



100 John West Way
Aurora, Ontario
L4G 6J1
(905) 727-3123
aurora.ca

Town of Aurora
Committee of the Whole Report
No. PDS24-120

Subject: Application for Radiocommunication Tower
Shared Tower Inc.
15400 Bayview Avenue
PLAN 65M3074 BLK 2 PT BLK 3
File Number: SP(T)-2024-01

Prepared by: Antonio Greco, Senior Planner

Department: Planning and Development Services

Date: November 5, 2024

Recommendation

1. That Report No. PDS24-120 be received; and
2. That Innovation, Science and Economic Development Canada (ISED) be advised that the applicant has complied with the Town's Radiocommunication and Broadcasting Antenna Systems Protocol; and
3. That Council provide their direction regarding the installation by Shared Tower Inc. of a 40 metre (131 feet) tall, monopole design telecommunication tower at 15400 Bayview Avenue.

Executive Summary

The purpose of this report is to inform Council that the applicant has completed the Town's Radiocommunication and Broadcasting Antenna Systems Protocol. The approval authority for telecommunication tower in Canada is Innovation, Science, and Economic Development Canada (formally known as Industry Canada).

- The proposal will help minimize the number of towers in the area by providing co-location opportunities
- The proposed telecommunications tower is placed in an area that is identified to have poor coverage

- The proposal will reduce the amount of future infrastructure of this nature in the area
- The proposed telecommunications tower has been designed to minimize visual impacts to surrounding residential properties

Background

Proposed Development

The applicant is proposing the following:

- 40 metres (131 feet) tall, monopole design telecommunication tower.
- The telecommunications tower is designed to support co-location opportunities for other carriers, as required by ISEDC.
- The telecommunications tower will improve network coverage in the surrounding area.

Application History

The initial preliminary consultation was held between the applicant and Town Planning and Development Services Staff in August 2023. The applicant submitted the Radiocommunication Tower/Antenna Facilities Application on February 22, 2024, which was deemed complete on March 20, 2024.

Location / Land Use

The subject property is located on the west side of Bayview Avenue, south of Hollidge Boulevard, east of Civic Square Gate. The site is municipally known as 15400 Bayview Avenue with an area of approximately 12.1 hectares (29.95 acres) and a frontage of approximately 299.5 metres (980.9 ft) on Bayview Avenue.

The property is currently used for retail commercial purposes, which presently includes the Canadian Tire and multiple strip plazas containing a variety of commercial retailers. The site can be accessed from Bayview Avenue and also from Hollidge Boulevard.

The proposed telecommunication tower is specifically located at the southwest corner of the subject property, in behind the Canadian Tire on the west side, as shown in Figure 1 – Location Map. The proposed tower is accessible via a private driveway located at the south side of the Canadian Tire, which provides direct access to the proposed tower

and related equipment. As such, no significant alterations to accommodate construction or future maintenance is required.

Surrounding Land Uses

The surrounding land uses are as follows:

North: Various commercial retailers

South: Various commercial retailers

East: Bayview Avenue and residential development

West: Existing Hydro Corridor and Residential development

Policy Context

Innovation, Science, and Economic Development Canada (ISED) exempts telecommunication towers from planning policies on private lands

ISED approves licenses for radio and telecommunication companies to operate and ultimately authorizes and approves locations of telecommunication antennas and towers. Although telecommunication towers are not subject to municipal land use policies including the Town of Aurora Official Plan, Town of Aurora Zoning By-law 6000-17, or *Planning Act* regulations for Site Plan Control, ISED requires all proponents to comply with any local telecommunication protocols and consult with the local municipality.

Town of Aurora Radiocommunication and Broadcasting Antenna Systems Protocol

For all telecommunication towers over 15 metres in height, the proponents are required to provide the following:

- Site Selection Report which outlines the location of non-tower and sharing options that have been considered and why the proponent's proposal is the preferred and/or only option.
- Needs Assessment which details the coverage and capacity of existing tower / antenna facilities in the surrounding area, confirming the need for a new tower at the proposed location.
- Map/inventory of all antenna systems within the surrounding area.
- Letter of authorization from the property owner, including a property survey.

