

City of Kitchener

Telecommunication Tower and Antenna Protocol

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Section 1 - Introduction and Objectives

The regulation and approval of telecommunication towers, antennas and related facilities falls under federal responsibility and is governed by the *Radiocommunication Act* administered by Industry Canada. In some cases, a condition of obtaining a license from Industry Canada requires all Proponents to consult with the local land-use authority and the public as required under the procedures described in Client Procedure Circular 2-0-3 "*Radiocommunication and Broadcasting Antenna Systems* (CPC-2-0-03). The intent is to provide an opportunity to have land-use concerns addressed, while respecting federal jurisdiction. This protocol has been developed with the following objectives and intent:

1. To provide a consistent and timely process for the review of telecommunication facilities and installations within the City of Kitchener.
2. To encourage consultation by Proponents with the municipality as early in the location process as practical and feasible.
3. To encourage the location and siting of telecommunication facilities in a manner which minimizes the effects on residents, lessens visual impact, and respects natural and human heritage features and sensitive land uses to the greatest extent possible.
4. To afford an appropriate and effective opportunity for public notification with respect to mitigating concerns over the siting of wireless telecommunication facilities.
5. To recognize that matters pertaining to health (e.g., Safety Code 6), structural safety and the environment fall under the mandate of the federal government, which are further in turn taken into consideration by Industry Canada, as detailed in CPC-2-0-03.

Section 2 - Guidelines

Site Selection

In determining an appropriate site for a new tower or antenna, the Proponent shall adhere to the following principles:

1. Sites should be selected to minimize the total number of telecommunication tower sites required. Locations on existing structures or buildings or co-locations on existing tower sites are strongly encouraged. Opportunities to incorporate an antenna into the design of a new building or structure should be explored by the Proponent. The construction of a new telecommunication tower is discouraged and will be accepted only when all other options to accommodate the telecommunication antenna are deemed not viable.

2. New telecommunication towers are strongly discouraged within 120 metres of any Residential Zone, elementary or secondary school, or Heritage Conservation District, unless required for reasons of engineering or network objectives. If a new tower is proposed to be located within 120 metres of a Residential Zone, school or Heritage Conservation District, a detailed rationale for the necessity of this location must be provided in the Site Selection/Justification Report (see 'Submission Requirements').
3. The Proponent shall make every effort to locate new telecommunication towers within lands that are zoned Industrial or Commercial, whenever possible and where technically feasible.
4. When selecting sites for telecommunication towers, the following shall be considered:
 - a) Maximizing locations with a minimum distance separation of 120 metres or more from residential uses, schools, and active park space,
 - b) Maximizing locations with a minimum distance separation of 120 metres or more from properties designated under Parts IV or V of the Ontario Heritage Act; or properties listed as non-designated property of cultural heritage value or interest on the City's Municipal Heritage Register (as per Section 27(1.2) of the Ontario Heritage Act),
 - c) Maximizing locations with a minimum distance separation of 120 metres from natural features, Environmentally Sensitive Areas, Hazard Lands,
 - d) Avoiding sites that would obscure public views, vistas, and significant Cultural Heritage Landscapes, and
 - e) Compatibility with adjacent uses.
5. Proponents shall be encouraged to locate telecommunication towers with a minimum setback to all property lines and to all existing buildings of a distance equivalent to the height of the tower (measured from grade), whenever possible.
6. Proponents are furthermore encouraged to comply with Zoning By-law regulations which do not conflict with federal law respecting radiocommunication.

Design and Landscaping

The use of design features, colour, and landscaping can be used to screen telecommunication facilities from view and should be encouraged, whenever possible. The following design guidelines should be taken into consideration when designing a new tower or antenna:

1. New telecommunication towers which are located more than 120 metres from a residential zone, or elementary or secondary school shall be designed with co-location capacity.

