



**Intelligent Information
Technology Solutions, Inc.**

Marbletown North Professional Building 2821 Route 209 ■ Kingston ■ New York ■ 12401

July 10, 2007

Behnam Ghaffari
Office of Engineering Technology
Federal Communications Commission

Dear Mr. Ghaffari,

In response to your request to submit an exhibit as an attachment to application #EL265964 FCC File No. 0246-EX-PL-2007 Reference Number 5138, I have attached a base map of the two locations and a data sheet for the Motorola PTP54600 unit which we would like to deploy.

The application used for the NLOS Data link would enable EMS, Police and Fire to monitor and control critical video and IT systems at the City of Poughkeepsie Water Plant and Filtration Facility. Because of the remote location of the Water Plant, the Motorola 5.4Ghz Bridge would be the best working solution for the project. They currently are on a 5.8Ghz and are experiencing interference.

If you have any questions, please feel free to contact me at 845-340-1025 ext 101.

Regards,

Gilbert de Leon
President

MOTOwi⁴

Motorola Point-to-Point Bridges – PTP 600 Series



Motorola PTP 58600 Bridges 5.8 GHz Part Numbers

BP5830BH-2AA Integrated
BP5830BHC-2AA Connectorized
BP5830BH15-2AA Integrated Lite
BP5830BHC15-2AA Connectorized Lite

Motorola PTP 54600 Bridges 5.4 GHz Part Numbers

BP5530BH-2AA Integrated
BP5530BHC-2AA Connectorized
BP5530BH15-2AA Integrated Lite
BP5530BHC15-2AA Connectorized Lite

Spectrum-Efficient, High-Availability Wireless Ethernet Bridges

The Motorola wi4 Fixed Point-to-Point Wireless Ethernet Bridges – PTP 600 Series – bring together the speed and reliability of licensed wireless with the flexibility of the unlicensed space. Operating in the 5.8 and 5.4 GHz bands at Ethernet data rates up to 300 Mbps, the systems are designed for virtually any environment – non-line-of-sight, line-of-sight and high interference – where high throughput is a major requirement and/or single or dual T1/E1 capability is needed.

Through Motorola's unique combination of technologies, PTP 600 Series solutions enhance link performance in a variety of applications, including T1 replacement, Voice-over-IP, video surveillance, distance learning, telemedicine and high-speed backhaul.

The PTP 600 Series bridges are incorporated in Motorola's MOTOwi4™ portfolio of innovative wireless broadband solutions that create, complement and complete IP networks. Delivering IP coverage to virtually all spaces, the MOTOwi4 portfolio includes Fixed Broadband, WiMAX, Mesh, and Broadband over Powerline solutions for private and public networks.

