City of Richmond
Planning and Development Department

Report to Committee

To:	Planning Committee	**Date:**	October 28, 2009
From:	Brian J. Jackson, MCIP Director of Development	**File:**	
Re:	**Draft Telecommunication Antenna Consultation and Siting Protocol**		

Staff Recommendation

That the Telecommunication Antenna Consultation and Siting Protocol (**Attachment 1** to the staff report dated October 28, 2009) be approved for discussion with key stakeholders.

Brian J. Jackson, MCIP
Director of Development

KE:blg
Att. 2

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ROUTED TO: — **CONCURRENCE** Real Estate Services ..... Y ☑ N ☐ Law ..... Y ☑ N ☐ Parks Planning, Design & Construction .... Y ☑ N ☐ Engineering ..... Y ☑ N ☐	**CONCURRENCE OF GENERAL MANAGER**
REVIEWED BY TAG — YES ☑ NO ☐	**REVIEWED BY CAO** — YES ☑ NO ☐

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Staff Report

Origin

This report follows-up on a Council resolution (adopted on September 22, 2008) that directed staff to:

> *"...Review and bring forward a policy that establishes a local Telecommunications Tower Siting and Consultation Protocol".*

After review of the Federal regulatory framework covering telecommunication antennas, City staff have developed a draft Telecommunication Antenna Consultation and Siting Protocol contained in **Attachment 1**.

The objectives of the draft Telecommunication Antenna Consultation and Siting Protocol for Richmond are to:

- Facilitate the development of a Protocol in compliance with Federal legislation and process for approving telecommunications antenna proposals.
- Identify an efficient Council review process for all telecommunication antenna proposals in the City.
- Develop a protocol that focuses on addressing adjacencies and impacts to surrounding land uses in conjunction with supporting telecommunication infrastructure development across the City.
- Identify a public consultation requirement and procedure for telecommunication antenna proposals in keeping with Industry Canada guidelines and regulations.
- Ensure a coordinated land use approach to telecommunication antenna and supporting utilities to minimize unnecessary proliferation of telecommunication antenna installations City-wide.
- Develop and include criteria in the City's protocol to facilitate co-location and implement siting, design and screening guidelines for proponents to follow.

There has been recent initiatives by the Federal Government to release increased amounts of spectrum for use by cellular communication providers, which has resulted in the establishment of a number of new telecommunication providers and enabled existing service providers the opportunity to expand networks. It is anticipated that newly established and existing service providers will be undertaking infrastructure development to facilitate the creation of their networks. As such, the City's proposed Telecommunication Antenna Consultation and Siting Protocol is well-positioned to provide direction to telecommunication providers when developing their networks as well as establishing a consultation process and consistent set of land use criteria to inform the placement of telecommunication antenna utilities throughout the City.

Approach to Protocol Development and Consultation with Stakeholders

The regulation and development of policy regarding telecommunication antenna is a complex issue involving Federal Governmental jurisdiction, local land use issues, local residents and a variety of service providers involved in the telecommunications industry. A 3-step approach to the development of a Telecommunication Antenna Consultation and Siting Protocol for Richmond is proposed, generally involving the following:

1. **Current Step** - City staff prepare a draft Telecommunication Antenna Consultation and Siting Protocol for Richmond. This draft is being forwarded to Council for review and comment. Subject to any comments arising from Council, the draft Protocol would be endorsed by Council to undertake consultation with key stakeholders to obtain additional input.
2. **Future Step** - City staff would undertake consultation with key stakeholders on the draft Protocol. Some of the stakeholders identified to date are various service providers (cellular communication companies) and the Federal authority involved in licensing and approvals (Industry Canada).
3. **Future Step** - Upon completion of the consultation with stakeholders, appropriate revisions would be made to the Protocol and brought forward to Council for approval along with various implementation measures (procedural and fee bylaw amendments).

The estimated time frame to undertake this process is approximately 4 months pending comments and requested revisions from Council and various stakeholders.