2. A new telecommunication tower which must be located within 120 metres of a Residential Zone or elementary or secondary school for reasons of engineering or network objectives is not required to be designed for future co-location capacity. In this situation, a monopole design or other stealth design technique, as described in point #3 below, may be considered.
3. Where appropriate, stealth design techniques, including, but not limited to, camouflaging antenna within church steeples, clock towers, or flagpoles, should be used in the design of a new telecommunication tower. If stealth design techniques are employed in the design of a new tower, co-location capacity will not be required in accordance with #1 above. See Appendix "A" for photos of stealth design examples.
4. The design of the tower or antenna should be sympathetic to the surrounding architecture and built form.
5. Where appropriate, the planting of trees and shrubs at the tower site is encouraged to enhance the character of the surroundings.
6. Safety features shall be incorporated to prevent unauthorized access.
7. Efforts should be made to decrease the size and visibility of telecommunication towers so that they blend in with the surroundings to the greatest extent possible. To reduce the scale and visual impact of towers, mitigation measures should include consideration of design features, structure type, colour, materials, landscaping, screening, and decorative fencing. Neutral colours that blend the structure with its surroundings are encouraged (though it is recognized that new towers must comply with the requirements of Transport Canada and NAV Canada). Where equipment shelters are located on the ground, the visual impact of the built form shall be mitigated through the use of colour, decorative fencing, screening, landscaping and/or building material similar to the neighbourhood.
8. Telecommunication towers will only accommodate telecommunication antennas and only signage directly related to the equipment or required by Industry Canada shall be permitted on the site. A small plaque (sign) must be placed at the base of the structure (either on the tower, shelter, or fence) identifying the owner/operator and contact information (including phone number). The sign shall be no larger than 0.6 m x 0.6 m and contain no third-party advertising or promotion. A sign permit is not required. In all other respects, signage shall comply with the City of Kitchener Sign By-law (Chapter 680 of the City of Kitchener Municipal Code). Exceptions to this signage requirement may occur for public safety agencies, under certain circumstances.
9. Lighting of telecommunication antenna and towers is prohibited unless required by Transport Canada. Proof of this requirement should be provided by the Proponent to the City of Kitchener with their application. If lighting is required, shields to minimize objectionable light (glare) from affecting any adjacent residential area are required, to the extent possible, and in keeping with Transport Canada tower lighting requirements.

Section 3 - Exemptions from Requirement for Municipal Review

Proposed telecommunication towers and antennas which are exempted from the requirement to consult with the City of Kitchener under the provision of Industry Canada's CPC-2-0-03 ("Radiocommunication and Broadcasting Antenna Systems", June 2007) will be exempt from the requirement to submit an application. The exemptions are listed as follows:

1. Maintenance of existing radio apparatus including the antenna system, transmission line, mast, tower, or other antenna-supporting structure.
2. Addition or modification of an antenna system (including improving the structural integrity of its integral mast to facilitate sharing), the transmission line, antenna-supporting structure or other radio apparatus to existing infrastructure, a building, etc., provided the addition or modification does not result in an overall height increase above the existing structure of 25% of the original structure's height.
3. Maintenance of an antenna system's painting or lighting in order to comply with Transport Canada's requirements.
4. Installation, for a limited duration (typically not more than 3 months), of an antenna system that is used for a special event, or one that is used to support local, provincial, territorial, or national emergency operations during the emergency, and is removed within 3 months after the emergency or special event.
5. New antenna systems, including masts, towers, or other antenna-supporting structure, with a height of less than 15 metres above ground level.

Heritage Review – It is noted that although towers may be exempt from the municipal consultation application process, they may still require formal heritage approvals (Heritage Impact Assessment and/or Heritage Permit application). These approvals may be required for all properties designated under Part IV or V of the Ontario Heritage Act; all properties directly adjacent to a designated property; and all properties listed as a non-designated property of cultural heritage value or interest on the Municipal Heritage Register.

Section 4 - Site Plan Review

All proposals for a new telecommunication tower which are not exempt from the requirement for municipal consultation, as specified in Section 3, are required to submit a full Site Plan application to the City of Kitchener for review. Applications are to be submitted to the attention of the City's Manager of Development Review, who has been delegated as approval authority, or in his absence, the Director of Planning.

While the City of Kitchener recognizes that Industry Canada is the final approval authority for telecommunication facilities, it is also recognized that Industry Canada directs telecommunication proponents to consult with the local municipality prior to erecting any

non-exempt telecommunication towers. Although new telecommunication facilities are not required to obtain site plan approval under The Planning Act, the City's Site Plan application process is an existing process which affords the City an opportunity to review and comment on new telecommunication towers. There will be no requirement for the Proponent to enter into a Site Plan Agreement as part of this process.

