

A thick, curved blue line starts from the left edge of the slide and curves upwards and to the right, ending near the top center.

Proposed Telecommunications Tower 7 Harlech Court, Markham Ontario

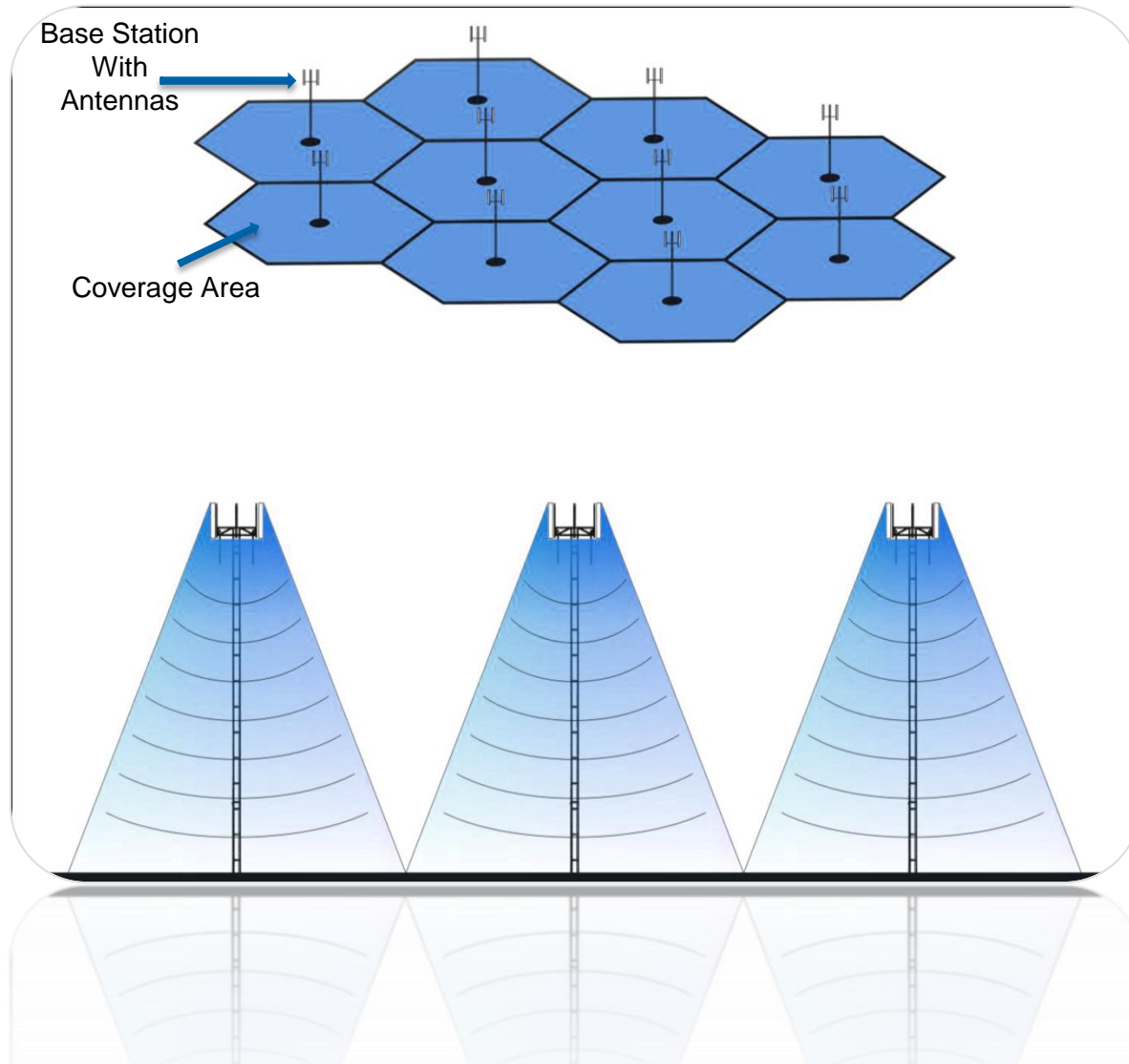
Why is the tower needed?

