Land Use Map

File # CT-02-13

Property Location: 1837 Lansdowne St W







Public Consultation Summary and Response Report

Prepared for:

City of Peterborough

Rogers Site: C4786 1837 Lansdowne Street West, Peterborough, Ontario, K9K 1R4 The purpose of this report is to summarize the process undertaken by Rogers relevant to the site proposed to be located on privately owned property known as 1837 Lansdowne Street West, Peterborough. The report will outline the questions which were posed by members of the public as a result of the Public Notification and an Open House Information Session held on Wednesday, July 24th, 2013 at Peterborough Sports & Wellness Centre located at 775 Brealey Dr., Room A.

The information in this report will be systematically addressed in the following order;

- 1. **Network Coverage Requirement**: identification of a coverage gap in the wireless network and its geographical translation
- 2. **Site Selection History**: previously proposed, and considered site locations as part of the site selection analysis
- 3. Selection of Proposed Site: identification of proposed candidate site and the resulting coverage
- 4. **Public Notification**: questions and comments submitted by members of the commenting public
- 5. Conclusion

1. Network Coverage Requirement

The selection of a wireless communications site works similarly to fitting a piece into a puzzle. In this case, the puzzle is a complex radio network, situated in an urban setting and an area of continuous growth. Client demand, radio frequency engineering principles, local topography and land use opportunities working in concert with one another direct the geography of our sites.

In order to achieve a reliable wireless network, carriers must provide a seamless transmission signal to alleviate any gaps in coverage. Gaps in coverage are responsible for dropped calls, and unavailable data service to clients. Rogers would utilize the following proposed site location in order to enhance the communications emergency services in the area as well as provide high quality wireless network signal for its 3.5G high-speed voice and data network.

2. Site Selection History

The currently proposed location at 1837 Lansdowne Street West, Peterborough, is a documented attempt to site the wireless communication installation necessary to provide the enhanced wireless coverage in the area of Lansdowne St. W. and Dobbin Rd. in the City of Peterborough and the surrounding area.

The proposal is to install a 40m tall monopole structure. The subject property which was selected is well suited for the proposed structure.

In January of 2013, Rogers conducted a pre-consultation meeting with the City of Peterborough in order to evaluate the wireless communications installation proposal in fulfillment of Federal Guideline's requirements set out in the CPC 2-0-03, Issue 4 as they relate to Telecommunications and Broadcasting Antenna Systems.



3. Selection of Proposed Site

Communication systems are considered a fundamental part of basic utilities infrastructure and are important contributors that serve the significant growth and economic development of communities by providing infrastructure connection.

Rogers' site selection method is a comprehensive undertaking. The site selection process is a challenging exercise that must meet Rogers' network coverage, while having regard for land use constraints and the obligation to customers to provide a high quality service. Other factors include radio frequency engineering principles and local topography which work in concert with one another to direct the geography and location of our sites.

It is important to note that the selection of a site for a telecommunication antenna support structure does not occur randomly. Among the factors considered are:

- 1. expected usage patterns of service and proximity to users
- 2. local topography and building types
- 3. interaction with existing and future sites
- 4. line of sight requirements for high quality communications
- 5. opportunities to use existing structures
- 6. availability of a willing Landlord
- 7. the industry's commitment to high service standards and customer satisfaction

As part of evaluation process it was determined by Rogers' Radio Frequency Engineers that a 40-metre high structure was required in order to meet our network requirements.

In reflection of area setting and the surrounding community, Rogers proposed a monopole design for a structure in order to minimize the visual impact of the installation while still meeting our network requirements.

Rogers' proposed site located at 1837 Lansdowne Street West, Peterborough, ON, will achieve the necessary engineering coverage objectives to enhance much relied upon communication services in the area such as EMS Response, Police and Fire; will significantly improve wireless signal quality for the local residents; those traveling along the major roads as well provide local subscribers with Rogers' 3.5G wireless network coverage and capacity for products and services such as BlackBerry, iPhone, cellular phone and wireless internet through the Rogers Rocket Stick technology in the surrounding area.