Pre-Consultation

Prior to submitting a Site Plan application, the Proponent is required to attend a formal Pre-Consultation Meeting with City staff for any proposed telecommunication towers which are not exempt from the requirement for municipal consultation, as specified in Section 3. Proponents may obtain a Pre-Consultation Meeting Request Form from the Planning Division or on the City's website at www.kitchener.ca,

The purpose of a Pre-Consultation meeting is to:

- Determine if the proposal will require public notification, as per Section 5,
- Provide an opportunity for discussion of site selection and design guidelines to ensure that all siting options are considered prior to a Site Plan application being submitted,
- Identify any preliminary concerns or constraints on potential telecommunication tower sites; and,
- Review submission requirements for the Site Plan application and identify any additional studies that may be required to be submitted with the application (including, for example, a Heritage Permit Application, Heritage Impact Assessment, and/or an Environmental Impact Statement).

Following the Pre-Consultation meeting, the applicant will be provided with a Site Plan application form.

Site Plan Application Process

Following the Pre-Consultation meeting, and upon submission of a completed Site Plan application and fee, the following process shall be undertaken:

1. Planning staff shall circulate the application to relevant departments/agencies, including the Ward Councillor, for information and comment.
2. All comments received as a result of the internal circulation of the Site Plan application shall be provided to the Proponent.
3. If public notification is required, as per Section 5, the Proponent shall provide the City with a public notification package, which will then be circulated by City staff as outlined

in Section 5 (Notice Requirements). The City will circulate by mail the notification letter to all property owners within a radius of three times the tower height.

4. The Proponent shall respond to the comments received, make the required modifications to the plans, and submit revised plans and drawings, where required.
5. Once all concerns have been addressed, and if the City is in agreement, the City shall provide approval of a “Telecommunications Plan” and a formal letter to Industry Canada and the Proponent. If there is non-concurrence with the proposal, a letter will be provided to Industry Canada and the Proponent as outlined in Section 6.
6. The entire process shall take no more than 120 days to complete, as outlined in Industry Canada’s publication CPC-2-0-03 (“Radiocommunication and Broadcasting Antenna Systems”, June 2007). Proposals that do not require public consultation are expected to take less than 60 days to complete.

Submission Requirements

The following information shall be submitted with the Site Plan application:

1. Site Selection/Justification Report - this report shall outline the steps taken by the Proponent to investigate all non-tower and co-location options, and why a new tower option is the preferred alternative. The report shall identify the location of all existing telecommunication towers within the proponent’s search area and identify the reasons why these towers are not suitable for co-location. The location of these towers shall be illustrated on a map to be included in the Report. In addition, the report shall also identify any alternate sites for the location of the new tower that were investigated by the proponent, and the rationale for eliminating these sites as the preferred alternative. The report shall confirm the need for a new tower at the proposed location and will also confirm the need for the proposed height of the tower. Future sharing possibilities with other providers shall also be reviewed. Finally, the report shall outline the design elements proposed in order to minimize the visual impact of the proposed structure, and address any lighting requirements that may be required by Transport Canada,
2. Site Plan with Key Map - the Site Plan shall be for the entire property if possible. If not feasible, then only the leased portion may be shown. The Site Plan shall show the relationship between the proposed telecommunication facility and existing features on the property such as buildings, parking, pedestrian and vehicular movement, natural features, site grading, property lines, fencing, and landscaping. The Site Plan shall be provided in paper copy and digital format as noted in the Site Plan application form,
3. Elevation Drawings,
4. Site Plan Application Form and Fee (form available on City website, www.kitchener.ca, or contact the Planning Division),

5. A map indicating the horizontal distance between the proposed tower installation and the nearest residentially zoned property, dwelling, elementary or secondary school, and/or Heritage Conservation District,
6. A colour photograph of the subject property with a superimposed image of the proposed tower; and,
7. Any other information or studies identified in the Pre-Consultation Meeting.

