

DECISION/DIRECTION NOTE

Title: Proposed Small Cell Antenna Installations
Rogers Communications
Various City Structures
INT200001

Date Prepared: January 7, 2020

Report To: Committee of the Whole

Councillor and Role: Councillor Maggie Burton, Planning & Development Lead

Ward: All

Decision/Direction Required:

To seek approval on the installation of small low-powered Small Cell antennas on municipal structures (buildings, streets, and traffic poles). As well, to exempt these Small Cell antennas from the City's public notification process in keeping with the protocols of Industry Canada.

Discussion – Background and Current Status:

Rogers Communication has proposed a development plan to deploy Small Cell wireless technology to the City. These low radio frequency power non-tower structures have a small footprint and range and are effective both outside and inside of buildings improving coverage and/or increase capacity in higher populated areas. Unlike traditional telecommunication towers which are situated on high points of land or tall buildings, the Small Cell antenna can be attached to existing structures (see attached Appendix with presentation).

Industry Canada, the regulator for wireless installation and communication, can exempt non-tower structures such as antennas on buildings, water towers, lamp posts, etc. from public consultation where the height above ground of the non-tower structure, exclusive of any appurtenances, is not increased by more than 25%. This includes Small Cell antennas.

The *Siting Protocol for Wireless Facilities in the City of St. John's* require that the location of wireless communication structures within the City be reviewed to help identify preferred locations for these wireless facilities. As this process involves towers and roof-top antennas and not Small Cell antennas, the proponent is requesting an exemption from the current public notification process to align with that of Industry Canada.

While this may be a Rogers Communications application, all changes will apply to all telecommunication companies.

Key Considerations/Implications:

1. Budget/Financial Implications:
City will collect lease payments for use of cell units on City infrastructure.

ST. JOHN'S

2. Partners or Other Stakeholders:
Rogers Communication and the City of St. John's.
3. Alignment with Strategic Directions/Adopted Plans:
Decisions should align with the City's Strategic Direction of being fiscally responsible.
4. Legal or Policy Implications:
Amend City's current Protocol for Wireless Facilities to accommodate Small Cell antenna Installations.
5. Privacy Policy Implications: Not applicable.
6. Engagement and Communications Considerations: Not applicable
7. Human Resource Implications: Not applicable
8. Procurement Implications: Not applicable
9. Information Technology Implications: Not applicable
10. Other Implications: Not applicable

Recommendation:

To approve the use of Small Cell antennas on City buildings where deemed appropriate upon consultation with the City's Facility Engineering Division. As well, it is recommended to exempt these Small Cell antennas from the City's public notification process in keeping with the protocols of Industry Canada.

Prepared by/Signature:

Gerard Doran, Supervisor of Development

Signature: _____

Approved by/Date/Signature:

Jason Sinyard, P. Eng., MBA, Deputy City Manager
Planning, Engineering & Regulatory Services

Signature: _____

GD/dlm

Attachments:

Siting Protocol for Wireless Facilities
Small Cell Presentation – Rogers Communications

DEVELOPMENT INFORMATION BULLETIN

SITING PROTOCOL FOR WIRELESS FACILITIES IN THE CITY OF ST. JOHN'S

This is one in a series of Development Information Bulletins prepared to assist Property Owners and Developers to undertake specific types of development in the City of St. John's. Please contact the Department of Planning, Development and Engineering for further information on other Bulletins available in the series.

Demand for wireless telecommunication services is increasing. The quality of wireless service is important to St. John's residents and visitors. Locating broadcasting antenna systems, cellular towers and all wireless communications structures (hereinafter referred to as "wireless facilities") is a challenge. Radio waves are limited in how far they can travel while still being reliable. Telecommunications infrastructure provides public benefits, better wireless coverage, faster connections and improved emergency service response in the area. However, concerns from residents over the location of wireless facilities must be considered.

REGULATION OF WIRELESS FACILITIES

Radio communication is exclusively within the legislative authority of the federal government. All wireless communications facilities in Canada are governed by Federal legislation and regulated by Industry Canada. Communication companies must apply to Industry Canada for a license to operate an installation at each specific location. As set out in the Radiocommunication Act, Industry Canada is responsible for the licensing, development and operation of wireless facilities.