Regulatory Framework on Telecommunication Antenna

Telecommunication antenna installation falls under the mandate of the Federal Government and is governed by the *Radiocommunication Act*. Telecommunication antenna and any supporting infrastructure is a field solely within the legislative authority of the Federal Government. As such, the assigned agent of the Federal Government (Industry Canada) has the sole authority to approve or not approve the location and installation of telecommunication antenna and related structures. The City is not able to establish any regulations, through either policy or bylaw, that directly prohibit the location or restrict the placement of telecommunication antenna installations in certain areas in the City.

An essential component of the City's draft Telecommunication Antenna Consultation and Siting Protocol is the recognition of the Federal Government's legislative authority and mandate over telecommunication installations. The City's role is advising Industry Canada regarding the local preferences, comments and concerns. To ensure that the City's draft protocol is aligned with the regulatory framework, the draft protocol addresses the following:

- Identifies preferred locations for telecommunication antenna installations.
- Recommends siting considerations depending on site-specific context (trees, environmentally sensitive areas, adjacent land uses).
- Establishes a public consultation process to be undertaken (depending on the site location and type of antenna installation).
- Establishes co-location, siting and landscape screening guidelines for telecommunication antenna installations.

As a result of the existing regulatory framework, the City's proposed Telecommunication Antenna Consultation and Siting Protocol is aimed at facilitating opportunities for antenna co-location in conjunction with parameters on placement, screening and design. The Protocol also has a public consultation component and process built into the policy requiring full consultation for stand alone telecommunication antenna towers and related utilities that are located in areas with specific land use designations or adjacencies. Industry Canada requires public consultation to take place at the local level prior to its approval of most types of applications. Industry Canada's exceptions to the public consultation requirement are included as exemptions under the City's proposed Telecommunication Antenna Consultation and Siting Protocol.

Canadian Radio-Television and Telecommunications (CRTC) Licensing Process

Proposals involving broadcasting are subject to CRTC licensing processes and approvals. This is in addition to Industry Canada requirements and approvals. Broadcast companies often initiate the licensing process with the CRTC concurrent to or before the submission and review of a telecommunication antenna installation proposal to the City. This approach is taken to determine the broadcaster's feasibility of obtaining a license prior to initiating an application to the City for an antenna installation involving staff processing and public consultation (where required). Regardless of when the proponent initiates a CRTC licensing process, requirements for consultation and submission of a proposal to the Local Government in accordance with the processing and consultation requirements contained in the City of Richmond's proposed Protocol remain. To ensure that the broadcaster has initiated the applicable CRTC licensing process, the proposed Protocol includes a provision for the proponent to confirm initiation of the CRTC licensing process and ultimate decision when it is made.

Telecommunication Antenna Provisions in the Proposed New Zoning Bylaw

The proposed new Zoning Bylaw (Scheduled to be brought forward to Planning Committee in October 2009) permits telecommunication antenna as a permitted use in all zones throughout the City. Although telecommunications antenna will be permitted in all zones throughout the City, such installations (antenna, structures and mechanical buildings) will have to comply with applicable zoning regulations (height, setback, lot coverage, density) that are different based on the zoning of the subject site.

As an example, a residentially zoned property will typically have a much lower building and accessory structure height limitation as well as reduced ability to accommodate structures due to limited setback and density provisions when compared to an industrial zoned site that will have larger tolerances related to density, setback and height provisions. As a result, industrial sites and zoning will generally be able to accommodate telecommunication antenna installations more readily when compared to other zones or areas in the City.

As currently proposed, if the new Zoning Bylaw is adopted by Council (as early as the November 2009 Public Hearing) no follow-up amendments will be required to the Zoning Bylaw as the proposed Telecommunication Antenna Consultation and Siting Protocol was developed in conjunction with the new Zoning Bylaw.

