



City of Berwyn

Emergency Telephone System Board

Bid Specification

9-1-1 Fire Radio System Upgrade

ADDENDUM #1

Issue Date:

03-12-2015

Bid Due Date:

04-16-2015

Attention Perspective Bidders:

This Addendum contains changes in technical requirements for equipment qualification.

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CITY OF BERWYN EMERGENCY TELEPHONE SYSTEM BOARD

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**ADDENDUM #1 to the BID SPECIFICATION FOR 9-1-1 Fire Radio System Upgrade,
THE BID TO BE IN THE HANDS OF THE CHAIRMAN, City of Berwyn Emergency Telephone
System Board, BEFORE 1:30 P.M., April 16th, 2015.**

INSTRUCTIONS TO BIDDERS

Change in Technical Requirements

This Addendum #1 changes certain technical specifications and requirements for equipment to be procured under this bid.

Compliance Requirements

Bidders are advised that the changes in this addendum may qualify equipment otherwise excluded by prior published specifications..

Thomas O'Halloran, Chairman

City of Berwyn Emergency Telephone System Board

03/12/2015

The following supersedes prior published requirements:

2.8 *Technical Requirements*

Electronic equipment for radios and devices shall conform to the following minimum technical requirements. All electronic circuitry contained in the radio , signaling and amplification sections of the equipment shall be solid state. Firmware or software used to determine the various functions to be performed by the equipment shall be programmable, or variable through the use of programmable read-only memory circuits. All visual indicators shall be light emitting diodes or liquid crystal displays in lieu of incandescent lamps. Labeling of base station transmit/receive devices is required designating use and frequency. Control of radio functions shall include both the method of superimposed audio tone direct and/or IP (Internet Protocol) interface when digital modulation is used.

2.8.1 Transmitters

VHF Transmitters

Frequency	-	138 - 174 Mhz
Frequency Stability	-	±0.0002% of center frequency, from -30° to 60° C
Spurious & Harmonic Emissions	-	-85 Db (Typical)
FM Noise	-	-55 Db (Typical)
Modulation	-	12.5 Khz Analog FM 12.5 Khz Digital 4FSK (6.25 Khz compliat)
Audio Response	-	+1 to -3 Db, 6 dB per octave, 300 to 3000 Hz

2.8.2 Receivers

VHF Receivers

Frequency	-	138 - 174 Mhz
Frequency Stability	-	±0.0002% of center frequency, from -30° to 60° C
Sensitivity, Analog 12 Db SINAD	-	0.35 Uv (Minimum)
Sensitivity, Digital 5%BER	-	0.35 Uv (Minimum)
Selectivity	-	-90 dB at ±15 Khz (Typical)
Modulation Acceptance	-	±3.5 Khz
Intermodulation Rejection	-	-85 dB
Spurious & Image Rejection	-	-90 dB (Typical)
Carrier Squelch Sensitivity	-	6 dB SINAD (Analog)
Tone Code Squelch Sensitivity	-	+ 1 to -3 dB of a 6 dB/Octave de-emphasis 300-3000 Hz

2.8.3 Fixed Station Equipment

- Fixed Station transmit keying: - Tone Control direct wired and/or IP (Digital Mod only)
- Fixed Station Audio Input - -20 to +11 Dbm
- Fixed Station Audio Output - 5 W into 8 ohms, 3% maximum distortion
- Fixed Station Line Output - -20 to +11 dBm or >325 mV, less than 3% distortion
- Power Output - Minimum 75W at 50 Ohm antenna connector