Wireless facilities are defined as infrastructure that enables wireless communications including broadcast antennas, cellular phone towers and other infrastructure mounted either on the ground or on another structure such as a rooftop. They include private antenna systems such as for Ham Radio and Citizen Band (CB) Radio where the antenna is mounted on a tower; Protocol excludes private antennas that are mounted on other structures (such as a chimney or the side of a house).

CITY BYLAWS AND POLICIES FOR WIRELESS FACILITIES

The City of St. John's is not the approving authority for wireless facilities. These are regulated under federal jurisdiction by Industry Canada. Local regulations such as municipal zoning cannot override the federal jurisdiction. However, the City does review applications for wireless facilities using the St. John's Development Regulations and the Siting Protocol to help identify the City's preferred locations for these wireless facilities.



PURPOSE AND OBJECTIVES

The purpose of the Siting Protocol is to establish procedural standards that will allow the City to effectively participate in the placement of wireless facilities proposed within City limits. The Siting Protocol is intended to assist City Council, City staff, Industry Canada, the telecommunication industry, and members of the public in understanding the roles, review procedures, and preferred locations for the installation of wireless facilities.

The objectives of this Protocol are:

1. To establish a process and criteria for consistently reviewing and evaluating each proposal for placing a wireless facility within St. John's and ensuring that the concerns of residents are considered;
2. To provide clear requirements for effective participation by proponents and their consultants with Council and City staff;
3. To minimize the number of wireless facilities within St. John's;
4. To ensure that co-location opportunities for wireless facilities are used wherever possible;
5. To promote opportunities for improved wireless facility design to minimize their visual impacts on the surrounding area; and
6. To assist a proponent in finding a suitable location that meets its needs while addressing the concerns of the City. This includes making the proponent aware of residents' concerns and providing recommendations regarding the placement and/or appearance of the structure.

THE ROLE OF THE CITY OF ST. JOHN'S

The role of the City is to review each proposal submitted by a telecom company (hereinafter referred to as the "proponent") and respond indicating whether or not the proposed installation is supported (concurrence) or not supported (non-concurrence). Note that in cases where the City does not support a proposal, it cannot prevent a proponent from appealing to Industry Canada. However, the City would expect the proponent to abandon the application if the City does not concur.

THE PROPONENT'S PUBLIC NOTIFICATION AND CONSULTATION PROCESS

Industry Canada requires that the proponent undertake a Public Notification and Consultation process for all new antenna systems (including masts, towers or other antenna-supporting structures). The proponent is responsible to mail notices to all property owners within a radius of three (3) times the proposed tower height. For better communication, the City requires a proponent to follow the City process for public notification of development applications (see below) rather than its own separate process.

THE CITY'S PUBLIC NOTIFICATION PROCESS

In accordance with the St. John's Development Regulations, wireless facilities of any height will be classed as a Discretionary Use. A Discretionary Use is a use which may be permitted by Council subject to conditions or controls. Discretionary uses may be approved or rejected by Council.

For a Discretionary Use application, staff advertise the application in accordance with Section 5.5 of the Development Regulations. The process requires advertisement of the application in a local newspaper and the mailing of notices to all property owners within a minimum 150-metre radius of the application site. Notices are intended to advise the public of the receipt of the application and the name of the Applicant. Notices list the application and the name of the applicant. They include a date for the receipt of written representations for anyone wishing to express an interest in the application. Any written representations received are forwarded to Council. Council may require a public meeting before approving or rejecting an application.

The City requires a proponent to participate in the City notification process and encourages the proponent to meet its Industry Canada requirements through our process rather than its own stand-alone process.

THE CITY'S PREFERRED LOCATIONS FOR WIRELESS FACILITIES INCLUDING CO-LOCATION

Co-location means the sharing of wireless facilities by multiple service providers. Both the Federal regulations and the City's protocol require co-location wherever possible. Optimal use of tower co-location can improve wireless service, improve structure design and minimize any negative visual impacts. Where co-location on an existing antenna system of structure-mounted antenna is not possible, any new freestanding antenna system should be designed with co-location capacity for other wireless service providers. Applicants are required to locate new wireless facility antenna systems onto existing infrastructure wherever possible, including (but not limited to) rooftops, water towers, utility poles or light standards. The applicant is responsible to document the investigation of co-location potential on existing structures.