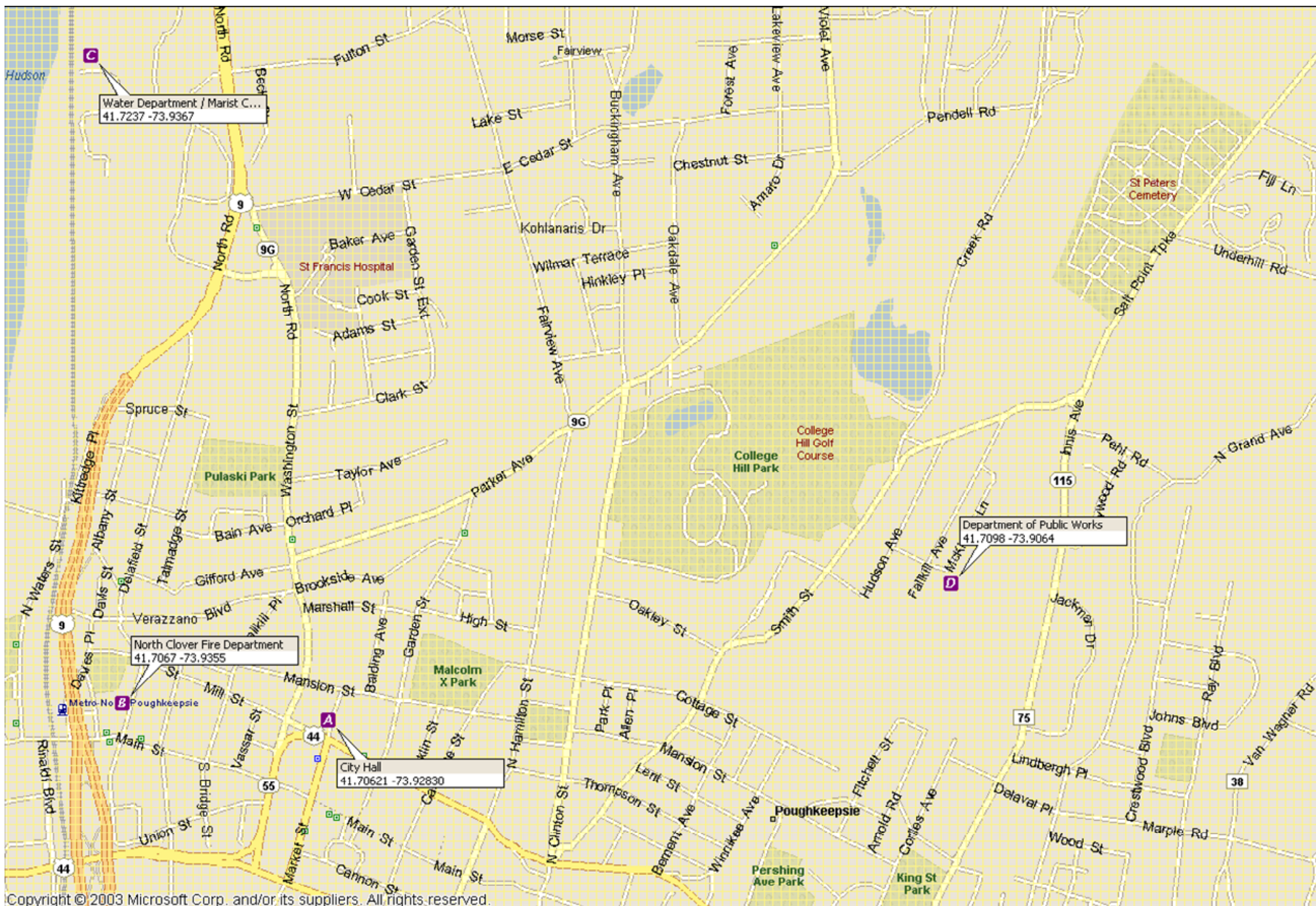
Note: The Federal Communications Commission (FCC) and Industry Canada (IC) have authorized the Motorola 5.4 GHz PTP 400 Series Point-To-Point Wireless Ethernet Bridges, Integrated models, for sale in the U.S. and in Canada. IC has also authorized the 5.4 GHz Motorola PTP 600 Series, Integrated models, for sale in Canada. Otherwise, the 5.4 GHz versions of these devices have not been authorized as required by the rules of the FCC and the IC, and those devices are not, and may not be, offered for sale or lease, or sold or leased in the United States or Canada, until authorization is obtained.

Technical Specifications for the MOTOROLA POINT-TO-POINT BRIDGES – PTP 600 SERIES

