



Site Selection Report – Wireless Communications Site

Rogers Site Name: C6503, County Rd 36 & Gil Mar Rd

Proposed Location: 1988 Heights Rd. Kawartha Lakes, Ontario

Wireless Communications Site

Introduction

The on-going increase in the use of personal cellular phones and other wireless devices such as BlackBerry, I-Phone and broadband internet for personal, business and emergency purposes requires the development of new wireless communication infrastructure including new antennas and their support structures to meet the demands of increased capacity and broadening services areas. Canadians currently use more than 27.6 million wireless devices on a daily basis. More importantly, each year Canadians place more than 6 million calls to 911 or other emergency numbers from their mobile phones.

Rogers Communications Inc. "Rogers" constantly strives to improve coverage and network quality for the sake of their clients. In the recent past, due to subscriber feedback, our Network Planning and Engineering departments have become aware of coverage deficiencies within the general area of Kawartha Lakes, at County Rd 36 & Gil Mar Rd.

This document outlines the site selection process in accordance with the requirements of Innovation, Science and Economic Development Canada's (ISED) formerly known as Industry Canada's Spectrum Management and Telecommunications Policy, CPC-2-0-03, Issue 5 (July 15, 2014) and provides a description of the system associated with the proposed wireless communication installation on property known as 1988 Heights Rd. Kawartha Lakes, Ontario.

Background & 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 a rural setting. Client demand, radio frequency engineering principles, local topography and land use opportunities working in concert with one another to 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 service to clients. Rogers Communications Inc. would utilize the following proposed site location in order to provide high quality network signal for its high-speed wireless voice and data network.

Wireless communication carriers constantly strive to improve coverage and network quality for the sake of their clients. Our current coverage in Kawartha Lakes, in the County Rd 36 & Gil Mar Rd area is well below our acceptable standards and we need to respond to our customers' requests for improved coverage in these areas.

The site as proposed will achieve the necessary engineering coverage objectives for our network. The proposed location will enhance much relied upon communication services in the area such as EMS Response, Police and Fire; will significantly improve our wireless signal quality for the local residents; those traveling along the major roads as well provide local subscribers with Rogers' 4G 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.

Proposed Site Location

The Subject Property, with an approximate area of 90.48 Hectares is known as 1988 Heights Rd. Kawartha Lakes, Ontario.

The geographic coordinates for the site are as follows:

Latitude (NAD83) N 44° 27' 44.2"

Longitude (NAD 83) W 78° 39' 58.4"

Figure 1 - Location Map

As shown on Figure 1, the Subject Property is located in a rural area North of HWY 36 between Heights Rd. and Gil Mar Rd.



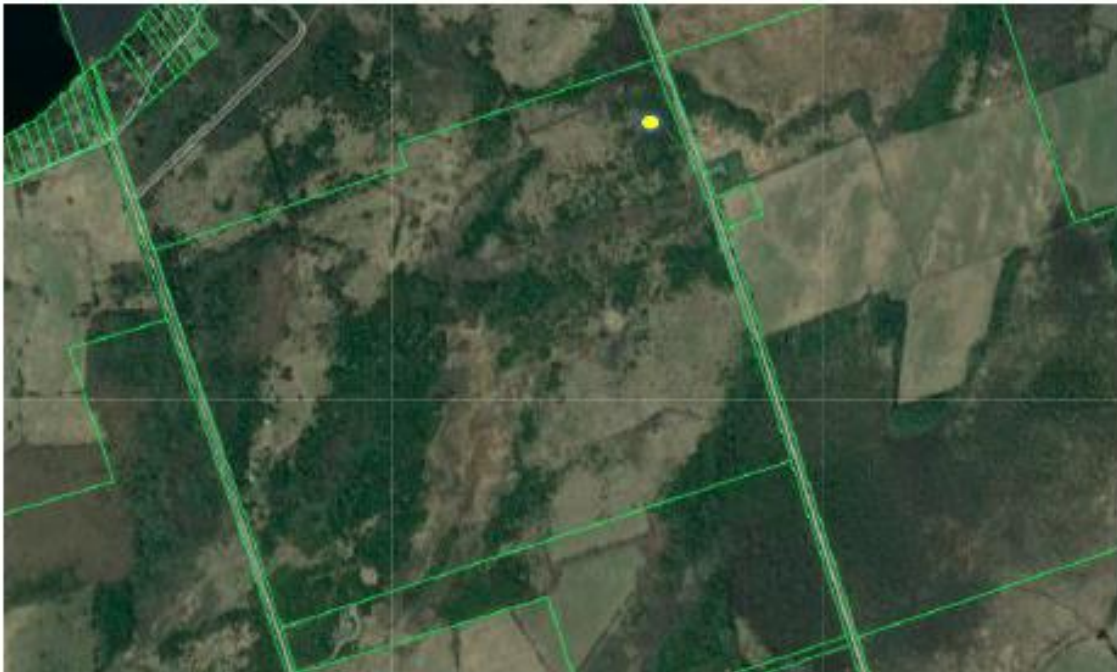
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Proposed Facility Location

The proposed wireless communication installation will be located on a property known as 1988 Heights Rd. Kawartha Lakes, Ontario. The property is currently being used as rural residential.