The location of the proposed site is shown on an aerial on the following page.



Figure 1 – Aerial of the subject property



4. Public Notification

The City of Peterborough has a developed protocol relevant for establishing telecommunication facilities in the municipality, outlining the land use consultation process relevant to evaluating wireless communication installation proposals (Telecommunication Structures Protocol, Procedure #0025-P01, October 24, 2011).

In accordance with City of Peterborough's Protocol, proponents must provide a notification package to the local public, businesses, and property owners, etc. located within a radius of 120m measured from the property line. It is also Rogers' responsibility to ensure that the notification provides at least 30 days for written public comment.

In addition, Rogers was required to host a Public Information Session and place an ad in the local community newspaper.

Rogers commenced its consultation period on July 2, 2013 in consultation with the City. The circulation material contained a description of the proposal outlining its location on the subject property; details of the tower including height, lighting requirements and design; provided an invitation to a Public Information Session being hosted by Rogers on Wednesday, July 24th between 6-8p.m. at the Peterborough Sports and Wellness Centre; provided contact information for the applicable municipal contact as well Rogers' contact information for the purpose of obtaining further information relevant to Rogers' proposal. In addition, a Public Notice ad was placed in Peterborough Examiner on July 5th.



Public Information Session Attendees (please refer to attached sign in sheet copy) and Information Provided:

Rogers Communications Inc:

- 1. Tatyana Moro, Municipal Relations Specialist
- 2. Brent Spence, Site Acquisition Specialist

City of Peterborough

- 1. Keith Payne, Urban Design and Eng. Technologist, Planning & Development Services
- 2. Lesley Parnell, Councillor (Otonabee Ward 1)
- 3. Dan McWilliams, Councillor (Otonabee Ward 1)

Members of the Public: (Sign-in record attached)

- 1. Roy Clapinson, 1818 Cherryhill Rd., #506
- 2. Laura Irving, 3016 Westridge Blvd.
- 3. Maria Slice, 3014 Westridge Blvd.
- 4. Kerry Jenkins, 3-1795 Stewartcroft Cres.

Display Materials:

The following is a summary of the materials on display at the open house:

- Context aerial view;
- Proposed structure design and Photo Simulations from different angles;
- Consultation requirements in accordance with Federal Regulations;
- Land-use authority and Industry Canada roles;
- Engineering coverage plots and justification on site requirement;
- Co-location map of other sites evaluated;
- Circulation map provided by the City, outlining the properties notified in accordance with the Protocol, 120m from property line
- Other relative information to regulations of wireless antenna structures and compliance requirements such as:
 - > Public Notice Information packages, as outlined in Appendix D in the City's Protocol;
 - Site Selection and Justification Report;
 - Additional general information related to telecommunications and the use approval and standards for these types of facilities;
 - Industry Canada's Brochure "Wireless Communication and Health An Overview, Safety Code 6-2009;
 - Industry Canada Frequently asked questions on Radio Frequency;
 - Rogers' Wireless Brochure;
 - Health Canada Brochure "It's Your Health";
 - Safety Code 6 information package;



Public Comments, Questions and Rogers' Responses:

In response to the information package circulation and the Public Information Session meeting held on July 24th, there were no written comments received pertaining to the proposed site.

Please refer to the summary of the topics discussed and addressed at the Public Information Session.

Question:

• Siting and site selection

Answer:

Wireless network coverage is not an exact science able to be measured in concrete terms for an infinite period of time in a given geographical location. The ability to install wireless sites in the Engineering Group's preferred location at the preferred height level, provides more assurance to longevity and reliability of the network coverage.

Our sites are chosen based on numerous factors including consideration of the local topography, Rogers' existing infrastructure in the area and the relevant data on coverage deficiencies.

Rogers' Radio Frequency Engineers determined that a 40m structure would be required in order to provide the optimum service improvements for our customers in the targeted area of Peterborough.

The Site is located within the Otonabee Ward 1 Boundaries, on a property designated as Commercial under the City of Peterborough Official Plan (Schedule A – Land Use).

