subcontractor	1.00	Each	$10,000.00	$10,000.00
Freight	Incoming Freight	1.00	Each	$2,087.00	$2,087.00
PRODNEEDED	Primary Dispatch G2 FSA System - Watertown FD Dispatch	1.00	Each	$59,569.00	$59,569.00
PRODNEEDED	PRIMARY DISPATCH G2 FSA SYSTEM - Jefferson County Dispatch	1.00	Each	$56,002.00	$56,002.00
PRODNEEDED	PRIMARY DISPATCH G2 FSA SYSTEM - Dodge County Dispatch	1.00	Each	$56,002.00	$56,002.00

Subtotal	$292,213.00
Freight	$0.00
Sales Tax	$0.00
Sales Order Total	$292,213.00

Returns & exchanges are accepted within 30 days of purchase and require an RMA number. Items must be in unused condition and in original packaging. Special order items are non-returnable and may not be cancelled once shipped from vendor/manufacturer. Radio and infrastructure equipment/manufacturers carry a 25% restocking fee.

* A 3% surcharge applies to all credit card payments.

Unless otherwise specified, shipping and handling charges are not included and will be added to the associated invoice.

Quote Accepted By_____ Date_____

GENCOMM

2880 Commerce Park Drive
Madison, WI 53719

Madison - (608)271-4848
Milwaukee - (262)439-2000
Eau Claire - (715)225-7604
WI Rapids - (715)424-3050
McHenry - (815)385-4224

800-356-3200 | www.gencomm.com

SALES QUOTE

Sales Quote No: 34422
Date: 10/2/24
Account No: 2834

Bill To:
Watertown Fire Department
106 Jones Street
Watertown, WI 53094
USA

Ship To:
Watertown Fire Department
Attn: Tanya Reynen
106 Jones Street
Watertown, WI 53094
USA

Sales Person	P.O. Number	Ship Method	Payment Terms	Quote Expires On
Scott Lesniewski	Alerting Station Fulll Project	Spee-Dee	NET 30 Days	11/1/24

Notes

Item No	Description	Quantity	UM	Price	Amount
VA	G2 VoiceAlert Single Station License	1.00	Each	$1,180.00	$1,180.00
G2-APP-DLI	G2 Mobile FSAS App- Additional Single Device License	3.00	Each	$15.00	$45.00
ATX	G21 ATX Station Controller- Power Signal Control up to 8 peripheral Remote Optons.	1.00	Each	$24,934.00	$24,934.00
UPS-STD	ATX UPS, Standard	2.00	Each	$1,253.00	$2,506.00
UPS-WMB	Shelf/Bracket, Wall Mount for UPS	2.00	Each	$80.00	$160.00
TVR	G2 HDTV Remote Module (TV & Electrical outlet by others; CEC contorl subject to TV ability)	3.00	Each	$1,201.00	$3,603.00
MR2	G2 Message Remote 2 Module (2017 Version 2)	3.00	Each	$1,632.00	$4,896.00
MS-G-S	G2 Message Sign (Digital LED) Standard GammaSign/24" Active Screen Width	6.00	Each	$1,350.00	$8,100.00
MS-AP-D	MS-G Adapter Plate, ouble VESA 100, joins (10 MS-G-S (or -E) to any std mount with VESA 100 hole pat	2.00	Each	$75.00	$150.00
MS-MNT-ART-L	MS Mount- Articulating Long Reach	2.00	Each	$417.00	$834.00
SPK-LED-FM	G2 Speaker-LED Illuminated- Flush Mount, 70v	36.00	Each	$400.00	$14,400.00
SPK-LED-SM	G2 SPEAKER - LED Illuminated - SURFACE Mount (Metal Box), 70v	2.00	Each	$400.00	$800.00
SPK-OAS	G2 Speaker OmniAlertStrobe- Omnidirectional Aleting Speaker, optimized for high vocal intelligibilit	3.00	Each	$1,124.00	$3,372.00
SPK-STD-SM	Speaker - Standard, Surface Mount (Metal Box, 70v	2.00	Each	$400.00	$800.00
STR	G2 Strobe light/Red LED	4.00	Each	$708.00	$2,832.00
XFMR	Transformer, 8 ohm to 70 V, External	1.00	Each	$53.00	$53.00
ST-SU	Station Configuration & Start-Up	1.00	Each	$3,300.00	$3,300.00
ST-PM	Station Project Management	1.00	Each	$2,000.00	$2,000.00
ST-ES	Station Engineering/Design Services	1.00	Each	$533.00	$533.00
ST-DM	Station Documentation	1.00	Each	$53.00	$53.00
RS-1YR-STD	Standard 1st Year Warranty & Support for this station system - 1 Year	1.00	Each	$0.00	$0.00
TB8	Bogan Tile Bridge Speaker Support	44.00	Each	$10.00	$440.00
EXP	G2 Expansion Kit-Allows ability to power/signal/control up to 12 more peripheral remote options	1.00	Each	$8,397.00	$8,397.00
RR2	G2 Room Remote 2 Module/2017 version 2 (4 gain wall box required for proper install)	5.00	Each	$2,417.00	$12,085.00
SPK-STD-FM	Speaker Standard Flush Mount 70V	8.00	Each	$135.00	$1,080.00

Shave Seconds, Even Minutes

with the Phoenix G2 Fire Station Alerting System

Helping you save lives and property with faster response times and healthier, more situationally aware first responders and dispatchers.

As a public safety leader, you strive to provide the best and most cost-effective service to your community. And you know that when it comes to saving lives and property, seconds count. That's why communities of every size trust and rely on the Phoenix G2 Fire Station Alerting System to help shave seconds—and sometimes minutes—off of emergency response times.

Powered by US Digital Designs (USDD), the Phoenix G2 Fire Station Alerting System can help reduce dispatch call-processing times by instantaneously alerting the right units, in the right places, so they respond more efficiently and with better information.
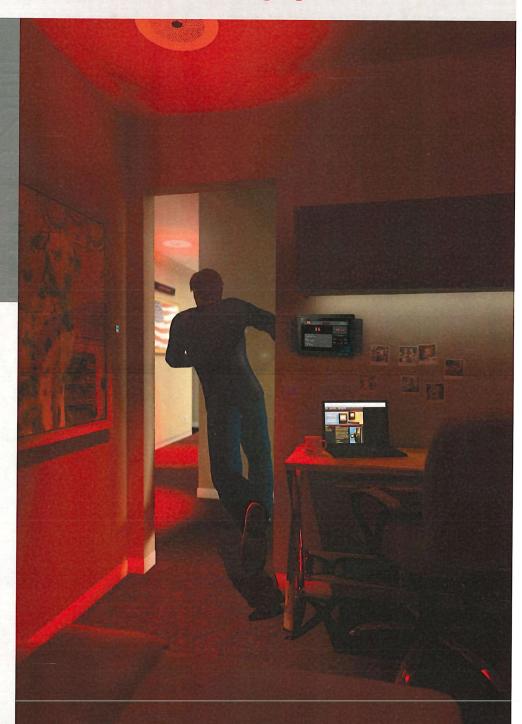
Table of Contents

Why Choose US Digital Designs
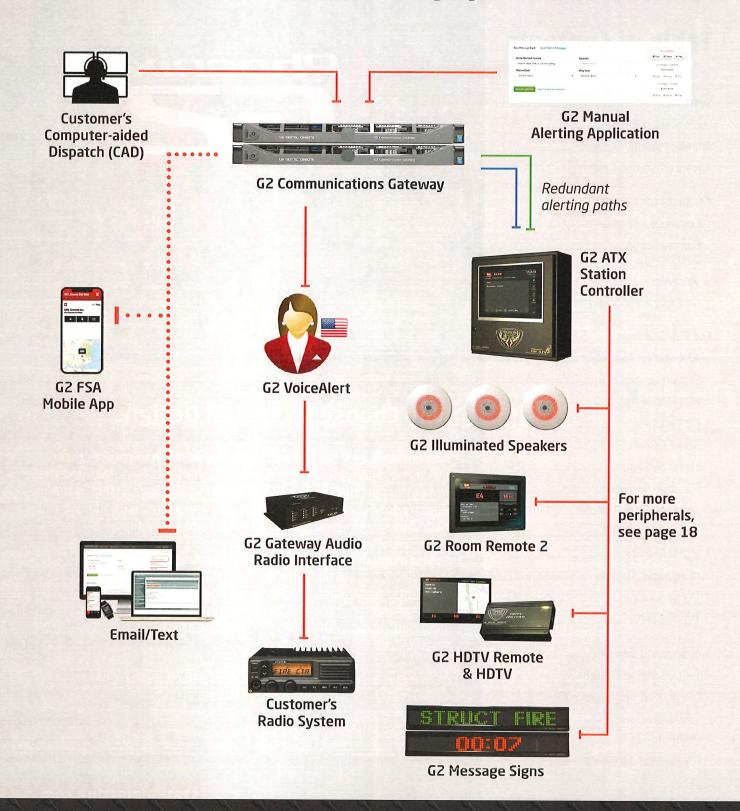
Two decades ago, our team of experienced mechanical, electrical and software engineers conceived, designed and manufactured the most effective, network-based, fire station alerting system in the industry for our own community. It was important to us that we made our system impeccable—to get it right every time.

As you evaluate the best fire station alerting system for your community, we are happy to provide USDD's customer and competitor lists to assist you in your due-diligence process. We stake our reputation on delivering innovative, continuously upgraded, made-in-the-USA[1] technology, as well as friendly, personalized customer service.

Please give us a call at 1-877-551-USDD (8733) (USA), or +1-602-687-1730 (Intl.), or visit stationalerting.com.

[1]'All' or 'virtually all' significant parts and processing are of U.S. origin.

Phoenix G2 Fire Station Alerting System Architecture

Customer's Computer-aided Dispatch (CAD)

G2 Communications Gateway

G2 Manual Alerting Application

Redundant alerting paths

G2 ATX Station Controller

G2 FSA Mobile App

G2 VoiceAlert

G2 Illuminated Speakers

Email/Text

G2 Gateway Audio Radio Interface

G2 Room Remote 2

For more peripherals, see page 18

G2 HDTV Remote & HDTV

Customer's Radio System

STRUCT FIRE
00:07

G2 Message Signs

Automated Alerting Benefits

For the community:

- **Peace of mind.** Ensures that emergency personnel will arrive more quickly and better informed, for a more optimized response.
- **Savings.** Offers higher-quality area fire protection, which can contribute to a lower community ISO Public Protection Class rating[2], thereby helping decrease insurance rates.

For dispatchers:

- **Speed.** Delivers automatic dispatch alerts simultaneously to one or multiple stations in less than a second, helping to reduce or eliminate dispatcher 'on-hold' time.
- **Wellness.** Dispatches alerts automatically, reducing dispatcher stress and workload, which frees them up to communicate with callers and manage the dispatch process more successfully.
- **High reliability.** Offers dispatchers a redundant system to communicate alerts if the CAD system fails.
- **Situational awareness.** Reviews the success of alerts as they are sent, and monitors the status of the system in real time.

For public safety administrators and city officials:

- **Compliance.** Helps stations shave valuable seconds—even minutes—off of response times, helping meet or exceed NFPA 1710[3] recommendations.
- **Safety and redundancy.** Reduces the chance of missing emergency calls during grid or power failures, thanks to multiple pathway options and a backup power supply.
- **Communication.** Keeps personnel advised of ongoing incidents via USDD's industry-leading fire station alerting smartphone app, SMS text, pager and email alerts.
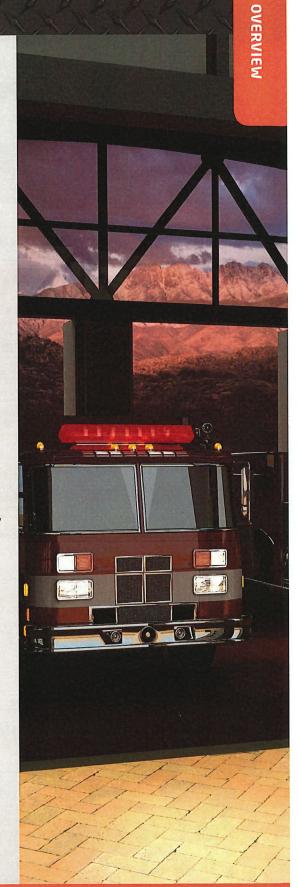
- **Value.** Reduces customer maintenance and management costs by integrating a reliable, proven system.

For fire and medical personnel:

- **Situational awareness.** Increase mental preparedness with clear, consistent vocalization of the alert, which helps units respond more quickly and efficiently.
- **Wellness.** Reduces cardiac stress, anxiety, optical shock and sleep deprivation with ramped tones and zoned alerting, thereby notifying only required stations and/or individual units.
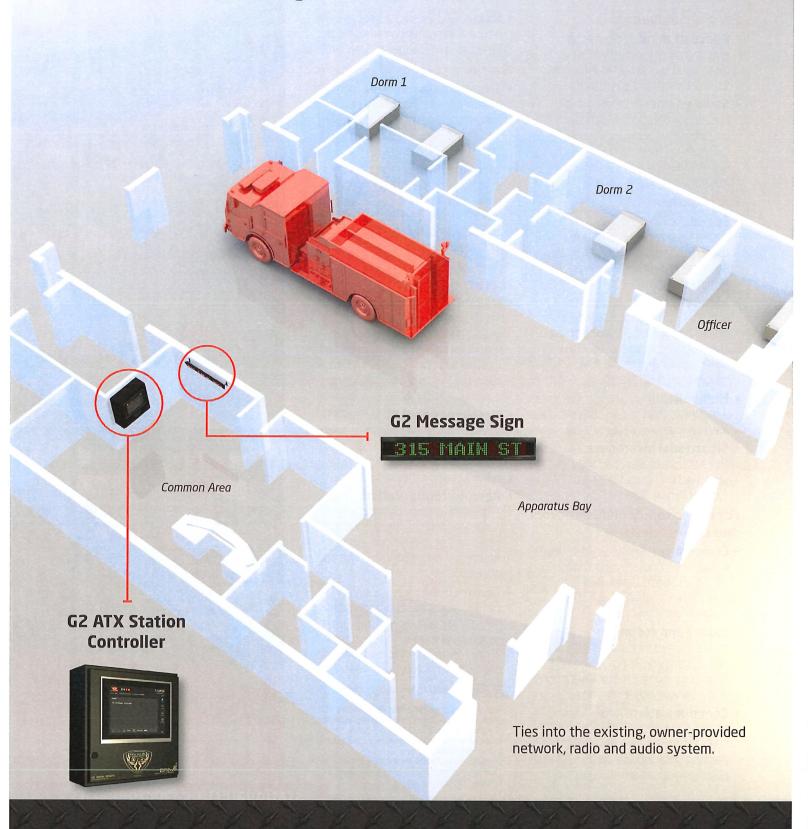
For public safety IT professionals:
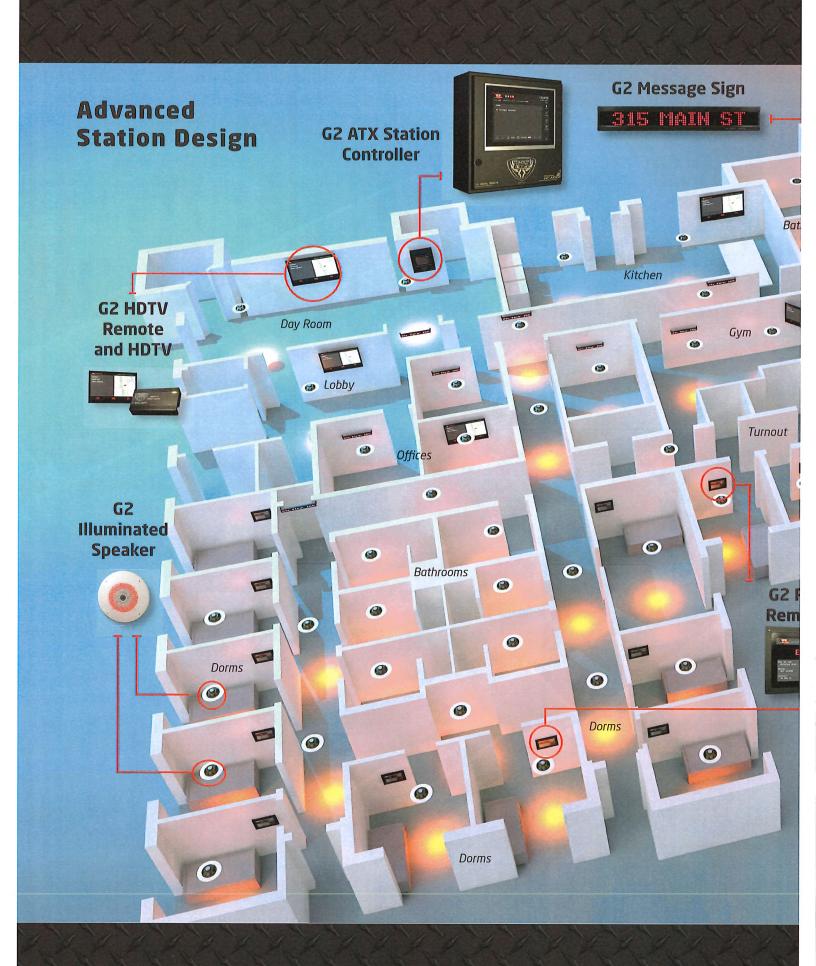
- **Reliability and compliance.** Maximizes system uptime through multiple NFPA 1221-compliant[4] redundant alerting pathways and manual alerting options, which can keep the system running during communication failures.
- **Network friendly.** Distributes quick, low-bandwidth alerting messages that are non-disruptive, enabling the continuous operation of legacy networks and other applications.
- **Remote configuration.** Enables IT support teams to remotely configure and deploy software upgrades from any web-enabled device, thereby reducing time and travel costs.
- **Control.** Offers agency-wide monitoring of all station peripheral equipment, and reports any failures to the host monitoring system and authorized system administrators via a smartphone app, email, text, etc.

[2] Insurance Services Office Public Protection Class rating.
[3] National Firefighter Protection Association 1710-Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.
[4] NFPA Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.
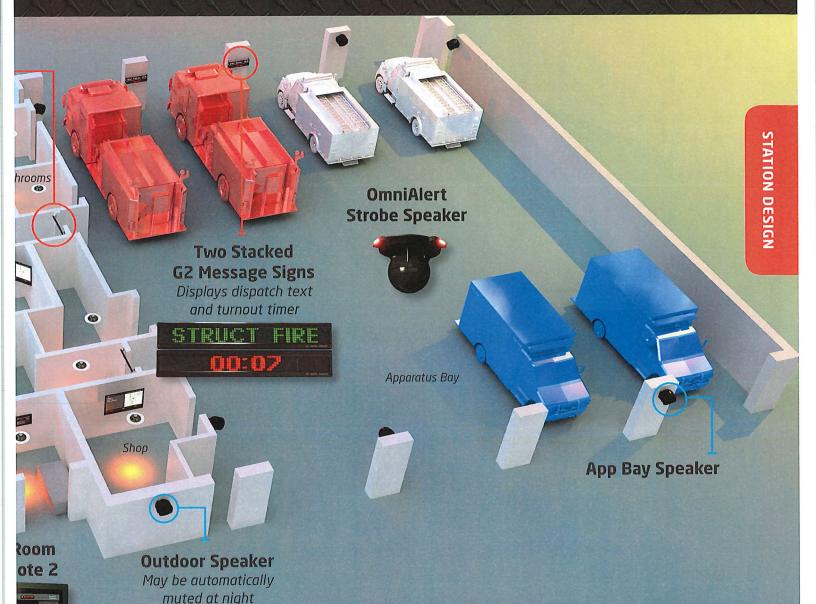
stationalerting.com/benefits

Basic Station Design

Dorm 1

Dorm 2

Officer

G2 Message Sign

315 MAIN ST

Common Area

Apparatus Bay

G2 ATX Station Controller

Ties into the existing, owner-provided network, radio and audio system.

Standard Station Design

**Two Stacked
G2 Message Signs**
*Displays dispatch text
and turnout timer*

**App Bay
Speaker**

**G2 Illuminated
Speakers**

Dorm 1

Dorm 2

**G2 Room
Remote 2**

E4   18 SEK

Officer

G2 Message Sign

315 MAIN ST

**App Bay
Speaker**

Common Area

Apparatus Bay

**G2 ATX Station
Controller**

12:49:15

Advanced Station Design

G2 ATX Station Controller

G2 Message Sign

315 MAIN ST

G2 HDTV Remote and HDTV

G2 Illuminated Speaker

Day Room

Kitchen

Lobby

Gym

Offices

Turnout

Bathrooms

G2 Remote

Dorms

Dorms

Dorms

hrooms

**Two Stacked
G2 Message Signs**
*Displays dispatch text
and turnout timer*

STRUCT FIRE
00:07

**OmniAlert
Strobe Speaker**

Apparatus Bay

Shop

App Bay Speaker

Room
ote 2

Outdoor Speaker
*May be automatically
muted at night*

No station too big or too small.

The Phoenix G2 system integrates crystal-clear text-to-speech technology and high-contrast message signs to help emergency personnel react promptly and efficiently to every call.

Fully automated dispatching awakens only on-call units with ramped tones and lighting, so non-dispatched crews remain undisturbed to receive necessary rest. Unquestionably, well-rested crews operate at peak effectiveness.

stationalerting.com/layouts

G2 Communications Gateway

Serves as an interface between the Station Alerting System and the customer's CAD host, radio and communications systems.

The G2 Communications Gateway is the link between the CAD system at the dispatch center and the G2 ATX Station Controller hosted at each fire station.

The Gateway's design is efficient in every way, from simple network requirements and software updates to the "trainable" self-service pronunciation editor integrated into our G2 VoiceAlert software.

Benefits

- **Connects with new** or existing voice and data systems.
- **Dispatches units** over the agency's radio system—without additional dispatcher action—using clear, automated VoiceAlert text-to-speech software.
- **Maintains** communications during path failures with redundant pathways.
- **Serves as an optional** disaster recovery system with replication.
- **Advises personnel** of ongoing incidents through smartphone, text, email and paging alerts.

- **Monitors the health** of every ATX Station Controller and G2 peripheral device within the department's network, and reports any failures to personnel via audible and visual alarms, per NFPA 1221 monitoring requirements.
- **Alerts stations** as well as reserve or volunteer personnel with two-tone or DTMF paging.
- **Eases IT support tasks** via remote or local browser-based configuration and automated backups.

Communication links supported:

IP Network

Commercial wireless, private wireless, wireline networks

Cradlepoint/ LTE/FirstNet

VOIP/SIP

Data Radio
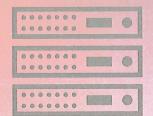
Two-tone/ DTMF Paging/ Trunk Call Alert

Email (SMTP) **Paging**

At US Digital Designs, we work with leading technology partners to provide our fire station customers with the right turn-key solutions to meet their needs.