General Parameters on Telecommunication Antenna Installations

Given the Federal mandate and authority over telecommunication antenna, a local government is not able to prohibit this use through either bylaw (Zoning) or policy. However, the City is able to apply other regulatory provisions to address appropriate setbacks, height, landscaping/screen provisions and design guidelines applicable to each project and zoning for the proposed site. The City's proposed Protocol also identifies a preference for telecommunication antenna installations to locate in industrial areas (standalone towers and building mounted installations) and commercial areas (preference for building mounted installations).

The proposed Protocol, in conjunction with the zoning bylaw provisions, strongly recommends that telecommunication installations should not be located in residential areas due to potential negative adjacencies that may occur and resulting public concerns(large structures exceeding the height of surrounding buildings). The Protocol also recognizes and discourages the unnecessary proliferation of telecommunication antenna towers in agricultural areas by encouraging co-location and building mounted installations and where the service providers are able to provide confirmation that other sites are not able to address service coverage issues.
Due to the impact of telecommunication installations in residential and agricultural areas, the process requires proponents to undertake extensive public consultation as an additional part of the application process so that concerns are identified and addressed.

Outline of Proposed Telecommunication Antenna Siting and Consultation Protocol

The proposed Protocol is set out in **Attachment 1**. In order to outline and identify highlights and answer common questions on the Protocol, regulations and process, a summary Question & Answer table is set out in **Attachment 2**.

Future Steps

If the recommendation to endorse the draft Telecommunication Antenna Consultation and Siting Protocol for consultation with stakeholders is approved by Council, the following initiatives will be undertaken by City staff.

- If required, amend the draft Telecommunication Antenna Consultation and Siting Protocol based on Council feedback.
- Liaise with key stakeholders (Industry Canada, various telecommunication service providers) to engage comments and feedback on the draft Protocol.
- Revise the Protocol where needed based on key stakeholder consultation.

Upon conclusion of external consultation with stakeholders, a follow-up report to Council will be prepared to bring forward the following:

- Final draft of the Telecommunication Antenna Consultation and Siting Protocol for Council review and approval.
- Appropriate amendments to other relevant City bylaws to:
    - Implement application processing fees associated with telecommunication antenna proposals on a cost-recovery basis.
    - Implement the necessary development application processing requirements.

Staff Comments

Public health and safety concerns in regards to telecommunication antenna installations and related radio frequency exposure limits is a common concern that arises. Health Canada has

established specific limits to radio frequency exposure for people. In order to address public health and safety issues, Industry Canada has adopted Health Canada's radio frequency exposure limits, thus requiring all proponents to comply with these guidelines in all telecommunication antenna proposals.

As part of the review of all telecommunication antenna installation proposals in the City, proponents will be required to adhere to Health Canada radio frequency exposure limits to address public health and safety concerns.

In addition to radio frequency exposure limits established by Health Canada, the following are already subject to Federal standards and regulations and do not need to be incorporated into the City's Protocol:

- Ensuring the telecommunication antenna installation does not interfere and is immune from other radio frequency installations and equipment.
- Compliance with Federal aeronautical safety based on Transport Canada and Nav Canada requirements (i.e., appropriate lighting and painting).
- Compliance with the Canadian Environmental Assessment Act, where deemed necessary by Industry Canada.

Municipal Access Agreements (MAA) are agreements between the City and another party (often a utility service provider) to manage the placement and installation of the service provider's equipment on City roads and right-of-ways (as defined in the agreement). If a wireless service provider completes the antenna siting application process identified in the proposed Protocol, additional follow-up to situate antenna related infrastructure (equipment such as kiosks and underground conduits) on City roads and right-of-ways (to be defined in each MAA) may be required. This results in either the service provider complying with the terms of an existing applicable MAA (where one is in place) or enter into negotiations to establish one (where one is not).

Consent of the local municipality is required for any service provider wishing to place equipment on City roads and right-of-ways, as outlined in the *Telecommunications Act*. If a telecommunication antenna installation involves establishment of a new MAA, Council approval of the agreement is required. The establishment of new MAA's are brought forward in a separate Report to Council for review and consideration.