Question:

Infrastructure need

Answer:

As the technology changes and advances, so does the nature of the demand for wireless services. Exponential increase in wireless communication usage due to the growing number of people working from home, the average cell phone users per household and smart phones with new data capacity and versatility requires the need for expansion in wireless infrastructure.

The site selection process is a challenging exercise that must meet Rogers' network coverage, while having regard for land use constraints and the obligation to customers to provide a high quality service. Other factors include radio frequency engineering principles and local topography.

Site evaluation is done through a process of conducting engineering drive-tests for evaluation of dropped call rate; bit **e**rror rate; failed call attempt statistics; as well as assessment of current antenna structures and customer comments on poor and non-existing wireless services.

Only upon completion of all site evaluation steps and in consideration of the relevant data on coverage deficiencies in the area, it was determined by Rogers' radio frequency engineers that a structure in the Lansdowne St. W. and Brealey Dr. area is essential in order to meet our network requirements.

The presentation boards displayed at the Information Session on July 24th, as well as the Site Selection and Justification Report submitted, outlined our coverage objectives on maps produced by Rogers' Radio Frequency Engineers through "Before" and "After" coverage scenarios for the purpose of exhibiting the need for this infrastructure in the Lansdowne St. W. & Brealey Dr. area.



• Consultation process requirements

Answer:

Wireless communication installations are exclusively regulated by the Federal Government. The consultation process established under Industry Canada's authority is intended to allow local land-use authorities the opportunity to address land use concerns while respecting the federal government's exclusive jurisdiction in the siting and operation of wireless voice and data systems. As the provisions of the Ontario Planning Act and other municipal by-laws and regulations do not technically apply to federal undertakings, Rogers is however required to follow established and documented wireless protocols or processes set forth by land-use authorities per Industry Canada protocol.

The City of Peterborough has a developed protocol relevant for establishing telecommunication facilities in the municipality, outlining the land use consultation process relevant to evaluating wireless communication installation proposals

In accordance with City's Protocol relevant to Telecommunication Facilities and in line with Industry Canada's consultation requirements, notice was issued by regular mail on July 2nd to all owners of properties located within a 120m radius of property line.

As part of the consultation requirement, a Public Notice ad was placed in Peterborough Examiner on July 5th. In addition, a Public Information Session was hosted by Rogers on Wednesday, July 24th between 6-8p.m. at the Peterborough Sports and Wellness Centre at 775 Brealey Dr., Room A.

In accordance with Industry Canada's guidelines, Rogers followed all necessary steps in pre-consulting with planning staff and local officials, advising the public of our proposal and providing the public with a required public comment period. Rogers feels that the process undertaken relevant to consultation was conducted openly and fairly, and engagement of the community through consultation has been effective in obtaining input from the public.

Question:

• Tower's Lighting Requirements

Answer:

In addition to the requirements for consultation with municipal authorities and the public, Rogers must also fulfill other important obligations such as compliance with Transport Canada / NAV CANADA aeronautical safety requirements. Transport Canada perform an assessment of the proposal with respect to the potential hazard to air navigation and notify Rogers of any painting and/or lighting requirements for the antenna system. Rogers's does not anticipate that lighting or painting of the structure will be applicable, however, final approvals will be obtained through associated departments and Rogers will submit the necessary applications.



• Health Concerns

Answer:

At Rogers, we take our obligation to safety very seriously. No matter where we construct a wireless facility, we have to demonstrate to Industry Canada that we meet all radiofrequency emission standards before we are allowed to start.

Rogers's site proposed for Lansdowne St. W. & Brealey Dr. area will be fully compliant with the requirements outlined by federal government institutions such as Industry Canada and Health Canada.

The general consensus among Canadian government health organizations and the scientific community is that there is no evidence that the radio signals produced by wireless communication structures have adverse effects on human health. The Canadian wireless industry as a whole, through the Canadian Wireless Telecommunications Association ("CWTA"), continually monitors the study of health issues related to wireless technology.

