

AMENDATORY CASH AGREEMENT

THIS AMENDATORY CASH AGREEMENT is made between the **CITY AND COUNTY OF DENVER**, a municipal corporation of the State of Colorado (the “City”), and **FEDERAL SIGNAL CORPORATION**, a Delaware corporation, with an address of 2645 Federal Signal Drive, University Park, IL 60484 (the “Contractor”) collectively referred to as (the “Parties”).

WITNESSETH:

WHEREAS, the Parties entered into an Agreement dated July 23, 2012 (the “Cash Agreement”); and

WHEREAS, the Parties wish to amend the Cash Agreement to increase the compensation in the amount of \$26,518.00 to the Contractor for the provision of additional products as follows; and

NOW, THEREFORE, in consideration of the premises and the mutual covenants and obligations herein set forth, the Parties agree as follows:

1. Articles 4(a) and 4(d)(1) of the Cash Agreement entitled “**Fee**” and “**Maximum Contract Amount**” are hereby amended to read as follows:

“4. **COMPENSATION AND PAYMENT:**

a. **Fee:** The City shall pay and the Contractor shall accept as the sole compensation for products delivered and services rendered and costs incurred under the Cash Agreement \$637,095.00. Amounts billed may not exceed the amounts or rates set forth in **Exhibits A** and **A-1**.

d. **Maximum Contract Amount:**

(1) Notwithstanding any other provision of the Cash Agreement, the City’s maximum payment obligation will not exceed **SIX HUNDRED THIRTY SEVEN THOUSAND NINETY FIVE DOLLARS AND ZERO CENTS (\$637,095.00)** (the “Maximum Contract Amount”). The City is not obligated to execute an Cash Agreement or any amendments for any further services, including any services performed by Contractor beyond that specifically described in **Exhibits A** and **A-1**. Any services performed beyond those in **Exhibits A** and **A-1** are performed at Contractor’s risk and without authorization under the Cash Agreement.”

2. This Amendatory Cash Agreement may be executed in counterparts, each of which shall be deemed to be an original, and all of which, taken together, shall constitute one and the same instrument.

3. Except as herein amended, the Cash Agreement is affirmed and ratified in each and every particular.

EXHIBIT A-1

1.0 STATEMENT OF WORK

1.1.1 General Information

This Statement of Work (SOW) for this contract amendment defines the principal activities and responsibilities of all parties for the implementation of the City and County of Denver’s Denver International Airport (DIA) Outdoor Warning System Base Station Addition Project. If this SOW is included with an RFP response, then RFP specifications will supersede unless listed as an exception, clarification, and assumptions in this document or in Federal Signal Corporation’s proposal.

EQUIPMENT/SERVICES	DELIVERABLE
Base Station Equipment	<ul style="list-style-type: none"> • Qty. 1 of Dell Power Edge R210 Rack Mount Server, 22” monitor, mouse, keyboard; • Qty. 1 of smart UPS 120 volt • Qty. 1 of SS2000+R digital DTMF encoder, rack mount • Qty 1 of MNC-MC noise cancelling microphone • Qty. 1 of ES-RADIO MTR3000 base 100W, VHF • Qty. 1 of OMNI-4 antenna, 152-156MHz VHF • Qty. 1 of AMB-W antenna mounting bracket, wall • Qty. 250’ of ES-PART R303009A LMR600 coax antenna cable • Qty. 2 of ES-PART 140603A LMR600 connectors
Software	<ul style="list-style-type: none"> • 1 SFCD25 (free; not included in quote)
Installation Services	<ul style="list-style-type: none"> • Qty. 1 of TK-I-ENCODER-CU encoder install – custom • Qty. 1 of TK-I-BASANT-CU base antenna install – custom • Qty. 1 of TK-IO-CRTPAY-CU admin fee – prevailing wage/certified payroll/Davis-Bacon Act
System Optimization	<ul style="list-style-type: none"> • Qty. 1 of TK-S-FULOPTPKG system optimization & Operator, Administrator & Maintenance training
Training	<ul style="list-style-type: none"> • Included in System Optimization
Misc.	<ul style="list-style-type: none"> • Qty. 1 of ES-FREIGHT • Qty. 1 of SFCD-W255 SFCD-W255 Commander software warranty (year 2) • Qty. 1 of EMT-MNT EMTools software warranty (year 2) • Qty. 1 of CS-MS-P SmartMsg Premium Server software warranty (year 2)