- Maintain the current wireless infrastructure presently located within the community
- Voice (phone)
- Data (email, SMS)
- Internet service (web)
- EMS response
- Police, Fire & Ambulance

In order to provide wireless communications each carrier must have a wireless network.

What is a Wireless Network?

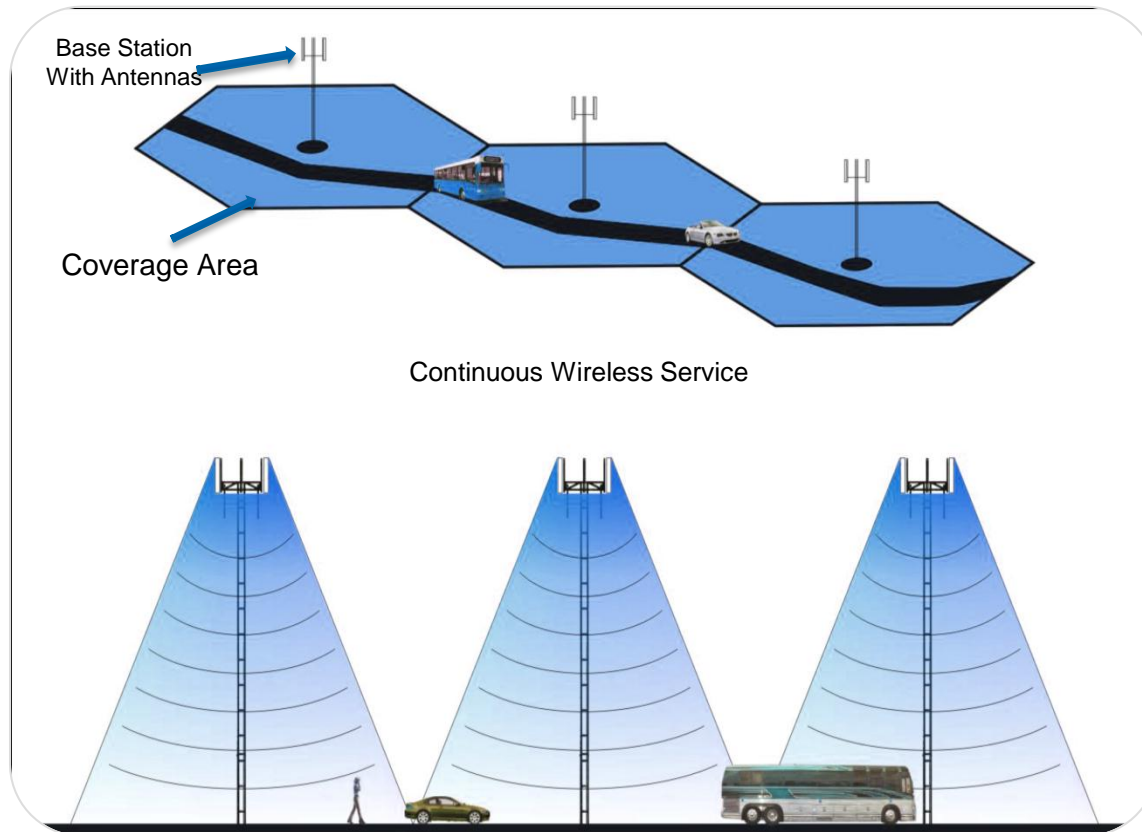
A network is a series of interconnected parts.