Health Canada, a federal government agency, sets the safety limits for exposure to radio signals and Canadian carriers are required to adhere to these guidelines. Health Canada, in its mandate to protect the health of Canadians, is responsible for research and investigation to determine and recommend the health protection limits for exposure to radio frequency (RF) electromagnetic energy.

Health Canada's guideline documents are not based on a single study; rather, they are based on the bulk of scientific evidence contained in numerous peer reviewed studies evaluated over several decades in relation to effects of RF energy on biological organisms. Furthermore, information published in non-peer-reviewed reports/articles posted on the Internet are difficult to evaluate. These safety limits are defined within a standard known as "Safety-Code 6" and are based on current accepted scientific data.

Health Canada works closely with the World Health organization in defining Safety Code 6 guidelines. Scientists at Health Canada continuously update their research in order to ensure that Safety Code 6 guidelines continue to protect public health. According to Health Canada, to date there is no convincing scientific evidence to support any contention of adverse health effects that might be speculated to occur at levels below the exposure limits specified in Safety Code 6.

Furthermore, Rogers' Radio Frequency engineers have conducted an analysis of the proposed antenna system. The emission levels of Rogers proposed wireless communication antenna will be within the limits outlined in the Safety Code 6 standards set out by Health Canada. In fact, the calculations of emission levels at the ground surrounding our Site will be a mere 0.65% of the allowable Safety Code 6 limit (or ~152 times below the maximum allowable limit); therefore our site will meet the applicable Safety Code 6 value by a significant margin.

More information in the area of RF exposure and health is available at the following web site: Safety Code 6: http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct-eng.php and http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct-eng.php and http://www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct-eng.php

In response to questions relevant to interference with pacemakers, Rogers would like to note that no interference is anticipated with any medical devices and our wireless antenna equipment.

Currently across Canada, there are approximately 13,000 wireless antenna sites located on roof tops, private and municipal properties. Many wireless antenna systems are installed on hospitals throughout Ontario and are considered part of an essential infrastructure for accessibility to emergency services. Placement of such systems on hospitals would not be possible if there was anticipated interference with any medical equipment.



Co-location

Answer:

Rogers Communications Inc. makes every effort to locate cellular sites where they will be the least visually. When a part of a network requires improvement, the first step is to evaluate existing structures (rooftops and towers) that are located within the specific geographical area offering the required height and that may be available to support new equipment or to use for co-location.

The performance of a wireless network is dependent on the geographical location of its equipment, height of its antennas, as well as the demand customers place on the network.

Other alternatives assessed by Rogers were co-locating our antennas on existing infrastructure. Co-location is not only part of our Industry Canada's mandate but also the cornerstone of our site development philosophy, as it provides us with an expedited process and is cost effective. Unfortunately, other potential site locations that were evaluated in the surrounding area of a similar height requirement are located outside of our search area required for optimal network implementation; therefore are not of sufficient distance in order to address our coverage objectives or are below the height required.

The closest existing structure in the area was identified with the nearest being 1.3km from the proposed site location. This option was disqualified as it is outside the required geographical area determined by Rogers engineers and would not meet the coverage requirements suitable for the Rogers network. In addition, this site is located in close proximity to our existing site 1.5km away, located south east of the targeted area at 1049 Crawford Dr. Locating our antennas on SBA's site would provide us with coverage overlap with the site on Crawford Dr., therefore not addressing our coverage objectives for the area and still leaving Rogers with a coverage gap west of Brealey Dr., therefore still requiring another structure in that area to fulfill our network requirements. Furthermore, due to topographical constraints, such 108ft elevation difference between our proposed location and the SBA tower, the height of the structure would not be sufficient to address our coverage deficiencies to provide continuous reliable coverage for the targeted area. The antennas already located on the SBA tower by another carrier, Wind Mobile, which are located at 40m would provide Rogers with an elevation of 30m in height, which is also below our optimal height in maximizing our network requirements, in addition to the elevation constraints described above.