1.1.2 General Install Provisions and Limitations

- Installation. Installation shall be by Customer unless otherwise specifically agreed to in writing by Federal Signal Corporation.
- Receiving Product and Staging Location. Customer is responsible to receive, store and protect all products intended for installation purposes, including, but not exclusively, siren equipment, poles, batteries, and installation materials. Materials received in cardboard containers, such as computers, encoders, radios must be protected from all forms of precipitation. Additionally, Customer shall provide a staging area of an appropriate size for installation contractors to work from and to store equipment overnight.
- Installation Methods & Materials. Installation is based on methods and specifications designed and intended by Federal Signal to meet or exceed all national, state & local safety and installation codes and regulations. Design changes required by Customer may result in additional charges.
- Radio Frequency Interference. If the SOW included installing a new base station co-located with other radio equipment, Federal Signal shall not be responsible for RF transmission and reception affected by system interference.
- Installation Site Approval. Customer must provide a “Notification to Proceed” that Federal Signal is authorized to commence installation at the site designated by Customer before Federal Signal will commence installation. Once installation has started at an approved site, Customer is responsible for all additional costs incurred by Federal Signal for redeployment of resources if the work is stopped by Customer or its agents, property owners, or as the result of any governmental authority or court order, or if it is determined that installation is not possible at the intended location, or the site is changed for any reason by the Customer.
- AC Power Hookup. Customer is responsible to coordinate and pay for all costs to bring proper AC power to within five feet of the base station computer equipment location, unless these services are specifically quoted by Federal Signal.
- Permits & Easements. Customer is responsible for obtaining and payment of all other required easements, permits, or other fees required for installation unless specifically quoted by Federal Signal.
- Site Cleanup. Basic installation site cleanup includes installation debris removal and general site cleanup. Additional Site Restoration quotes are available.
- Waste Disposal. Customer is responsible for providing disposal of all packing materials including shipping skids and containers.
- Work Hours. All installation quotes are based on the ability to work outdoors during daylight hours and indoors from 7 AM to 7 PM Monday through Saturday. Work restrictions, site access delays, or limitations imposed by Customer or its agents may result in additional charges being assessed to Customer for services.
- Project Reporting. Installation & Service Progress Reports will be provided on a regular basis, normally every two weeks during active installation, unless pre-arranged otherwise by mutual agreement.
- Safety Requirements & Compliance. Federal Signal requires that all subcontractors and their employees follow applicable laws and regulations pertaining to all work performed, equipment utilized and personal protective gear common to electrical and construction site work performed in the installation of Federal Signal equipment. Additional safety compliance requirements by Customer may result in additional charges assessed to Customer for the time and expenses required to comply with the additional requirements.
- Project Delays. Federal Signal shall not be liable in any regard for delivery or installation delays or any failure to perform its obligations under this Agreement resulting directly or indirectly from change order processing, acts or failure to act by Customer, unresponsive inspectors, utility companies and any other causes beyond the direct control of Federal Signal, including acts of God, weather, local disasters of any type, civil or military authority, fires, war, riot, delays in transportation, lack of or inability to obtain raw

materials, components, labor, fuel or supplies, or other circumstances beyond Federal Signal’s reasonable control, whether similar or dissimilar to the foregoing.

- **Point of Contact:** Federal Signal and Customer shall provide a single Point of Contact (POC) responsible to coordinate and channel all primary communications and change orders affecting the Contract, Purchase Order, Scope of Work and/or Schedule for the duration of the contract. Changes to the POC by either party may require adjustment to the contractual deadlines to adjust for the transition period.

1.1.3 Project Management

This portion of the project includes all periods that this contract is in effect. Project Management is designed to provide knowledge, skills, tools and techniques to the various project activities under the contract in order to meet the project requirements.