Evolution of the Wireless Network

A continuous wireless service network

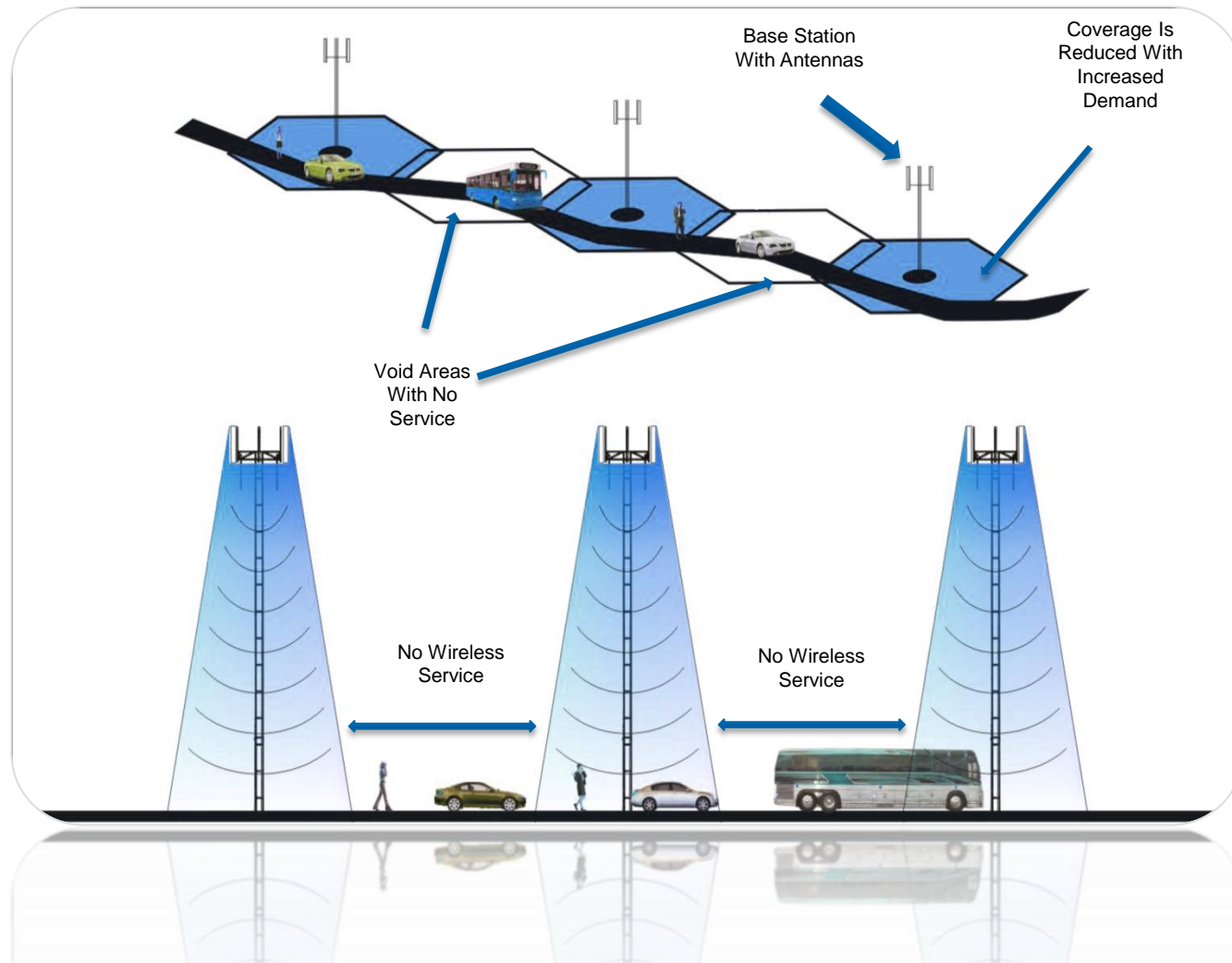
Each coverage area only serves a fixed number of calls