Visit our current CAD partners at: **stationalerting.com/cad-**

Communications Gateway Dashboard

Alerts dispatchers to communication failures and keeps them aware of system alert progress, helping departments meet NFPA 1221.

- **Manual alerting** for CAD backup and Administrative alerts.
- **Visual and audible alarms.**
- **Automated announcement** status and control.
- **Recent alert** and system status.

G2 VoiceAlert
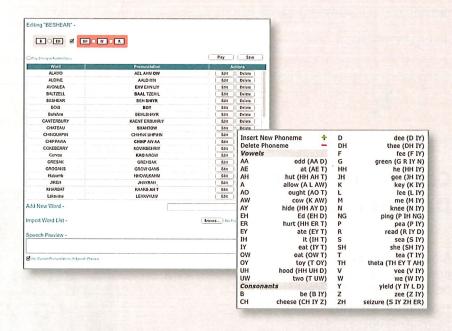
Makes automated dispatch announcements, enabling dispatchers to focus on resource management and situational awareness.

G2 VoiceAlert provides automated text-to-speech voice dispatching alerts using a calm, clear voice to the fire stations and through the voice radio system. The speech is sent to multiple stations simultaneously, relieving dispatchers of the time-consuming task of speaking the dispatch announcement. This reduces dispatcher workload and stress during busy periods, enabling them to perform other time-critical tasks, such as handling tactical traffic or processing the next call for service.

Included with VoiceAlert is a user-friendly editing tool, VoiceEditor, that lets you update pronunciations (e.g., street names and other words) for all system alerts.

Benefits

- **Reduces human error** and automatically dispatches crews with a clear, accent-neutral voice.
- **Adjusts to dispatch workload** by truncating the dispatch announcement during busy periods to speed up radio alerting.
- **Enables end-users** to easily edit and customize street names and other terms to match local pronunciations.

Listen to VoiceAlert samples at stationalerting.com/voicealert
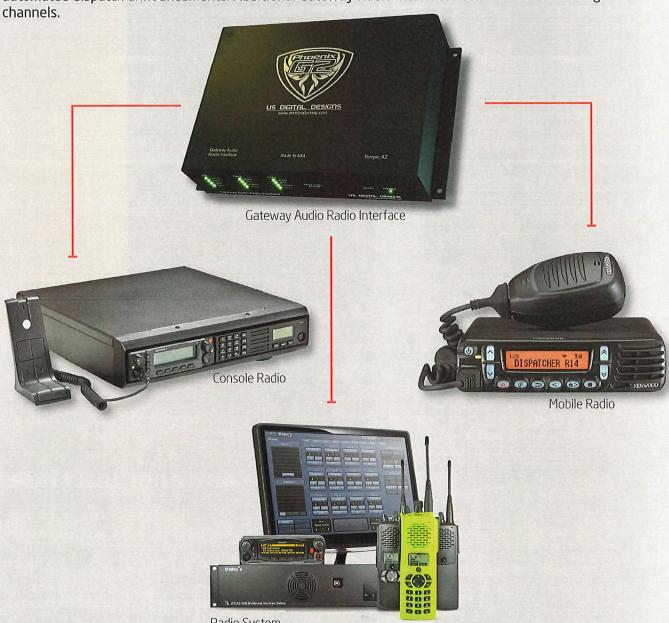
Gateway Audio Radio Interface

Automatically transmits VoiceAlert announcements across radio systems.

The Gateway Audio Radio Interface can play alert tones, VoiceAlert speech, and tone paging over the radio system. It supports two, simultaneous, independent radio channels, each with different announcement formats and queueing. It also links the Communications Gateways to radio channels or talkgroups for automated dispatch announcements. Additional Gateway Radio Interfaces can be used for adding more channels.

Gateway Audio Radio Interface

Console Radio

Mobile Radio

Radio System

G2 ATX Station Controller

Powers and controls in-station visual, audio and lighting alerts.

Station Controller Interface

Securely monitor, configure or update any station from a web-based browser.

The Station Controller Interface is a web-based application that helps you configure and manage fire station alerting from any location, at any time. It enables approved personnel to connect to the ATX Station Controller via a local or wide-area network.

The G2 ATX Station Controller processes incoming alerts for any combination of room zones with individual lighting, messaging, and volume control in each zone.

The ATX computer features a secure, embedded operating system for superior reliability, and a touchscreen display provides basic configuration and optional unit zone assignments.

Phoenix G2 peripheral devices in the station provide enhanced lighting, visual messaging, and mapping information to personnel. Devices can be integrated easily via a simple change to the web configuration.

Alerting Mode

- **Provides ramped, heart-saver** alert tones.
- **12" touchscreen** allows users to confirm proper operation of the system and review dispatches for tracking and reporting purposes.

- **Permits approved personnel** to optionally control or reassign zoned alerts to units via an on-screen touch selection.
- **Has built-in single-tone,** two-tone and DTMF paging decoding
- **Offers local and remote system** monitoring and logging.
- **Offers remote configuration** and software updates.
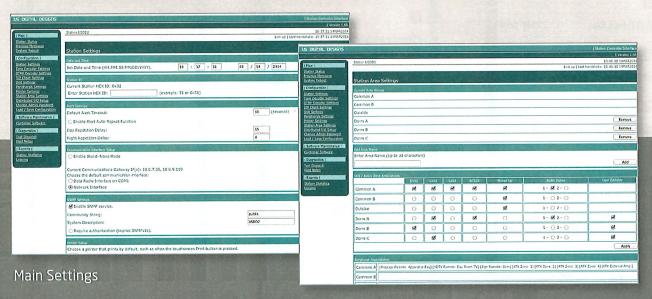
Network and Peripherals

- **Reduces alerting times** with IP-based alerts over a high-speed network, and notifies multiple stations in less than a second.
- **Enables doorbells** and other device inputs and outputs to control lighting, appliances, doors and gates via the G2 I/O Network.
- **Offers local- and remote-system** monitoring and logging, making it easy to troubleshoot and reconfigure settings, such as volume and unit-to-zone assignments.
- **Connects to rip-and-run** printers.

SPECIFICATIONS

- » Eight Power over Ethernet (PoE) ports for G2 peripherals
- » Audio inputs for dispatch radio, telephone intercom and auxiliary
- » SIP VoIP-ready
- » Three dry-contact inputs
- » Four relay outputs
- » Four 20-watt amplifier zones with Illuminated Speaker support
- » External amplifier connection to existing audio systems

Remote Display

- **Locate Station Controller** remotely and still have full control.

Main Settings

ATX Station Controller Area Settings

FSA Mobile App

Receive station alerts via your smart device.

- **Push notifications** to Dispatchers, Admin Messages and Support Notifications
- **Receive notifications** by Unit, Station, or Nature Code.
- **Control monitor alerts** individually.

- **View incident location** using USDD's mapping data or your smartphone's built-in mapping application.
- **Generate travel route** using smartphone's built-in mapping application.

- **Add customer GIS layers** to USDD mapping data.
- **Save notifications** for future reference and search for previous notifications.

Click on an alert to view more information.

View the location using mapping software.

Configure your smart device for proper notifications.

15:53
421 E Commerce St 15:53 Today
ACHR:Hit and Run Accident
T4
3521 Tulane Ave 15:52 Today
UNTR:Unknown Trouble
T4
100 S Biscayne Blvd Miami 15:51 Today
ELEV:Elevator Incident
RSV1
2200 Market St 15:50 Today
FIEX:Explosion
T1
Haight St / Ashbury St 15:49 Today
DSW:Debris in Roadway
M1
10 Thomas Cir NW 15:48 Today
TMED:Medical Assist
E2

100 S Biscayne Blvd Miami

R1   13:11 Today

COBU: Controlled Burn
100 S Biscayne Blvd Miami

COBU

Notification Settings

ASSIGNED

MONITORS   +

Any Unit

DSW   COBU

Edit Monitor   Notifications

11 **1**

Any Type

Edit Monitor   Notifications

ALS20 **ALS29** **13** **12** **11**

FIPA

Edit Monitor   Notifications

2 **15** **10**

Any Type

G2 Peripherals

Tailor your Phoenix G2 system to meet the needs of each station with optional signage, speakers and amplifier zones.

The Phoenix G2 Fire Station Alerting System is comprised of a central ATX Station Controller and a network of alerting peripherals that alert first responders throughout a fire station via audio, display, lighting and auxiliary input/output (I/O) components.

Message signs can display CAD information, including the location and type of the incident, the upper and lower cross streets to the incident, map page and assigned radio channel. They can also display a turnout timer.

Each G2 Peripheral:

- **Connects to the centralized** ATX Station Controller via a single CAT-5/6 cable for audio and Power over Ethernet (PoE).
- **Requires battery backup** and AC power at only one location.
- **Responds to many combinations** of alert conditions and station layouts, and is individually configurable by the ATX Station Controller.

- **Is enclosed with black anodized** aluminum, which increases corrosion- and wear-resistance.
- **Enables each station** to phase in alerting system upgrades and additions at any time with easy 'plug and play' installation.

G2 Peripherals Include:

- Message Sign
- Message Remote 2
- Room Remote 2
- HDTV Remote
- Illuminated Speaker
- Color Indicator Remote
- OmniAlert Strobe Speaker
- Strobe Light
- I/O Remote

G2 Room Remote 2

Target specific units or rooms with zoned alerting.

The G2 Room Remote 2 is the all-in-one peripheral that simultaneously shows dispatched units, incident information and turnout time. It features a 10.1-inch, full-color, high-resolution LCD multi-touch display for easily adjusting settings, such as units to be alerted, radio monitoring, and speaker volume. Automatic backlight control dims the display when an alert is not active.

Improving Health and Wellness

Did you know? Heart attacks account for half of firefighter deaths.

When a traditional station alarm sounds, a firefighter's heart rate can soar to dangerous levels for up to an hour. Studies show that a heart rate increases an astonishing 60 to 70 beats per minute within 15 seconds after an alarm sounds, thereby doubling the resting heart rate.

Over the course of a firefighter's career, the cumulative effects of stress produced by traditional station-alerting systems have been proven to cause permanent cardiac damage, and have been linked to multiple line-of-duty firefighter deaths, permanent hearing loss and physical disability.

Studies have shown ramped tones and lighting reduce stress on fire fighters.

G2 Message Sign

Displays a single-line scrolling alert message.

The G2 Message Sign is the quickest way for responders to understand an alert. It's easy to install: just plug in the PoE cable and mount it over doorways or in hallways, kitchens, offices and app bays. Additionally, the Message Sign can be configured to display alerted units, dispatch information, turnout timer, or unit status (with a capable CAD system). Available in three sizes: Mini, Standard and Extended.

Mini Message Sign with turnout timer.

Standard Message Sign shows incident information and a turnout timer or unit number.

Extended Message Sign show a turnout timer along with alerted units and incident information.

G2 Message Remote 2

Powers two zones of audio amplifiers and LED lighting control.
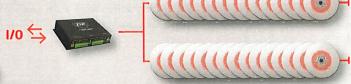
The most flexible peripheral available, the G2 Message Remote 2 contains two independent audio amplifiers with LED lighting control, and can be used to add additional speaker zones to a station.

SPECIFICATIONS

» Two 15-watt audio amplifiers
» Channels with speaker outputs
» Two dry-contact inputs
» Two relay outputs

Two zones of G2 Illuminated Speakers

I/O

One zone with the G2 OmniAlert Strobe Speaker

I/O

PERIPHERALS

stationalerting.com/peripherals

G2 Color Indicator Remote

Offers an alternative alerting method, featuring high-intensity LED lights.

The G2 Color Indicator Remote is instantly recognizable by station personnel, providing immediate dispatch information to the observer. Easily visible in sunlit rooms, this LED light is fully programmable by the ATX Station Controller.

G2 OmniAlert Speaker Strobe

Alerts staff in open areas with high ambient noise levels.

The G2 OmniAlert Strobe Speaker is a dual-purpose, visual and audible fire station alerting device. It's particularly effective in large, open areas with high ambient noise, as well as in acoustically challenging environments (e.g., apparatus bays and shops). Optimized for the spoken word, it broadcasts high-powered and clear voice announcements. Its 360-degree horizontal dispersion allows for greater coverage and installation flexibility.

Three built-in, high-intensity LED strobe lights simultaneously provide rotating bursts of light to visually alert your personnel, even if the local ambient noise conditions prohibit audible alerts.

The G2 Strobe is also available.

G2 HDTV Remote

Displays dispatch information, turnout timer and incident location map on a HDTV display.

The G2 HDTV Remote displays alerted units, dispatch information, turnout timer, and (optional) incident location map on a high-definition television (HDTV), providing another means of visual alerting.

In Dispatch Centers and administrative areas, the HDTV Remote can be used to display a list of recent alerts with individual station success indicators, (optional) incident map locations, system and radio channel status, and Station Controller alarms.

G2 Illuminated Speaker

Awakens first responders with soft-start LED lighting and audio alerts.

The G2 Illuminated Speaker offers soft-start, ramped night lighting at the time of dispatch. Each speaker is fitted with high-intensity red LEDs, which offer exceptional luminosity without causing light blindness due to dark-to-bright transition.

The Illuminated Speaker receives power from the ATX Station Controller, Message Remote 2 or Room Remote 2. Recommended installation locations include dorm rooms, hallways and common areas.

SPECIFICATIONS

» 10,000-hour LED life span

» Surface mount or ceiling mount

High-intensity red LED lights

PERIPHERALS

stationalerting.com/peripherals

G2 I/O Network

Controls station devices based on specific events or time of day.

The G2 I/O (input/output) Network enables the Station Controller to interface with external devices (e.g., station doorbells, push buttons, lighting, appliances, doors and gates) and can reset alerts, trigger walk-in alarms and monitor alarm devices. Based on specific events or time of day, the programmable Station Controller software can turn on/off outdoor speakers and lights. Additionally, dispatchers may access the I/O Network through the Communications Gateway to remotely control connected devices (e.g., door openers) as well as view station alarms.

G2 I/O Remote

Enables the monitoring and signaling of gates, doors, etc.

The G2 I/O Remote interfaces between the ATX Station Controller and field devices. The inputs (I) can be configured to monitor switches such as doorbells, walk-in alert triggers and door open sensors. The outputs (O) can be used to signal automatic doors and gates, activate strobe lights and more. The I/O Remote may be installed up to 90 meters (295 feet) from the ATX Station Controller.

SPECIFICATIONS

» Eight dry-contact inputs
» Eight Form-A relay outputs

About US Digital Designs

At USDD, we design, develop and customize the mission-critical Phoenix G2 Fire Station Alerting System, which plays a major role in helping save lives and reducing property losses in emergency situations. We employ sustainable manufacturing techniques in our environmentally-friendly solar-powered headquarters. Our electronic manufacturing processes are RoHS compliant[1], reducing the output of lead and other hazardous substances into the environment.

- **It works.** Long before any part is manufactured, we assemble and test the product in a virtual environment. We understand the need to get it right the first time, saving you from unnecessary frustration.
- **Improves response times.** Visual alerting is the quickest way to improve response times. And by combining visual and audio alerting, you'll also increase situational awareness and readiness.
- **One size doesn't fit all.** Having worked with thousands of fire stations, we find that each location has its own unique subculture. That's why our designers will produce a custom rendering of each station's floor plan to help you visualize how the Phoenix G2 system will meet your unique needs.

- **You dream it, we'll build it.** If you envision refinement or improvements to your existing system or a completely new product, talk to us. Each part of the Phoenix G2 system was developed based on the needs and feedback of first responders around the world. We will help turn your vision into reality.
- **Don't take it from us.** Ask around. Call any of our customers and you'll find that no alerting company has a better reputation for providing a more effective solution, better value or better service. Also, view our video testimonials and see Phoenix G2's impact on communities at stationalerting.com/impact.

[1] *Restriction of Hazardous Substances. RoHS is also known as Directive 2002/95/EC.*

Get Started

1. Take our quick survey at stationalerting.com/start

2. Email your fire station floor plans to sales@usdd.com

3. Receive a quick fire station alerting system design and budgetary assessment

Support

The Phoenix G2 comes with built-in, upgradeable features and capabilities; multi-year, 24/7 proven reliability; easy, hassle-free installation; web-based remote configuration and control; and almost no required maintenance. Telephone and email support are always available during normal business hours (Monday to Friday, 8 a.m. to 5 p.m., MST). Recurring annual service and support agreements are available, allowing you to continue the same worry-free operation and maintenance of all of your installed station alerting systems.

Warranty

At USDD, we warrant our products to be free from defects in material and workmanship during the one-year warranty period. If a product proves to be defective in material or workmanship within one year from date of purchase, we will, at our sole option, repair or replace the product. Replacement products or parts may include re-manufactured or refurbished parts or components. The replacement unit will be covered by the balance of the time remaining on your original limited warranty.

NPPGov
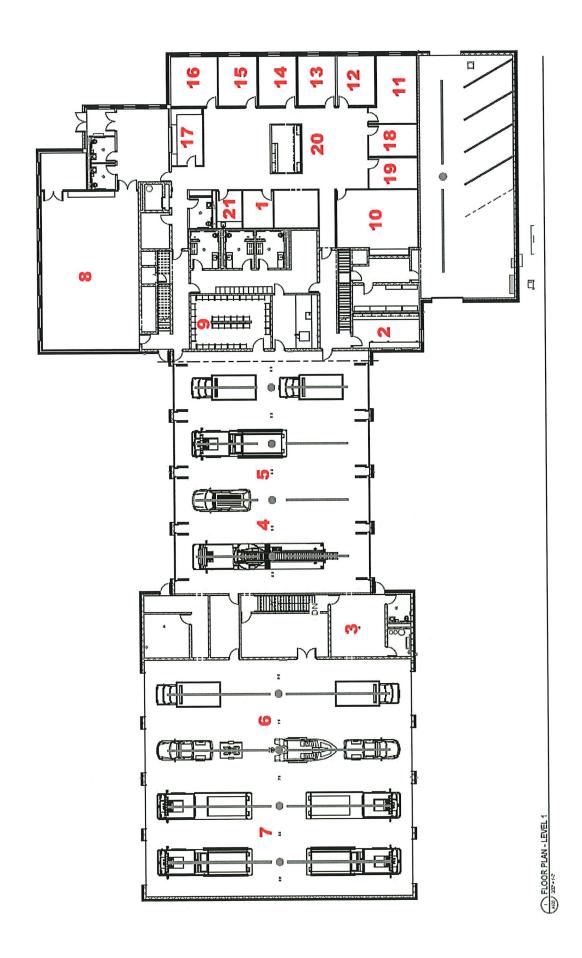
Pricing Protection with National Procurement Contract

Phoenix G2
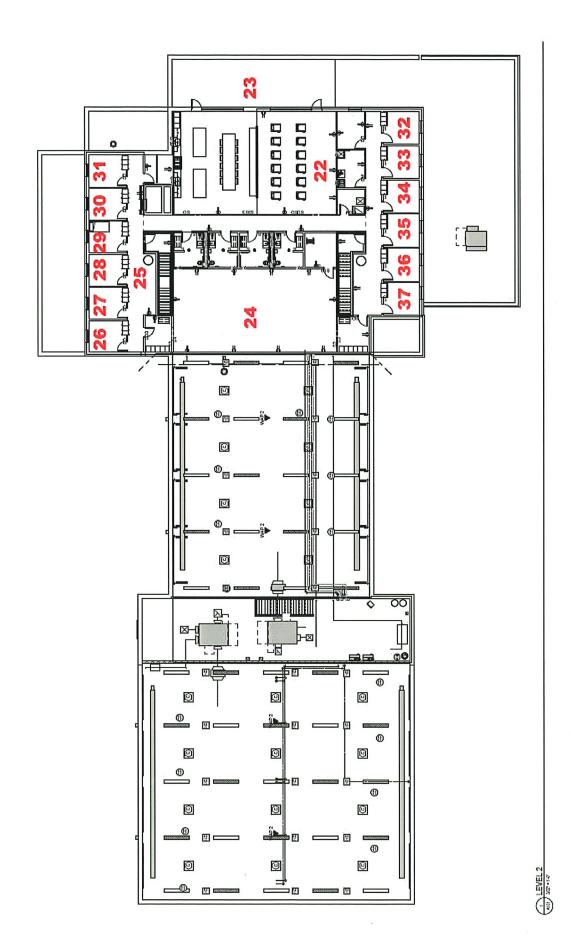
US DIGITAL DESIGNS

stationalerting.com

US Digital Designs, Inc. | 1835 East Sixth Street, Suite 27, Tempe, AZ, 85281 USA
1-877-551-8733 (USDD) | 1-602-687-1730

FSC MIX Paper from responsible sources FSC® C103525

FLOOR PLAN - LEVEL 1
A100 3/32"=1'-0"

23

31
30
29
28
27
26

22

25

24

33
32
34
35
36
37

LEVEL 2

Numbered Rooms:

First Floor:

1. No radios or speakers
2. Desktop Control Station
3. Speaker Only
4. Speaker Only
5. Speaker Only
6. Speaker Only
7. Speaker Only
8. Control Head, Microphone and Speaker
9. Speaker Only
10. Speaker Only
11. Desktop Control Station
12. Control Head, Microphone and Speaker
13. Control Head, Microphone and Speaker
14. Control Head, Microphone and Speaker
15. Speaker Only
16. Control Head, Microphone and Speaker
17. Speaker Only
18. Speaker Only
19. Speaker Only
20. Speaker Only
21. Speaker Only

Second Floor:

22. Desktop Control Station
23. OUTDOOR Speaker Only
24. Control Head, Microphone, and Speaker
25. Speaker Only
26. Speaker Only
27. Speaker Only
28. Speaker Only
29. Control Head, Microphone and Speaker
30. Speaker Only
31. Speaker Only
32. Speaker Only
33. Speaker Only
34. Control Head, Microphone and Speaker
35. Speaker Only
36. Speaker Only
37. Speaker Only

GENCOMM

Madison - (608)271-4848
Milwaukee - (262)439-2000
Eau Claire - (715)225-7604
WI Rapids - (715)424-3050
McHenry - (815)385-4224

2880 Commerce Park Drive
Madison, WI 53719

800-356-3200 | www.gencomm.com

Q U O T E

GCIQ1175
Sep 19, 2024

Expiration Date: 10/31/2024

Quoted To:

Tanya Reynen
Watertown Fire Department

106 Jones Street
Watertown, WI 53094

Prepared By:

Scott Smith
Email: scott.smith@gencomm.com

Scope of Work:

- Install a new multi-band (VHF and 7/800) radio system with 11 transmit/receive control stations in various rooms throughout the new fire station.
- Build 3 different radio systems into the same building for listening to different radio channels if/when required, with scanning capabilities.
- Allow all 3 radios systems in the building to listen/scan the same channel(s) or have the ability to have each radio system listen/scan a different set of channels independently.
- Allow any desktop radio to be able to easily switch from the current system they are on to any of the other 2 radio systems in the building.
- Allow any room (equipped with a desktop radio) to change radio channels and transmit.
- Allow any room in the firehouse to be "radio ready" whether an existing radio is being relocated or a new radio is being added to the system.
- Connect the radio system into the new Phoenix G2 Station alerting system to listen (only) throughout the entire buildings speaker system.
- Build a non-penetrating antenna system on the roof of the building to accommodate multi-band radio usage (VHF and 7/800).
- Program all 3 radio systems for multi-band capability and scanning.
- Create a system that is both Phase 1 and Phase 2 capable, which includes the ability to communicate on current local channels, Milwaukee/Waukesha County Oasis (WIPSN), Danecon, Jefferson, and Dodge counties.

