



OFFICIAL PROPOSAL
Fire Station Radio Installations
December 26, 2006

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General Overview

To provide laptop level service to end users, Freenet needs to install approximately 450 mesh radios throughout the city of Lawrence. To facilitate data services to end users and make the service available for public safety, the company would like to make use of several City owned buildings.

Site Selection Criteria

The specified sites were chosen to facilitate services to end users and provide for future expansion of city services.

The proposed sites are as follows:



Figure 1: Station 1 - 746 Kentucky St., Lawrence, KS 66044



Figure 2: Station 2 - 2128 Harper, Lawrence, KS 66046



Figure 3: Station 3 - 3708 W. 6th St, Lawrence, KS 66049



Figure 4: Station 4 - 2819 Stonebarn Terr., Lawrence, KS 66047



Figure 5: Station 5 - 1911 Stewart Ave., Lawrence, KS 66046

Proposed Installation Details

As with Freenet's City Hall installation, the proposed radios would be installed on rooftops using non-penetrating roof mounts. These mounts are inconspicuous, durable and do not puncture or impact roof membranes.

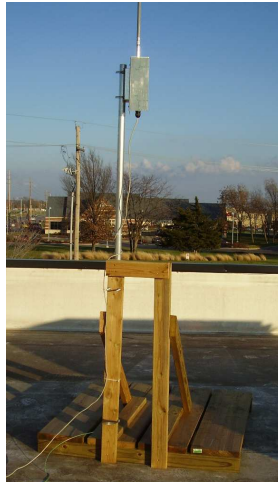


Figure 6: Example of Non-Penetrating Roof Mount Installation

Power will be drawn off of the nearest available power port. These units have cords up to 30' in length. If the unit is further from power, the company commonly uses a low voltage DC Power Over Ethernet (PoE) solution. The image in Figure 6 above uses this PoE solution.

Fire Department Uses

Once Freenet has completed the installation of its mesh network at the selected locations, the City may wish to make use of the additional network capacity for the purposes of providing high speed data to fire scenes or using video monitoring to enhance automobile accident response time.

Minneapolis, for example, has installed over 200 cameras throughout the city's highway system an error reporting system built into these cameras allows City staff to identify automobile accidents, stalls and car fires without waiting for a 911 call.

Current Incidents				
Camera	Description	Location	Blocking	Start Time
420	Crash	I-494 EB at Lyndale Ave	no	2006/12/26 13:58
851	Stall	I-94 EB at Robert St	no	2006/12/26 13:48
421	Injury Crash	I-494 WB at Lyndale Ave	no	2006/12/26 13:35
709	Unoccupied Stall	I-694 WB at Victoria St	no	2006/12/26 13:28
708	Unoccupied Stall	I-694 EB at Lexington Ave	no	2006/12/26 13:21
37	Stall	I-35E SB at Maryland Ave	no	2006/12/26 13:16
630	Unoccupied Stall	I-35W SB at Johnson St	no	2006/12/26 13:01
620	Unoccupied Stall	I-35W SB at 50th St	no	2006/12/26 12:51
849	Stall	I-94 WB at St Peter St	no	2006/12/26 11:56
617	Unoccupied Stall	T.H. 62 EB at Lyndale Ave	no	2006/12/26 11:41
426	Unoccupied Stall	I-494 WB at West Bush Lake Rd	no	2006/12/26 08:23

Next Camera West	Camera 421 I-494 @ I-35W	Next Camera East
Tue Dec 26 14:00:07 2006		
Closest lane: I-494 Eastbound (reference images)		

Figure 7: Minneapolis's System Flags Injury Crashes and Automobile Stalls



In addition, Fire inspectors may wish to make use of the network system to gain access to site plans, building drawings and other documents from building sites. As the mesh network is completed, Freenet is committed to working with departments within the city to make new services available to city staff.