- Visual Assessment study including colour photographs with the tower structure superimposed from various directions.
- Site layout plan showing all structures and distances to lot lines and adjacent structures, landscaping (removal/proposed) and proposed vehicular access points.
- Elevation drawings showing structure from all four sides, height and size of facilities, and grading plans.
- Hold a Public Information Session and provide mail notice to all properties within 120 metres of the site.
 - The proponent must submit to the Town a record of attendees, minutes, and a formal written response to concerns or issues raised at the Public Information Session.

York Region Official Plan (YROP)

The subject lands are designated “Urban Area” within the YROP and front onto Regional Road 34 (Bayview Avenue). The subject lands are not located within the Oak Ridges Moraine Conservation Plan (ORMCP) area but within the 5 – 25 Year Zone Wellhead Protection Area Zone.

Section 6.7 of the YROP outlines that as population growth continues in York Region’s Urban Areas, additional utility infrastructure is required to support a high standard of living for residents and the function of business services.

Town of Aurora Official Plan and Zoning By-law 6000-17, as amended

The Town’s Official Plan and Zoning By-law provide for public utilities in all designations and zones, subject to approval by the appropriate Public Authority (Innovation, Science, and Economic Development Canada under the jurisdiction of the Federal government).

Planning Considerations

The proposal will help minimize the number of towers in the area by providing co-location opportunities.

The proposed tower is designed to support co-location opportunities for other carriers, as required by ISEDC. The Town’s Protocol identifies that proponent of such towers be encouraged to minimize the number of towers within the Town of Aurora. The applicant has reported that co-location was studied for all existing towers within the general area, however, there were no suitable candidates as all are at capacity. The applicant has

ensured that carriers can collocate on the proposed tower through its strategic site location. This location will allow two (2) – three (3) wireless service providers to engineer and accommodate their equipment both on the tower and on the ground within the tower compound.

In addition, the applicant has advised that the proposed telecommunications tower is required to strengthen the telecommunications network to better support increased demands for consumer connectivity, and continued advancements in the digital economy. The proposed design will help to minimize the number of towers in the area by providing co-location opportunities and has demonstrated formal co-location requests from wireless carriers. In their work with service providers, the proposed tower will be built and allow for co-location opportunities by providing sufficient space on the tower and on the ground for carrier equipment which are situated in areas beneficial for multiple Canadian carriers.

The proposed telecommunications tower and the site selection.

The subject site at 15400 Bayview Avenue was selected as the best candidate to fulfil wireless network requirements (Figure 2 & 3). The Town of Aurora's Radiocommunication & Broadcasting Antenna Systems Protocol provides applicants with a site selection criteria to consider when proposing telecommunication towers in Town. The applicant provided a justification report outlining that the chosen location meets the site selection criteria and confirmed this preference was taken into consideration when choosing a location in their site selection stage.

The site selection process was carefully considered by the applicant through their site acquisition specialists, network planners and carrier relation specialists, which ultimately resulted in a proposed site that meets the following:

- Meet carrier requirements (i.e. search areas, height requirement, tower design style)
- Placed in areas identified to have poor coverage
- Will reduce the amount of future infrastructure of this nature in the area
- Design to minimize visual impacts to surrounding buildings and land-uses

The proposed location at 15400 Bayview Ave, is the ideal site to support the poor coverage identified in the surrounding areas. The site was chosen as the best candidate to satisfy carrier requirements to alleviate existing coverage gaps in this dense area while working with existing infrastructure to support network traffic.

The proposed telecommunications tower will improve network coverage in the surrounding area.

The applicant has advised that the proposed telecommunications tower is required to improve coverage for the area surrounding the subject site, particularly for surrounding residential areas east and west of Bayview Avenue. The proposed location will improve network coverage in the area by offloading surrounding towers to increase the strength, quality, and capacity of the network.