Page 1 of 2

GEN**COMM**

Quoted To:	
Tanya Reynen	
Watertown Fire Department	
106 Jones Street	
Watertown, WI 53094	

Prepared By:

Scott Smith

Email: scott.smith@gencomm.com

Q U O T E

GCIQ1175
Aug 28, 2024

Expiration Date: 9/27/2024

Responsibilities of Watertown Fire:

1. In the electronics closet, provide (2) 20-amp 4-receptacle outlets, each on their own dedicated breaker. These 2 receptacles should be labeled as "Radio Only".

2. Provide 1 CAT6(a) wall receptacle in each room of the fire station.
   a. This wall receptacle should be on the wall where a desk is going to be placed approximately 12-inches off the floor.
   b. The wall CAT6 outlet MUST be labeled "Radio Only"
   c. A CAT6(a) cable must connected to the receptacle and run from the wall receptacle in each room, back to the electronics closet.
   d. Within the electronics closet:
      i. For each CAT6 cable, there should be 20-feet of extra cable left for cleanly routing into the electronics rack. NOT TERMINATED.
      ii. Each cable must be clearly labeled by identifying which room the other end of the cable terminates in.

GENCOMM

Madison - (608)271-4848
Milwaukee - (262)439-2000
Eau Claire - (715)225-7604
WI Rapids - (715)424-3050
McHenry - (815)385-4224

2880 Commerce Park Drive
Madison, WI 53719

800-356-3200 | www.gencomm.com

Quoted To:

Tanya Reynen
Watertown Fire Department

106 Jones Street
Watertown, WI 53094

Prepared By:

Scott Smith
Email: scott.smith@gencomm.com

Watertown FD station radios

Please see attached document for "Scope of Work".

	Electronics Rack		Qty	Unit Price	Ext. Price
1	1 SPACE RACKSHELF 11DP	U1	3	$74.50	$223.50
2	Utility Shelf 14.50" depth 2 space	U2	3	$99.00	$297.00
3	leviton Extreme 6+ 48 Port Universal Patch Panel	6A586-U48	1	$1,142.00	$1,142.00
4	NEXSYS™ 9 Outlet, 20 Amp Rackmount Power with Series Surge Protection	PDX-920R-SP	1	$350.00	$350.00
5	Netgear Prosafe Plus GS108E Ethernet Switch	GS108E-300NAS	3	$85.78	$257.34
6	Samlex Power Supply	SEC1223	4	$212.00	$848.00
7	Samlex America Rack plate mount	SEC-R2	2	$77.90	$155.80
8	Miscellaneous ties, clamps, and patch cables from patch panel to network switches	SALESMISC	1	$500.00	$500.00
	Electronics Room Phoenix G2 control head/audio		**Qty**	**Unit Price**	**Ext. Price**
9	Harris Control Unit, XL-CH	XZ-CP6A	1	$1,387.50	$1,387.50
10	L3 Harris CABLE, POWER, Y-SPLIT, DESKTOP	XZ-CA6R	1	$131.25	$131.25
11	L3 Harris Cable, XL Mobile, Speaker Accy	XZ-CA6F	1	$90.00	$90.00
12	Harris Power Cable, XL-CH	XZ-CA6D	1	$65.25	$65.25
	Electronics Rack DUAL BAND Radio Chassis VHF 7/800		**Qty**	**Unit Price**	**Ext. Price**
13	L3 Harris Mobil XL-200M, Multiband, LTE, NA	XZ-MPM1M-NA	3	$3,206.25	$9,618.75
14	Harris Feature, VHF Band	XZ-PL4J	3	$450.00	$1,350.00
15	Harris Feature, 700/800 MHZ Band	XZ-PL4L	3	$450.00	$1,350.00
16	Harris Feature Package, P25 Trunking	XZ-PKGPT	3	$1,350.00	$4,050.00
17	Harris Featire, XL200M Single Key DES Encryption	XZ-PL4U	3	$0.01	$0.03
18	Harris Feature, XL200M Single Key AES Encryption	XZ-PL9E	3	$0.01	$0.03
19	Harris Feature, Encryption Lite	XZ-PL8Y	3	$0.01	$0.03

Line #:			Qty	Unit Price	Ext. Price
20	Harris Feature, Phase 2 TDMA	XZ-PL4F	3	$206.25	$618.75
21	Harris Feature, Link Authentication	XZ-LLA	3	$93.75	$281.25
22	Harris, Cable, Power VCH	XZ-CA6C	3	$78.75	$236.25
Antenna System			**Qty**	**Unit Price**	**Ext. Price**
23	TNC Male Crimp for LMR-400	RFT-1202-1	3	$15.00	$45.00
24	Times Microwave 3/8" Ultra Low Loss Coax Cable Sold Per Foot	LMR-400	325	$2.25	$731.25
25	RF Industries Coax Connectors, N-Male	RFN-1006-3I	12	$13.46	$161.52
26	POLYPHASER 125-1000 MHz general coverage bulkhead mnt. protector, 50,000 amps surge. <800U throughp	IS-B50HN-C2	3	$123.99	$371.97
27	Pad Kit for JRM Mounts 3/8 thick	JRMPAD1	3	$261.00	$783.00
28	Outdoor Mast Flat Roof Non-Penetrating Mount	JRM23805HC	3	$555.50	$1,666.50
29	Sinclair 136-960 Mhz 2DBi Tri-band Omni Antenna W/N Female Connector	SC2340-HMBSNF(D00)	3	$620.00	$1,860.00
30	Concrete blocks, ties, tape, clamps,...etc.	SALESMISC	1	$125.00	$125.00
Remote Room Radio control heads			**Qty**	**Unit Price**	**Ext. Price**
31	Harris Control Unit, XL-CH	XZ-CP6A	11	$1,387.50	$15,262.50
32	L3 Harris CABINET, XL DESKTOP Includes desktop cabinet and power supply.	XZ-CA6L	11	$543.75	$5,981.25
33	Harris BRACKET KIT,MOUNTING,XL CH	14050-6210-01	11	$67.00	$737.00
34	Harris Power Cable, XL-CH	XZ-CA6D	11	$65.25	$717.75
35	L3Harris XL-200M Desk Mic, XL-Mobile, Desktop	XZ-MC6C	11	$183.75	$2,021.25
36	Harris Speaker External Mobile	XZ-LS6A	11	$45.00	$495.00
37	L3 Harris Cable, XL Mobile, Speaker Accy	XZ-CA6F	11	$90.00	$990.00
38	Cable, XL-Mobile, Ethernet, 9M (14050-6300-02)	XZ-CA6B	11	$31.50	$346.50
Programming			**Qty**	**Unit Price**	**Ext. Price**
39	Programming Template Development Dual Band VHF-7/800	LABORSERV-MF	1	$750.00	$750.00
40	Labor Programming Radio - Each Unit	LABOR-PROGR-EA	3	$45.00	$135.00
Installation Labor			**Qty**	**Unit Price**	**Ext. Price**
41	Installation of antennas	LABORINSTALL-MF	1	$2,400.00	$2,400.00
42	Build radio components into cabinet, cabling, setup and testing	LABORINSTALL-MF	1	$2,400.00	$2,400.00
43	Installation of remote control heads into 11 rooms	LABORINSTALL-MF	1	$1,200.00	$1,200.00
44	Miscellaneous ties, clamps, tape, brackets, and fabrications.	SALESMISC	1	$125.00	$125.00
45	Mobilization crew to onsite installation x 3 days	MobZone6	3	$185.00	$555.00

Line #:		Qty	Unit Price	Ext. Price
Totals				

Subtotal		$62,813.22
Tax		$0.00
Freight		$0.00
Grand Total		**$62,813.22**

Returns & exchanges are accepted within 30 days of purchase and require an RMA number. Items must be in unused condition and in original packaging. Special order items are non-returnable and may not be cancelled once shipped from vendor/manufacturer. Radio and infrastructure equipment/manufacturers carry a 25% restocking fee.

* A 3% surcharge applies to all credit card payments.

Unless otherwise specified, shipping and handling charges are not included and will be added to the associated invoice.

Signature:_____ Date:_____

BAYCOM

A Lifeline in the Moments that Matter

BAYCOM, Inc.		Date:	8/27/2024
1545 Corporate Center Dr			
Sun Prairie, WI 53590		Quote Number:	DF-240827-1
Cell: 608-445-0832 Email: dfoster@baycominc.com			

Prepared for:	Watertown Fire Department	
Attn:	Tanya Reynen	
Address:	106 Jones Street	
City, State, Zip:	Watertown, WI 53094	
Phone:	920-285-1827	
E-Mail:	TReynen@watertownwi.gov	
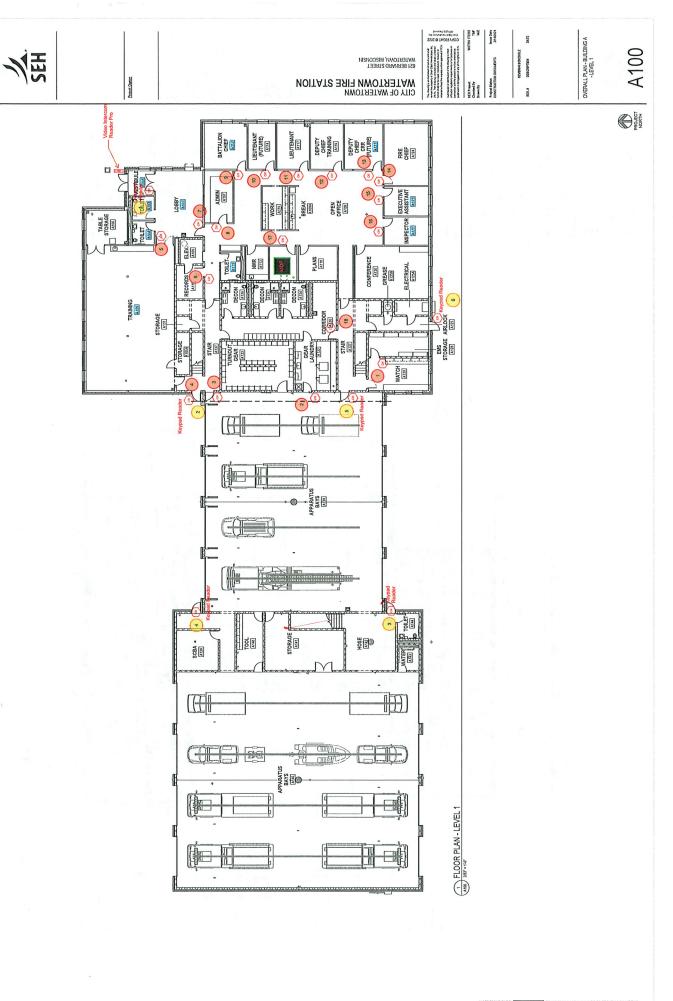
Qty.	Item ID	Description	Unit Price	Total
		Quote for Motorola Radio Equipment w/ WCA Contract Pricing		
2	a	**Motorola APX Consolette - VHF w/ DANECOM**	$9,507.20	$19,014.40
2	b	**Motorola APX Consolette - 800MHz w/ OASIS**	$9,230.53	$18,461.06
1	c	**MCD5000 Radio Gateway Unit, Power Supply & Cables** *Customer is responsible for LAN access at the APX Consolette location to each MCD5000 Deskset	$2,055.36	$2,055.36
15	d	**Motorola MCD5000 Deskset w/ Cables**	$1,857.60	$27,864.00
6	e	**Motorola MCD5000 Deskset Wall Mount Kit**	$40.00	$240.00
1	f	**Easy Smart Switch with 24-Port PoE+**	$375.00	$375.00
1	g	**Budgetary VHF & 800MHz External Antenna Systems** **This number can be firmed up once Baycom can do a site walk of the new fire station**	$12,000.00	$12,000.00
1	h	**Budgetary Baycom Labor to Implement Project** **This number can be firmed up once Baycom can do a site walk of the new fire station**	$12,000.00	$12,000.00

Item Total:	$92,009.82
Shipping:	N/A
Sub Total:	$92,009.82
Tax:	Exempt
Total:	$92,009.82

Price valid 60 days from date of Quote

Quoted by: Derek Foster

Date: 8/27/2024

Accepted by: _____   Date: _____

Note: Price quoted for payment by check or ACH transfer

FLOOR PLAN - LEVEL 1
A100   3/32" = 1'-0"

PROJECT NORTH

Video Intercom Reader Pro

Keypad Reader

Keypad Reader

Keypad Reader

Keypad Reader

Keypad Reader

VESTIBULE

TOILET

LOBBY

ADMIN

BATTALION CHIEF

LIEUTENANT (FUTURE)

LIEUTENANT

DEPUTY CHIEF TRAINING

DEPUTY CHIEF CRR (FUTURE)

FIRE CHIEF

EXECUTIVE ASSISTANT

INSPECTOR

WORK

BREAK

OPEN OFFICE

CONFERENCE

GREASE

ELECTRICAL

PLANS

MDF

NMR

TOILET

ELEV.

RECORDS

DECON

DECON

DECON

CORRIDOR

AIRLOCK

EMS STORAGE

WATCH

STAIR

STAIR

GEAR LAUNDRY

TURNOUT GEAR

STORAGE

STORAGE

TRAINING

TABLE STORAGE

TOILET

APPARATUS BAYS

SCBA

TOOL

STORAGE

HOSE

WATER

TOILET

APPARATUS BAYS

CITY OF WATERTOWN
WATERTOWN FIRE STATION
621 BERNARD STREET
WATERTOWN, WISCONSIN

A104
FLOOR PLAN - BUILDING A - LEVEL 2

CONSTRUCTION KEYNOTE LEGEND

1. CONCRETE FILLED METAL PAN STAIR
2. STEEL PIPE HANDRAIL, MOUNTED TO WALL
3. (3) 18" WIDE THRU-WALL PASS-THRU LOCKERS, SEE 4/A505
4. TILE SHOWER, SEE 1/A505, FOR THRESHOLD DETAIL
5. INSTALL GRAB BARS IN SHOWERS WITH TOP OF GRIPPING SURFACE AT 34" A.F.F.
6. WALL MOUNTED WIRE SHELF, (1) LINE 14X72 OR EQUAL
7. PROVIDE BLOCKING IN THIS WALL, 4 STUD CAVITIES W/ (2) 8" TALL BLOCKS EACH, VERIFY LOCATIONS W/ OWNER
8. SOLID SURFACE COUNTERTOP W/ (4) GROMMETS, VERIFY GROMMET LOCATIONS W/ OWNER, SEE 6/A505
9. BULLNOSE ALL OUTSIDE CORNERS OF CMU WALL
10. WALL MOUNTED STEEL SHIPS LADDER, SEE 2/A505
11. REMOVABLE RAILING, SEE 13/A505
12. CUBICLES, N.I.C.
13. ROOF PAVERS, TYPICAL
14. FURNITURE - N.I.C.
15. PIPE BOLLARD, SEE STRUCTURAL FOR DETAIL
16. HOSE WASHER - N.I.C.
17. GEAR DRYER - N.I.C.
18. DRINKING FOUNDATION, SEE PLUMBING
19. STANDALONE SAUNA UNIT - N.I.C.
20. PREFINISHED GUTTER AND DOWNSPOUT
21. STANDING SEAM METAL ROOF
22. WALKWAY PADS
23. TAPER ROOF INSULATION TO SLOPE TOWARDS ROOF DRAINS, MAINTAIN 8" MINIMUM INSULATION
24. STEEL PIPE GUARDRAIL, SEE 10/A505
25. SOLID SURFACE TOP, SEE 6/A505
26. ROOF SCUPPER TO LAMBS TONGUE
27. COLUMN ENCLOSURE, SEE 11/A505
28. 18" HIGH MIRROR ALONG ENTIRE WALL MOUNTED @ 36" A.F.F.
29. CAULK JOINTS IN PRECAST PLANK

FIRE POLE, BASIS OF DESIGN MCINTIRE BRASS WORKS, INC. MODEL 23, WWW.SLIDEPOLE.COM
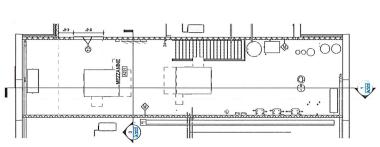
SPECIALTIES SCHEDULE

KEYNOTE	SPECIALTIES DESCRIPTION
1	TURNOUT GEAR LOCKER (O.F. / C.I.)
2	18" GRAB BAR (VERTICAL)
3	24" GRAB BAR (HORIZONTAL)
4	36" GRAB BAR (HORIZONTAL)
5	42" GRAB BAR (HORIZONTAL)
6	TWO-WALL GRAB BAR (HORIZONTAL)
7	TOILET TISSUE DISPENSER
8	ADA BENCH (FREE STANDING)
9	PAPER TOWEL (ROLL) DISPENSER
10	MIRROR
11	WALL MOUNTED SOAP DISPENSER
12	FOLDING SHOWER SEAT (CONFIRM MOUNTING PRIOR TO INSTALLATION)
13	RESIDENTIAL WASHER (N.I.C.)
14	MOP & BROOM HOLDER
15	METAL LAUNDRY LOCKER (18" WIDE)
16	GAS RANGE (N.I.C.)
17	REFRIGERATOR (N.I.C.)
18	COMMERCIAL EXTRACTOR (N.I.C.)
19	COMMERCIAL DRYER (N.I.C.)
20	SUNSHADE
21	SAFE HAVEN BABY BOX (CENTERED ON WINDOW ABOVE)
23	FIRE EXTINGUISHER CABINET, VERIFY LOCATION W/ OWNER
24	WALL MOUNTED FIRE EXTINGUISHER, VERIFY LOCATION W/ OWNER
25	DISHWASHER (N.I.C.)
26	TOILETRIES SHELF
27	SHOWER CURTAIN & ROD
28	ROBE HOOK

2. LEVEL 2 FLOOR PLAN — 1/8" = 1'-0"

3. FLOOR PLAN - LEVEL 2 — 1/8" = 1'-0"

LAFORCE

ELECTRONIC SECURITYSYSTEMS
powered by LAFORCE

QUOTE

N58 W16780 Ridgewood Dr.
Menomonee Falls, WI 53051
Questions: (262) 252-5150

QUOTE NUMBER	486913QU
QUOTE DATE	9/11/2024
CUSTOMER REQUISITION	VERBAL
MODE OF DELIVERY	Security Integrations install
CUSTOMER	208547
CONTACT	BEN OLSEN

SOLD TO
WATERTOWN POLICE DEPARTMENT
ATTN: BEN OLSEN
106 JONES ST
WATERTOWN, WI 53094
USA

SHIP TO
WATERTOWN FIRE DEPT
106 JONES ST
WATERTOWN, WI 53094
USA

JOB *** SI-ACCESS CONTROL WATERTOWN FD PER FLOOR PLAN

LINE	QTY	ITEM	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
2.000	1	HDW	B-ACS6100L-E BRIVO CONTROLLER		
2.000	11	HDW	B-ACS6100-DB CONTROL BOARD		
3.000	1	HDW	B-ACS6100L-EXP EXPANSION CABINET		
4.000	6	HDW	HU-40KNKS01 WALL READER / KEYPAD		
4.500	18	HDW	HU-40NKS000 WALL READER		
5.000	1	HDW	AX-AL1012ULM POWER SUPPLY		
5.500	1	HDW	IM-1270F1 12VDC BATTERY		
6.000	22	MHDW	HES 4500C-630 ELECTRIC STRIKES		
7.000	2	MHDW	QEL CONVERSION KIT FRONT ENTRY		
7.500	2	OHDW	TRANSFER HINGE		
7.719	50	HDW	HU-2050PNNMN ICLASS FOBS		
7.938	50	HDW	H7U-52260PSGG PRINTABLE DUAL TECH CARDS		
8.000		WIRE	WIRE / MATERIALS		
9.000		ELTRIP	SI TRIP CHARGE		
10.000	1	MHDW	SCISSORS LIFT		
11.000		ELINSTALL	SI INSTALLATION OF MATERIAL		
12.000	1	REFERENCE	QUALIFICATIONS: *ANNUAL HOSTING FEE NOT INCLUDED AND TO BE QUOTED SEPARATELY **IF LIFT IS REQUIRED IS REQUIRED MORE THAN 1 DAY ADDITIONAL FEES WILL BE INCURRED AND ARE NOT INCLUDED		

486913QU

LAFORCE

ELECTRONIC SECURITYSYSTEMS
powered by LAFORCE

QUOTE

LINE	QTY	ITEM	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
RECEIPT REQUIRED FOR REFUNDS OR EXCHANGES.					

Stock materials are subject to 45% restocking fee. Special order materials are not returnable. No returns after 90 days. Payment can me made via Credit Card or E-Check by accessing our payment portal at: **https://www.e-billexpress.com/ebpp/LaForce/** (MC / VISA / AMEX / DISC) A transaction fee will be charged on all payments made via credit card, which is not greater than our cost of acceptance. This quotation is subject to the Terms and Conditions found at http://laforceinc.com/terms-conditions/, which are incorporated in full by this reference. The Terms and Conditions will be sent by mail to the Buyer upon request. LaForce, Inc. limits acceptance to the Terms and Conditions, and objects to any other additional or different terms in the Buyer's purchase order or acceptance.	**FREIGHT**	$0.00
	SUBTOTAL	$57,663.88
	SALES TAX	$0.00
	TOTAL	**$57,663.88**
PAY TERMS: NET 30		

- Charge per user for access
- No proximity to open

QUALIFICATIONS

- Quote is valid for 30 days from date of quotation unless otherwise stated herein.
- Past due accounts are subject to a service charge of 1.5% per month on the unpaid balance.
- This offer is conditioned upon approval of credit by LaForce on the purchaser.
- No sales, use or other taxes included unless otherwise stated herein in writing.
- See attached qualifications and terms for this project.
- Federal project note: Federal Contractor vaccine mandate compliance not available.