RADIO TECHNOLOGY	REMARKS
RF band	5.725 GHz–5.850 GHz* 5.470 GHz–5.725 GHz*
Channel size	30 MHz
Channel selection/dynamic frequency control	By <i>Intelligent</i> Dynamic Frequency Selection (i-DFS) or manual intervention; automatic selection on start-up and continual adaptation to avoid interference; 10 MHz step size for WiMAX compatibility
Transmit power control	Varies with modulation mode and settings from 0 dBm to 25 dBm
System gain	Integrated: Varies with modulation mode; up to 163 dB using 23.5 dBi integrated antenna ** Connectorized: Varies with modulation mode and antenna type**
Receiver sensitivity	Adaptive, varying between -91 dBm and -58 dBm
Modulation	Dynamic; adapting between BPSK single and 256 QAM dual
Error correction	FEC, ARQ
Duplex scheme	TDD ratio: Dynamic or Fixed; same or split frequency Tx/Rx
Antenna: type/gain/B/W	Integrated: Integrated flat plate 23 dBi / 7° Connectorized: Approved to operate with flat plate up to 28 dBi or parabolic dish up to 37.7 dBi; connected via 2 x N-type female
Range	Up to 124 miles (200 km)***
Security and encryption	Proprietary scrambling mechanism; optional AES 128 and 256 Bit Encryption * Regulatory conditions for RF bands should be confirmed prior to system purchase ** Gain and maximum transmit power may vary based on regulatory domain *** In all cases the range limit is set by the latest software release
ETHERNET BRIDGING & T1/E1	REMARKS
Protocol	IEEE 802.3
User data throughput	Integrated and Connectorized: Dynamically variable up to 300 Mbps at the Ethernet (aggregate) Integrated and Connectorized Lite: Dynamically variable up to 150 Mbps at the Ethernet (aggregate)
Latency	<1 ms each direction typical
Interface	10 / 100 / 1000 Base T (RJ-45) – auto MDI/MDIX, 1000 Base SX option
T1/E1 Interface	G703/G704 G823/G824 Integrated and Connectorized: Provides dual T1/E1 ports Integrated and Connectorized Lite: Provides a single T1/E1 port
MANAGEMENT & INSTALLATION	REMARKS
LED indicators	Power status, Ethernet link status and activity
System management	Web or SNMP using MIBII, WiMAX and private MIB
Installation	Built-in audio assistance for link optimization
Connection	Distance between outdoor unit and primary network connection: up to 330' (100 meters)
PHYSICAL	REMARKS
Dimensions	Integrated outdoor unit (ODU): Width 14.5" (370 mm), Height 14.5" (370 mm), Depth 3.75" (95 mm) Connectorized ODU: Width 12.2" (309 mm), Height 12.2" (309 mm), Depth 4.1" (105 mm) Powered indoor unit (PIDU Plus): Width 9.75" (250 mm), Height 1.5" (40 mm), Depth 3" (80 mm)
Weight	Integrated ODU: 12.1 lbs (5.5 kg) including bracket Connectorized ODU: 9.1 lbs (4.3 kg) including bracket PIDU Plus: 1.9 lbs (864 g)
Wind speed	150 mph (242 kph)
Power supply	Integrated with Indoor Unit
Power source	90–240 VAC, 50–60 Hz / 36–60V DC; redundant powering configurations supported
Power consumption	55 W max
ENVIRONMENTAL & REGULATORY	REMARKS
Operating temperature	-40°F (-40°C) to +140°F (+60°C), including solar radiation
Protection and safety	UL60950; IEC60950; EN60950; CSA-C22.2 No. 60950
Radio	5.8 GHz: FCC Part 15, sub-part C 15.247, Eire ComReg 03/42, UK Approval to IR2007 5.4 GHz: EN 301 893
EMC	USA–FCC Part 15, Class B; Europe–EN 301 489-4