Co-location of antenna structures is the City's preferred solution for new wireless facilities. Similarly, the City prefers "structure-mounted" wireless facilities (installation on rooftops, electrical transmission lines, water towers or utility poles) over "freestanding" structures. Applicants are also encouraged to camouflage or screen new antennas. Creative solutions for camouflaging antenna systems are encouraged, particularly in heritage areas and near historic sites (e.g. in church steeples or on flag poles and the sides of buildings. When new freestanding antenna systems must be constructed, industrial, or commercial locations are preferred. Free-standing wireless facilities are discouraged in or near residential, apartment, school, and recreational areas.

THE CITY'S REVIEW PROCESS

1. **Pre-Consultation:** Proponents are required to consult City staff before submitting an application. From this meeting, Planning staff will advise the proponent of preferred locations for wireless facilities. Typically, they would discuss the following items:
 - i) The City's Application Form
 - ii) The type and height of the proposed wireless facility
 - iii) The proposed location
 - iv) Co-location potential

2. **Review Application:** After the application is received, it will be reviewed by the Development Officer and other City staff where necessary. Staff will evaluate each submission based on the following criteria:
- i) Conformity with the St. John's Municipal Plan and the St. John's Development Regulations;
 - ii) Documentation regarding co-location potential, to ensure all co-location opportunities have been explored and exhausted;
 - iii) Documentation by the proponent to evaluate alternate sites;
 - iv) The degree to which the design/type of structure integrates with the surrounding land uses and public realm;
 - v) Design elements of the proposal including height, colour, and supporting structure (if a freestanding system such as a lattice or monopole tower, a guyed system, or a structure-mounted system); and
 - vi) Visual impact of the proposed structure on the surrounding area (colour photographs or graphics showing the proposed design within the context of its surrounds are required).
3. **Public Notification Process:** For wireless facilities, the City will use its public notification process under Section 5.5 of the St. John's Development Regulations. This includes public advertisement in a local newspaper and mailing notices to all property owners within a minimum 150-metre radius of the application site. To avoid duplication and ensure clear communication, the City requires the proponent to provide staff with information for a common notice, rather than the proponent doing their own mailout or their own newspaper ad.
4. **Public Meeting:** Council will decide whether a public meeting should be held regarding the wireless facility proposal. If a public meeting is required by Council, the City and proponent shall host a joint public meeting in according with the City's usual processes.
5. **Concurrence or Non-concurrence:** Following the public consultation process, Council shall vote on the concurrence (support) or non-concurrence (non-support). The City's Development Officer will inform the proponent of the decision.

The Department of Planning, Development and Engineering maintains written communication with the proponent throughout the application process.

FOR FURTHER INFORMATION, PLEASE CONTACT:

**Development Officer
Department of Planning, Development and Engineering
3rd Floor, St. John's City Hall
City of St. John's
P.O. Box 908
St. John's, NL A1C 5M2
Telephone: (709) 576-8220 or FAX: (709) 576-8625
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Small Cell Presentation to the City of St. John's