In addition to adherence with the provisions of the draft Protocol outlined in this staff report, telecommunication antenna installations and related infrastructure are required to comply with all other applicable City bylaws (i.e., Building Regulation Bylaw; Flood Plain Designation and Protection Bylaw).

Analysis

The inclusion of telecommunication antenna in all zones under the proposed new Zoning Bylaw, the proposed Telecommunication Antenna Consultation and Siting Protocol and future implementation amendments to various fee and procedural bylaws is to provide a comprehensive and coordinated approach to addressing telecommunication antenna installations on a City-wide basis.

In addition to zoning regulations with respect to density, height, setback, and coverage, the draft Protocol puts in place a set of criteria and guidelines for telecommunication antenna installations to follow in regards to:

- Preferred land use and adjacency considerations for telecommunication antenna installations.
- Required public consultation approaches depending on type of telecommunication antenna installation (tower or building mounted) and location (industrial vs. residential areas).
- General parameters for telecommunication antenna installations regarding ESA's, trees and agricultural areas.
- Co-location, siting, design and screening provisions applicable to all telecommunication antenna installations.

If Council approves the draft Protocol, consultation with key stakeholders will be undertaken. Upon completion of the consultation, a finalized Protocol and related implementation measures (fee and procedure bylaw amendments) will be brought forward for consideration by Council.

Financial Impact

New development application fees will be introduced in the future as part of the implementation measures associated with Council approval of the Protocol. Application processing fees will be based on a cost-recovery model to cover City costs and resources needed to process telecommunication antenna applications.

Conclusion

Staff recommend the draft Telecommunication Antenna Consultation and Siting Protocol be approved for discussion with key stakeholders.

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City of Richmond

Policy Manual

Page 1 of 4	Adopted by Council:	Draft Protocol
File Ref:	Telecommunication Antenna Consultation and Siting Protocol (Draft)	

Policy :

Intent – This is a Citywide protocol addressing the processing and applicable public consultation requirement associated with Telecommunication antenna installations in the City of Richmond. This protocol also establishes siting and locational criteria applicable to all telecommunication antenna proposals submitted to the City for review pursuant to the *Radiocommunication Act.*

1. Zoning Provisions (proposed new zoning bylaw)

- Under Federal regulations and authority over telecommunication antenna installations, the City is not able to prohibit these uses. However, this Protocol identifies a preference for telecommunication installations to be located in non-residential areas.
- Telecommunication antennas are a permitted use in all zones. For the purposes of this protocol, telecommunication antenna can take the form of either antennas mounted on a stand-alone tower or building mounted antenna applications along with any supporting mechanical rooms and infrastructure.
- Appropriate zoning regulations (i.e., siting, height, landscaping, etc.) are applicable to all telecommunication antenna installations (including support buildings and structures).

2. Processing Requirements and Review by Richmond City Council

- All telecommunication antenna (stand-alone towers and building mounted applications) are required to be reviewed through application and considered by Richmond City Council.
- Processing will vary depending on the specifics of each telecommunication antenna proposal and location, but will generally involve the following:
    - Submission of the proposal and payment of applicable development application fees.
    - Review of the application based on the parameters established in this protocol.
    - Undertaking public consultation (if required by Section 4 of this protocol).
    - Requesting the appropriate zoning variance (if necessary).
    - Generation of a report to Council with appropriate recommendation (i.e., endorse; not endorse).
    - Council recommendation would be forwarded to proponent and Industry Canada to conclude processing.

3. Exemptions

A general exemption from the provisions of this protocol applies to:

- Maintenance and upkeep of existing telecommunication antenna installations, including painting and lighting to comply with Transport Canada's aeronautical requirements.
- Structural upgrades and/or additions to towers to facilitate increased capacity or co-location of antenna on existing towers so long as tower height does not result in an overall height increase of 25% above the original structure's height. Applicable zoning provisions related to height and setback will apply to overall tower height along with any additional supporting structures.