The applicant has also investigated the need for improved network coverage in this specific area. A Propagation Study from a third party was completed to demonstrate the positive network impact of the proposed telecommunications tower. These reports analyze the current network coverage for major carriers and how the proposed telecom tower site would contribute to these existing networks.

Appendix B provides an illustration of the current network coverage and the post network coverage, with the installation of the proposed telecommunications tower. The first image to the left as shown in Appendix B, demonstrates the current network coverage, which is considered to be very poor to adequate in the area, which would allow for minimal voice call capabilities and low throughput data streaming. The image to the right in Appendix B shows the improvement in network coverage with the proposed telecom tower. The proposed telecommunications tower will enable the area to transition from having very poor to adequate coverage, to having great coverage, allowing for quality voice call capabilities, as well as high throughput data streaming uses.

Beyond servicing the areas surrounding the subject site, the proposed tower is intended to work with existing telecommunication towers and other antenna installations in supporting the network traffic in this densely populated area of Aurora. When a new telecommunication tower is implemented into the network to service a need, the surrounding towers are able to optimize their antennas to better service their direct areas.

Alternative locations explored by the applicant that did not meet the site selection criteria.

Alternative locations were investigated by the applicant during the site selection stage, but did not meet the site selection criteria listed in the Town of Aurora's Radiocommunication & Broadcasting Antenna Systems Protocol. Through the applicant's justification report, they outlined a list of the alternative locations that were investigated but did not ultimately meet the criteria. The following sites included:

- 15820 Bayview Avenue (Beer Store Plaza)
- 650 Wellington Street East
- Toyota Dealership (669 Wellington Street East)
- Hyundai Dealership (305 Wellington Street)
- Lands Southeast of Wellington St E and Bayview Ave Intersection
- 15340 Bayview Avenue
- 15370 Bayview Avenue
- 15380 Bayview Avenue
- Rooftop Alternatives
- Lands adjacent to Aurora's Joint Operations Centre
- 11 Spring Farm Road (Soon to be the location of Dr. GW Williams Secondary School)
- Mavrinac Park (234 Mavrinac Blvd)
- Lands within the Aurora Arboretum

These options were ruled out due to the lack of availability of a willing Landowner, future redevelopment plans of the property, lack of space for tower placement, lower elevations, hazardous lands such as wetlands that are protected and would pose construction and engineering barriers. Furthermore, there were many properties that were either regulated within Lake Simcoe Conservation Authority, Municipal Environmental Protected zones, and proximity to existing telecommunications infrastructure, which did not meet the wireless network objective. Modern 5G networks require towers approximately to be a maximum of 750m - 1 km apart in order to deliver the targeted service levels and data speeds. That said, the above noted options did not adequately meet the site selection criteria.

The applicant also explored the opportunity to also investigate rooftop alternatives in the area. Unfortunately, these options were also ruled out as possible alternatives. There were no rooftops of sufficient height within the search radius to adequately provide additional network coverage.

The proposed telecommunications tower has been designed to minimize visual impacts to surrounding residential properties.

Efforts to minimize visual impact were made by the applicant through the tower design selection. The proposed tower has a monopole design that is consistent with telecommunications towers in urban areas like the subject site and those located throughout the Town of Aurora. Additionally, both the monopole and flush-mounted design are considered to be a stealth design for infrastructure of this nature, minimizing

negative visual impacts, while still enabling multiple service providers to install their equipment on the tower. Optimally, a tower of this height is not built as a flush-mount monopole because the design offers less space for antennas than a monopole with a pinwheel or a lattice-style tower. However, in this case a flush-mount monopole was chosen to balance visual impact with the network need.

Furthermore, there will be no trees removed as part the tower construction and related equipment. That said, the Town's Park Division requested for sufficient landscape screening at the tower's base from public view. The applicant has demonstrated the planting of three (3) Colorado Spruce trees with a height of 2.4 m. This has been reviewed and approved by the Town's Parks Division with no further comments.

Department / Agency Comments

The proposed application was circulated to all internal and external agencies for review and comments. In general, all circulated agencies have indicated no objection with the proposal and have no further comments at this time.

