Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
		GENERAL			
General System Components	A1.1	The alerting system shall be designed specifically for use as a station alerting system			Mandatory
	A1.2	The system must comply with all requirements as outlined in NFPA 122A1.			Mandatory
	A1.3	The contractor should ensure that all components of the system are supported by an uninterruptible power supply.			Non-Mandatory
	A1.4	If possible, the system may be designed to use a single source of power and communications i.e. Power over Ethernet (PoE) via CAT6 cable.			Desired
	A1.5	The vendor must be able to provide a list of the CAD systems that the alerting system has been interfaced to on other client sites			Mandatory
	A1.6	Traffic shall be passed from the CAD over the alerting system to the stations via an IP network			Mandatory
	A1.7	The alerting system shall allow for secondary communication paths including (but not limited to) cellular communication or data radio communication			Mandatory
	A1.8	The alerting system should allow for failover capabilities in the event that the primary alerting server is down			Non-Mandatory
	A1.9	The alerting system should allow for multiple connections from the CAD system for failover capabilities in the event that the primary CAD server is down			Non-Mandatory
	A1.10	The alerting system must provide a method for notifying the dispatcher of the success/failure of the system to complete the alert			Mandatory
	A1.11	The alerting system should provide a visual indication to dispatchers and technical support staff that the system and its components are in operating condition.			Non-Mandatory
	A1.12	The alerting system interface to the CAD system shall support dispatch alerts and non-emergency alerts			Mandatory
	A1.13	The alerting system should be capable of alerting by station			Non-Mandatory
	A1.14	The alerting system should be capable of alerting by group			Non-Mandatory

Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
		GENERAL			
	A1.15	The alerting system must be capable of alerting by unit			Mandatory
	A1.16	The alerting system should be capable of alerting multiple units assigned to an incident but responding in different modes	1	When multiple units are dispatched to an incident and 1 unit responds emergency while other units respond routine.	Non-Mandatory
	A1.17	The system should be designed in a network-friendly manner with data packets being (on average) no larger than 30 - 60 kb.			Non-Mandatory
	A1.18	The alert should begin no more than 2 seconds after the system receives the dispatch information from the CAD system			Non-Mandatory
	A1.19	There should be a method for the dispatchers to manually alert units, stations and groups in the event that the CAD system is not available.	1	Can manually open the PA in each station or a group of stations and make an announcement	Non-Mandatory
	A1.20	The alerting system should have its own internal audio amplifiers with full remote volume control capability.			Non-Mandatory
	A1.21	The system should be compatible with commercially available P.A. amplifiers.			Non-Mandatory
	A1.22	The system should provide the ability to control (at each station) audible tones, lighting, relay activation as required (i.e. open/close bay doors)			Non-Mandatory
	A1.23	The system should allow for alerting via SMTP or ESMTP which can be directed at the system administrations discretion to a paging or smart phone system to deliver either a page or SMS as required			Non-Mandatory
	A1.24	The system should allow for zone alerting within each station so that units in one area of the station can be alerted without disturbing units in another area of the station			Non-Mandatory
	A1.25	The system must allow the system administrator to configure the alert components	1	Tones	Mandatory
			2	Announcement speed (if voice announcement is optioned)	Mandatory
			3	Announcement data (if voice announcement is optioned)	Mandatory
			4	Order of Announcement (if voice announcement is optioned)	Mandatory
			5	Style of numerical announcement (2-1-2-1 versus 21-21)	Mandatory

Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
			6	Style of alpha-character announcement (A versus Alpha, B versus Bravo)	Mandatory
	A1.26	If automated voice announcement is optioned, the announcement must include detailed dispatch information.	1	Address/Location information	Mandatory
			2	Unit announcement	Mandatory
			3	Response priority	Mandatory
			4	Operational Radio channel (TAC)	Mandatory
			5	Map grid information	Mandatory
			6	Event type	Mandatory
			7	Common Place Name	Mandatory
			8	Cross Street	Mandatory
	A1.27	If automated voice announcement is optioned, the system should have the ability to alert the unit to contact dispatch for any information the system is unable to announce.			Non-Mandatory
	A1.28	The system should allow the system administrator to create different announcement configurations based on a multitude of criteria.	1	EMS units	Non-Mandatory
			2	Fire Units	Non-Mandatory
			3	In station	Non-Mandatory
			4	Out of station (on air)	Non-Mandatory
	A1.29	The system must allow the dispatcher to 'step' over any automated voice should that become necessary for any reason.	1	If announcement is playing, dispatcher must be able to interrupt the audio to make alternate or updated announcement.	Mandatory
			2	Dispatcher must be able to interrupt the audio on a station by station basis if required.	Mandatory
2.0 Tones & Automated Voice	A1.30	The system should provide the users in each station with the ability to determine whether they want to hear alerts for only their zone, their station or for all units in all stations and/or groups			Non-Mandatory
	A1.31	The system should allow the system administrator to configure different tones to be played based on a multitude of criteria.	1	Unit type	Non-Mandatory
			2	Event type	Non-Mandatory
			3	Response type (emergency versus routin	Non-Mandatory
	A1.32	The system must provide the ability to have 'escalating or 'ramping' audible tones			Mandatory
	A1.33	Automated voice announcement must commence immediately following the completion of the tones.			Mandatory

		GENERAL			
Section	**Item**	**User Requirement**		**Definition/Test**	**Mandatory/ Non-Mandatory/ Desired**
	A1.34	The system should only play unit-specific tones in the stations that those units are being dispatched from.	1	If an engine is being dispatched from station 1 and the pump is being dispatched to the same incident from station 2, only the engine tone will play in station 1 and only the pump tone will play in station 2.	Non-Mandatory
	A1.35	The system should only play each unit-specific tone 1x regardless as to how many of that unit type are being dispatched to the incident.	1	If three engines are dispatched from the same station to the same incident, the engine tone should only play once. The length of the tone should be no different than if only one engine were dispatched.	Non-Mandatory
	A1.36	The system must include a method for interfacing with the WFPS radio system for both system redundancy and on-air dispatching			Mandatory
	A1.37	The interface with the radio system must be able to detect traffic on the channel and buffer the data until the channel is clear.			Mandatory
	A1.38	The system must have the ability to announce different incidents at different stations simultaneously. In cases where two or more units in the same station are dispatched to different incidents at the same time, the system should 'stack' the incidents and play them one after the other.			Mandatory
	A1.39	If announcement is in progress and network connectivity is lost, the system should be capable of completing the announcement without interruption.			Non-Mandatory
	A1.40	The system administrator may able to modify the pronunciation of any street name, city name or common place name without the need to involve the vendor.			Desired
	A1.41	The system must allow for the integration of reader boards which can be configured to visually display dispatch information in real time			Mandatory
	A1.42	The system administrator should be able to configure the data displayed on the reader board	1	Speed of data scrolling	Non-Mandatory
			2	Information displayed	Non-Mandatory
			3	Order of information displayed	Non-Mandatory
			4	Colour of units based on status	Non-Mandatory

Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
		GENERAL			
		The system should allow for multiple reader boards within one station which can be placed in various locations	1	Vendor should indicate any limitations to the number, size of the reader board	Non-Mandatory
	A1.43				
	A1.44	The reader board should continuously scroll the dispatch information for a pre-defined amount of time (configurable by the system administrator)			Non-Mandatory
	A1.45	When no dispatch information is being displayed, the units assigned to the station should be displayed and their current status should be indicated.			Non-Mandatory
	A1.46	If a second dispatch is received while the first dispatch is still being displayed, the new dispatch information must replace the initial dispatch information on the reader board.			Mandatory
	A1.47	There should be no limit to the distance a reader board can be placed from the main station controller unit for the alerting system			Non-Mandatory
	A1.48	The reader boards may allow for a single power and communication source (PoE)			Desired
3.0 Visual Indicators & Lighting	A1.49	The system must allow for reader boards to be set up based on the zones within the station	1	If the station has more than one zone, the system must allow reader boards to be set up and operate for each zone.	Mandatory
	A1.50	The system must allow for the integration of turn out timers which can be configured to begin counting either at the beginning or end of an alert by the system administrator	1	Turn out timers must count up from 0 in 1 second increments	Mandatory
	A1.51	The system should allow for multiple turn out timers within one station which can be placed throughout the station.	1	Vendor should indicate any limitations to the number, size of the turn out timers	Non-Mandatory
	A1.52	Once all units in the station 'turn out' (hit a pre-designated status), the turn out timer should reset until the next dispatch is received through the alerting system.			Non-Mandatory
	A1.53	If a second dispatch is received while the first dispatch is still turning out, the new turn out timer must reset and start counting from 0			Mandatory

Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
		GENERAL			
	A1.54	There should be no limit to the distance a timer can be placed from the main station controller unit for the alerting system			Non-Mandatory
	A1.55	The system may allow for integration with televisions so that a video display of the dispatch information can be provided			Desired
	A1.56	The system administrator may be able to configure the data displayed on the television output separately from the data displayed on the reader board			Desired
	A1.57	The alerting system should allow for the integration of 'soft lights' which will provide illumination but not have a visual impact to building occupants at	1	LED red lights which can be added to the dormitory ceilings	Non-Mandatory
			2	Light ramping in main part of station such as kitchen and hallways	Non-Mandatory
	A1.58	The alerting system may allow the users to turn on/off any 'soft light' features so that they can be disabled during the day when not required			Desired
	A1.59	The system should allow for the integration of light bars which can be configured to visually display unit status information	1	The light bars (unit indicators) should include no less than 5 colours	Non-Mandatory
			2	Vendor should indicate any limitations to the number and placement of the light bars	Non-Mandatory

Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
		TECHNICAL			
Technical	A2.1	Agency currently, ~700 events per day, plan for ~1200 events per day (split between IFT & Emergency Fire & EMS Dispatch)	1	System must be capable of managing 1100+ events per day	Mandatory
	A2.2	The system should track all actions taken by a user in the system.			Non-Mandatory
	A2.3	The system should operate on a standard industry-recognized operating system			Non-Mandatory
	A2.4	The system database should be on a standard industry-based database			Non-Mandatory
	A2.5	The vendor should allow for annual upgrades of OS and DB			Non-Mandatory
	A2.6	The system shall be centrally managed and the IT personnel, Communications Operators shall have full control and access to the system at all times.			Mandatory
	A2.7	System updates will be managed from a central location and IT personnel should have the ability to push any updates out to each station via network connection			Non-Mandatory
	A2.8	Each component within the system shall be monitored at all times and the status of online and/or offline will be updated in real time.			Mandatory
	A2.9	The alerting system should be capable of notifying support staff of critical events that occur within the system via visual notification, email, pager and/or text message.			Non-Mandatory
	A2.10	Error and status logs should be generated for all traffic from the CAD system to the alerting system and, if exists, between the alerting system server and stations.			Non-Mandatory
	A2.11	Remote system monitoring and connectivity which may reside on the customer network should be supported.			Non-Mandatory
	A2.12	The system must operate on industry standard operating system	1	Microsoft Windows 8.1 or higher	Mandatory
	A2.13	The vendor should provide a complete system architecture diagram which includes wiring diagrams, database schema etc.			Non-Mandatory
	A2.14	The vendor should provide application health status alerts to facilitate system monitoring			Non-Mandatory

Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
		TECHNICAL			
	A2.15	The vendor should provide the database dictionary			Non-Mandatory
	A2.16	The vendor should provide detailed system administration documentation			Non-Mandatory
	A2.17	The vendor should provide system administration training			Non-Mandatory
	A2.18	The vendor should provide functional documentation			Non-Mandatory
	A2.19	The vendor should provide functional test plans and test scripts			Non-Mandatory
	A2.20	The vendor should provide load test scripts			Non-Mandatory
	A2.21	The vendor should provide a system architecture diagram			Non-Mandatory
	A2.22	The vendor should provide a multiple environment test environment			Non-Mandatory
	A2.23	The system should have the ability to failover to a secondary server			Non-Mandatory
	A2.24	The system should allow for multiple connectivity methodologies	1	Fibre	Non-Mandatory
			2	Commercial Wireless network (4G or hig	Non-Mandatory
			3	Data radio	Non-Mandatory

Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
		CORPORATE			
Corporate General	A3.1	Vendor solution is currently installed in departments of similar size and number of users	1	Vendor should be able to provide references	Non-Mandatory
	A3.2	Vendor must support/work with standard vendors for various interfaces including CAD and PeopleSoft solutions			Mandatory
	A3.3	Vendor must offer annual maintenance packages			Mandatory
	A3.4	Vendor must provide a warranty for the product/solution			Mandatory
	A3.5	Vendor should offer an extended warranty			Non-Mandatory
	A3.6	Vendor may support/provide a user conference	1	Vendor may support/provide a user conference	Desired
	A3.7	Vendor may support/provide a Canadian user conference	1	Vendor may support/provide a Canadian user conference	Desired
	A3.8	Vendor supports a regional user conference	1	Vendor supports a regional user conference	Desired
Product Documentation	A3.9	The vendor should provide a system database schema			Non-Mandatory
	A3.10	The vendor should be able to describe the different services and levels of support that are available			Non-Mandatory
	A3.11	The vendor should provide product release notes for the version of the software being recommended for use at the time of system implementation			Non-Mandatory
	A3.12	System documentation should include both user guides and system administrator guides			Non-Mandatory
	A3.13	The vendor may provide system test plans	1	User Acceptance Test Plan	Desired
			2	Regression Test Plan	Desired
Client Support	A3.14	The vendor should provide technical assistance with the configuration of the system			Non-Mandatory
	A3.15	The vendor should provide technical assistance with the implementation of the system			Non-Mandatory
	A3.16	A predefined process and associated expected timelines for trouble resolution may be provided			Desired
	A3.17	The vendor must be able to provide a process for system upgrades			Mandatory
	A3.18	System solution should be subject to an internal (vendor) QA process			Non-Mandatory
	A3.19	The vendor must provide software configuration training to identified super users			Mandatory
	A3.20	The vendor may provide user-level training in a train-the-trainer format			Desired

Section	Item	User Requirement		Definition/Test	Mandatory/ Non-Mandatory/ Desired
		CORPORATE			
	A3.21	The vendor should provide implementation and project support			Non-Mandatory
	A3.22	Vendor must provide 7/24/365 support	1	The vendor must provide an agreed service level agreement	Mandatory
			2	The vendor must provide a response within a certain time frame to calls for assistance	Mandatory
			3	The response time must be based on the priority of the request	Mandatory
			4	The vendor should provide first, second and third level support	Non-Mandatory
			5	The vendor should provide a web-based knowledge bank;	Non-Mandatory
			6	Users may be able to post information/issues to the web-based bank	Desired
	A3.23	The vendor may provide a file transfer site;			Desired
	A3.24	Vendor should track and monitor customer submitted bugs	1	Should track, monitor bugs and provides feedback to the customer	Non-Mandatory
	A3.25	Vendor should provide a single point of contact	1	The vendor should provide a single point of contact for customer support This should include a single project manager	Non-Mandatory
User Base	A3.26	Vendor is currently installed with a number of users and anticipated call volume	1	Refer to the Assumptions worksheet for details	Mandatory

	Glossary
Term	Definition
Report	A report is the results of a query or view that can be exported or printed from the application based on a predefined format or template.
Query	A query is a request for information based on a specified set of criteria. The results of a query are displayed within the application with the option to export to a application (e.g. Excel, Word, etc.) or produce a report based on a standard format.
View	A view is a formatted way of looking at data within the application. A view can be the results of a query with the option to produce a report.