Thank you for this opportunity to quote your needs. Please sign and return this quote and attached qualifications or send a written purchase order, and we will proceed with your order. LaForce, Inc. is not able to accept verbal purchase authorizations at this time. We look forward to working with you. If you have any questions, or need further information, please give me a call.

Thank You,

JIM MARTIN
Email: Jim.Martin@laforceinc.com
Phone: 262-252-5150

JIM MARTIN
Email: Jim.Martin@laforceinc.com
Phone: 262-252-5150

Quote Number: 486913QU

Authorized By: _____

Company: _____

Date: _____

486913QU

Cell: (920) 285-1827

THE CITY OF
WATERTOWN
Opportunity runs through it.

From: Mary Driscoll <Mary.Driscoll@laforceinc.com>
Sent: Wednesday, September 11, 2024 1:56 PM
To: Tanya Reynen <TReynen@watertownwi.gov>
Cc: Sara Hammer <Sara.Hammer@laforceinc.com>; Jim Martin <Jim.Martin@laforceinc.com>
Subject: Updated quote for Watertown Fire Dept 486913QU

Good Afternoon Tanya,

In follow-up to our discussion this morning we've attached an updated quote for hardware and installation of 24 readers at the new Fire Department (we had previously quoted 13).

The second attachment is for the Brivo subscription levels. The police and community center are currently on the Base plan which we still recommend as a good option for you moving forward.
If there are features you would like in the upper levels we would be happy to have further discussions to see the most cost effective solution. These fees are billed initially upon installation and then yearly to access the system.
Police Dept, Fire Dept and Community Center locations will be combined onto one account with the following costs:

Subscription Level	Annual Cost
Standard/Base with 100 Bluetooth licenses	$3160
Professional with 100 Bluetooth licenses	$6614 *Baycom Comparable*
Enterprise with 100 Bluetooth licenses	$11069

Qualifications / Notes:
Bluetooth will only work at Fire station card readers.
Police and Community Center readers can be upgraded to accept Bluetooth.

Please let us know if you have any questions and thank you for this opportunity to earn your business!

Mary Driscoll
Project Manager

Security Integration Department

LaForce | Electronic Security Systems
TF: 262.252.5150 ext. 122302 • Direct: 262.345.7242
Mary.Driscoll@laforceinc.com

Tanya Reynen

From:	Mark Stevens <MStevens@watertownwi.gov>
Sent:	Monday, September 16, 2024 2:41 PM
To:	Tanya Reynen; Emily McFarland
Cc:	Chad Butler; Andrew Day
Subject:	RE: Updated quote for Watertown Fire Dept 486913QU

The quiz on this quote that the quote itself can't answer is how an original assumption for 13 readers blossomed to 24. We haven't added doors to the plans, so how did we almost double those that need secure access?
Original place holder was $21,385.
Second proposal was $39,283.
Now this one is $57,664

If this quote assumes a Bluetooth phone access, what are the 50 fobs and dual tech cards needed for? (Perhaps these are an economical part of the whole. The quote has no breakdown to know if a reduction is a healthy cost-savings.)

Mark

From: Tanya Reynen <TReynen@watertownwi.gov>
Sent: Wednesday, September 11, 2024 2:48 PM
To: Mark Stevens <MStevens@watertownwi.gov>; Emily McFarland <emcfarland@watertownwi.gov>
Cc: Chad Butler <cbutler@watertownwi.gov>; Andrew Day <ADay@watertownwi.gov>
Subject: FW: Updated quote for Watertown Fire Dept 486913QU

All-
Please see the updated quote for Laforce. After talking with them today, and reiterating what we were asking for in the drawings submitted previously, they realized they had errors in the quotes previously provided. Unfortunately, that impacted the cost.

Below is a brief summary referencing the "Enterprise" ability they offer. In talking with them, they did say they had another version of that concept they called "professional" that allows for managing multiple sites.

The FD like to have the app or Bluetooth via our phones for access, Baycoms quote included that ability cited in the quote.

Please provide me your final decisions for direction on the access control. I believe whomever we utilize for access control would need to be invited to the Sept 17 meeting for coordinating with electrician and door folks. I will reach out to Trevor to make sure we invite the correct players...

Thank you,

Tanya Reynen
Fire Chief / Emergency Manager

Main: 920-261-3610

1

brivo

Brivo Access
Cloud-based access control that fits the needs of any organization

EXPERIENCE MODERN SMART AND EFFICIENT ACCESS CONTROL FOR YOUR FACILITY

Brivo Access is offered in three editions so you can select the right package to fit your needs

Standard

The gold-standard for access control

Our base edition includes the essential tools to secure facility access including event tracking, user and credential management, facility lockdown and video surveillance. The Standard edition provides a great entry-level solution with core functionality and add-on capabilities.

Professional Edition

Most popular for more effective security

As our most popular edition, Professional empowers organizations to be more efficient and effective managing security across their facilities. Added features include, API integrations, Occupancy Tracking, Brivo Visitor, Brivo Snapshot, License Plate Credentials, Event trend analysis, extended data retention, integration with corporate identity management, and more.

Enterprise Edition

Enterprise-grade and built to scale

Built for enterprise security applications, Enterprise Edition offers features specifically designed to manage large numbers of access points, across multiple locations, while meeting the increased security and compliance requirements demanded by enterprise size organizations. Added features include, Data Explorer, Single signon, Anomaly Detection, Global View, Shared Access, and more.

Let's find the Edition that's right for you

Standard	Professional	Enterprise	
Up to 10	Up to 30	Unlimited	Administrators available*
✓	✓	✓	Event tracking
✓	✓	✓	Device status
✓	✓	✓	Facility lockdown & egress
✓	✓	✓	Role-based admin permissions
✓	✓	✓	Remote & mobile management
✓	✓	✓	Video surveillance
✓	✓	✓	Multi-factor authentication
Available for purchase	✓	✓	Identity Connector
Available for purchase	✓	✓	API integrations
Available for purchase	✓	✓	Licence Plate Credentials **
	✓	✓	Occupancy Tracking
	✓	✓	Custom event classification
	✓	✓	Event trend analysis
	✓	✓	Access Commands
	✓	✓	Emergency Scenarios (Global)
	✓	✓	Global Switch
	✓	✓	Video: Analytic Events **
	✓	✓	Elevator Controls
	✓	✓	Bulk Actions
Available for purchase	Available for purchase	✓	Single sign-on (SSO)
		✓	Anomaly Detection
		✓	Global View
		✓	Data Explorer
		✓	Shared Access
		✓	Floor Plans
Available for purchase	Available for purchase	Available for purchase	Monitored Devices
	500	1000	Brivo Mobile Pass
1 Year	0 - 2 Years	0 - 3 Years	Data reporting retention***
Available for purchase	1 Subscription	3 Subscriptions	Brivo Visitor
Available for purchase	1 Subscription	3 Subscriptions	Brivo Snapshot

*Additional Administrators for Standard and Professional Editions are available for purchase
**Additional Eagle Eye Networks subscriptions required
***Additional data retention available for purchase

BAYCOM

A Lifeline in the Moments that Matter

Quotation For:

Watertown Fire Department
Tanya Reynen
106 Jones Street
Watertown, WI 53094
920-285-1827
TReynen@watertownwi.gov

Vendor:

BAYCOM, Inc.
Derek Foster
1545 Corporate Center Dr
Sun Prairie, WI 53590
608-445-0832
dfoster@baycominc.com

Quote # DF-241001-5

Date: 10/1/2024
Valid Until: 10/31/2024

TOTAL PRICE

Motorola Alta Access Control

Includes: (3)Core Series 8 port 12/24V Smart Hub, 8 entry capacity. $16,359.06
Power supply: FPO series, E4 enclosure

(1)Core Series 4 port 12/24V Smart Hub, 4 entry capacity.
Power supply: FPV series, E1 enclosure

(4)Standard Smart Keypad Reader V2, black, Multi. Freq

(21)Single Gang Reader, Mutli. Freq

(1)Video Intercom Reader Pro

(1)Annual subscription for Premium for Pack of 25 entries,
includes 500 active users

(1)Annual subscription for Premium for Pack of 1 entry,
includes 500 active users

(10)MIFARE Classic Key Fob, use with high frequency
readers, pack of 10

Door Strikes & Additional Hardware

Misc Hardware: (26) 5200 Complese Door Strikes. $5,195.87

"Misc Hardware," also encompasses all ancillary and
supplementary hardware components necessary for the
complete and functional installation of video surveillance and
access control equipment as specified in this proposal. This
includes, but is not limited to, screws, mounts, brackets,
cables, connectors, and power supply units.

Baycom Services

Labor Total: New Alta Access Control System (26) Doors each with New $18,375.00
Door Strikes, System Design, Project Management,
Programming, Configuration, Testing and Travel.

2026 & Beyond
Annual Cost $2,700.
  - Warranty
  - Hardware
  - Access/Use
  - license
  - Support

*The customer must ensure the availability of sufficient
network infrastructure capable of supporting the newly
installed IP devices, including any necessary cabling,
switches, and network configuration. The customer is
also responsible for providing access equipment, such
as a lift, for the installation of cameras at locations
exceeding standard ladder height.*

Ø charge for Additional Credentials

Approved By				$39,929.93
		Shipping:		Included
		Tax:		n/a
PO #		Total:		$39,929.93

Terms and Conditions can be found at https://www.baycominc.com/baycom-operating-terms-conditions/
We impose a surcharge of 2% on credit card purchases over $1,000, which is not greater than our cost of acceptance
All of the information listed on this proposal is confidential and proprietary information.
Your Signature Is An Agreement To Purchase And An Acceptance Of The Above Terms

AVIGILON™

THE ULTIMATE GUIDE TO ACCESS CONTROL SYSTEMS

What access control is and why it's important to security

MOTOROLA SOLUTIONS

THE ULTIMATE GUIDE TO ACCESS CONTROL

Access control systems are an important and integral element of security systems to protect property, people and resources. Door access control systems determine who is authorized to enter a property or a restricted area within a property and provide various techniques to manage and control access.

Access control security is used in many different types of building, including campuses, office blocks, commercial buildings, multi-tenant apartment buildings, industrial complexes, condos, gated communities, schools and colleges, airports, stadiums and government buildings.

This article explains what access control is and why it's important to security. You'll also learn about the benefits and use cases for access control, as well as access control policies and the components of an access control system.
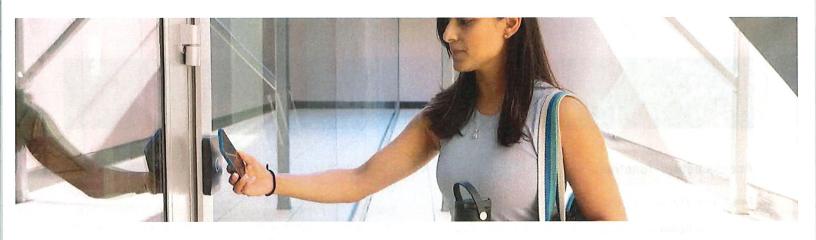
Access control definition

The role of access control security, or the true access control security meaning, is to regulate who can enter a building or a space. Its aim is to minimize risk to a business or organization.

To secure facilities, organizations deploy electronic access control systems that incorporate user credentials, access control readers, auditing and reports to manage and track access to restricted locations. They may also deploy alarms and lockdown capabilities to prevent unauthorized access or control operations in restricted areas.

Electronic access control has replaced traditional lock and key systems as a more secure and convenient method of controlling access, overcoming the problems of lost or stolen keys, retooling locks and the inability to view access activity.

Another subset of access controls, information security can include ways to limit who has access to computer systems or networks. Also known as cybersecurity access control, these types of methods are used both on the premises and in cloud-based platforms to help ensure data and information remains protected. When combined with physical security methods, it's often referred to as security convergence, a growing trend in the security industry.

Why access control security is important

In short, replacing traditional locks and keys with electronic security and access control strengthens security. Traditional locks have many drawbacks, including management challenges, lack of audit trails and the fact that metal keys are easily lost, stolen and copied.

Electronic credentials are more difficult to steal or copy, and they require validation before an individual can gain access, which gives security teams greater ability to control access. Electronic access control systems can be programmed with different levels of access for individual users and groups, which enables security teams to impose the strongest levels of security where they are needed most.

Flexibility and control are important because, compared to single-family residential properties, commercial buildings must provide convenient, secure access to large numbers of occupants and their visitors, who might include friends or family, business visitors, couriers delivering mail, packages or food, contractors or tradespeople carrying out maintenance work.

A commercial access control system is important at building entrances, where the system provides convenient access for employees, residents or other occupants, while preventing intruders or unauthorized individuals from entering.

Within a building, access security protects areas where entry must be restricted by only allowing users with the right credentials to enter. In an office block, this might apply to server rooms or spaces where confidential data is stored. In a multifamily residential complex, the access security system might limit access to resident-only facilities such as gyms or mail rooms.

A door access control system also provides security teams with important information on all entry activities. This can provide useful evidence in the event of an incident or suspicious activity.

How access control security works

A user who is authorized to enter a building or secure area presents credentials to an access control reader positioned at the entrance or door. The reader transmits the credentials' data to software which validates the credentials against a database of authorized users.

If the credentials are valid, the software initiates a door release signal which opens an electronic lock to grant access. If the credentials are invalid, or the user does not have permissions for that door or time, the door will remain locked.

An access control panel is the backbone for the access control system; access control panels or controller boards determine the basic functions of the system, including the entry decisions. The system also records and retains all access requests for analysis, audit or evidence.

In the case of visitors requesting security access, they will either need temporary credentials, such as a visitor badge or digital guest pass. If the occupant or front desk has the ability to operate the access control mechanism, either via a button or app, they can issue a door release signal to grant access.

What is an access control policy?

To impose the right level of security and access at entrances to restricted areas, security professionals or property managers must enforce access control policies. These fall into five main categories:

- **Discretionary access control (DAC):** The owner or administrator of the property sets the access control policy defining who is authorized to access the building or a specific area. This type of access control provides minimal levels of security.

- **Mandatory access control (MAC):** Security professionals grant and manage access rights based on multiple levels of security. Access is granted or denied based on the user's security clearance level. This category is used to protect highly secure areas.

- **Attribute-based access control (ABAC):** This approach provides access to users based on who they are, rather than what they do. Access permissions can be based on the user's type, location, department and duties, mirroring the organizational structure of the business.

- **Role-based access control (RBAC):** Access is based on defined business functions rather than the individual user's identity. The aim is to provide users with access only to areas that are deemed necessary for their roles within the organization.

- **Rule-based access control:** An administrator defines rules that govern access to an area. These rules may be based on conditions, such as time of day and location.

Access control functions

Access security has five main functions:

- **Authorization:** The access control system administrator specifies individual users' access rights to areas or resources. For example, employees are authorized to enter a building, but only authorized to enter restricted areas relevant to their grade or job function.

- **Authentication:** The system or an individual validates an entry request such as the identity of a person or the credentials they present. For example, a resident checks a video image of a visitor before granting access, or the system validates credentials against a database of authorized users.

- **Access:** When the system has authenticated a request, it grants access by opening a locked door.

- **Management:** Security administrators manage the access control database by adding or removing authorized users so that the access control devices only validate requests based on current information.

- **Audit and review:** Regular reviews and audits minimize the risk of users retaining access rights they no longer require. Audits also provide essential records for compliance.

Reporting is also an important function. Each time a user requests access, the system generates data that provides important management information. The system records all access requests with details of location, user identity and type of credential used. Notifications also provide insight into potential security issues, such as tailgating, doors left open or access requests from unidentified users.

The data from door access control helps security professionals monitor the performance of the systems through reports such as:

- Door activity history recording who opened a specific door and at what time

- Invalid access attempts where users attempt to use their credentials at an unauthorized access point

- Door openings, door forced open or door left open too long

Access security configuration

System administrators use the information from the authorization process to configure access levels for users and access locations. They rank locations based on the level of security and authority required to gain access. They can then configure the credentials issued to individual users.

Access control software can also configure user credentials to automatically expire by specific dates, based on the completion of a project, for example, or the date when a resident leaves their tenancy. The software can also configure temporary credentials for a one-time event, for example, where

attendees will only require access for emergency maintenance or a vendor visit.

Building owners may wish to restrict general access to a building at certain times, such as evenings or weekends. Software can configure all credentials to be invalid at those times. It's also important to put emergency measures in place so that access control systems can automatically operate in lockdown mode in the event of a fire or other emergency.

Security access locations

Security access control examples are found in many internal and external areas of a building or campus that need to be secured and controlled. Here are a few examples of common areas for access control security to be installed:

- **Main entrance:** This might be a reception area where check-in is automated and employees and visitors must present credentials. There may be multiple entrances to a building, so it is essential that they are all covered by access control techniques.

- **Turnstiles:** These might be located close to the main entrance as a means of access control where there is public lobby access, but restricted access to the rest of the building. They may also be located on other floors or zones that need to be secured.

- **Car lot or parking garage entrance:** Entry may be secured by a gate or other form of barrier that limits access to authorized vehicles and visitors.

- **Elevators:** Access control systems may be used to manage numbers of occupants or to control access to certain floors.

- **Server rooms:** All entrances must be secured, allowing only authorized users.

- **Perimeter:** In a building or campus with a large perimeter, security access can be installed at gates, barriers or other entrance points to manage the flow of visitors and vehicles.

It's also essential to identify other areas that are vulnerable to intrusion, represent a security risk, or where it's important to manage movement:

- **Vulnerable areas:** These include emergency exits, windows or unsecured exterior doors where intruders could gain access without detection.

- **Areas with a security risk:** In commercial buildings these include certain offices, storage areas or meeting rooms where confidential information is held. In multi-occupant residential buildings, these might include storage rooms or resident-only facilities such as gyms or recreation areas.

- **Areas to manage movement:** These include lobbies, stairways and passages where it's essential to avoid overcrowding.

ACCESS CONTROL COMPONENTS

Door access control systems have a number of basic components, each with its own importance for a fully functioning system. It's important to understand how access control components influence the convenience and security of the system in order to deploy a solution that fits your needs.
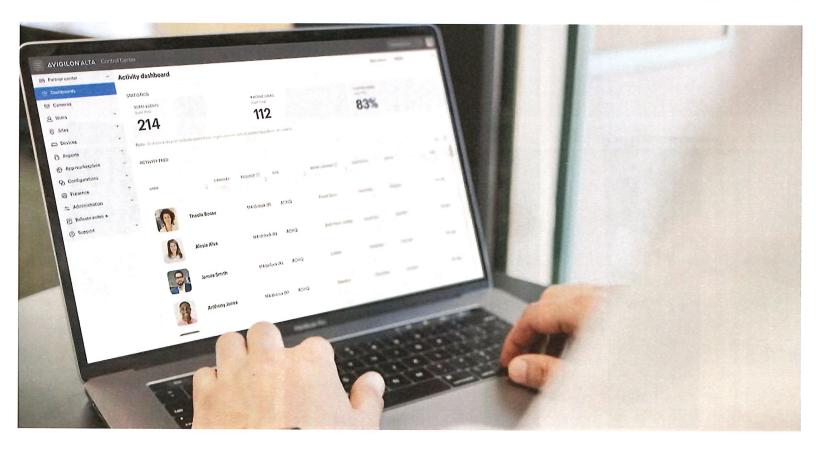
Door access control credentials

Credentials are what users will present to a door reader when they want to enter the building. There are six main types of credentials that offer different levels of security and convenience:

- **PIN codes:** PIN codes are convenient, but require users to remember their codes. General codes can be used in low-risk areas, with individual codes issued for higher-security entrances.

- **Swipe cards:** These badges feature codes on a magnetic strip. Users swipe the cards through a reader to request access. While they are convenient, they can present a security risk if users swap or lose cards that can be used by intruders.

- **Proximity key cards and key fobs:** Proximity solutions use RFID technology to provide contactless access. Users present RFID-enabled key cards or key fobs when they are close to a reader. This makes them a simple, convenient form of access for high-traffic areas.

- **Smart cards or smart fobs:** These advanced cards and fobs contain a computer chip that can store additional, unique credential information, which increases security while retaining convenience.

- **Mobile solutions:** Users download an app to their smartphone or other mobile device. Depending on the access control system, they scan the smartphone at the reader or use an unlock feature in the app to gain access. Mobile credentials support regular use for authorized users, or temporary access to specific areas for visitors, contractors or service staff.

- **Biometric solutions:** Biometric door locks combine strong security with convenience for authorized users. The most widely used solutions include fingerprint door locks, facial ID and eye scan door locks for retinas or irises. Biometric solutions overcome the problems of lost or stolen credentials because they are extremely difficult to copy.

The systems to capture biometric credentials and the scanners required to read them are expensive, and this initially limited their use to protecting highly secure areas. However, if budgets allow, they can also be used as a fast, convenient method of access in high-traffic areas.

Door readers

Door readers can be installed inside and outside of the building to provide security for areas with different levels of vulnerability. There are different types of security door readers for use with corresponding credentials. They include:

- **Keypad readers:** Users key in a general or unique PIN using the keypad. Although this type of reader is simple and convenient to use, PINs can be shared, guessed or used by intruders with stolen credentials, especially when buttons wear over time. Capacitive touch keypads and longer-digit unique PINs help combat these challenges.

- **Key card swipe readers:** Users swipe their key cards through the reader. Although these readers are secure, they may require frequent maintenance if they are used in areas of heavy traffic.

- **RFID key card or key fob readers:** This type of contactless reader is more suitable for heavy traffic areas. Readers simply present their credentials when they are within range of the reader.

- **Biometric readers:** Users present one of their approved biometric attributes, which are scanned for validation against a biometric database. For even higher levels of security, biometric solutions can be used as part of two-factor authentication with other credentials.

- **Smart door lock readers:** These readers are designed to operate with different types of credentials. They can also be programmed for two-factor authentication using a combination of credentials to increase security levels.

- **Video door readers:** Video door readers have a camera embedded into the access control device, giving security teams visual evidence of identity and any security issues.

- **Intercom readers:** This type of access control device combines reader technology with two-way audio, and is commonly used on front doors to help verify visitors prior to granting entry.

Controllers and access control boards

These are the "brains" of the access control system, acting as a link between the door reader and the user database. These units are usually installed behind restricted doors, as they contain vital data and information that should be protected.

Access control software and data storage

The software for access control systems is a vital tool for managing the database of authorized users. The database holds the details of the network of access controlled doors and authorized users together with their access levels.

To maintain security, it's essential to keep the database up to date by adding new users and removing users who have left or who no longer have permissions to access specific areas.

There are two options for hosting access control software: on-site in servers or hosted in the cloud accessible via the Internet.