Through discussions with the City of Peterborough planning, Rogers was also informed of a Bell proposal for a 25 metre site to be located at 2071 Lansdowne St. W., in the abutting municipality (Township of Cavan-Millbrook-Monaghan). This location is outside the Rogers' criteria for addressing service coverage need for the proposed installation as well as is below the height necessary for Rogers' network requirements. As such, the site was disqualified by Rogers' engineers.

Since there were no suitable alternative structures readily available for co-location to accommodate our network coverage requirements, Rogers Communications Inc. had to consider the construction of its own installation.



• Design

Answer:

In order to enhance wireless services in the targeted area and in an attempt to enhance sight-lines of the general vicinity, Rogers is proposing to install a 40 metre monopole on the subject property to support a new telecommunications facility.

Rogers makes every effort in order to minimize visual impact of our sites. The proposal for 1837 Lansdowne St. W. in the City of Peterborough was chosen as it produces minimal disruptions to the existing daily operation of the property; provides a commercial setting that mitigates some of the visual impact on the immediate land uses; as well as Rogers is implementing appropriate design techniques for this site suitable for the context of the area (such as monopole design, wood fencing surrounding the compound), which will be maintained through co-location with other licenced carriers as well as implementation of future technologies.

The monopole design has been used throughout the City and is appropriate considering the commercial area context. The design, construction and installation of the installation will be consistent with the required engineering practices including structural adequacy.

The installation would provide an opportunity to accommodate future technology services, municipal services as well as potential co-location with other licensed carriers helping reduce the number of future structures in the area, which is encouraged through City's Protocol and by Industry Canada.

5. Conclusion

Rogers is constantly improving and expanding its infrastructure to meet the ever-growing demand for high-quality reliable wireless voice and data services. The trend of future telecom is to become truly "wireless", that is the delivery of the voice and data communications via conventional telephone lines, such as telephone poles along streets and roads. The current wireless infrastructure will be able to meet this trend and still provide a reliable system. In addition, technological upgrades are important factors for communities that continue to grow and strive to attract new business to the area. Communities wanting to opt out of this trend will be passed by future development.

In addition to meeting consumer needs, technological upgrades are also critical to ensuring the accessibility of emergency services such as fire, police and ambulance. Wireless communications products and services, used daily by police, EMS, firefighters and other first responders, are an integral part of Canada's safety infrastructure.

Rogers has undertaken and now completed a comprehensive public consultation process as it pertains to the proposed new wireless communications site to be located at 1837 Lansdowne St. W. in the City of Peterborough in fulfillment of all the requirements under City's Protocol and Industry Canada's guidelines.

Should you have any further questions or comments, please feel free to contact me via email at <u>Tatyana.Moro@rci.rogers.com</u>, or via phone at (647)747-2351.

Sincerely, Tatyana Moro, Municipal Relations Specialist Rogers Communications Inc., Network Implementation





Rogers Communications Inc. 8200 Dixie Road Brampton, ON L6T 0C1

August 14, 2013

Planning and Development Services City of Peterborough 500 George St. N. Peterborough, ON K9H 3R9

Attention: Caroline Kimble, Land Use Planner

Re:Rogers wireless communications Site C4786Site Location:1837 Lansdowne Street West, Peterborough

On behalf of Rogers Communication Inc. ("Rogers"), I would like to submit for your review and consideration a summary of the municipal and public consultation process and a request for the report to be forwarded to Council in respect with issuing a statement of concurrence concerning a proposed wireless communication site to be located on the property known as 1837 Lansdowne St. W., Peterborough.

Project Description & Proposed Location

Rogers is constantly improving and expanding its infrastructure to meet the ever-growing demand for high-quality reliable wireless voice and data services. The proposed site is needed to improve our wireless voice and data services within the community.

The proposed wireless communication installation consists of a 40-metre monopole structure and (1) walk-in equipment cabinet located within an enclosed compound.