- Temporary installation (typically for a period of less than three months) of telecommunication antenna and related infrastructure used for a special event or to support local, Provincial or Federal programs or emergency operations, provided the temporary installation is removed within three months after the emergency or special event and the lands are reinstated to their original condition.
- Telecommunication antenna installations that are solely dedicated to operation of City utilities and infrastructure.

4. Proposals that Require Public Consultation

- Public consultation is required for telecommunication antenna installations and related infrastructure involving free-standing towers on all lands within the City, except lands designated or zoned for industrial uses that is located more than 500m from lands designated or zoned for residential or park uses.
- Public consultation is not required for building mounted telecommunication antenna installations.
- The Director of Development can require any type of telecommunication antenna installation to undertake public consultation depending on the site-specific circumstances presented in each proposal.
- Broadcasters require licensing approval from the Canadian Radio-Television and Telecommunications (CRTC). Where a broadcaster requires telecommunication antenna installations, broadcasters are required to provide documentation to the City confirming the initiation of the applicable (CRTC) licensing process and decision when made.
- The following process will apply to telecommunication antenna proposals requiring public consultation:
    - All public consultation is to be undertaken and documented by the proponent.
    - The proponent must advertise in at least two consecutive issues of a local newspaper to inform the public of the proposal.
    - The proponent must provide notification, via direct-addressed mail, to all property owners within a 500m radius of the base of the proposed telecommunication antenna tower.
    - A follow-up public information meeting at an appropriate location and with adequate notification may be required based on the public feedback and responses on the proposal as determined at the sole discretion of the City's Director of Development.
    - The proponent is required to document all aspects of the public consultation process and include a summary report to form part of their application to the City. In addition to highlighting the details of the consultation process, the report must contain all public correspondence received and responses by the proponent to address public concerns and comments.

5. General Parameters Applicable to all Telecommunication Antenna Proposals

- Telecommunication antenna installations are encouraged to locate in non-residential, areas with minimal residential adjacencies and situated in a manner that properly integrates into the built and natural landscape.

- Telecommunication antenna and related infrastructure should not be situated in, or in a manner that would negatively impact Environmentally Sensitive Areas, Riparian Management Areas, designated conservation areas and areas with ecological habitat.
- Telecommunication antenna and related infrastructure should be located with existing trees and landscaping with the objective of minimizing the visual impact of any installations.
- Removal of trees and/or significant modification of existing landscaping to facilitate the installation of telecommunication antenna and related infrastructure should be avoided.
- The preferred type of telecommunication antenna installations should be for co-location on existing towers, existing building/structured mounted applications or stand alone towers in industrial designated or zoned areas only.
- Telecommunication antenna installations should avoid locating on sites that are contained in the Agricultural Land Reserve (ALR) or zoned/designated for agriculture in order to minimize the loss of farmland and reduce negative impacts on farm operations.
- If it is deemed necessary for a telecommunication antenna installations to be located on agriculturally zoned/designated land or in the ALR, the following requirements apply:
    - Public consultation.
    - Comply with ALR regulations on telecommunication utilities requiring that all tower and related installations be contained within a maximum footprint area of 100 sq. m.
    - If this maximum footprint area is exceeded, a "non-farm use" application to the City will be required prior to going through the application procedure outlined in this protocol.
    - Telecommunication antenna and related infrastructure should be located in a manner that maximizes land available for farming and minimize negative impacts to existing and future agricultural operations.
    - Telecommunication antenna installations should be located on existing buildings or structures or co-locate on existing towers where possible.