Access control devices can produce high volumes of data, particularly if the system incorporates video or biometric credentials which create very large file sizes. If data volumes grow, additional servers may be required for an on-site system. Cloud storage is more scalable; if capacity requirements increase, additional capacity is available on demand for a

higher subscription. In some cases, a hybrid option may be available, which is particularly useful for businesses with multiple locations.

Another key differentiator in these system options is that on-site servers have to be maintained and updated by an internal IT team. All maintenance and updating of cloud-based systems is usually handled by the hosting company as part of the subscription.

Cloud storage for access control devices offers the additional benefit of remote access. Security teams are no longer restricted to reviewing data on-site. If data is stored in the cloud, security teams can also access the data from any location using an Internet-connected fixed or mobile device. This increases flexibility, allowing teams to remotely monitor and operate keyless locking systems outside of normal business hours.

Electronic locks for door access control

Electronic door entry systems remain closed until a user's credentials are validated and a 'release' signal unlocks them. There are two types of electronic door locks for commercial keyless entry:

Electric strike locks are fitted to the inside of a door frame where they replace conventional lock strike plates. A small motor on the strike is connected to a power supply and the current holds the strike plate in the locked position. When an access controller submits a 'release' signal, the motor releases the strike plate allowing an authorized user to open the door.

Magnetic strikes incorporate an electromagnet attached to the door frame, which bonds to a metal plate on the door. The door remains locked while an electric current is flowing through the electromagnet. When a user's credentials are validated, the access controller sends a signal which cuts the power, breaking the magnetic bond and allowing the user to open the door.

Commercial security doors

Electronic locks for access control are generally used in conjunction with commercial security doors, which have the strength and durability to resist threats. These doors can cope with high traffic volumes and continuous use by larger numbers of users with minimal maintenance. They also have the performance to withstand different internal and external environmental conditions, such as extreme weather conditions.

Data networks and cabling

Dedicated cabling has traditionally been used to connect security access components. However, cabling can be expensive to install and maintain, with additional installation costs if the system changes or expands.

Data networks offer a more flexible alternative for IP-based systems. Access control components, such as readers and control units, can be connected to existing networks wirelessly or using Power over Ethernet (PoE), reducing installation costs and offering simpler, faster scalability.

A fast, secure and reliable data network is essential for efficient access control operations. The networks must be able to transmit signals securely between controllers, readers and electronic locks.

Data networks must be capable of transmitting high volumes of data at high speed to minimize the risk of slow response times. To maintain performance, the network should provide high bandwidth availability and functionality such as traffic prioritization to support bandwidth-hungry traffic such as video images or data from biometric devices.

Power supply

An access control system requires power for door readers, controllers and electronic door locks. Power can be connected using conventional cabling to each component or supplied via a data network using PoE technology. This simplifies installation and reduces costs because no separate cabling is required.

As part of your access control best practices, it is recommended that each component also have a backup power supply, so that doors can still be functional in the event of an Internet or power outage.

INTEGRATING DOOR ACCESS CONTROL SYSTEMS WITH OTHER SECURITY SOLUTIONS

Access control systems provide an essential first line of defense against unauthorized access. However, integrating access control devices with other security system components can strengthen protection even further and provide security professionals with a single 360-degree view of activity throughout a building.

Security video cameras monitor vulnerable areas inside and outside commercial properties to identify and record incidents. By installing video cameras at restricted areas covered by access control systems, security professionals can monitor and analyze the camera feeds so that they can respond rapidly to any incidents.
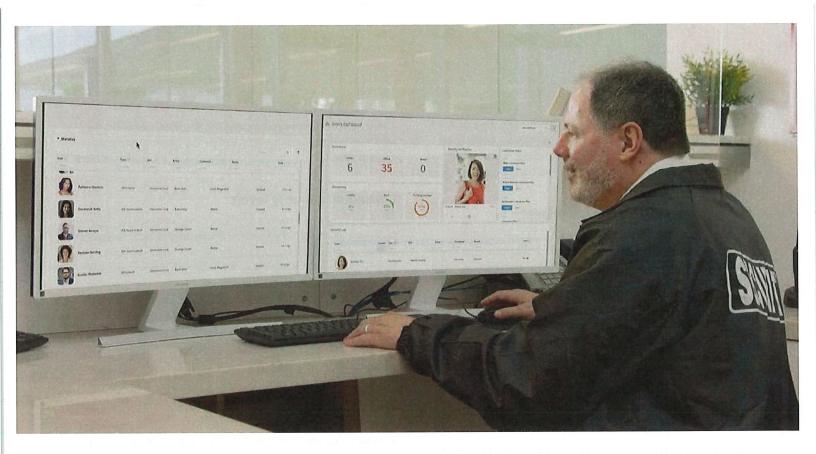
Integrating security access data with video feeds enables security teams to identify suspects more easily in the event of an incident.

Fitting alarms and sensors to external doors and windows extends security coverage and ensures that security teams receive immediate notifications of any attempt to break into the building. When integrated with the access control system, this allows security teams to quickly identify a door forced or propped open, or remotely unlock a door if needed. Smoke and fire alarms can be integrated with security access to trigger local or building-wide lockdown in the event of an emergency.

Software applications can also be integrated with access control systems for more efficient management. For example, syncing identity platforms with access control ensures credential databases are always up-to-date, and connecting visitor management platforms gives security teams greater control and visibility over guest access within a property.

Video cameras, alarms, sensors, access control devices and electronic locking systems should be built to open standards so that they can be easily integrated into a comprehensive security system that provides the highest level of protection for people and property.

BENEFITS OF ACCESS CONTROL SYSTEMS

Investing in access control techniques can transform the security and convenience of building access and deliver important operational and financial benefits.

Stronger security

Replacing traditional locks and keys with electronic access control mechanisms strengthens security. It eliminates the problem of lost or stolen keys and replaces them with electronic credentials offering different levels of security. Electronic credentials are more difficult to copy and they require validation before a user can gain access, which gives security teams greater ability to control access.

Targeted security

Security professionals can deploy different types of door access control systems or program electronic credentials with different levels of access. This enables security teams to impose the strongest levels of security where they are needed most. For example, smart key cards can be programmed with unique codes to protect highly secure areas, or users can be assigned mobile access permissions based on their titles or work schedules. Mobile or RFID credentials can also be paired with other credentials, such as PIN codes or biometrics, to support two-factor authentication.

Greater convenience for users

Credentials for security access control systems are available in different forms, all offering users convenient access. Proximity solutions, for example, allow users to enter high-traffic areas quickly and easily, while biometric solutions eliminate the need for separate credentials. Mobile credentials can increase convenience even further by allowing users and visitors to identify themselves using a smartphone app. When choosing and developing an access control policy, make sure to provide staff training on how to use the new system.

Simpler user management

Security teams no longer have to issue, manage and replace large numbers of individual keys, which could prove expensive in a building with many different lockable doors and entrances. Adopting mobile credentials simplifies management even further. Teams do not have to issue key cards or key fobs; they simply send a link to smartphone apps programmed with individual access levels.

Modern access control system management software also allows teams to manage credentials online, handling moves, adds, changes and removals with just a few clicks. With cloud-based access control, security teams can manage user credentials from any location on any Internet-connected device.

More flexible property management

A cloud-connected security access system gives teams greater operational flexibility. They no longer have to be onsite outside normal business hours because they can manage access requests, open or lock doors and monitor alerts from any location with a secure Internet connection.

A remote door entry system can provide important security continuity in the event of a fire or other disaster that makes it impossible to provide onsite security management. Teams can continue to monitor and secure doors from a temporary location with Internet connectivity.

Reduced support burden

Electronic access security systems require less maintenance than traditional manual entry systems. IT staff do not have to manage and maintain connectivity and power supply because this is handled by the network team. If the system is cloud-enabled, the IT team doesn't have to manage servers or other infrastructure because this is handled by the cloud hosting provider.

Greater scalability

Networked access control security systems are easier to scale than conventional lock and key systems or access systems connected by dedicated cabling. A new door reader can be added to an existing data network with no need for the delay or disruption of installing dedicated cabling. In addition, adding new locations to the access control security network in the cloud is just as effortless, with all sites managed from a single dashboard.

Consistent security levels

Cloud-enabled security access systems provide an opportunity to centralize security operations and impose consistent security standards, particularly for organizations with multiple sites. A central security team can monitor and manage all access requests from a single location, or remotely via a secure web browser. Centralized management enables security teams to standardize permissions and access levels across all sites, which can strengthen overall security.

Detailed audit trails

Data from access control requests can be useful for analyzing real-time access activity as well as providing input for security audits, management reporting and compliance records. This type of information can also help security teams and property managers assess the efficiency of access control and refine best practices over time.

Streamlined interoperability

Access control devices designed and built to open standards can be integrated with other security components such as sensors, alarms, video security cameras, existing access control systems, fire and smoke alarms to create a comprehensive security solution that enables security professionals to monitor and manage all activity through a single pane of glass. These systems can also be integrated with compatible building management systems and environmental control platforms to improve overall protection and safety in the building.

ACCESS CONTROL AND SMART BUILDINGS

Access control systems play an essential role in protecting a building and its occupants against threats from intruders, but they can also make a wider contribution to building management and the evolution of smart buildings.

While the primary application of access control techniques is to monitor and control access to secured areas, data from the system can also provide greater insight into movement and use of facilities within buildings. That can provide valuable input into facilities planning to create safer and more efficient routing as well as optimizing space utilization. For example, analyzing traffic in spaces such as conference rooms or other busy spaces provides useful information on room availability and occupancy levels.

Access control devices can also be integrated with other elements of building management systems. For example, security access data on room occupancy can support more efficient use of heating, lighting, ventilation and other facilities by automating the allocation of resources in line with actual occupancy. This can improve resource efficiency and reduce overall operating costs.

SELECTING AN ACCESS CONTROL SECURITY SYSTEM

There are many factors to take into consideration when selecting a security access control solution for door access control:

Security

The most important factor is security. The system must ensure that only authorized users and approved visitors can enter a building. Door access security must restrict entry and provide adequate protection for areas of the building that contain sensitive information or resources and facilities that could harm the business if they were damaged by intruders.

Reliability

If a reader or access control unit is not reliable, it reduces the level of security. Downtime for repair or maintenance also increases risk and inconvenience for users. The equipment should have guaranteed levels of uptime and incorporate back-up or failover solutions for high-security areas.

Convenience

Although access control is designed to deter unwanted intruders, it should not prove inconvenient for authorized users who require access. The system and access control devices should be quick and easy to use and incorporate touchless technologies for added convenience.

Management

As well as convenience for users, the access control mechanisms and system should also be convenient to manage. Operation, configuration, management and maintenance should be straightforward with software that's intuitive to use and interoperable with other security tools. Selecting a cloud-enabled system simplifies management even further.

Customization

System components should be customizable so that security professionals can configure them to meet specific requirements for different areas and individual users. Look for solutions that offer multiple permissions levels, door schedules and custom management dashboards to further streamline and control access throughout the property. The system should also be quick and easy to reconfigure if security requirements change.

Scalability

For growing businesses, it's important to have a system that can be easily scaled to cover more access points or support additional users. Organizations operating across multiple sites can improve operational efficiency if a system on one site can be scaled via the cloud to other sites. This will ensure consistent security across the organization and reduce overall costs.

Compliance

The security access control system should enable the business to comply with any customer security requirements, data protection requirements or industry-specific regulations. For example, customers may require data relating to their business to be secured by special measures as part of a contract. In some industries, compliance with an international security standard such as ISO 27001 is essential for doing business, while business in sectors such as healthcare or financial services require even higher levels of security compliance. In general, it's essential to provide security for personal data to comply with data protection regulations.

Cost of ownership

Cost is one of the most important factors in selecting an access control system, not just the initial costs, but the ongoing costs for operating, maintaining and managing access control systems. The upfront cost will be based on the number of access points to be covered as well as the type of components required. The ongoing costs will include installation and configuration, operation, monitoring and management, and the costs of maintenance, repair and upgrading. Costs may be more predictable with a cloud-based solution that includes maintenance and upgrading costs in a monthly subscription.

Access control features

As well as providing the essential security functions, it's important to select systems that include access control features that save time or improve efficiency. For example, automated notifications from the cloud ensure the security team has the latest information on potential incidents. A wide range of reports will enable security teams to provide different stakeholders with the specific information they need for their role. Remote management capability improves convenience and flexibility for the IT team, enabling them to manage systems and respond to incidents from any location.

GETTING THE BEST ACCESS CONTROL SYSTEM FOR YOUR BUILDING

To gain full benefit from security access control, it's important to plan the solution carefully by assessing vulnerabilities and access requirements throughout the building. A professional security system installer can provide advice and guidance on the most appropriate solution for different areas of the building and prepare detailed installation plans. Security specialists can also recommend integration opportunities to ensure the system forms part of a holistic solution for building security and management.

Here are a few questions to ask when determining which access control features and solutions are the best for your business:

How reliable is the access control system?

Security systems are only worth the investment if they work. Reliable door access control systems will have public downtime reports so you can compare. Also consider adding backup and fail-over security for your access controlled doors.

Is the system on-premise or cloud-based?

It's important to weigh the pros and cons of a cloud-based vs. on-premise access control system before investing in new technology. If you have an on-prem solution, some providers now offer remote capabilities and hybrid cloud deployments to make management more flexible.

How easy is it for employees to use the access control devices?

You don't want to make it harder for your staff to get into the building. Unlocking the door should be simple, fast and reliable. Touchless access control methods are a great way to keep traffic moving in your building, without compromising on security.

What does the installation process look like?

Before purchasing, know how long your access control system will take to install and what the installation project will involve. Do you need to run new cabling? Are there existing access control units or readers that you want to keep? Be sure to include installation costs in your access control plan.

What access control features are available with this system?
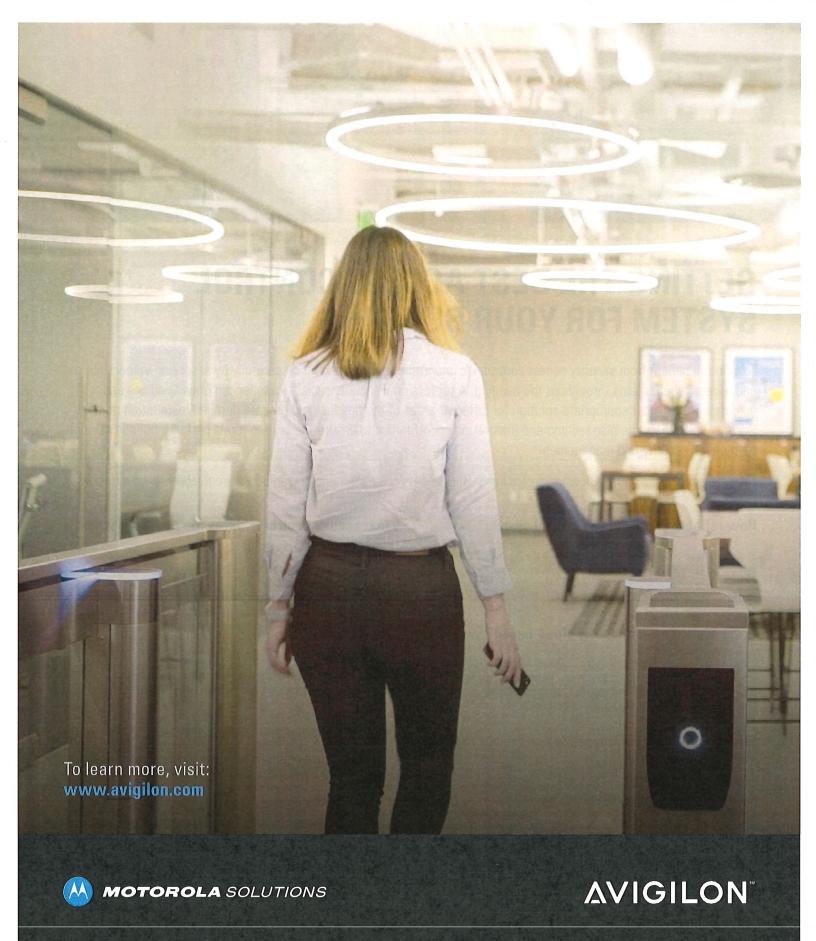
Be sure the system you invest in has a full feature set, with everything you need to maintain security in your buildings. Look for customizable user permissions, the ability to set door schedules, advanced reporting and audit tools, support for multi-factor authentication and automatic alerts. Other features you may want include lockdown capabilities, custom rule engines, digital guest passes and unification with video security systems.

Does the system integrate with my existing security and access control infrastructure?

Open architecture is an important consideration for access control, as it allows you to connect your access control devices to other security systems. For the best experience managing and maintaining your security, access control systems should be able to seamlessly integrate across your entire technology stack, including video systems, alarms and software tools.

How future-proof is this access control system?

A future-proof system is one that has all the access control features you need now, and will also work for any future security challenges the business might face. Factors like scalability, ease of integration and automatic updates all impact how future-proof a solution is. Consider what the process is for upgrading the software with the latest security, and how the company rolls out new features to determine the longevity of your access control system.

To learn more, visit:
www.avigilon.com

Training/Conference Room AV

Watertown Fire Department

Travis Teesch

Fire Chief

tteesch@watertownwi.gov

Our Mission:
To provide world-class technology solutions with an unwavering commitment to our
Customers, Vendor Partners and Employees while providing an environment that
encourages profitable growth, learning and fun!

Site Address:

Watertown Fire Department

106 Jones St

Watertown   WI   53094

Billing Address:

Watertown Fire Department

106 Jones St

Watertown   WI   53094

ACP CreativIT LLC (d/b/a Camera Corner Connecting Point or CCCP)

529 N. Monroe	851 Commerce Ct
Green Bay, WI 54301	Buffalo Grove, IL 60089

Website: www.cccp.com   www.acpcreativit.com

Project #:	OPP127765
Modified Date:	09/13/2024
Revision:	6
Acct. Manager	Jason Hussong

Project Description:

Integration Services Scope of Work

A. Summary: Watertown Fire Department is building a new facility and would like to incorporate AV into the training room. The goal of this project is to provide an integrated system that allows users to connect their laptops for presentations and web-based meetings. The system should be easy to use and provide good audio and video pickup in the space.

B. System Description (Training Room)
   a. Functionality Description: The Training room system features 3 displays each with a local HDMI input for sharing only on the adjacent display, and a feed from the main AV system. A 4th display will be planned for future installation. The infrastructure will be installed and blanked off until the display is purchased and installed. Two cameras and ceiling mounted microphones and speakers will be used for web conferencing. The speakers will also be used for presentation audio. Users will connect their laptops to the HDMI and USB cable at the lectern. The touch controller at the lectern will be used for system control. The lectern will include a small 2 HDMI switcher to be used for user laptops and a Doc Cam. The Lectern will connect to a wall plate with two AV connections and power.
   b. Source Devices:
      i. At the lectern
         (1) User provided Laptops (HDMI connection at lectern)
         (2) A new Hovercam document camera will be installed on the lectern.
      ii. At the Equipment Rack (storage room)
         (1) Courtesy HDMI cable for HDMI Sources (PC, Media Player, Cable Box, Etc)
      iii. At each display location
         (1) An HDMI input plate will be placed under each display to provide an easy access connection to the display.
         (2) This input can be used for any HDMI source, breakout sessions, Emergency Ops, Etc.
   c. Displays:
      i. Two 86" displays will be wall mounted on the front (south) wall.
      ii. One 75" display will be mounted on the back wall between the windows
      iii. A 4th display will be planned for on the west wall Exact location will be determined by the pillars in the room.
         (1) All cabling power and boxes shall be installed at this location. The receiver can be placed in the equipment rack until the display is installed at a later date.
   d. Video Switching
      i. A video switcher in the equipment rack will route video signals to the displays in the room. All four displays will be sent the same content.
      ii. Long HDMI runs will be extended using twisted pair HDMI transmission.
   e. Audio:
      i. 6 boundry microphones will be installed in the ceiling to provide even pickup in the room
      ii. 8 Ceiling speakers will be installed in the ceiling to provide even audio coverage in the room.
      iii. A Qsys DSP will be used as the audio processor for the microphones and provides a USB connection for the laptop.
   f. Conferencing:
      i. A QSYS system will be installed bringing cameras and audio into one platform for managing, switching, controlling, and USB Bridging.

    ii.   The Qsys system allows users to connect their laptops to the USB Cable at the lectern or at the equipment rack, this will make the room peripherals (Cameras, mics, and speakers) available to the laptop.

    iii. Users can select the room camera, speakers and microphones in applications such as MS Teams, Zoom, Google Meets and streaming applications.

    iv. The cameras are network connected through a stand-alone switch to the QSYS Processor.

g. Controls:

    i.   A QSYS touch controller, with bridging license, will be provided on the lectern to control the system. The Bridging license allows users to connect to the USB port for conferencing.

    ii. The touch controller will have the following controls.

        (1) System on/off (turns displays on/off)

        (2) Video source switching

            (a) Change inputs of each display to local HDMI or AV System

            (b) Default setting will select the AV System as the display source.

        (3) Audio Routing

        (4) Room Volume

        (5) Privacy Mute.

        (6) Camera Page includes Camera switching, PTZ Controls, 6 customizable presets per camera.

    iii. The control system will also be available on laptops, tablets, and other network connected devices by scanning a QR code at the rack location.

        (1) This allow users to control the system even if the lectern is not connected.

        (2) Laptops and tablets must be connected to the same Wi-Fi network/subnet.

h. Networking:

    i.   A standalone network switch will be installed in the Rack for control connections. This system does not need to be connected to the building network.

    ii. A building network connection is recommended for portable control of the system.

        (1) This connection must be tied to the same Wi-Fi network that the portable devices use.

        (2) A network drop will be required at the rack location (BY OTHERS)

i. Electrical: (By Others)

    i.   Power will be required at the display locations. Single 15a outlet

    ii. Power will be required at the lectern connection location. Single 15a outlet

    iii. Power will be required at the Equipment rack location. Duplex 15a outlet

j. Equipment Location:

    i.   The system equipment will be installed in a wall mounted rack in the storage room adjacent to the training space.

    ii. A lectern connection plate will be installed at the front of the room

        (1) The plate includes a Video and Touch panel connection.

        (2) The lectern will be connected to the plate via a cable whip.

C. Exclusions: The following work is not included in our Scope of Work:

    a. All conduit, high voltage, wiring panels, breakers, relays, boxes, receptacles, etc.

    b. Concrete saw cutting and/or core drilling.

    c. Fire wall, ceiling, roof and floor penetration.

    d. Necessary gypsum board replacement and/or repair.

    e. Necessary ceiling tile or T-bar modifications, replacements and/or repair.

    f. All millwork (moldings, trim, cut outs, etc.).

    g. Patching and Painting.

    h. Permits (unless specifically provided for and identified within the contract).