A copy of Rogers' surveyed site plan has been attached for your reference and information.

Figure 2 – Proposed tower location on subject property is shown with yellow circle in aerial photo below.



Description of Proposed System

As determined by Rogers' radio frequency engineers, Rogers is proposing to construct a 75 meter high (approximately 246 feet) Self Support Tower, which will be able to meet our network requirements.

This particular site will be a 3-sectored LTE 700, 2100, 2600 MHz services, as well as the offset 3-sectored LTE 850 and 1900 MHz services for the initial provision of services using (6) antennas, allowing for loading of future LTE and other technologies.

The Self Support Tower design has been used throughout Southern Ontario and is appropriate for rural areas such as Kawartha Lakes. The design, construction and installation of the facility will be consistent with required engineering practices including structural adequacy.

We have included, for your consideration, photo simulations at the end of this report which illustrate the proposed installation from nearby locations and along major roads.

Rogers's installation as proposed will not affect the existing drainage patterns servicing the property's current use.

Access to the installation during construction and for maintenance purposes will be via a new driveway entrance to the proposed location on the subject property. The site would occupy a compound area of approximately 225 sq. meters, which will include both tower and equipment cabinet location as outlined on the site plan provided. The compound will also contain a walk-in equipment cabinet (WIC) containing radio equipment, backup battery power, maintenance tools, manuals and a first aid kit.

The installation would provide an opportunity to accommodate future technology services as well as potential co-location with other licensed carriers helping reduce the number of future structures in the area, which is encouraged by the City of Kawartha Lakes and ISED.

Co-location Assessment

Rogers Communications Inc. makes every effort to locate cellular sites where they will be the least visually obtrusive and always makes an initial effort to co-locate on existing structures. Apart from being encouraged by ISED, co-location is one of the cornerstones of Rogers' site development philosophy.

Other potential site locations were evaluated and opportunities to co-locate onto existing structures were investigated. However, the wireless communication structures in the surrounding area that were evaluated are all beyond the distance or below the height required in order to address the coverage deficiencies in the area; are not suitable for our network needs and would not improve our existing signal coverage to the expected quality levels.

As part of our initial site evaluation process Rogers looked for an existing structure in the area, which would be suitable to install antennas. Unfortunately, there are none.

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

A survey of installations in the surrounding area in relation to our proposed site location are illustrated on an aerial shown below - (Figure 3).

Figure 3 – Co-location Map



LEGEND:
Red Pin - Rogers Structures

The distance to the closest tower to the East and West of our proposed location are over 7.8 km. These towers are unsuitable for Rogers because they are too far away to meet the coverage objective for this site.

Please refer below for a sample of the installation for your reference (Figure 4). An additional package of viewscales is attached to this report. It simulates the view of the proposed installation from major visible intersections. The process of simulating the proposed facility into the existing conditions of each viewscape was done by superimposing an image of the proposed structure on a photograph taken for each viewscape.

Figure 4 – Sample image of proposed installation



Municipal and Public Consultation Process

Rogers Communications Inc. is regulated and licensed by ISED to provide inter-provincial wireless voice and data services. As a federal undertaking, Rogers is required by ISED to consult with land-use authorities in siting antenna locations.

The consultation process established under ISED'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 voice and data systems.

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

The City of Kawartha Lakes has developed a protocol for establishing telecommunication facilities in the City. In fulfillment of the City's request for public notification, Rogers will be providing an information package to all those property owners located within a radius of 225 metres (three times the tower height) from the leased area. Concurrent to the mailing of this information package, Rogers will place a notice in the local community newspaper; as well as hold a Community Open House allowing the opportunity for the public, the City and Rogers to exchange information relevant to the proposal. A copy of this information package will be provided to the City of Kawartha Lakes Planning Department.

Location of surrounding residential uses

There is one existing residential dwelling located approximately 132 meters from the proposed installation, as shown in Figure 5. This is the only residential dwelling that falls within the radius of 225 meters (three times the height of the tower) in proximity to the proposed installation.

Please refer to the following page providing an aerial which displays the surrounding residential dwellings. (Figure 5)

Figure 5 – Surrounding residential dwellings.



Federal Requirements

In addition to the requirements for consultation with municipal authorities and the public, Rogers must also fulfill other important obligations including the following:

Canadian Environmental Assessment Act

ISED requires that the installation and modification of antenna systems be done in a manner that complies with appropriate environmental legislation. This includes the Canadian Environmental Assessment Act, 2012 (CEAA 2012), where the antenna system is incidental to a physical activity or project designated under CEAA 2012, or is located on federal lands.