Section 5 - Public Notification

Exclusions from Requirement for Public Notification:

- 1) Where a proposed telecommunication tower is located at a distance of three times the tower height or greater than 120 metres from a Residential Zone, elementary or secondary school or Heritage Conservation District, measured from the tower base or the outside perimeter of the supporting structure,
- 2) Where, in the opinion of the City's Manager Development Review, appropriate stealth design techniques are employed in the design of the tower (see Appendix 'A' for example designs); and,
- 3) In addition, all telecommunication towers that are exempt from the requirement for municipal review, as per Section 3, are also exempt from the requirement for public notification.

Notice Requirements

For all applications that are not exempt from the requirement for public notification, the Proponent will be required to supply the City with a notification letter (the number of copies required to be determined by the City). The City will send notice of the proposal by regular mail to all property owners within a radius of three times the tower height, measured from the tower base or the outside perimeter of the supporting structure or fencing, whichever is greater.

1. The notification shall include the following information in plain language:
 - a) The address of the proposed tower site
 - b) A Location Map identifying the site of the proposed tower
 - c) A plan indicating the proposed location of the tower on the subject site
 - d) Physical details of the tower including height, colour, type, and design
 - e) Colour photograph of the property with a picture of the tower superimposed
 - f) Contact information (name and telephone number) for the Proponent

City Planning staff must be provided with a complete notification package including the required number of copies (the number of copies required to be determined by City staff). A copy will be forwarded to the Ward Councillor.

2. The public shall have a minimum 21-day period to provide comments in writing to the City.
3. The City shall provide a copy of all written comments received from the public to the Proponent and the Ward Councillor.
4. Upon receiving comments from the public, the Proponent shall respond, in writing, to all reasonable and relevant concerns, or explain why the question, comment, or concern is not, in the view of the Proponent, reasonable or relevant. The Proponent shall copy the City (Planning staff) on all responses provided, and the Planning staff shall forward a copy to the Ward Councillor.
5. If any modifications to the proposal are agreed upon as a result of the public comments, revised drawings and plans must be submitted to the City.

Section 6 - Concluding Consultation

1. The City response to the Proponent and Industry Canada will take into consideration all division and agency responses from the Site Plan review and from the public notification.
2. The City's Manager of Development Review will provide the Proponent and Industry Canada with a letter stating whether the local land-use consultation process has been completed in accordance with the City's Protocol, and will include recommendations regarding the proposal as follows:
 - a) Concurrence, if the proposal conforms with the City's requirements, as set out within this Protocol, and will include conditions of concurrence, if required; or,
 - b) Non-concurrence, if the proposal does not conform with the City's requirements, as set out in this Protocol. The City will further provide details of what deficiencies, under the protocol, the non-concurrence was based upon.
3. The City will provide a copy of this letter to all interested parties and the Ward Councillor.

Section 7 - Definitions

Antenna - an exterior transmitting device used in telecommunications designed for various uses such as telephonic, radio, or television communications by sending and/or receiving radio signals.

Carrier – see “Proponent”

Co-location - the installation of multiple telecommunication antenna systems on a building or tower structure by two or more Proponents.

Cultural Heritage Landscape - a defined geographical area of heritage significance, which has been modified by human activities and is valued by a community. It involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites, and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. Examples may include, but are not limited to, heritage conservation districts designated under the Ontario Heritage Act; and villages, parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, railways, and industrial complexes of cultural heritage value. (PPS, 2005)

Industry Canada - the Federal Department which is responsible for radio frequency spectrum management. Information detailing federal procedures relating to the siting of radiocommunication and broadcasting antenna systems is available at: www.ic.gc.ca/antenna

Proponent - shall include the following: AM, FM, TV Broadcast Undertakings; Cable Television Distribution Undertakings; Radiocommunication (wireless) Service Providers; and Radiocommunication Users (business or government use only).

Telecommunication Facility – for the purpose of this protocol: the components required for the operation of a wireless radiocommunication network, which includes cell sites, transmitters, receivers, antennas, and an unoccupied equipment shelter.

Telecommunication Tower – for the purpose of this protocol: a structure used to support one or more antenna systems for the purpose of radiocommunication and which may include, but is not limited to, a guyed tower, a self-support tower or monopole tower, and which may be located at ground level or on the roof of a building.