D. Construction Considerations:

    a. In order to accomplish the outlined goals of this project, the Customer will be responsible for contracting with an outside entity to make the necessary modifications to the space as directed by ACP/CCCP. The costs associated with these modifications are not included in this proposal.

Project Resources:

Account Manager:	Jason Hussong	Design Engineer:	Brad Behling

Control Programming:	QSYS Control	DSP Programming:	QSYS DSP
Project Manager:	TBD	Trainer:	TBD
Network Engineering:	Netgear (Standalone)	VOIP Engineering:	NA
Other:	Logitech System Configuration	Other:	Travel Charges and Overnight stays included

Control Programming:	QSYS Control	DSP Programming:	QSYS DSP
Project Manager:	TBD	Trainer:	TBD
Network Engineering:	Netgear (Standalone)	VOIP Engineering:	NA

Quantity	Description	Unit Price	Price
4	**Cables To Go** HDMI Pass Through Single Gang Wall Plate - Brushed Aluminum		
4	**Cables To Go** 10ft DB9 M/F Serial RS232 Extension Cable - Black		
2	**Cables To Go** USB-C Female to USB-A Male SuperSpeed USB 5Gbps Adapter Converter		
8	**Cables To Go** High Speed HDMI Cable, 10'		
6	**CCCP** One Piece RJ45 crimp connector for Cat6 cable		
600	**CCCP** Mic/Line audio cable. 22AWG shielded twisted pair with ground wire. Plenum Rated		
375	**CCCP** CAT. 6 Plenum		
750	**CCCP** 23 gauge 4 pair Cat 6A cable Shielded overall foil, Black - Plenum		
345	**CCCP** 2 Cond 16 Unshielded Raw Cable, Plenum, Per Foot		
1	**Chief** FUSION 8" ABOVE/BELOW SHELF L DISPLAYS		

	1	**Chief**	FUSION PULLOUT
	2	**Chief**	Fusion™ Extra-Large Pull Out Accessory
	1	**Chief**	Micro-Adjust Tilt Wall Mount Large
	3	**Chief**	1/4-20 TOGGLER Anchor Kit - 4 Anchors
	2	**Chief**	Micro-Adjust Tilt Wall Mount X-Large
	2	**Comprehensive**	USB 3.0 A Male To B Male Cable 15ft.
	4	**Extron**	HDMI Twisted Pair Receiver - 230 feet (70 m)
	1	**Extron**	DTP Transmitter for HDMI - Decorator-Style Wallplate, White - 230 feet (70 m)
	3	**Extron**	4K Premium High Speed HDMI Ultra-Flexible Cable - 12' (3.6 m)
	4	**Extron**	12 V, 1.5 A, Power Supply on Captive Screw
	1	**Extron**	1U 9.5" Deep Universal Rack Shelf Kit
	4	**Extron**	Mounting Kit for 1/8 and 1/4 Rack Width Products
	1	**Generic**	[OFE] - Presenters Laptop
	1	**Hovercam**	12MP Document Camera

1 **Leviton**
1-Gang Decora Faceplate, Standard Size, Thermoplastic Nylon, Device Mount, - Black

2 **Liberty AV Solutions**
LOW VOLT MT/BRKT SG RETRO

1 **Liberty AV Solutions**
1 gang decora metal BLACK - ETHERCON CAT 6A - VIDEO & RJ45 - Control

1 **LinkUSA Inc**
Ethernet Patch Cable, Cat5e SF P, Nuetrik NE8MX-B-1, 025 Ft.

1 **Middle Atlantic**
1 RU Flanged Blank Rack Panel, Aluminum

1 **Middle Atlantic**
2 RU Flanged Blank Rack Panel, Aluminum

1 **Middle Atlantic**
3 RU Flanged Blank Rack Panel, Aluminum

1 **NEC**
75" Ultra High Definition Commercial Display

2 **NEC**
86" Ultra High Definition Commercial Display

6 **Neutrik**
3 Pin Female XLR Connector

1 **QSC**
Q-SYS AV Bridging feature license. One license is required per TSC Series Gen 3 touch screen controller with AV Bridging enabled. Perpetual. For NV-21-HU, TSC-70-G3 and TSC-101-G3

8 **QSC LLC**
6.5" Two-way ceiling speaker, 70/100V transformer with 8? bypass, 110° conical coverage, includes C-ring and rails for blind mount installation. Priced individually but must be purchased in pairs. White

1   **QSC LLC**
110° Horizontal Field of View, ePTZ network camera, PoE, includes mounting bracket for monitor and surface mounting

1   **QSC LLC**
12x Optical Zoom 80° Horizontal Field of View, PTZ Network Camera, PoE, with HDMI and SDI output. Includes PTZ-WMB1 wall mount bracket

1   **Rack/System Hardware**
Rack Screws, Plates, Lacing Bars, Cable ties, Etc.

    10   Liberty AV Solutions
            LOW VOLT MT/BRKT SG RETRO

    1   Middle Atlantic
            10 PACK L LACER BAR

    1   Middle Atlantic
            100PC 10-32 RACK SCREWS W

    10   VANCO
            Single Gang Plate with Brush Style Grommet - White

    1   Velcro
            Hook-and-Loop Cable Tie Roll, 0.5" W x 75' L

6   **Sennheiser**
Wired ceiling boundary microphone with omni pickup pattern.

12   **Sentinel**
Category 6A and 6 RJ45 Plug For Larger Size Conductors (.044"-.048")

1   **Tripp Lite**
CAT6 Patch Cable, GREEN, 25'

	Quantity	Description	Unit Price	Price
	1	**Cables To Go** High Speed HDMI Cable, 1'		
	2	**Cables To Go** High Speed HDMI Cable, 3'		
	16	**CCCP** Mic/Line audio cable. 22AWG shielded twisted pair with ground wire.		
	30	**CCCP** Control Cable. 22AWG shielded twisted pair with ground wire.		
	1	**Comprehensive** USB 3.1 C Male to C Male Cable 10ft.		
	2	**Extron** HDMI Twisted Pair Transmitter - 230 feet (70 m)		
	1	**Extron** HDMI Twisted Pair Transmitter with Input Loop-Through - 230 feet (70 m)		
	5	**Extron** 4K Premium High Speed HDMI Ultra-Flexible Cable - 15' (4.5 m)		
	1	**Extron** Standard Model		
	1	**LinkUSA Inc** Custom Panel, 1RU, UV Printed, (1) etherCON Passthrough CCCP Logo		
	4	**Middle Atlantic** 1SP FLANGED ECONO BLANK		
	1	**Middle Atlantic** 10SP/17D ECONO WLRK,BK,DR		

1 **Middle Atlantic**
9 Outlet, 15 Amp Rackmount Power with Multi-Stage Surge Protection

1 **Middle Atlantic**
1SP UM SHELF,11.5"D,KIT

1 **Netgear**
8x1G PoE+ 125W 2x1G and 2xSFP Managed Switch (Americas)

1 **QSC LLC**
Unified Core with 8 local audio I/O channels, 64x64 network I/O channels with 8x8 Software-based Dante license included, USB AV bridging, dual LAN ports, VoIP telephony, 8x8 GPIO, 8 AEC processors, Half-size 1RU.

1 **QSC LLC**
Q-SYS peripheral providing control expansion with 4 serial communication I/O. Up to 4 devices daisy-chainable. 1U-1/4W, powered over Ethernet or +24 VDC. Surface mountable, rack kit sold separately.

1 **QSC LLC**
Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable). Scripting Engine Software License, Perpetual.

1 **QSC LLC**
Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable). UCI Deployment Software License, Perpetual.

1 **QSC LLC**
1/2 RU 2 Channel ENERGY STAR amplifier / Stereo Operation 200 watts into 8? & 4?, Bridged operation 400 watts into 8? & 4?, and 350 watts into 70v and 100v / 100-240 VAC Operation.

30 **Techflex**
Flexo® PET - 1/2" - Black Expandable Tubing Black 100 Foot Roll

4 **Tripp Lite**
5 Feet Cat6 Gigabit Snagless Molded Patch Cable (RJ45 M/M) - Black

1 **Tripp Lite**
CAT6 Patch Cable, 10', Blue

Quantity	Description	Unit Price	Price
1	**Extron** Two Input 4K/60 HDMI Switcher with Integrated DTP2 Transmitter and HDMI Output		
1	**Hosa** 25' Extension cord, 14 AWG (15 amp)		
1	**Middle Atlantic** SLIM PWR STRIP,8 OUTLET,1		
1	**Middle Atlantic** 1SP UM SHELF,11.5"D,KIT		
1	**QSC LLC** Q-SYS 10.1" PoE Touch Screen Controller for In-Wall Mounting. Color - Black only		
1	**QSC LLC** Table top mounting accessory for TSC-70-G3 and TSC-101-G3.		
1	**Spectrum Industries** Compact Lectern - Media Manager Series		

Quantity	Description	Unit Price	Price
1	**CCCP** Ground Shipping and Handling Estimate		
1	**CCCP** Miscellaneous installation hardware		

Equipment Subtotal:	**$47,276.34**
Labor Subtotal:	**$22,947.12**
Project Subtotal:	**$70,223.46**

Equipment:	$47,276.34
Labor:	$22,947.12

Grand Total:	**$70,223.46**

Payment Schedule	Amount	Due Date
Initial Deposit	$35,111.73	
Equipment Delivery	$28,089.38	
Final Acceptance	$7,022.35	

Planned Down Time

ACP CreativIT LLC will provide prior notice of any necessary system outages during the implementation. In case of unforeseen issues during the installation and cutover, ACP CreativIT LLC will make every effort to minimize any interruption.

Testing

ACP CreativIT LLC will verify that the system and features meet the customer's expectations, as laid out in this document. This includes ensuring that the present functionality of the system is still available unless directed otherwise.

First day of Service

On the first day of service, ACP CreativIT LLC will be available for the customer to discuss questions or issues they may have. We will document all issues and work quickly to resolve them.

Return Policies

We strive to provide our customers with the highest level of service possible. From first visit to order delivery and installation, we want you to be completely satisfied with your experience.

Unless specified, the manufacturer's product warranty does not cover the labor to fix defective product(s).

Unless specified otherwise, all products are covered by the manufacturer's warranty. Please identify any concerns that you have within 30 days of the invoice date. Any issues after the first 30 days will be subject to the restrictions and limitations imposed by our vendors.

All cancelled orders/returns are subject to a 15% restocking fee. Opened software is not returnable. Special order/non-stock items may not be returnable or may be subject to a higher restock fee. Vendor approval will be required prior to the return of opened hardware. Defective hardware may be returned for exchange only. Support blocks are non-refundable. Refund checks will be mailed.

A RETURN AUTHORIZATION ("R.A") REQUEST must be placed by filling out our online Return Authorization Request and is required for ALL returns. (Go to www.cccp.com and click on the Return Authorization Request Form link under Policies & Terms.). You will get a response within 48 hours of your request. Merchandise must be returned within 7 days of the issuance of the R.A.

Please do not write on original packaging or boxes. In addition, save all boxes and packing material as they are required for returns/rebates and repairs.

ACP CreativIT LLC inspects all returns and reserves the right to return merchandise that does not meet manufacturers return authorization criteria.

If you have additional questions, please email returns@cccp.com.

Programming

Programming performed by ACP CreativIT LLC is subject to a limited warranty. ACP CreativIT LLC warrants that the physical medium on which this programming is located is free from defects and that the products impacted by this programming will perform as outlined in this SOW. This limited warranty is good for 60 days from the date of invoice. See Programming Addendum to the SOW if applicable.

Supply Chain

Many of the industries we serve are experiencing considerably longer-than-normal lead times due to COVID-19 related shortages in raw material, production material, semiconductor and microchips, as well as other supply chain issues. As a result of these issues, equipment, material lead times and prices of products we use in the design of projects and customer proposals are subject to change, and may unexpectedly be discontinued without notice. ACP CreativIT/Camera Corner Connecting Point is not responsible for any hardship to our customers caused by these issues, though we will work diligently with the customer and our vendor partners to resolve these issues as quickly and as cost effectively as possible.

Disclaimers and Limitations of Liability

ACP CreativIT LLC WILL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, PROPERTY DAMAGE, LOST TIME, LOSS OF USE OF ANY EQUIPMENT OR ANY OTHER DAMAGES RESULTING FROM THE BREAKDOWN OR FAILURE OF ANY EQUIPMENT OR FROM DELAYS IN SERVICING OR THE INABILITY TO RENDER SERVICE ON ANY EQUIPMENT. ACP CreativIT LLC LIABILITY FOR DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, ACP CreativIT LLC NEGLIGENCE OR INSTALLATION OF DEFECTIVE PARTS OR COMPONENTS, WHETHER OR NOT SUCH DEFECT WAS KNOWN OR DISCOVERABLE, SHALL NOT EXCEED THE ACTUAL PRICE PAID TO ACP CreativIT LLC BY CLIENT FOR THE EQUIPMENT OR PARTS, WHICHEVER IS LESS.

Contact for Service

When you need to place a service call to ACP CreativIT LLC, please call us at (920) 438-0333. We will take your name, a brief description of the trouble, and a call back number. We will then contact one of our qualified associates to follow up on your request.

Statement of Confidentiality

This Statement of Work and proposal is the proprietary and confidential property of ACP CreativIT LLC. By accepting possession of this document, the company named in this document agrees to keep the contents in confidence and not to use, duplicate, or disclose for any purpose other than the purpose of evaluating ACP CreativIT LLC ability to provide the services herein, unless otherwise agreed to in writing by ACP CreativIT. On request by ACP CreativIT, the company named in this document agrees to return the copies of the Statement

of Work to ACP CreativIT, together with the other materials supplied by ACP CreativIT.

Non-Solicitation of Personnel

Client agrees not to solicit, directly or indirectly (through individuals, subsidiaries, holding companies, partnerships, subcontractors, employment agencies or any other financially related firms), nor to tender an offer for employment nor place on their payrolls any present ACP CreativIT LLC employee who becomes known to Client in connection with the proper performance of this Agreement during the term of this Agreement and for a period of one (1) year after its termination. In the event Client hires or contracts with a ACP CreativIT LLC employee in violation of the terms of this paragraph, the Client agrees to pay ACP CreativIT LLC as liquidated damages, and not as a penalty, an amount equal to one half of the employee's annual compensation, including but not limited to wages, bonuses and fringe benefits.

Post Installation Review

ACP CreativIT LLC wants to get your feedback to understand how we could serve you better, and improve our relationship with you. We may also ask for referrals or testimonials. Please feel free to contact us with any questions you may have.

Approval for Acceptance and Authorization of Project Completion

ACP CreativIT LLC will work with you to resolve any problems and answer any questions you have regarding the system implementation. Your signature of acceptance will be asked for upon completion of the project.

Approval for Contact Information/Logo Placement

ACP CreativIT LLC will place our logo and contact information on a 1U blank rack panel to provide you convenient contact information.

Approval for Pictures of Completed Project

ACP CreativIT LLC may take pictures of the equipment upon completion of the project. They will be primarily used to document the installation work and reference in the future if design changes or troubleshooting is required. Your signature of acceptance will be asked for upon completion of the project.

Other Approvals

Throughout this project, ACP CreativIT LLC may provide the customer with other documents requiring approval before we begin a particular phase of the project. Such documents are addendums of this document and are subject to all of the same guidelines stated in this document. A non-exhaustive list of examples would include a Programming Addendum to the SOW and a Custom Plate Addendum to the SOW.

Subcontractors

ACP CreativIT LLC may use subcontractors to assist on this project. All work by subcontractors will be directed and/or supervised by ACP CreativIT LLC staff. Tasks that subcontractors may be utilized for include the following:

- Low voltage cabling – including Cat. 6 cabling
- Conduit and raceway work as required
- Physical installation of devices and equipment

Remote Access

Unless specifically directed otherwise, ACP CreativIT LLC will install TeamViewer software on the any provided servers and create a ACP CreativIT LLC account on the system. This access will be used to facilitate service and repair issues as well as programming changes as directed by the owner.

Acceptance and Authorization of SOW

IN WITNESS WHEREOF, the parties hereto each acting with proper authority Accept this Statement of work

Project Name: Training/Conference Room AV

Travis Teesch	Jason Hussong	Bradley Behling
Customer Printed Full Name	ACP CreativIT LLC Acct Rep Full Name	ACP CreativIT LLC Engineer Full Name
Fire Chief	Account Manager	Designer
Title	Title	Title
Signature	Signature	Signature
Date	Date	Date

An authorized signature on this document acknowledges that the customer has read our Return Policy located on the Company Info page of the ACP CreativIT LLC website www.cccp.com.

After all parties have signed, please provide original to customer and a copy to ACP CreativIT LLC.

Acceptance and Authorization of Project Completion

IN WITNESS WHEREOF, the parties hereto each acting with proper authority Accept this Statement of work

Project Name: Training/Conference Room AV

Travis Teesch	Jason Hussong	Bradley Behling
Customer Printed Full Name	ACP CreativIT LLC Acct Rep Full Name	ACP CreativIT LLC Engineer Full Name
Fire Chief	Account Manager	Designer
Title	Title	Title
Signature	Signature	Signature
Date	Date	Date

Can we use you as a reference or testimonial for the work just completed?   Yes _____   No_____

If no, may we ask why?

_____

After all parties have signed, please provide original to customer and a copy to ACP CreativIT LLC.

Assumptions

The list of assumptions below was used to develop this Statement of Work and Quote. If any of these assumptions are not correct or if additional, unanticipated information was uncovered during the project, it may affect the SOW and Quote relative to the installation timeline and/or price. If so, a change order (discussed below) will be written and signed off by the customer before this additional work is performed.

1.
2. The room(s) match(es) the drawings provided
3. Site preparation by the Customer and their contractors includes electrical and data placement per ACP CreativIT specification.
4. Site preparation will be verified by ACP CreativIT project manager or representative before scheduling of the installation. All work areas should be clean and dust free prior to the beginning of on-site integration of electronic equipment.
5. Customer communication of readiness will be considered accurate and executable by ACP CreativIT project manager.
6. In the event of any arrival to site that ACP CreativIT is not able to execute work and definable progress, the Customer will be charged a $110/hr per installer Fee to offset the lost time due to the lack of readiness. The Fee will be presented as a Contract Change Order and will/may halt work until acceptance by the Customer and rescheduling of the integration effort is agreed upon.
7. Rescheduling and redeployment of ACP CreativIT technicians due to unacceptable site preparation may cause scheduling delays of up to 10 business days.
8. There is ready access to the building / facility and the room(s) for equipment and materials.
9. There is secure storage for equipment during a multiple-day integration.
10. If Customer furnished equipment and existing cabling is to be used, ACP CreativIT assumes that these items are in good working condition at this time and will integrate into the designed solution. Any repair, replacement and/or configuration of these items that may be necessary will be made at an additional cost.
11. All Network configurations including IP addresses are to be provided, operational and functional before ACP CreativIT integration begins. ACP CreativIT will not be responsible for testing the LAN connections.
12. Cable or Satellite drops must be in place with converter boxes operational before the completion of integration. Any delay resulting in extra work caused by late arrival of these items will result in a change order for time and materials.
13. Document review / feedback on drawings / correspondence will be completed by the Customer within two business days (unless otherwise noted)
14. The documented Change Control process will be used to the maximum extent possible – the Customer will have an assigned person with the authority to communicate/approve project Field Directed Change Orders and Contract Change Orders
15. In developing a comprehensive proposal for equipment and integration services ACP CreativIT's Account Managers and Engineering teams must make some assumptions regarding the physical construction of your facility, the availability of technical infrastructure and site conditions for installation. If any of the conditions we have indicated in the site survey form are incorrect or have changed for your particular project or project site, please let your Sales representative know as soon as possible. Conditions of the site found during integration effort which are different from those documented may have an effect on the price of the system solution, integration or services. To ensure that you have an accurate proposal based on your facility and specific to the conditions of your project, please review all project documentation carefully.

Customer Responsibilities

Customer, at its expense, shall:
A. Provide employees or agents of ACP CreativIT LLC:
   - reasonable access to the premises and facilities
   - suitable and easily accessible floor space that's close to the project area
   - necessary power and grounding
   - an environment that prevents equipment from over-heating and/or exposure to moisture
   - floor plans
   - any other information as needed
B. Communicate all project related issues with ACP CreativIT LLC in a timely basis such that the project timeline is not imperiled.

C. Provide all required licensing and software needed to ensure the timely backup of data as well as protection from viruses and other risks at all levels of the network.
D. Confirm all drop ship items have arrived.
E. Do not write on original packaging or boxes. Save all boxes and packing material as they are required for returns/rebates and repairs.
F. Cover the cost of lift rentals, if necessary to access and/or install all equipment included in this project.
G. Upon request and prior to scheduling, provide photographic confirmation of the completed customer responsibilities.
H. Upon project completion, review and verify the system implemented by ACP CreativIT LLC.

Work Schedule/Billing Rate

Rates - Regular billing hours are 7:30am – 5:30pm Monday through Friday. Any work performed outside that range is billed at the after-hours rate. Refer to the Billing Rate Schedule below.

ACP CreativIT LLC will work with the customers schedule when after-hours work is required. ACP CreativIT LLC will confirm the installation timeframe with the customer.

Time	Rate per Hour	
7:30am – 5:30pm (M-F)	Published Rate	
5:30pm – 7:30am (M-F)	1.5x	Published Rate
Saturdays (7:30am-5:30pm)	1.5x	Published Rate
Saturdays (5:30pm-12:00am Sunday)	2x	Published Rate
Sundays (until 7:30am Monday)	2x	Published Rate
Holidays	3x	Published Rate

Travel – For any customer within 60 miles of its corporate offices ACP CreativIT LLC charges for service from the time we leave our corporate office until the time our work is complete (i.e., we charge travel to the customer's location, but not from). In addition, for all service calls greater than 60 miles from our offices, ACP CreativIT LLC reserves the right to charge an additional fee for zone travel charges. In addition, gas prices may at times, require us to include a small surcharge on dispatched trips from our technical team. Your account rep can explain how these charges may apply to you.