Municipal & Public Consultation Process

Rogers Communications Inc. is regulated and licensed by Industry Canada to provide inter-provincial wireless voice and data services. As a federal undertaking, Rogers is required by Industry Canada to consult with land-use authorities in siting tower locations. The consultation process established under Industry Canada's authority is intended to allow the local land-use authorities the opportunity to address land-use concerns while respecting the federal government's exclusive jurisdiction in the siting and operation of wireless and data systems.

The provisions of the Ontario Planning Act and other municipal by-laws and regulations do not apply to federal undertakings, Rogers is however required to follow established and documented wireless protocols or processes set forth by land-use authorities.

Rogers Communications Inc. submitted an application with the City of Peterborough in January of 2013 for a wireless communications installation to be located on a property known as 1837 Lansdowne St. W., Peterborough.

The City of Peterborough has a developed protocol relevant for establishing telecommunication facilities in the municipality, outlining the land use consultation process relevant to evaluating wireless communication installation proposals (Telecommunication Structures Protocol, Procedure #0025-P01, October 24, 2011).

In accordance with City of Peterborough's Protocol, proponents must provide a notification package to the local public, businesses, and property owners, etc. located within a radius of 120m measured from the property line. It is also Rogers' responsibility to ensure that the notification provides at least 30 days for written public comment. In addition, Rogers was required to host a Public Information Session and place an ad in the local community newspaper.

I would like to confirm, that in accordance with City's Protocol relevant to Telecommunication Facilities and in line with Industry Canada's consultation requirements, Rogers commenced its consultation period on July 2, 2013 in consultation with the City. The circulation material contained a description of the proposal outlining its location on the subject property; details of the tower including height, lighting requirements and design; provided an invitation to a Public Information Session being hosted by Rogers on Wednesday, July 24th between 6-8p.m. at the Peterborough Sports and Wellness Centre; provided contact information for the applicable municipal contact as well Rogers' contact information for the purpose of obtaining further information relevant to Rogers' proposal. In addition, a Public Notice ad was placed in Peterborough Examiner on July 5th.

Rogers has now fulfilled all circulation requirements under City of Peterborough's Protocol and in accordance with Industry Canada's Consultation Process for the development of wireless communication structures as they pertain to the proposed new communication site to be located on 1837 Lansdowne St. W., Peterborough. Rogers has followed all the necessary steps in accordance with City' Protocol and Industry Canada's guidelines CPC-2-03 in consulting with the municipality; advising the public of our proposal; in addressing all reasonable and relevant concerns pertaining to our proposal as well as made every effort in providing the public with additional website and contact information that pertains to Health and Safety, Industry Canada Spectrum; and in keeping and producing all associated communications to Industry Canada and the municipality.

Please refer to attached Public Consultation Summary and Response Report outlining correspondence in accordance with Appendix F of the City' Protocol, including: complete list of the attendees at the Information Session; summary of topics/questions/concerns discussed at the Information Session and how Rogers' addressed these concerns.

Conclusion

Rogers feels that the proposed site is well located to provide improved wireless voice and data services in the targeted area of Lansdowne St. W. and Dobbin Rd. in the City Peterborough and the surrounding area.

Rogers has undertaken a comprehensive notification process and believes that all relevant concerns brought forward have been noted and addressed.

Request for Concurrence

Rogers has now fulfilled all the requirements under City of Peterborough's Protocol and Industry Canada's guidelines, as they pertain to the proposed new telecommunications site at 1837 Lansdowne St. W., Peterborough.

In order to conclude this land-use consultation and meet Industry Canada's requirements, Rogers Communications Inc. respectfully requests that our proposal be put on the next Council Agenda and the City of Peterborough move forward with the assessment of the process Rogers has undertaken to date, and issue a formal Letter of Concurrence to Rogers with a copy to Industry Canada in order to permit Rogers to move forward with the construction phase of the proposed wireless communication site.

If you require further information about this matter, please feel free to contact me at anytime. Rogers looks forward to working with City of Peterborough in obtaining the concurrence on this proposal for the purpose of improving wireless services in the City.

Yours Truly, Tatyana Moro, Municipal Relations Specialist, Rogers Communications Inc., Network Implementation

cc. Industry Canada