Project Management Responsibility Matrix

Task	Responsibility	Deliverable
Supervision of All Work	Federal Signal	Sufficient Supervisors, Policies and Procedures to ensure job completion
Bi-Weekly Meetings	Federal Signal & Customer	Meetings will be held using web, audio, or video conferencing capabilities
Reports of Meetings	Federal Signal	Written report of meetings in Issues and Action Items format
Project Scheduling	Federal Signal	Microsoft Project Schedule with no less than monthly updates as necessary
Change Control	Federal Signal	Change Order documents with sufficient documentation to allow Customer approval

Customer Initials: _____

1.1.4 Control Point Installation

- General Description: The installation will include one additional outdoor warning system base station located at Denver International Airport.
- Base Station Antenna Installation:
 - During antenna installation, the Customer is responsible to identify and to reduce or disable any high-powered transmitters that may pose a safety hazard to installers.
 - Tower Assumptions: Federal Signal assumes that existing customer-owned antenna tower #1 will be utilized for base station antenna to be installed.
 - This tower is assumed to have the capacity for the additional antenna equipment without interfering with existing transmitters.
 - Tower engineering or inter-modulation studies that may prove necessary for this installation are not included.
 - DIA's designated POC shall direct Federal Signal as to where the antenna should be mounted on the tower by providing the mounting bracket requirements, the installation height, the tower leg to be utilized and the required stand-off distance from the tower.
 - Federal Signal is not responsible for any RF interference that is determined to exist after the equipment is installed on the tower.
 - Existing ground points will be utilized for grounding the new antenna and coax per common industry standards.
 - Coax Runs:
 - Existing conduits will be utilized, where possible, for coax installation at base station locations and shall be assumed to have sufficient capacity for the additional coax cable.
 - Existing building penetrations will be utilized for coax entrance into building.
- Computer & Equipment Installation:
 - The Customer shall identify the locations to install the equipment and provide the necessary desk, rack and other space required to install the prescribed equipment.
 - Custom mounting requirements or other hardware are not included, unless it is specifically quoted.
 - The Customer shall identify and provide an electrical outlet for the provided equipment to operate. Typically, the requirement is 110 Volt/20 AMP circuit.
 - Federal Signal will install the provided computers encoders UPS, and cabling per the specific quotation bill of material (BOM).
- Cable Length Limitations: Unless specifically stated in the Quotation BOM, the following cable length limitations apply. Any distances found to exceed these may require a Change Order and additional costs.
 - Computer to SS2000+R encoder interface cable is 25'.
 - SS2000+R encoder to radio interface cable is 6'. Radio to grounding Polyphaser coax length is 35'.
 - Polyphaser to antenna coax length is 35'.

1.1.4.1 Control Point Install Responsibility Matrix

Task	Responsibility	Deliverable
Installation of computer, encoder, UPS and software	Federal Signal	Equipment delivered and installed on site
Interfacing of equipment to existing system	Federal Signal and Customer	Operational siren system
Access to Tower #1 and shack where base station equipment will be located	Customer	Proper and timely access provided to installers
Provide conduits, or a clear path, to allow antenna installation cable run	Customer	Accessible and proper size conduits or unobstructed path for antenna cable
Provide A/C power to base station equipment installed in shack	Customer	Protected A/C power
Radio coverage for system operation	Customer	Sufficient radio coverage to allow system operation.
DIA Radio Technician available for consultation during installation	Customer	Availability by phone (at minimum) of DIA radio technician
Testing of base station equipment	Federal Signal	One screen shot from SFCDWARE Commander software showing "green" communication with City and County of Denver sirens. If any sirens are not functioning due to unrelated issues, acceptance will not be prohibited for this reason.

Customer Initials: _____

1.2 OUTDOOR WARNING SYSTEM OPTIMIZATION AND TRAINING

The purpose of the System Optimization is to review the system installation and interface to ensure proper system activation and accurate system status as outlined in Federal Signal’s product manuals.

1.2.1 System Optimization of DIA Base Station

- Review installation, wiring and terminations
- Verify RF link from DIA base station to each RTU site via SS2000+R encoder
- Verify base station radio RF transmit and receive modulation levels
- Configure SFCDWARE Commander and SmartMsg (for Informer-IP and scrolling message display indoor notification units) software to Customer’s specifications

1.2.2 Knowledge Transfer - Training

Federal Signal will conduct training modules that are designed to provide technical and functional knowledge on the warning systems that DIA’s personnel will be required to monitor and potentially activate. Administrator, Operator and Maintenance training will be provided for appropriate DIA personnel. Training will be conducted based on a pre-determined training schedule. A customer-provided conference room in reasonably close proximity to the base station computer is required for training, as there will be a hands-on component to the training. The conference room should also be equipped with an LCD projector as PowerPoint slides will be used for the training modules.