(continued on next page)

Labor – Labor for this project is to be billed as follows:

- ☐ Time and Materials billed off Sales Order
- ☐ Time and Materials billed off Block
- ☐ Project Based *(flat fee no matter how long it takes – excluding costs associated with change orders)*

Billing Rate – The billing rate for this project is based on current published rates:

Installation:	$115/hr
Programming:	$175/hr
Project Management:	$150/hr
Design/Engineering:	$175/hr
Network Engineer:	$190/hr minimum (certification dependent)

Special Notes on Billing:

Terms

Consulting	Product	Labor

% to be Pre-Paid: % to be Pre-Paid: % to be Pre-Paid (from b
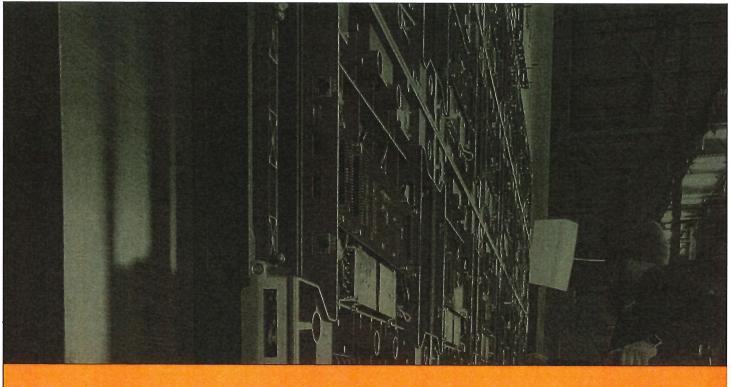
% to be Paid n/30:   % to be Paid n/30:   % to be Paid n/30:

% Special Terms: % Special Terms: % Special Terms:

Change Management

ACP CreativIT LLC will review change requests to this Statement of Work by you. As part of this review, ACP CreativIT LLC will prepare a Change Order (available upon request) that documents the request and, if applicable, any impact on the project schedule and pricing. ACP CreativIT LLC will incorporate the change into the project schedule and scope of work upon receipt of your signed Change Order. Changes requested can affect the implementation schedule and services quoted. The following personnel at your company are authorized to make change orders:

Name	Title
Name	Title
Name	Title

Watertown Fire Station Training Room

The City of Watertown

Proposed by:

majic
PRODUCTIONS
Creative sound, video & lighting solutions

Unassigned

2   **QSC**

12x Optical Zoom 80¡ Horizontal Field of View, PTZ Network Camera, PoE, with HDMI and SDI output. Includes PTZ-WMB1 wall mount bracket

200   Windy City Wire

23 AWG 4 Pair, Non-Shielded Plenum Rated Category 6

4   Windy City Wire

RJ45 Connector for Round Solid Cable

Unassigned Total   **$7,288.32**

Ceiling

2   **Shure**

Ceiling Array Microphone, Square, White, 24 inch

200   Windy City Wire

23 AWG 4 Pair, Non-Shielded Plenum Rated Category 6

4   Windy City Wire

RJ45 Connector for Round Solid Cable

12   **Sonance**
PS-C63RT WHITE

600   Windy City Wire

16 AWG 2 Conductor, Plenum Speaker Cable

Ceiling Total   **$10,479.92**

* Price Includes Accessories

Lectern

1   **Gator**
Frameworks 13" Solid Steel Gooseneck with Black Finish

1   **QSC**
4K60 4:4:4 Network Video Endpoint for the Q-SYS Ecosystem, software configurable as Encoder or Decoder. 3 HDMI 2.0 Inputs, 2 HDMI 2.0 Outputs, on-board AV Bridging. Supports optional stand-alone ÒQ-SYS Core Mode" operation for audio DSP with local video switching (no encoding or decoding) and AV Bri

     1   C2G
         2m USB 3.0 AM-BM CBL BLK

     2   C2G
         6ft/1.8M High Speed HDMI Cable w/ Eth

     100   Windy City Wire
         23 AWG 4 Pair, Non-Shielded Plenum Rated Category 6

     2   Windy City Wire
         RJ45 Connector for Round Solid Cable

1   **QSC**
Q-SYS 7Ó PoE Touch Screen Controller for In-Wall Mounting.
Color - Black only

     1   QSC
         Table top mounting accessory for TSC-70-G3 and TSC-101-G3.

     100   Windy City Wire
         23 AWG 4 Pair, Non-Shielded Plenum Rated Category 6

     2   Windy City Wire
         RJ45 Connector for Round Solid Cable

1   **Shure**
Mounting Flange, Heavy Duty, Black

* Price Includes Accessories

| | 1 | **Shure** |
| | | Access Point/Charger/DSP - 2 Ch. |

| | 100 | Windy City Wire |
| | | 23 AWG 4 Pair, Non-Shielded Plenum Rated Category 6 |

Lectern Total   ·   **$5,246.30**

* Price Includes Accessories

South Wall

	2	**Sony Professional** 85" 3840x2160 4K 440nit, 24/7 display - Black
	2	C2G Decora Wall Plate HDMI F/F White
	2	C2G 6ft/1.8M High Speed HDMI Cable w/ Eth
	2	C2G 10ft/3M High Speed HDMI Cable w/ Eth
	2	CHIEF Tempo Flat Panel Wall Mount System, PDU Bundle
	2	CHIEF IN-WALL LARGE WHT - W/ SURGEX 1 OUTLET
	2	Juice Goose iP Series Slim Line Web Based Power Controller with RX Series Surge Protection Technology
	2	QSC 4K60 4:4:4 Network Video Endpoint for Q-SYSEcosystem, software configurable as Encoder or Decoder. 1 HDMI 2.0 Input, 1 USB-C Input, 1 HDMI 2.0 output. Optional Software License to enable AV Bridging (SLQBR-P).
	600	Windy City Wire 23 AWG 4 Pair, Non-Shielded Plenum Rated Category 6

South Wall Total $14,264.00

* Price Includes Accessories

Back Wall

	1	**Sony Professional**	
		75" 3840x2160 4K 440nit, 24/7 display - Black	
	1	C2G	
		Decora Wall Plate HDMI F/F White	
	1	C2G	
		6ft/1.8M High Speed HDMI Cable w/ Eth	
	1	C2G	
		10ft/3M High Speed HDMI Cable w/ Eth	
	1	CHIEF	
		Tempo Flat Panel Wall Mount System, PDU Bundle	
	1	CHIEF	
		IN-WALL LARGE WHT - W/ SURGEX 1 OUTLET	
	1	Juice Goose	
		iP Series Slim Line Web Based Power Controller with RX Series Surge Protection Technology	
	1	QSC	
		4K60 4:4:4 Network Video Endpoint for Q-SYSEcosystem, software configurable as Encoder or Decoder. 1 HDMI 2.0 Input, 1 USB-C Input, 1 HDMI 2.0 output. Optional Software License to enable AV Bridging (SLQBR-P).	
	300	Windy City Wire	
		23 AWG 4 Pair, Non-Shielded Plenum Rated Category 6	

Back Wall Total   **$6,180.40**

* Price Includes Accessories

Watertown Fire Station Training Room

	1	**C2G**
		Decora Wall Plate HDMI F/F White
	1	**C2G**
		6ft/1.8M High Speed HDMI Cable w/ Eth
	1	**C2G**
		10ft/3M High Speed HDMI Cable w/ Eth
	1	**CHIEF**
		Tempo Flat Panel Wall Mount System, PDU Bundle
	1	**CHIEF**
		IN-WALL LARGE WHT - W/ SURGEX 1 OUTLET
	1	**Juice Goose**
		iP Series Slim Line Web Based Power Controller with RX Series Surge Protection Technology
	1	**QSC**
		4K60 4:4:4 Network Video Endpoint for Q-SYSEcosystem, software configurable as Encoder or Decoder. 1 HDMI 2.0 Input, 1 USB-C Input, 1 HDMI 2.0 output. Optional Software License to enable AV Bridging (SLQBR-P).
	300	**Windy City Wire**
		23 AWG 4 Pair, Non-Shielded Plenum Rated Category 6

West Wall Total   **$3,622.00**

* Price Includes Accessories

1   **LEA Professional**

2 Channel x 350 watt @ 41/2, 81/2, 70V and 100V per channel. Internal DSP w/ Crossovers and Dante, IoT Device with built in WiFi Hotspot, Wifi or FAST Ethernet connectivity and Highly Efficient Power Supply with Class D Output Stage

1   **Majic Productions**

Shipping, Handling, Logistics

1   **Middle Atlantic**

12SP/22D ECONO WALLRK BK

    1   Hubbell

late, Frame, Decorator, with 2HDMI, FF, Black

    1   Middle Atlantic

1SP PNL W/(1)DECORA OP BK

    1   Middle Atlantic

12SP REAR RL KIT DWR/EWR

    7   Middle Atlantic

1SP FLANGED ECONO BLANK

    1   Middle Atlantic

10PK LACING BARS W/1.5OFF

1   **Middle Atlantic**

Premium+ PDU with RackLink

1   **Netgear**

NETGEAR AV Line M4250-26G4F-PoE++ 24x1G Ultra90 PoE++ 802.3bt 1,440W 2x1G and 4xSFP Managed Switch

1   **QSC**

4K60 4:4:4 Network Video Endpoint for the Q-SYS Ecosystem, software configurable as Encoder or Decoder. 3 HDMI 2.0 Inputs, 2 HDMI 2.0 Outputs, on-board AV Bridging. Supports optional stand-alone ÒQ-SYS Core Mode" operation for audio DSP with local video switching (no encoding or decoding) and AV Bri

* Price Includes Accessories

	1	C2G
		3FT CAT6 SNAGLESS STP CABLE-BLK
	3	C2G
		6ft/1.8M High Speed HDMI Cable w/ Eth
	1	Majic Productions
		5' Cat6 Patch Cable - Black
	1	QSC
		Q-SYS Software-based Dante 32x32 Channel (16x16 Flows) License, Perpetual.
	1	QSC
		Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable) license for Microsoft Teams Room software features, enables both Q-SYS Scripting and UCI Deployment, Perpetual
	1	QSC
		Q-SYS Core Mode Video Streaming feature license. Enables network video encoding or decoding on Q-SYS NV-32-H (Core Capable) when in Core Mode. Perpetual.

A105A - Storage Closet Total   **$12,972.16**

Project Subtotal: **$60,053.10**

---

* Price Includes Accessories

PROJECT SUMMARY

Equipment:	$60,053.10
Labor:	$22,155.00

Grand Total:	**$82,208.10**

Client: Mark Stevens

Date

Contractor: Majic Productions

Date

DIGICORP
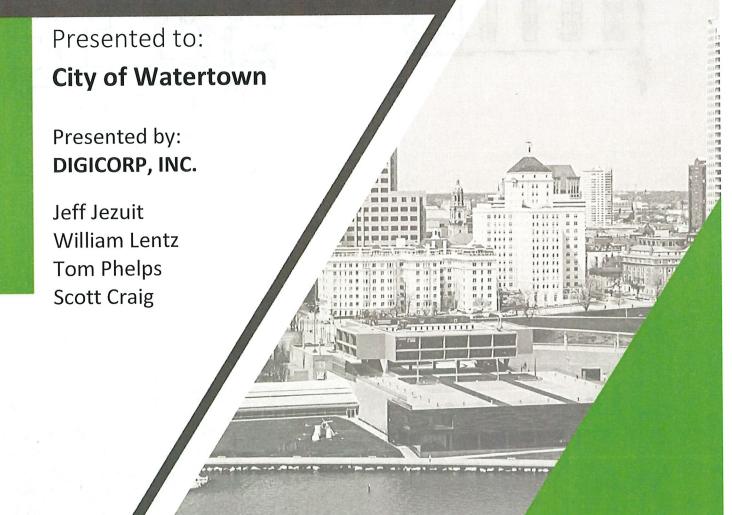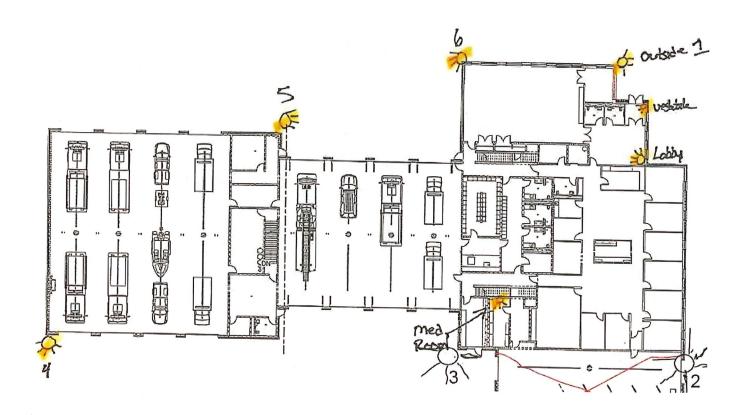
Proposal:
Security Camera System
for
Watertown Fire Station

Presented to:
City of Watertown

Presented by:
DIGICORP, INC.

Jeff Jezuit
William Lentz
Tom Phelps
Scott Craig

DIGICORP

Proposed Camera Layout

Pricing Summary

Camera System (Axis Cameras and ExacqVision NVR Server):

i. Equipment

QTY	ITEMS/DESCRIPTION	MSRP (Unit Price)	Est. Sales Price (Unit)	Est. MSRP (Extended)
6	Axis P3735-PLE 4-sensor Multi-Directional Outdoor Rated camera: • 4 x 5 Megapixel varifocal sensors are individually positioned to capture views in 4 directions, up to 360° • Each lens can be individually adjusted to provide a 108° - 40° horizontal field of view and 55° - 23° vertical field of view • Axis Object Analytics with deep learning supported on all 4 sensors • Forensic WDR, Lightfinder, and 360° IR illumination with individually controlled LEDs for balanced recording in challenging light conditions, low-light, and IR recording in total darkness • Hardened security with Signed firmware, brute force delay protection, digest authentication, password protection and Axis Edge Vault • Zipstream Technology with support for H.264 and H.265 to significantly reduce storage/bandwidth requirements • 5 Year Manufacturer's Warranty included	$ 1,499.00	$ 1,287.00	$ 7,722.00
6	AXIS T91A64 Corner Bracket - AXIS T91A64 Corner Bracket is compatible with AXIS T91B6 Wall Mount and AXIS T91D61 Wall Mount 1.5" NPS	$ 89.00	$ 76.00	$ 456.00
6	AXIS T91D61 Wall Mount 1.5" NPS – Outdoor Rated – T91A6 Pipe Seal included - Compatible with Axis fixed dome pendant kits and ACI ¾" conduit adapters. The cables can be routed through the back or from the side using a conduit connection	$ 99.00	$ 85.00	$ 510.00
6	AXIS T94N01D Pendant Kit allows AXIS P37 Network Cameras to be mounted on poles, parapets and outer corners using 1.5" NPS threaded brackets	$ 99.00	$ 85.00	$ 510.00
3	Axis P3265-LV 2MP Indoor Dome Camera: Features include remote focus and zoom, P-Iris controlled varifocal lens with 100° - 36° horizontal /53° - 20° vertical field of view, day/night functionality, Lightfinder 2.0 with Forensic Wide-Dynamic Range and Optimized IR, Corridor Format, Object Analytics with deep learning processing unit (DLPU) enables advanced features and powerful analytics (e.g.classification of humans and vehicles) based on deep learning on the edge, built-in cybersecurity features such as Axis Edge Vault prevents unauthorized access and safeguards your system, audio and I/O connectivity, IP52 and IK10 impact rated, and Zipstream Technology with support for H.264 and H.265 to significantly reduce storage/bandwidth requirements; 5 Year Manufacturer's Warranty included	$ 639.00	$ 548.00	$ 1,644.00
1	ExacqVision X-Series 1U Rack Mount NVR Server with 32TB Raw Storage Capacity (24TB Usable with RAID 5) – Includes the following features: • Supports up to 150 IP cameras • CPU: Intel Xeon E2334-G Processor • Memory: 16GB RAM (2 x 8GB DIMM modules) • OS Drive: Dual 240GB Solid State (SSD) Drives in RAID 1 • Enterprise Class, Continuous-Duty Hot-Swappable Hard Drives (4 x 8TB Hard Drives, out of 4 total drive bays) • RAID 5 configuration included for hard drive redundancy • Operating System: WIN Server 2022 OS • VMS Software: ExacqVision VMS Professional Software (Server, Client, and Mobile APP) with 8 x IP Camera Licenses Included • NIC: 2 x 1GbE & 4 x 1GbE • Power: Redundant Hot Swappable Power Supplies • iDRAC9 Enterprise Remote Server Management	$ 16,325.00	$ 13,570.00	$ 13,570.00

	• Hardware Health Monitoring with ExacqVision VMS Pro Software • Rackmount sliding rail Kit included • Manufacturer's Warranty includes 5 year hardware and 5 year SSA coverage (software updates)			
1	ExacqVision Professional IP Camera License – Includes 1 year of software updates (extended to 5 years when purchased with a X-series NVR)	$ 230.00	$ 189.00	$ 189.00
	Subtotal			**$ 24,601.00**

ii. Digicorp Labor– Camera System Installation

Qty	_DESCRIPTION_	_Sales Price (Unit)_	_Sales Price (Extended_
1	**Camera System Installation** – Digicorp labor required for the following tasks: • Mount and focus 9 cameras (6 x outdoor and 3 x indoor) • Install and Configure ExacqVision NVR • Configure 9 cameras onto system *NOTE: We assume a suitable outdoor lift will be provided by the customer* **Cabling required for cameras is not included, as it is being proposed separately*	$ 4,978.00	$ 4,978.00
	Subtotal		**$ 4,978.00**

Total (Camera System) = $29,579

PROJECT NOTES: Freight and taxes (if applicable) are not included.

We assume a suitable outdoor lift will be provided by the customer for camera installation.

Low voltage cabling required to support proposed cameras is not included and is being proposed separately.

Pricing will expire on 10/31/24.

Agreement

This Statement of Work ("SOW") is made as of the last date of signature below ("Effective Date") between Digicorp, LLC, a Wisconsin limited liability company hereinafter referred to as "Digicorp," and the customer identified below ("Customer"), and is subject to the terms and conditions located at https://www.wintechnology.com/digicorpterms.

Digicorp will provide to Customer the Services identified herein, for the estimated prices set forth in the Pricing Breakdown above.

IN WITNESS WHEREOF, the Parties have caused this SOW to be effective as of the Effective Date, by execution of their authorized representatives below.

DIGICORP, LLC	CUSTOMER: CITY OF WATERTOWN
Signature	Signature
Print Name	Print Name
Title	Title
Date	Date

DIGICORP
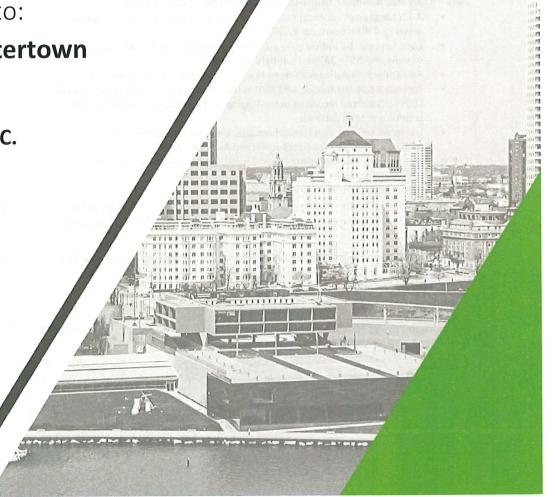
Proposal:
Security Camera & Wireless Bridge for Light Pole Installation - Watertown Fire Station

Presented to:
City of Watertown

Presented by:
DIGICORP, INC.

Jeff Jezuit
William Lentz
Tom Phelps
Scott Craig

DIGICORP

Executive Summary

We're quoting a 4-sensor camera to be installed on a light pole outside of the main fire station building. This would be used to view the area around the training tower. Our plan is to deploy a wireless point-to-point bridge to effectively extend the network from the main fire station building to the light pole. We are assuming the electricians will provide suitable 100VAC electrical power to the light pole along with a NEMA enclosure to house the POE injectors we are proposing to help establish network connectivity to the proposed camera and Ubiquiti wireless device at the light pole.

A potential alternative to this wireless design would be to install the camera on the outside of a cold storage building that has been included on the recent construction drawings as a proposed option. With this plan, we would run ethernet cabling from the main fire station building into the cold storage building, and would assume the electricians would install suitable conduit into each building. We have not presented pricing for this option as the plans for the cold storage building have not been finalized.

Pricing Summary

i. Camera Equipment & Licensing

QTY	ITEMS/DESCRIPTION	MSRP (Unit Price)	Est. Sales Price (Unit)	Est. MSRP (Extended)
1	Axis P3735-PLE 4-sensor Multi-Directional Outdoor Rated camera: • 4 x 5 Megapixel varifocal sensors are individually positioned to capture views in 4 directions, up to 360° • Each lens can be individually adjusted to provide a 108° - 40° horizontal field of view and 55° - 23° vertical field of view • Axis Object Analytics with deep learning supported on all 4 sensors • Forensic WDR, Lightfinder, and 360° IR illumination with individually controlled LEDs for balanced recording in challenging light conditions, low-light, and IR recording in total darkness • Hardened security with Signed firmware, brute force delay protection, digest authentication, password protection and Axis Edge Vault • Zipstream Technology with support for H.264 and H.265 to significantly reduce storage/bandwidth requirements • 5 Year Manufacturer's Warranty included	$ 1,499.00	$ 1,287.00	$ 1,287.00
1	AXIS T91B67 Pole Mount – Designed for indoor/Outdoor use – Fits onto poles 65-165 mm (2.5" – 6.5") in diameter - Support for 1.5" NPS threaded Axis pendant kits	$ 109.00	$ 95.00	$ 95.00
1	AXIS T94N01D Pendant Kit allows AXIS P37 Network Cameras to be mounted on poles, parapets and outer corners using 1.5" NPS threaded brackets	$ 99.00	$ 85.00	$ 85.00
1	LAN Power 35W Single Port High Power POE+ Midspan Injector – *Needed to provide power to the camera at the light pole*	$ 75.00	$ 59.00	$ 59.00
1	ExacqVision Professional IP Camera License – Includes 1 year of software updates (extended to 5 years when purchased with a X-series NVR)	$ 230.00	$ 189.00	$ 189.00
	Subtotal			**$ 1,715.00**

DIGICORP

ii. Ubiquiti Wireless Bridge Equipment

Qty	ITEMS/DESCRIPTION	MSRP (Unit)	Sales Price (Unit)	Sales Price (Extended)
1	Ubiquiti airMAX Lite AP –Ultra Lite 5GHz wireless access point • Integrated 5 GHz antenna, 10+ km link range • 450+ Mbps throughput • 50+ client capacity • Dedicated spectral analysis radio • 24V, Power Supply - 0.5A gigabit PoE adapter (Included) • Includes a versatile ball-join mount • Limited 1 Year Manufacturer's Warranty included	$ 89.00	$ 89.00	$ 89.00
1	Ubiquiti airMAX Litebeam 5AC Wireless Bridge Device – Includes the following: • 5 GHz, 15+ km link range • 450+ Mbps throughput • 24V power supply - 0.3A gigabit PoE adapter (Included) • Limited 1 Year Manufacturer's Warranty included	$ 65.00	$ 65.00	$ 65.00
2	Ubiquiti Surge Protector/Suppressor	$ 12.50	$ 12.50	$ 25.00
2	Ubiquiti Universal Antenna Arm Mount	$ 10.00	$ 10.00	$ 20.00
	Subtotal			**$ 199.00**

iii. Digicorp Labor – Camera System Installation

Qty	DESCRIPTION	Sales Price (Unit)	Sales Price (Extended
1	**Camera System Installation** – Digicorp labor required for the following tasks: • Mount a Ubiquiti wireless bridge device on the main firehouse building, and another onto the light pole by the training tower • Configure 2 x Ubiquiti wireless bridge devices for a Point-to-Point connection from the main firehouse building to the light pole by the training tower • Mount and focus 1 camera to the light pole by the training tower • Install and Configure camera onto ExacqVision NVR (NVR included in separate proposal) • Configure 1 camera onto system • Test and provide network documentation *NOTE: We assume a suitable outdoor lift will be provided by the customer We assume electricians will install 100VAC electrical power at the light pole with a suitable NEMA enclosure to house the proposed POE injectors needed for the camera and Ubiquiti device*	$ 1,220.00	$ 1,220.00
	Subtotal		**$ 1,220.00**

Total = $3,134

PROJECT NOTES: Freight and taxes (if applicable) are not included.