Evolution of the Wireless Network

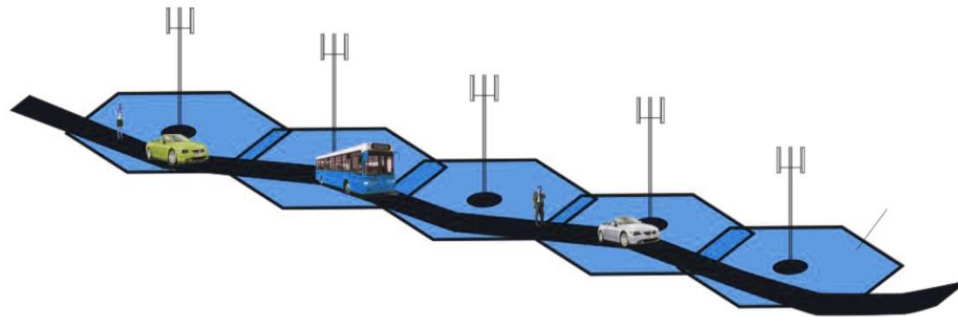
Increased users creates gaps in service

Number of calls in a coverage area is limited. When a coverage area reaches its maximum capacity it reduces its footprint in order to provide service to the strongest (closest) signals.

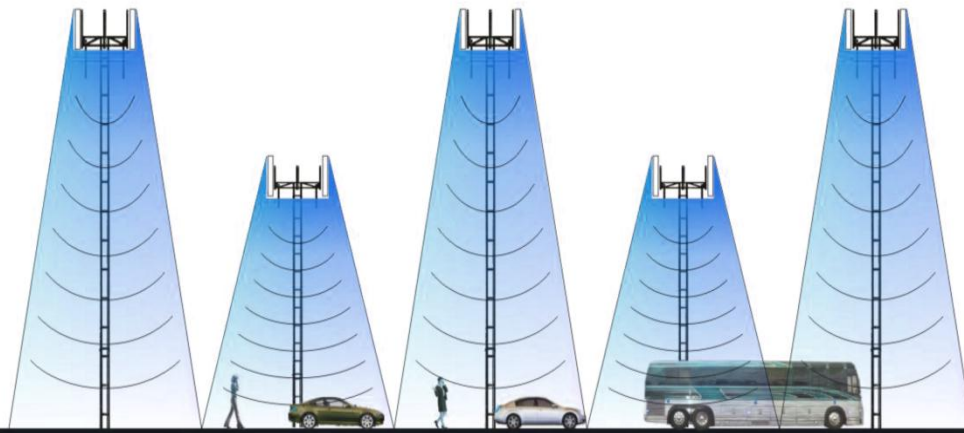


Evolution of the Wireless Network

Continuous coverage restored by filling gaps



New base station sites constructed to fill in the void areas, restoring continuous wireless service