Hard copy training manuals will be provided for each training module in quantities determined by DIA at least 10 days in advance of scheduled training. The Customer will be trained on how to develop and generate standard and ad-hoc reports that can be produced using the software. Training that allows the Customer to reconfigure the systems as well as perform diagnostics, fault determination and resolution, and performance analysis will be provided within the limitations of warranty protection.

Responsibility Matrix

Task	Responsibility	Deliverable
Provide Scheduling of Training	Federal Signal	Training Schedule and publication to interested attendees
Classrooms or Locations to Provide Training	Customer	Locations to conduct training
Training Materials	Federal Signal	Electronic copy for future training
Training on configuring the system as well as to perform diagnostics, fault determination, resolution, and performance analysis	Federal Signal	Training to Customer’s personnel on system.

1.3 CLOSEOUT/ACCEPTANCE PROCEDURE

This phase of the project consists of ensuring that there are Acceptance Procedures.

1.3.1 Responsibility Matrix

Task	Responsibility	Deliverable
Verification that installation and system optimization meet SOW requirements	Customer	Installed base station equipment allows for successful communication with City and County of Denver siren system as defined in SOW
Provide SOW-required testing for base station installed equipment	Federal Signal	Testing per SOW requirements successfully completed and SOW-required documentation of test results provided to Customer
Issuance of system acceptance	Customer	Signed System Acceptance Certificate document provided to Federal Signal
Deficiency identification and punch list	Customer & Federal Signal	Written punch list report created detailing any failures or deficiencies of installed DIA base station system
Completion of punch list items	Federal Signal	Written report or email detailing completion of listed punch list items

By their signatures below, the following Customer representative on behalf of the Customer accepts Federal Signal's proposed statement of work.

Customer Signature: _____ **Date:** _____

Print Name: _____

Print Title: _____

System Acceptance Certificate

The purpose of this document is to provide confirmation that Federal Signal (FSC) has completed the project with the following punch list items. By signing this document, the Customer accepts the system and acknowledges:

- ✓ FSC will invoice the Customer for the associated purchase order(s).
- ✓ If applicable, warranties and/or service agreements will be effective the date this confirmation form is completed by both parties.

Site Addresses	
Customer Name	
Customer PO #	
FS Sales Order/Quote #	

Sign Off	
Is the installation complete?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable
Is the system optimized?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable
Customer Rep Signature: _____	Date: _____
Customer Rep Name:	
FSC Rep Signature: _____	Date: _____
FSC Rep Name:	

Call 1-800-524-3021 or visit <http://www.alertnotification.com/> for technical support and additional documentation.

Call Customer Support & Sales at 1-800-548-7229 for purchasing additional equipment, extended warranty, and on-site maintenance.



FEDERAL SIGNAL
Safety and Security Systems

Advancing security and well-being.

2645 Federal Signal Drive
University Park, Illinois 60484-0975
800.548.7229
alertnotification.com

Contact Name: Scott Field

Customer: City of Denver

Address: 1437 Bannock Street, room 3

City: Denver

State: CO

Zip: 80202

Country: USA

email: scott.field@denvergov.org

Phone: 720-865-7604

Cell:

Quotation No.: FWS

122112095921

Reference quote no. on your order

Upon receipt of your order and acceptance by Federal Signal Corporation, the equipment herein will be supplied at the quoted prices below.
Delivery schedule cannot be established until radio information is supplied, if applicable.