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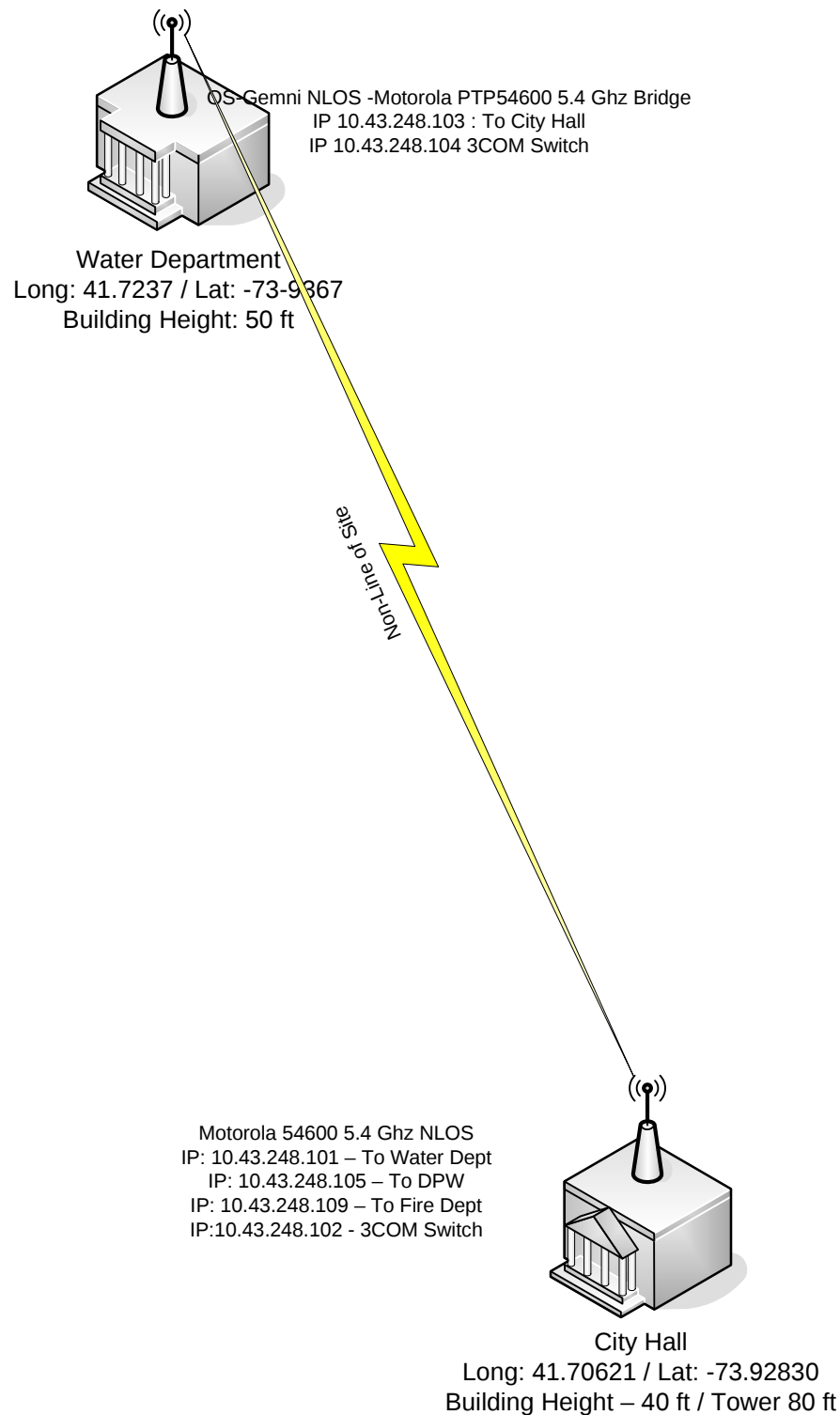


A – City Hall (Main Site)

B- North Clover FD

C- Water Department

D- Department of Public Works



Network Configuration:

TCP/IP – Protocol
 802.1q/p priority
 VoIP
 2 VLAN's
 IP Surveillance (Pelco)
 Wireless 8-33.6 MB Per Link
 Synchronous
 Latency: <30 ms

 Intelligent Information Technology Solutions, Inc. (845) 340-1025	City of Poughkeepsie			
	Wireless Access – Orthogon Systems			
	SIZE A	FSCM NO	DWG NO Cpwp-100.1	REV 3
	SCALE	None	SHEET	2 OF 3