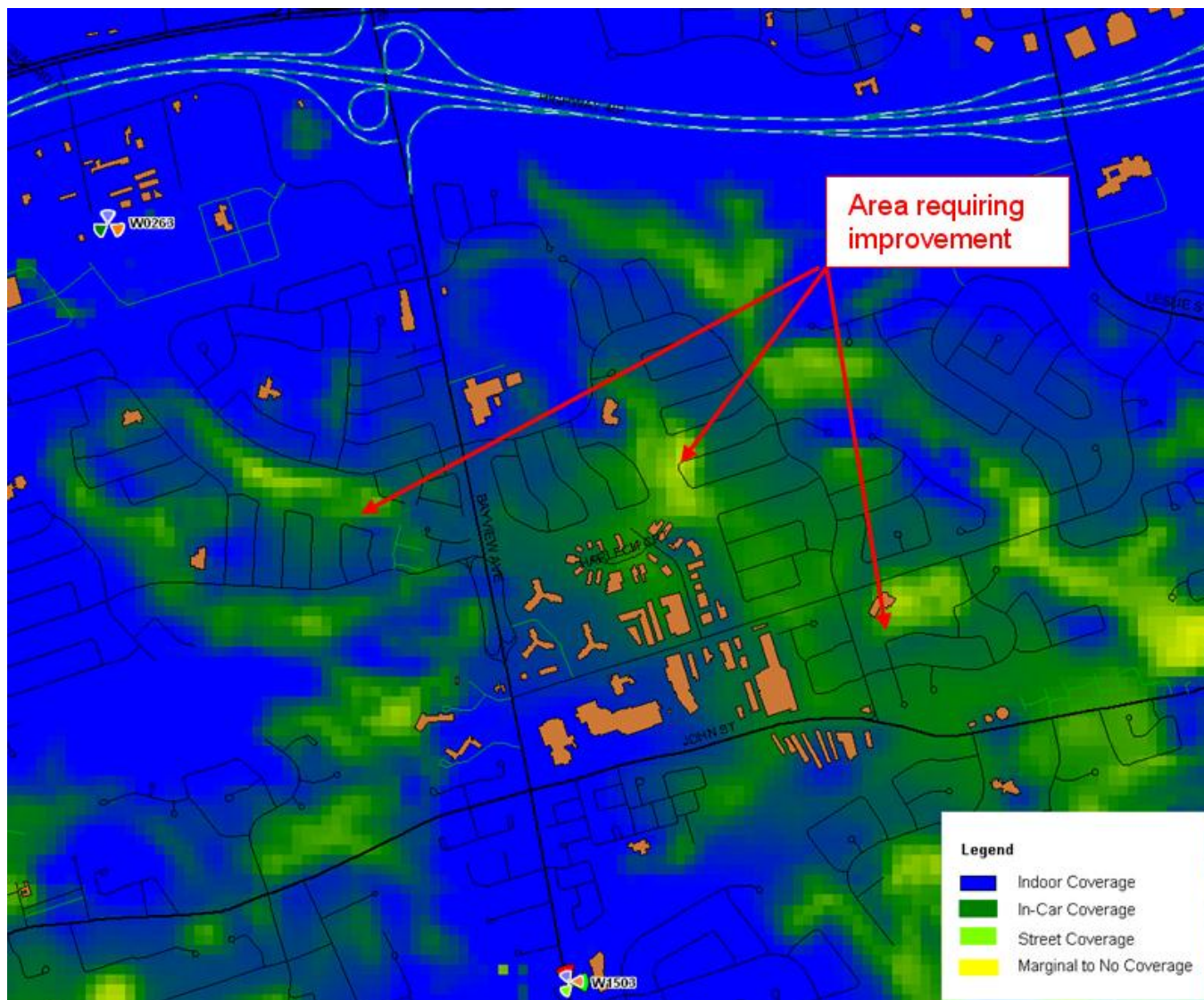


Continuous Wireless Service

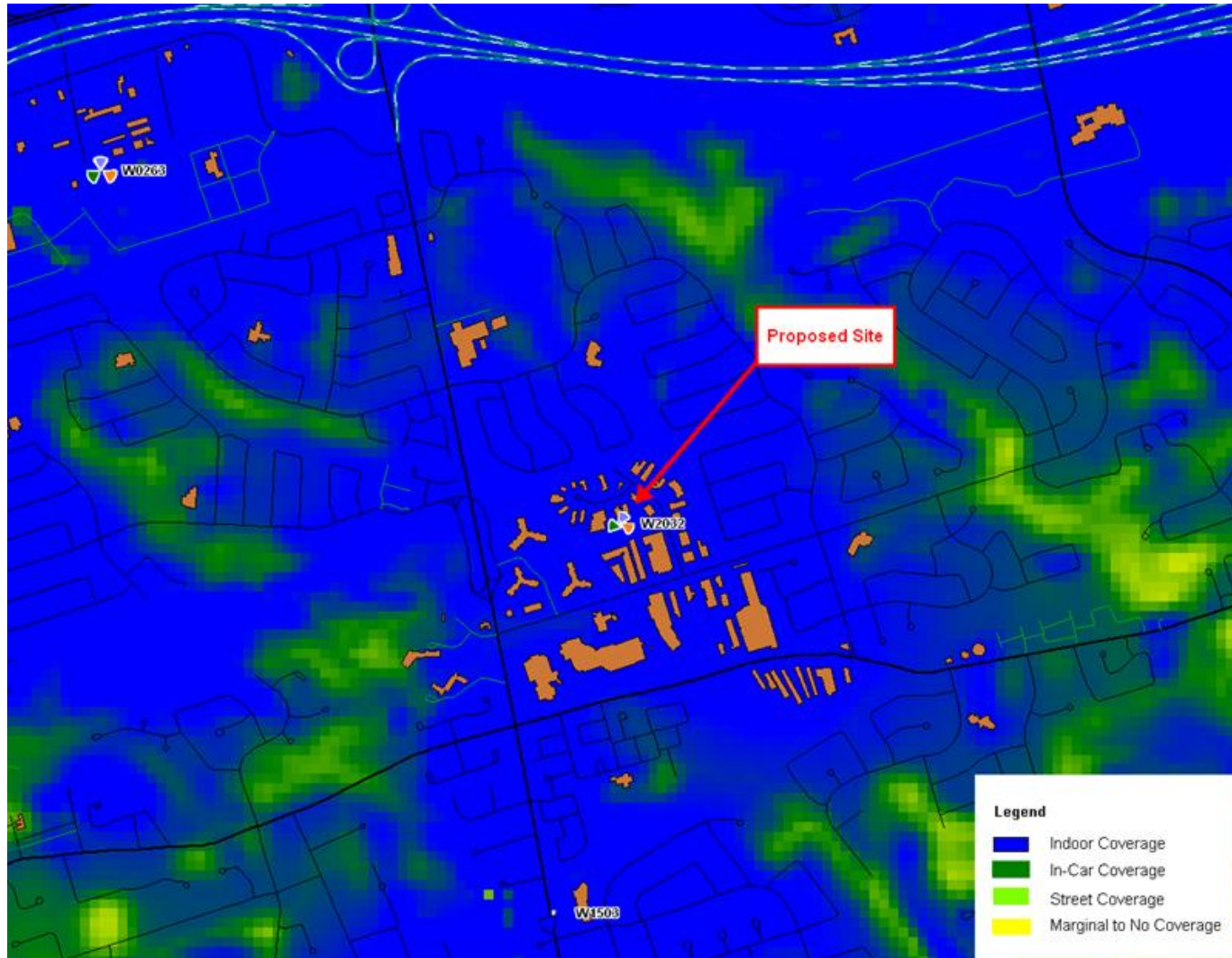
Site Location



Predicted Coverage (Before)



Predicted Coverage (After)



Safety Code 6: Putting Public Safety First

- Safety Code 6 was developed and recently updated (2009) by Health Canada as the exposure standard for the regulation of mobile phones, base stations, Wi-Fi and other radio communications emitting infrastructure. It is consistent with World Health Organization requirements.
- The exposure limits are the result of thorough and ongoing scientific review and are comparable to similar exposure limits in other jurisdictions, including the United States and the International Commission on Non-Ionizing Radiation Protection, a standard adopted by most European countries.
- Industry Canada has made compliance, on a cumulative basis, with Safety Code 6 a condition of licence for all Canadian wireless carriers.

Photo Rendering

Bell

W2032 7 Harlech Crt

Photo Simulation

Coordinates : 43.823006,-79.398084

Taken November 22 2011 14:53pm

Exposure 1/160 f6.3 ISO 500 Focal 24mm



Additional Resources

- **Industry Canada: Antenna Towers in Your Community: Frequently Asked Questions (in support of CPC-2-0-03 - Radiocommunication and Broadcasting Antenna Systems)**
<http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08788e.html>
- **Health Canada and Industry Canada FAQ on Radio Frequency Fields – Frequently Asked Questions**
<http://strategis.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08792e.html>
- **Health Canada; Safety Code 6 – Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz.**
http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/99ehd-dhm237/index_e.html
- **Canadian Wireless Telecommunications Association (CWTA)**
<http://www.cwta.ca/CWTASite/english/index.html>