December 21, 2012

Item No.	Qty.	Federal Model/ Part No.	Description	Unit Price	Total
DIA ACTIVATION POINT - UPGRADE					
1	1	ES-PART	Dell Power Edge R210 Rack Mount Server, 22" Monitor, mouse ,keyboard	\$3,650.00	\$3,650.00
2	1	X-UPS	SMART UPS 120 VOLT	\$876.00	\$876.00
3	1	SS2000+R	Digital DTMF Encoder, Rack Mount	\$2,034.00	\$2,034.00
4	1	MNC-MC	MIC,NOISE CANCELLING .25	\$80.00	\$80.00
5	1	ES-RADIO	MTR3000 BASE 100W, VHF	\$6,700.00	\$6,700.00
6	1	OMNI-4	ANTENNA, 152-156MHZ VHF	\$222.00	\$222.00
7	1	AMB-P	ANTENNA MOUNTING BRACKET, POLE	\$74.00	\$74.00
8	250	ES-PART	R303009A LMR600 COAX, PER FOOT	\$3.00	\$750.00
9	2	ES-PART	140603A CONNECTORS	\$22.00	\$44.00
10	1	TK-S-FULOPTPKG	System Optimization & Operator, Admin & Maintenance Training	\$2,888.00	\$2,888.00
11	1	TK-I-ENCODER-CU	Encoder Install-CUSTOM	\$1,000.00	\$1,000.00
12	1	TK-I-BASANT-CU	Base Antenna Install-CUSTOM	\$4,650.00	\$4,650.00
13	1	TK-IO-CRTPAY-CU	ADMIN FEE-Prevailing Wage/Certified Payroll/Davis-Bacon Act. The price of	\$675.00	\$675.00
14	1	ES-FREIGHT	SHIPPING FEES	\$690.00	\$690.00
EXTENDED 1 YR. SOFTWARE WARRANTY (after standard 1 yr. warranty)					
15					
16	1	SFCD-W255	Commander Software Warranty (year 2)	\$862.00	\$862.00
17	1	EMT-MNT	EM Tools Software Warranty (year 2)	\$523.00	\$523.00
18	1	CS-MS-P	SmartMsg Premium Server Software Warranty (year 2)	\$800.00	\$800.00
Total:					\$26,518.00

Prices are firm for 120 days from the date of quotation unless shown otherwise. Upon acceptance, prices are firm for 6 months. This quotation is expressly subject to acceptance by Buyer of the Terms document, and any exception to or modification of such Terms shall not be binding on Seller unless expressly accepted in writing by an authorized agent or Officer of Seller on the basis set forth above, in whole or in part, shall constitute an acceptance by Buyer of the Terms. Any such order shall be subject to acceptance by Seller in its discretion. If the set forth above exceeds \$50,000 then this quotation IS ONLY VALID if countersigned below by a Regional Manager of the Safety & Security Systems Group, Federal Signal Corporation. In unless specifically quoted as a line item above. Adverse Site Conditions, including rock, caving soil conditions, contaminated soil, poor site access availability, and other circumstances which hours to install a pole, will result in a \$385.00 per hour fee, plus equipment. Trenching is additional. Power Clause, bringing power to the equipment is the responsibility of the purchase special permits, licenses or fees will be additional. See attached Terms sheet.

Delivery: Per Project Schedule

Freight Terms: FOB - University Park, IL (Factory)

Terms: Equipment: Net 30 Days upon shipment

Services: Net 30 Days, billed monthly
upon completion

Proposed By: Chris Lopez

Company: Federal Signal Corporation

Address: 2645 Federal Signal Drive

City,State, Zip: University Park, IL 60466

Country: USA

Work Phone: 805-509-5094

Fax: 805-647-8163

Approved By: Chris Lopez, Sales Manager

Purchase order MUST be made out to:

Federal Signal Corporation, Alerting & Notification Systems, 2645 Federal Signal Drive, University Park, IL 60484

Accepted By: _____

Signature:

Date:

Title:

Contract Control Number:

IN WITNESS WHEREOF, the parties have set their hands and affixed their seals at Denver, Colorado as of

SEAL

CITY AND COUNTY OF DENVER

ATTEST:

By _____

APPROVED AS TO FORM:

REGISTERED AND COUNTERSIGNED:

By _____

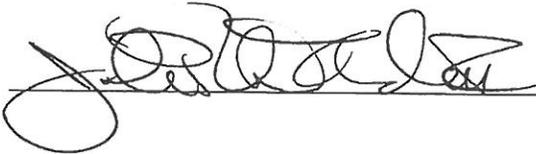
By _____

By _____



Contract Control Number: MOOEM-201205697-01

Contractor Name: Federal Signal Corporation

By: 

Name: John P. Von Thaden
(please print)

Title: VP/GM - AWS
(please print)

ATTEST: [if required]

By: _____

Name: _____
(please print)

Title: _____
(please print)