6. Co-Location, Siting, Design and Screening Provisions

Co-Location

- All telecommunication antenna proponents will be required to explore co-location on existing towers or facilitate future co-location by designing new towers to accommodate additional antenna and users. This key criteria is intended to minimize unnecessary proliferation of towers throughout the City while accommodating the telecommunications sector need to provide and expand services to clients.
- Each proponent proposing a new tower will need to explore opportunities for co-location on existing towers or structures if one exists within a 500 m radius of the proposed tower.
- All new telecommunication towers should be designed and engineered to accommodate additional antennas and related supporting infrastructure (i.e., mechanical buildings).
- Proponents should engage all other relevant service providers to confirm opportunities for or agreements to co-locate on a single tower.
- Written documentation provided by the proponent, along with appropriate information from professional consultants, is required to confirm adherence to co-location criteria.

Siting and Design Criteria

- The preference for telecommunication antenna and related infrastructure is to locate in non-residential areas with minimal residential adjacencies and situated in a manner that properly integrates into the built and natural landscape.
- All applicable zoning regulations (height, setback, lot coverage, density and landscaping) will apply to stand-alone towers and building mounted telecommunication antenna and supporting utility structures.
- Standalone towers should be properly integrated with existing buildings/structures and located to minimize the visual impact of the tower and antenna to surrounding land uses. A variety of tower designs can be considered to achieve siting and design criteria.
- Building mounted telecommunication antenna should be architecturally integrated into the design of the building with appropriate screening applied to minimize and integrate the visual appearance of antenna and supporting utility buildings.
- Building mounted telecommunication antenna installations should not extend beyond 3 m above the roof or parapet wall of the building to which the antenna is fixed and must comply with maximum permitted building height.

Screening and Landscaping Provisions

- Appropriate fencing is to be implemented to properly secure telecommunication antenna and any supporting utility buildings.
- A contiguous, solid planted landscape buffer is to be implemented to screen stand alone telecommunication towers and supporting utility buildings from residential areas, adjacent buildings and public roads.
- A minimum width of 1.5 m constitutes an appropriate landscape screen consisting of a combination of hedging, trees and shrubs.
- Proponents should provide for long-term maintenance and upkeep of appropriate landscaping for its telecommunication antenna sites.

Q&A Summary Table
Proposed Telecommunication Antenna Consultation and Siting Protocol
City of Richmond (October 2009)

Zoning Approach
How does the new zoning bylaw regulate telecommunication antenna installations? ❑ "Telecommunication Antenna" are permitted in all zones. These cover both stand alone towers or building/structure mounted antenna and any supporting utility buildings. ❑ Setback, height, density and other applicable regulations specific to each zoning district will apply to telecommunication antenna.
How will telecommunication antenna proposals be processed if they exceed the permitted height (or other regulation) identified in a zone? ❑ Every telecommunication antenna proposal will be examined in conjunction with the zoning regulations for the subject site (height, setback, coverage, density, landscaping regulations etc.) ❑ A development variance permit application will be required and integrated into the processing of telecommunication antenna proposal applications to the City. This process will be developed to include the proposal and any necessary variances into one report to Council. ❑ The Telecommunication Antenna Consultation and Siting Protocol will be applied through the processing of any development variance permit application.
Council Review and General Exemptions
Will all telecommunication antenna proposals (standalone towers and building mounted installations) be reviewed by Council? ❑ YES – The proposed Protocol will facilitate each telecommunication antenna proposal to be reviewed in conjunction with the provisions of the Protocol and brought forward to Council for consideration. ❑ A variety of processing "streams" are applicable depending on the location, size and specifics of each proposal.
When does the City's review of the telecommunication antenna proposal conclude? ❑ Once Richmond City Council passes a resolution based on a telecommunication antenna proposal that has been reviewed in conjunction with the City's Telecommunication Antenna Consultation and Siting Protocol. ❑ This information is conveyed to the proponent and Industry Canada.
What work related to telecommunications antenna and related utilities will <u>not</u> be required to go through any approval process with the City? ❑ Maintenance and upkeep of existing telecommunication antenna installations, including painting and lighting to comply with Transport Canada's aeronautical requirements. ❑ Structural upgrades and/or additions to towers to facilitate increased capacity or co-location of antenna on existing towers so long as tower height does not result in an overall height increase of 25% above the original structure's height. Applicable zoning provisions related to height and setback will apply to overall tower height along with any additional supporting structures. ❑ Temporary installation (typically for a period of less than three months) of telecommunication antenna and related infrastructure used for a special event or to support local, Provincial or Federal programs or emergency operations, provided the temporary installation is removed within three months after the emergency or special event and the lands reinstated to their original condition. ❑ Telecommunication antenna installations that are solely dedicated to operation of City utilities and infrastructure.