We assume a suitable outdoor lift will be provided by the customer for camera installation.

We assume electricians will install 100VAC electrical power at the light pole with a suitable NEMA enclosure to house the proposed POE injectors needed for the camera and Ubiquiti device.

Pricing will expire on 10/31/24.

Agreement

This Statement of Work ("SOW") is made as of the last date of signature below ("Effective Date") between Digicorp, LLC, a Wisconsin limited liability company hereinafter referred to as "Digicorp," and the customer identified below ("Customer"), and is subject to the terms and conditions located at https://www.wintechnology.com/digicorpterms.

Digicorp will provide to Customer the Services identified herein, for the estimated prices set forth in the Pricing Breakdown above.

IN WITNESS WHEREOF, the Parties have caused this SOW to be effective as of the Effective Date, by execution of their authorized representatives below.

DIGICORP, LLC **CUSTOMER: CITY OF WATERTOWN**

Signature / Print Name / Title / Date

Signature / Print Name / Title / Date

AVAYA

Experiences That Matter

An IP Office™ Solution for:

City of Watertown

Presented by:

Troy Thompson
W134 N4981 Campbell Dr.
Menomonee Falls, WI 53051
4142284498
tthompson@convergent-solutions.net
11/7/2023

AVAYA

Experiences That Matter

11/7/2023

Mr. Andrew Day
City of Watertown
106 Jones Street
Watertown, Wisconsin 53094

Dear Andrew,
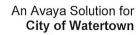
Thank you for giving Convergent Solutions the opportunity to recommend a communication and collaboration solution that meets your company demands. We recognize that all businesses have unique team and customer engagement challenges and we look forward to working through those challenges with you step by step. At the core of our proposed solution is the award winning Avaya IP Office. It is a simple, yet comprehensive, communications platform that can grow with your business without having to assemble a customized multivendor solution.

In the following pages of this proposal, please find a full description of a solution specifically designed to address the engagement challenges and priorities you outlined. The proposed engagement solution is intended to provide immediate productivity gains and assist in the growth of your business.

We look forward to discussing the details of the proposal in more detail and offering guidance as you work through difficult questions.

Sincerely,

Troy Thompson
Convergent Solutions
(414) 228-4498
tthompson@convergent-solutions.net

Table of Contents
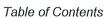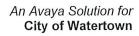
Avaya IP Office

Designed specifically for small to midsized business the Avaya IP Office™ Platform delivers affordable and powerful unified communication choices that can change the way workforces collaborate. Voice, video, and mobility solutions drive engagement on multiple device types with the system maneuverability required to meet ever-changing demands with five editions from which to choose.

IP Office™ Platform Edition Comparison

Features and Scalability	Basic Edition	Essential Edition	Preferred Edition	Server Edition	IP Office Select
Capacity					
Single Site Users	100	384	384	2,000	3,000
Total System Users	100	1,000	1,000	2,000	3,000
Networked Sites		32	32	32	150
Total Unified Communication Users			384	750	3,000
Mobility, Access, and Integration					
Mobility		Basic	Enhanced /	Enhanced	Enhanced
Web Based User Portal			✓	✓	✓
Outlook (plugin) ~~and Salesforce.com~~			✓	✓	✓
~~Avaya Communicator for Windows or iPad~~ Avaya Workplace for iPad, iOS, Android		Basic	✓	✓	✓
~~Avaya Communicator for Lync~~			~~✓~~	~~✓~~	~~✓~~
~~Microsoft Skype for Business~~			~~✓~~	~~✓~~	~~✓~~
~~Avaya Communicator for Web~~ Avaya Spaces Calling			✓	✓	✓
~~Avaya Equinox™ client~~ Avaya Workplace client (desktop)			✓	✓	✓
Conferencing					
Ad Hoc Users	64	128	128	256	512
Meet-Me Users			128	256	512
Conference Scheduling			✓	✓	✓
Web Collaboration			✓	✓	✓
~~H175 Video Collaboration Station~~		~~✓~~	~~✓~~	~~✓~~	~~✓~~
Telephony					
System	Key	IP	IP	IP	IP
Voicemail	Basic	Basic	Pro	Pro	Pro
Call Recording			✓	✓	✓
Auto-Attendant Quantity	9	40	Unlimited	Unlimited	Unlimited
Number of Receptionists		4	4	32	50
Deployment					

Features and Scalability	Basic Edition	Essential Edition	Preferred Edition	Server Edition	IP Office Select
Main Deployment Method	Appliance	Appliance	Appliance	Software	Software
LDAP or Microsoft Active Directory Integration				✓	✓
Centralized Licensing				✓	✓
Contact Center Support			✓	✓	✓
Avaya Aura® Branch		✓	✓		

Avaya IP Office Essential Edition
Fundamental Business Communications

Avaya IP Office Essential Edition provides small businesses the communications tools needed to operate effectively and efficiently. These include the essentials needed to enhance communications with customers and to streamline operations, such as one number access, caller identification, dial by name, automated attendants, conferencing, and voicemail.

Features and Benefits

The Avaya IP Office Essential Edition includes the following features and benefits:

- One Number Access
  - Provide a single office phone number to customers
  - Configure calls to ring simultaneously to any other phone (mobile, remote office, home), eliminating missed calls while keeping the secondary phone number hidden
- Collaboration via Integrated Conferencing Capabilities
  - 128-party conferencing capacity
  - Up to 64 parties on a single conference call
  - Increase communication with staff, vendors, suppliers, and customers while cutting costs
- Advanced Call Routing and Auto Attendants
  - Route calls to the appropriate person or group based on caller identification
  - Provide options to callers in queue via 40 easily customizable automated attendants
  - Customize caller greetings so key clients receive a personalized message
- Embedded Voicemail
  - No additional hardware required
  - Retrieve voicemail messages from any telephone or via the email inbox
  - Save, delete, forward, repeat, rewind, fast forward, and skip messages
- Additional Basic Call Features
  - Automatic Callback
  - Caller Identification
  - Hold Call Waiting
  - Message Waiting Indication
  - Multilingual Automation capabilities
  - Location Time Zone setting
  - Music on Hold
  - Park and Page
  - Toggle Calls
  - Transfer

Avaya IP Office Server Edition
Seamless Growth, Simple Management, and Reduced Total Cost of Ownership for Midsize Businesses
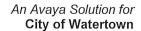
IP Office Server Edition is the ideal solution for midsize businesses, delivering intelligent unified communications, scalable growth, and seamless management. It enables businesses to quickly and easily add users to an existing office or connect a remote office. Server Edition delivers true centralized management and licensing for all users across all locations in one intuitive graphical user interface.

IP Office can be deployed as virtualized software, enabling deployment on a customer-supplied server running high availability VMware ESXi software. Other virtualized options include Microsoft Hyper V, Amazon Web Services or KVM Virtualized IP Office software is packaged in a single Open Virtual Appliance format that can be ignited as a primary, secondary, expansion, Avaya one-X® Portal, or applications server. IP Office software can run inside a virtual machine, on a dedicated server, an appliance, or a combination of these.

Features and Benefits Summary

The Avaya IP Office Server Edition includes the following features and benefits:

- Expanded maximum scale/capacity
  - 2,000 users at a single site or across up to 32 locations
  - 150 voice messaging ports
  - 32 Music on Hold sources
  - 150 Recording channels
  - 300 Hunt Groups
  - 256 Size paging group
  - 256 Conference channels
  - 32 Receptionist Soft Consoles
- Centralized Management
  - Using one intuitive interface, the administrator can view all users on a single site or across up to 32 locations
  - System status allows the administrator to know of any potential issues that could affect system performance, including over utilized trunk lines, voice ports, and bandwidth utilization
  - Store and synchronize basic employee information with integration to industry standard enterprise directories such as LDAP and Microsoft Active Directory
- Centralized Licensing
  - Centralized licensing with WebLM
  - Easily assign user solutions to employees anywhere within the network
- Built-in Resiliency
  - In the event of a system outage within a multisite network where Server Edition is deployed across remote locations, all IP phones at the location of the outage will register to an alternate location

- Flexibility

  - Virtualized IP Office software adds flexibility, while enabling customers to match the deployment method to their infrastructure plans and objectives

  - Analog, digital, and IP phones are all supported, giving you the freedom to choose what works best for your business – operationally and financially

- Web Collaboration

  - User features include document sharing, white boarding, full participant controls, and a common user interface

- Location Time Zone

  - Apply local time zone to users telephone, voicemail box, and call log

Avaya IP Phone J159

The Avaya IP Phone J159 is a button-intensive IP Phone that addresses the need for everyday voice communications. It is available in Cobalt Black color and is targeted users who desire a small form factor packed with lots of feature buttons.

The Avaya IP Phone J159 uses J100 SIP software which supports the Avaya SIPAST software with Avaya Aura® which provides incremental features over third party offers which support 'SIPPING 19' standards-based SIP software. With J100 SIP software and IP Office 11.0.4.2 or later software, the Avaya IP Phone J159 provides incremental features over third party offers.

Benefits

The Avaya IP Phone J159 is the ideal solution for end-users who need any of the following capability:

- Gigabit Ethernet
- Headset
- Integrated ability to support an additional 24 programmable buttons
- Fixed feature keys (Hold, Transfer, Conference, Redial)
- Any of the following features on Avaya Aura® when using SIP software (MLPP, Bridge Call Appearance, Call Pickup, Hunt Group Busy, Team Button, Enhanced Call Forward, Dial Intercom, Exclusion, LNCC, Priority Calls, Whisper Page)
- Full feature capability on Avaya IP Office™
- Color display - Wireless Lan connectivity

The Avaya IP J159 Phone Specifications:	• Multiple line phone with four red/green line/feature indicators around primary display, and another six red/green line indicators for secondary display
	• 2.8" (diagonal) primary color display – 320 x 240 pixels & 2.3" (diagonal) secondary color display – 160 x 240 pixel
	• 4 Context Sensitive Soft Keys
	• Fixed feature buttons for Hold, Transfer, Conference, and Redial
	• Supports SIP-AST for enhanced features and integration on Avaya Aura
	• Supports "CCMS over SIP" for enhanced features and integration on IP Office[1]
	• Supported on selected 3rd-party Open SIP call platforms
	• Excellent audio – Handset & Speakerphone. Integrated RJ9
	headset port with Electronic Hook Switch (EHS)
	• Supports optional J100 Wireless Module for Wi-Fi® connectivity
	• Recent Call Log
	• Contact List
	• Extensive ability for user to customize when deployed on Avaya Aura or 3rd-party Open SIP call platforms
	• Built in volume boost control in Handset for Hearing Impaired
	• Mute Key with Mute Alerting
	• Dual 10/100/1000 Ethernet ports to support co-located PC
	• Power over Ethernet Class 1 (class 2 with USB and/or WiFi) and support for 802.3az
	• Single Type A USB port
	• Optional AC -> 5 volt DC power supply
	• Simultaneous Registration & Fallback like 9600-series
	• Support for TLS / SRTP for encryption
	• Configurable via web interface
	• Support for Avaya L100 headsets including Avaya Acoustic Edge™
	• Use with Avaya Cloud Office, Avaya Aura® and Avaya IP Office™.(Refer to limitations in J100 Software ReadMe file)

1 Requires IP Office 11.0.4.2 or later software.

Go Green with Avaya Products

From employee programs to the manufacturing process, Avaya is dedicated to being environmentally responsible in every facet of our business. As such, Avaya actively designs products, applications, and solutions that help reduce our customers' carbon footprints. These include reducing equipment energy costs, decreasing office expense by supporting remote workers, and eliminating travel costs while retaining collaboration via enhanced audio and web conferencing.

Our commitment to high-quality intelligent voice communications at a low environmental cost applies to product portfolios being developed today, as well as those developed years ago, as evidenced in the following information:

- Avaya has an ISO 14001-based EH&S Management System for its facilities and services. In addition, Avaya has an ISO 14001 Environmental Management System certification for its Design for Environment (DfE) process.

- Avaya-designed and third party products that will be used in our solutions are evaluated to ensure that they comply with relevant legislation and regulations.

- Avaya designs its products using material that comply with the European Union's Restrictions of Hazardous Substance (RoHS) Directive and China RoHS Regulations.

- In compliance with the European Union's Registration, Evaluation, Authorization, and Restriction of Chemical (REACH) substances, Avaya discloses on Avaya.com the product and product packaging that contain the chemical substances on the European Chemical Agency's (ECHA's) candidate list of REACH Substances of Very High Concern (SVHC) in concentrations of 0.1% or more by weight.

Avaya and its customers harness the power of our products to reduce the impact we have on the planet.

Avaya offers both a robust videoconferencing service plus increasingly energy efficient equipment, providing an advantage over our competitors because we give our customers solutions that increase productivity and save costs while minimizing their carbon footprint. For example, Avaya Scopia empowers businesses to host effective and collaborative team meetings remotely, reducing the need for business travel. After implementing Avaya Scopia, one of our customers was able to cut travel costs by 80% and GHG emissions by 27.25 metric tons of CO_2e per year. For more information, refer to Avaya's Corporate Responsibility report. (Corporate Responsibility report found here - https://www.avaya.com/en/about-avaya/our-company/corporate-responsibility/corporate-responsibility/)

Product Design

Avaya has developed Design for Environment (DfE) Guidelines, Requirements, and Checklists to help designers maintain compliance with legal requirements and consider environmental concerns, from raw materials extraction to end-of-life handling. The DfE process is included in our ISO 14001 Environmental Management System certification, which ensures DfE objectives have been properly incorporated into the design process.

The core DfE aspects in our product design program include:

- Energy Efficiency
- Materials & Packaging
- Recyclability & Upgradability

Why Avaya?

Avaya helps our customers bring people together with the right information at the right time in the right context, enabling business users to improve their efficiency and quickly solve critical business challenges. Because our solutions are based on open standards, our customers can decide what works best for them. Our objective is to give people the best collaboration experience, regardless of the devices, locations, or media they choose. As businesses move toward a more geographically dispersed, 24 x 7 workforce, they need tools to enable their users to quickly solve business challenges. With over 500,000 systems shipped worldwide, IP Office is the leader in unified communications and real-time collaboration for small and midsize businesses.

Industry Recognition

Avaya is a recognized innovator leading business communications for the digital age. More than 130,000 businesses worldwide, including 90% of the FORTUNE 100®, use Avaya collaboration solutions for IP telephony, unified communications, and contact center. Avaya is consistently recognized as a global leader by industry and technology experts and has achieved worldwide leadership positions in the following segments:

- Ranks No. 1 in Worldwide SME Telephony[1]

- Ranks No. 1 in Worldwide Contact Center[2]

- Ranks No. 1 in Worldwide Interactive Voice Response[3]

- Ranks No. 1 in Worldwide Unified Messaging[4]

- Ranks No. 1 in Worldwide Audio Conferencing[5]

- Named a 2017 Unified Communications Product of the Year Award winner for Avaya IP Office Contact Center[6]

- Ranks among the global Top 100 Software Companies for taking advantage of changing technology and offering cutting-edge, software revenue.[7]

- Recipient of the CUSTOMER Contact Center Technology Award for Avaya Workforce Optimization Select[8]

- Named a 2017 Gold Edison Award Winner for innovation in the category of Cyber Security[9]

---

1 Dell'Oro Group, Enterprise Telephony Report, 4Q16, March, 2017

2 Worldwide Contact Centre Market and Forecasts, August, 2016

3 Canalys, Worldwide Contact Centre Market and Forecasts, August, 2016

4 IHS Technology, Enterprise Unified Comm and Voice Equipment, Quarterly Market Tracker, 4Q16, March 2017

5 MZA, Ltd., The Unified Communications Applications Market Competitive Environment, June 2016

6 TMC, April 2017

7 PricewaterhouseCoopers (PwC), PwC Global 100 Software Leaders – Digital intelligence conquers the world below and the cloud above, June 2016

8 TMC and CUSTOMER magazine, Oct, 2016

9 Edison Awards, a program conducted by Edison Universe, April 2017

AVAYA
Experiences That Matter

CONVERGENT SOLUTIONS
YOUR TECHNOLOGY PARTNER

Contract #: 4265110723

Date: Tuesday, November 7, 2023

Budget Quote - Requires Revision Before Signing

SCHEDULE "A" Equipment Agreement

Agreement for:
City of Watertown
106 Jones Street
Watertown, WI 53094
(920) 262-4000

Performed at:
City of Watertown
621 Bernard Street
Watertown, WI 53094

Quantity	Description:	Part Number	List Per Unit	Discount	Cost
1	Avaya Communications Solution	185446	$ -	0%	$ -
1	IP Office Model	182448	$ -	0%	$ -
1	IP500 V2 Control Unit 2A	700514867	$ 683.00	40%	$ 409.80
1	IP Office Rack Mount Kit	700429202	$ 63.00	40%	$ 37.80
1	IPO MC VCM 32 V2 Product	700504031	$ 184.00	35%	$ 119.60
1	IP500 V2 System SD Card	700479710	$ 53.00	40%	$ 31.80
1	IP Office R11 Server Edition Lisc	396449	$ 3,195.00	40%	$ 1,917.00
8	IP Office R10 Sip Trunk 1 PLDS	383085	$ 77.00	40%	$ 369.60
9	IP Office R10 Avaya Endpoint License	383110	$ 75.00	40%	$ 405.00
1	Power Lead	700289770	$ 19.00	40%	$ 11.40
9	J159 IP Phone, No Power Supply	700512394	$ 415.00	38%	$ 2,315.70
1	Comprehensive Support Model	185579	$ -	0%	$ -
1	IPO C/D 3 year RTS 8X5 NBD 500V2- Support	271659	$ 1,964.16	0%	$ 1,964.16
1	Installation Package, Shipping, Warranty, Training		$ 9,804.00	35%	$ 6,372.60

Includes (3) Year Chassis Parts and Software, no Terminals
Includes (1) Year Ship to Site Handset Warranty
Estimate assumes all current cable is useable
All customer data equipment configuration not included in this quote
All work to be completed during normal business hours

Solution Total $ 13,954.46

Convergent Solutions

Name: _____

Title: _____

Signature: _____

Date: _____

City of Watertown

Name: _____

Title: _____

Signature: _____

Date: _____

This agreement, if accepted, is to be governed by the "Terms and Conditions."

TERMS AND CONDITIONS
For Schedule "A" Equipment Agreement

1. Payment Terms

> 50% payment is due at signing
> 40% payment is due when the installation process begins
> 10% payment is due upon cutover of system

Purchase price fully installed (exclusive of any conduit). Labor warranty for 1-year and parts warranty as defined on the Schedule A Equipment Agreement, provided all service work is performed solely by Convergent Solutions, Inc.

2. Creation of a Security Interest, Acceleration
Until such time as Buyer has paid the agreed purchase price, Seller hereby retains and Buyer hereby grants a purchase money security interest in the described equipment. In connection therewith, Buyer agrees to execute all instruments deemed necessary by Seller under applicable law to establish, maintain and continue perfected Seller's purchase money security interest in the equipment of others is protecting its rights in and to said equipment.

Upon Buyer's failure to perform any of its obligations under the Agreement, Convergent Solutions, Inc., at its option, and without notice to Buyer, may thereupon declare the entire amount of the unpaid balance immediately due and payable.

3. Limited Warranty
Seller hereby warrants that the installation of said equipment shall be performed in a workmanlike manner. Buyer's remedy under these warranties shall be the repair and replacement by Seller at Seller's expense of non-conforming equipment of parts thereof, unless, however, the equipment or any part thereof is damaged or rendered unserviceable as a result of Buyer's negligence or a connection to direct current, in which case this warranty and any duties and obligations of Seller arising there under shall terminate immediately. In no event shall Seller be liable for consequential damages or commercial losses arising out of a breach of any warranty or any other provision contained herein.

4. Waiver, Amendment, Notice Termination
Any waiver or rights hereunder or any amendment or requirement of notice or termination hereof shall not be effective unless made in writing and signed by the party against whom such waiver, amendment, notice or termination is sought to be enforced.

5. Risk of Loss
When the equipment or any portion thereof is delivered to the installation site, Buyer shall bear the risk of loss, and the risk of loss shall remain with the Buyer regardless of any breach by Seller of any provisions hereof.

6. Tax Obligation
Buyer will pay promptly when due all taxes, assessments and other charges levied or assessed by any governments or governmental agency upon the sale of the described equipment

7. Assignment
Buyer may not delegate its performance or assign its rights under this Agreement except upon the express written consent of Seller.

8. Benefit
This Agreement shall be binding upon, shall inure to the benefit of, and shall be enforceable, by each of the parties hereto, its successors and assigns, except as limited by Paragraph 6 above.

9. Construction
This writing constitutes the final expression of the agreement between the parties and is intended as a complete statement of the terms of the agreement. No course of prior dealing between the parties and no usage trade shall be relevant to supplement or explain any term used in this Agreement. Whenever a term defined by the Uniform Commercial Code (the "Code") is used in this Agreement, the definition contained in the Code is to control unless otherwise stated herein to the contrary. This Agreement has been finally accepted in the State of Wisconsin and shall be governed by the laws of the State of Wisconsin including the Code and its amendments as effective in the State of Wisconsin.

10. Attorney's Fees
Buyer shall pay to Seller all attorney's fees, court costs, and all other expenses, which may be incurred by Seller in enforcing, or attempting to enforce collection of agreed costs of the equipment and the installation thereof, or against any guarantors hereof, or with respect to any matters connected with the subject matter hereof.