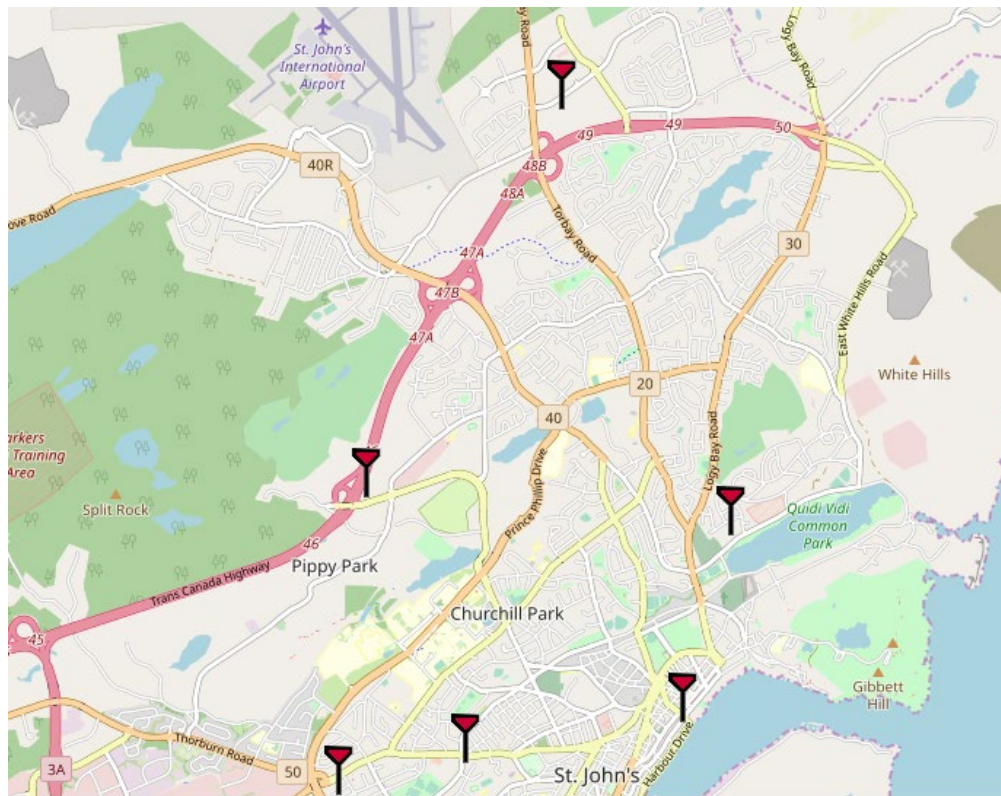


Introduction

- Smartphones play an important role in our everyday lives.
- Consumers use their smartphones to stay connected, to navigate, work, stream music, be entertained and so much more.
- Rogers believes in providing its customers with a network experience that empowers them to do more.
- To do so, Rogers provides worry-free, reliable wireless connections on a network built to consistently deliver unique experiences and we continuously invest to ensure a positive experience.
- We invest heavily in our existing infrastructure and new infrastructures.
 - Modernize: renewal of equipment to increase performance
 - New sites: addition of telecommunications sites /small cells



Current Rogers network in St. John's



Current situation and future outlook

- According to the Canadian Wireless and Telecommunications Association (CWTA):
 - 99% of the Canadian population has access to wireless services;
 - Approximately one third of Canadian households rely exclusively on wireless services.
 - In 2017, Canada's mobile data traffic grew 38%.
- Traditionally, telecommunication towers have been positioned:
 - Mountain peaks;
 - Industrial sectors;
 - Commercial sectors;
 - In proximity to residential neighborhoods
- To meet the growing demand for wireless services, certain key areas of the City of St. John's, require additional coverage or extra capacity.
- **Small Cell Solution:**
 - A wireless network base station with a low radio frequency power output, footprint and range;
 - Provides coverage and capacity in a similar but smaller way to a tower;
 - Effective inside or outside of buildings;
 - Does not replace existing telecommunications towers.



Small Cells – objective and advantages



Objective: Develop a plan with input from the City of St. John's to deploy Small Cells.

- Install small low-powered Small Cell antennas on municipal structures (buildings, street lights and traffic lights) to improve coverage and/or increase capacity in densely populated urban areas of the city.
- Use of existing structures.
- Esthetically pleasing, unobstructive: Small Cells can be painted.
- Quick and easy to install on walls, posts, ceilings, etc.
- Use of Hydro polls.
- Prepare the foundation for smart cities and “Internet of Things”



Photo simulation 1



Photo simulation 2



Photo simulation 3



Proposed locations to consider : decorative light poles in downtown area
(for discussion purposes only and subject to city approval)



Proposed locations to consider: public spaces and buildings (for discussion purposes only and subject to city approval)



Proposed locations to consider: public spaces and buildings *(for discussion purposes only and subject to city approval)*



Benefits to entering into a Master Agreement

- Requires less time for Planning and Council given there is one agreement in place.
- Benefits residents, businesses and tourists with improved service.
- New locations can be added as needed and approved by city.
- Revenue from each small cell installation



Next steps to consider

- Negotiate a Master Municipal Agreement, allowing for access to the city's infrastructure;
- Install Small Cell infrastructure to support the growing coverage and capacity requirements.



Thank you