Requirements for Public Consultation

What telecommunication antenna proposals are required to undertake public consultation for telecommunication antenna proposals?

- Public consultation is required for telecommunication antenna installations and related infrastructure involving free-standing towers on all lands within the City, except lands designated or zoned for industrial uses that is located more than 500m from lands designated or zoned for residential or park uses.
- Public consultation is not required for building mounted telecommunication antenna installations.
- The Director of Development can require any type of telecommunication antenna installation to undertake public consultation depending on the site-specific circumstances presented in each proposal.
- Telecommunication installations that are not required to undertake public consultation are still required to be reviewed by staff in conjunction with the Protocol criteria and considered by Council.

What timing considerations should the City take into consideration?

- Industry Canada establishes a guideline of a **120 day** period for submission of a Telecommunication Antenna application to the local government, completion of any applicable public consultation process and conclusion of local government processing.
- The proposed Protocol and anticipated processing of applications will be prepared to ensure telecommunication antenna proposals are processed in a streamlined manner. In certain situations, length or processing may be extended due to specific issues or response to public comments that arise and need to be addressed by the proponent.

Details of Public Consultation Process

What is involved in the public consultation process for telecommunication antenna proposals?

- All public consultation is to be undertaken by the proponent.
- Advertisement in a local paper (minimum of two consecutive issues) to inform public of proposal.
- Mailed notification to surrounding properties within a 500 m radius from the base of the installation. This radius is equivalent (and in some cases larger) than notification radiuses established in other Lower Mainland municipalities.
- Public Information Meeting to be hosted by the proponent may be necessary pending initial public feedback. Participation and involvement of City staff is not required.
- Proponent shall document all aspects and include a public consultation report to form part of their application to the City.

General Parameters for Telecommunication Antenna in Specific Areas

What is the preferred location for telecommunication antenna installations?

- The preferred location is in non-residential areas. The protocol encourages telecommunication installations to locate in industrial areas (stand–alone towers and building mounted) or commercial areas (building mounted installations).

What considerations should be given to telecommunication antenna installations in Environmentally Sensitive Areas (ESA) and ecologically sensitive locations?

- These locations should be avoided. If this is not possible, telecommunication antenna installations should be situated in such a manner that would not negatively impact ESA's, Riparian Management Areas, designated conservation areas or areas with identified ecological value.

What considerations should be given to telecommunication antenna installations impact on existing trees and landscaping?

- Telecommunication Antenna infrastructure should be sited taking into consideration existing trees and landscaping with the objective of properly integrating with existing landscape features and minimizing the visual impact of installations.
- Removal of trees and/or modification of significant landscaping should be avoided.

What are the applicable regulations for telecommunication antenna installations in agricultural areas?

- Telecommunication antenna installations should avoid locating on sites that are contained in the Agricultural Land Reserve (ALR) or zoned for agriculture in order to minimize the loss of farmland and reduce negative impacts on farm operations.
- Telecommunication antenna installations in the ALR or on zoned/designated agricultural land are subject to the full public consultation process and would be examined to ensure minimal impact to farmland and existing agricultural operations.
- The Agricultural Land Commission (ALC) permits telecommunication utilities where all tower and related installations are contained within a maximum footprint area of 100 sq.m (i.e., combined area not available for farming due to installation). If this footprint area is exceeded, review through non-farm use application to the City and ALC is required first prior to all other applications.