The subject application conforms to the YROP as it facilitates additional telecommunication utility infrastructure to support residents and businesses within the Region. Further, the YROP provides for public utilities in all designations. York Region Development Engineering has no comments / concerns regarding the subject application.

Public Comments

As per the Town's Radiocommunication and Broadcasting Antenna Systems Protocol, a Public Information Session was held on May 15, 2024, at the Aurora Family Leisure Complex. A member of Town staff was present at the event. There was various discussion regarding the health and safety of the proposed telecommunications tower and its chosen location.

In summary, the applicant identified that health concerns regarding telecommunication towers are governed by Health Canada's guidelines identified as Safety Code 6. It is a requirement of Innovation, Science, and Economic Development Canada that all telecommunication providers comply with these guidelines for all related infrastructure at all times. The applicant has indicated that the equipment proposed in this application will comply with the Federal health guidelines.

Furthermore, given the extensive discussions received from the Community Information Meeting, the applicant retained a third-party engineering consultant specializing in radio frequency engineering to complete a Safety Code 6 report. This in-depth analysis of radiofrequency exposure with the proposed tower location is based on the most recent Safety Code 6 (2015) guidelines. As shown in Appendix C: Safety Code 6 Report, the site is compliant with the maximum exposure limits established in Health Canada's Safety Code 6 for uncontrolled environments. The Safety Code 6 report shows that the maximum exposure from the proposed tower will be almost 10 times below the Safety Code 6 limits for areas that are accessible by the public.

Seven (7) public comments were received by the proponent, and fifteen (15) residents attended the Public Information Session hosted by the applicant. The Public Consultation Summary Report provided by the applicant is attached to this report (Appendix 'A').

Advisory Committee Review

No communication required.

Legal Considerations

ISED's approval process is set out in CPC-2-0-03 – Radiocommunication and Broadcasting Antenna Systems – and requires applicants to consult with municipalities and the public by requiring that applicants follow the consultation process put in place by the municipality.

The Town has a Radiocommunication and Broadcasting Antenna Systems Protocol that sets out the consultation process and other requirements. Once all of the requirements have been met and all issues have been addressed by the applicant, staff is required to bring a report to Council for approval. Since it is the ISED that approves these types of applications, Council's approval is based only upon the applicant complying with the Town's protocol. In this report, staff have confirmed that the applicant has complied with this protocol.

Financial Implications

Staff will ensure that any applicable fees and charges to this application are collected when they arise.

Communications Considerations

In accordance with the Town's Radiocommunication and Broadcasting Antenna Systems Protocol, and per Council directive, the applicant issued a Notice of Public Information Session respecting the subject application by mail to all addressed property Owners within a minimum of 120 metres (393 feet) of the subject lands. Notice of the Public Information Session signs was also posted on the subject lands by the applicant.

Climate Change Considerations

There are not direct impacts to climate change as part of this application.

Link to Strategic Plan

Investing in sustainable infrastructure: Maintain and expand infrastructure to support forecasted population growth through technology, waste management, roads, emergency services and accessibility.

Strengthening the fabric of our community: Work with residents and stakeholders to manage the significant changes that will impact the community as a result of growth through residential intensification.

Alternative(s) to the Recommendation

1. N/A

Conclusions

Planning and Development Services reviewed the proposed Telecommunications Tower Site Plan application in accordance with applicable standards and seeks Council's direction regarding the Telecommunications Tower Site Plan application (SP(T)-2024-01).

Attachments

- Figure 1 – Location Map
- Figure 2 – Conceptual Site Plan
- Figure 3 – Renderings of Tower
- Figure 4 – Renderings of Tower

Appendix A – Public Consultation Summary Report

Appendix B – Network Coverage Comparison

Appendix C – Safety Code 6 Report

Pre-submission Review

Agenda Management Team review on October 17, 2024

Approvals

Approved by Marco Ramunno, Director, Planning and Development Services

Approved by Doug Nadorozny, Chief Administrative Officer