Rogers attests that the radio antenna system as proposed for this site is not located within federal lands or forms part of or incidental to projects that are designated by the Regulations Designating Physical Activities or otherwise designated by the Minister of the Environment as requiring an environmental assessment. In accordance with the Canadian Environmental Assessment Act, 2012, this installation is excluded from assessment.

*For additional detailed information, please consult the Canadian Environmental Assessment Act at:
<http://laws-lois.justice.gc.ca/eng/acts/C-15.21/>*

Engineering Practices

Rogers attests that the radio antenna system as proposed for this site will be constructed in compliance with the National Building Code and The Canadian Standard Association, and respect good engineering practices including structural adequacy.

Transport Canada's Aeronautical Obstruction Marking Requirements

Rogers anticipates that the proposed installation will require markings or lighting and will submit the necessary applications to the appropriate parties to obtain required approvals.

In the instance where our structure requires lighting/markings, these requirements would be in compliance with CAR 621 Standards Obstruction Markings. The aforementioned standards provide for:

A combination of a medium intensity flashing white light during the day and steady burning aviation red light and/or flashing aviation red beacons at night

For additional detailed information, please consult Transport Canada's [at:
<http://www.tc.gc.ca/eng/civilaviation/regserv/cars/part6-standards-standard621-3808.htm>](http://www.tc.gc.ca/eng/civilaviation/regserv/cars/part6-standards-standard621-3808.htm)

Health Canada's Safety Code 6 Compliance

Health Canada is responsible for research and investigation to determine and promulgate the health protection limits for Exposure to the RF electromagnetic energy. Accordingly, Health Canada has developed a guideline entitled "Limits of Human Exposure to Radiofrequency Electromagnetic Field in the Frequency Range from 3kHz to 300 GHz – Safety Code 6". The exposure limits specified in Safety Code 6 were established from the results of hundreds of studies over the past several decades where the effects of RF energy on biological organisms were examined.

Radio communication, including technical aspects related to broadcasting, is under responsibility of the Ministry of Industry (ISED), which has the power to establish standards, rules, policies and procedures. ISED, under this authority, has adopted Safety Code 6 for the protection of the general public. As such, ISED requires all proponents and operators to ensure that their installations and apparatus comply with the Safety Code 6 at all times.

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Rogers Communications Inc. attests that the radio antenna system described in this notification package will at all times comply with Health Canada's Safety Code 6 limits, as may be amended from time to time, for the protection of the general public including any combined effects of additional carrier co-locations and nearby installations within the local radio environment. In fact, emissions levels of Rogers' wireless communication installations are far below the limits outlined in Safety Code 6.

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/radiation/cons/stations/index-eng.php>

Innovation, Science and Economic Development Canada's Spectrum Management

Please be advised that the approval of this site and its design is under the exclusive jurisdiction of the Government of Canada through ISED. For more information on ISED's public consultation guidelines including CPC-2-0-03 Issue 5 contact (<http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08777e.html>) or the local ISED office at spectrum.toronto@ic.gc.ca:

Toronto District Office

Room 909, 9th Floor
55 St. Clair Ave. E.
Toronto, ON
M4T 1M2
Tel.: 416-973-8215
Fax: 416-954-3553
Email: spectrum.toronto@ic.gc.ca

General information relating to antenna systems is available on ISED's Spectrum Management and Telecommunications website (<http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/home>)

Public consultation obligations

Rogers Communications Inc. is committed to effective public consultation. The public will be invited to provide comments to Rogers about this proposal by mail, electronic mail, phone or fax.

ISED's rules contain requirements for timely response to your questions, comments or concerns. We will acknowledge receipt of all communication within **14 days** and will provide a formal response to the Municipality and those members of the public who communicate to Rogers, within **60 days**. The members of the public who communicated with Rogers will then have **21 days** to review and reply to Rogers a final response.

Conclusion

Access to reliable wireless communications services is of great importance to residents' and travelers' safety and well-being in today's society. Wireless technology has fast become the preferred method of conducting business and personal communications among a large part of the population.

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, will be virtually obsolete. The current wireless infrastructure will be able to meet this trend and still provide a reliable system.

Rogers feels that the proposed site is well located to provide and improve wireless voice and data services in the targeted area. The proposed site is also situated and designed to have minimal impact on surrounding land uses.

Rogers looks forward to working with City of Kawartha Lakes in providing improved wireless services to the community.

Rogers Communications Inc.
Network Implementation

Proponent's Contact Information - Rogers Communications Inc.

SpectraSite Inc. – Acting as Agent for Rogers Communications Inc.
3307-89 Dunfield Avenue
Toronto, ON M4S 0A4

Contact: Laura Sterling
Phone: (905) 251-8848
lauras@spectrasiteinc.com