Protocol Criteria Applicable to all Telecommunication Antenna Proposals (Co-location; Siting; Design; Landscaping & Screening)

How is co-location addressed in the Telecommunication Antenna Consultation and Siting Protocol?

- Opportunities to facilitate co-location on existing standalone towers or develop towers with future co-location capabilities is a key component of the Protocol. As such, all proponents for new telecommunication antenna installations will be required to:
  - Explore opportunities for locating on existing towers or structures within a surrounding radius of 500 m.
  - In the case of where a new tower is proposed, the structure should be designed and engineered to facilitate future co-location and accommodate additional antenna array.
  - Proponents should engage all other relevant service providers to confirm opportunities or agreements for co-location.
  - Written documentation from the proponent and appropriate professionals is required to confirm the above conditions. Documentation should also contain rationale on why co-location is not feasibility or why other locations are not suitable.

What are the siting and design criteria for telecommunication antenna installations (for standalone towers)?

- Standalone towers are subject to the regulatory provisions for structures in the appropriate zoning district.
- Towers should locate in non-residential and non-agricultural areas or in areas with minimal impact to residentially designated areas.
- Tower placement should give consideration to locating in an area that properly integrates with existing buildings or structures.
- Towers should be situated to minimize the visual impact to surrounding structures, buildings and land uses.
- A variety of tower design schemes can be considered (lattice tower, structural monopole) with design elements added to improve integration of the tower and telecommunication antenna with the built and natural landscape.

What are the siting and design criteria for telecommunication antenna installations (for building mounted installations)?

- Building mounted telecommunication antenna are subject to the regulatory provisions for buildings in the appropriate zoning district.
- Building mounted telecommunication antenna should be architecturally integrated into the design

of the building.
- Appropriate screening measures for building mounted antenna and supporting installations (mechanical rooms) should also be architecturally integrated into the building design.
- Building mounted antennas should not extend 3 m above the main roof ridgeline or parapet wall.

What are the landscape screening provisions for telecommunication antenna installations?

- Standalone towers and supporting buildings should be fully enclosed with a solid or wire mesh fence at a minimum height of 6 feet.
- A contiguous, solid planted landscape buffer should be implemented to screen stand alone telecommunication towers and supporting utility buildings from residential areas, adjacent buildings and public roads.
- A minimum width of 1.5 m constitutes an appropriate fence and landscape screen consisting of a combination of hedging, trees and shrubs.
- Proponents should provide for long-term maintenance and upkeep of appropriate landscaping for its telecommunication antenna sites.

External Consultation on Protocol

Is Industry Canada (Authorized agent for the Federal Government) going to be consulted?

- Industry Canada staff have identified that they can review and provide comments on Richmond's Telecommunication Antenna Consultation and Siting Protocol if requested.
- Consultation to be undertaken after Council endorse the draft provisions of the protocol for stakeholder consultation.

Are third party service providers to be consulted? How and When?

- Third party service providers have identified a willingness to be consulted on Richmond's draft Protocol.
- Consultation to be undertaken after Council endorse the draft provisions of the protocol for stakeholder consultation.

Implementation Strategy

What bylaw amendment will be required to facilitate application processing for telecommunication antenna proposals?

- An amendment to the appropriate procedural bylaw is required to facilitate the staff review and Council processing framework.
- This amendment will be brought forward after consultation with key stakeholders is complete and draft Protocol is ready to be brought forward to Council for final review and approval.

What bylaw amendment will be required to implement fee structure?

- An amendment to Bylaw 7276 (Development Application Fees) is required to add the appropriate fee structure and mechanisms for processing telecommunication antenna proposal applications.
- The fee structure will be based on a cost-recovery model.
- This amendment will be brought forward after consultation with key stakeholders is complete and draft Protocol is ready to be brought forward to Council for final review and approval.

What other implementation measures are foreseeable?

- Generating and publishing Bulletins available to the public and proponents.