

# SITE SELECTION REPORT

Proposed Telecommunications Tower
447 Baptist Church Road, County of Brant
STC0079

Prepared by:

Tracey Pillon-Abbs, RPP
Municipal Relations Specialist
tracey@landsquared.com
226-340-1232

September 30, 2021

### Introduction:

LandSquared, on behalf of Shared Tower Inc. (STC) strives to constantly improve coverage and network quality.

In the recent past, due to subscriber feedback and other data factors such as dropped calls or quality of calls, we have become aware of coverage deficiencies in the surrounding area.

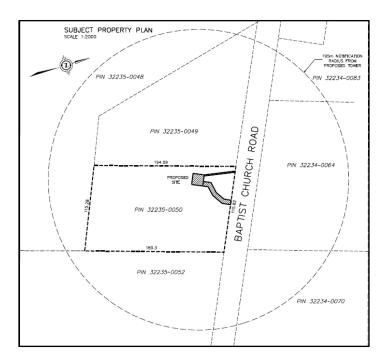
A survey of the surrounding has identified a proposed site that will achieve the necessary engineering coverage objectives for our network.

This justification report intends to provide network, sitting, and technical details relevant to our proposal in accordance with Innovation, Science and Economic Development Canada (ISED), formerly Industry Canada, guidelines set out in CPC-2-0-03 Issue 5; as well as information required by the County of Brant protocol regarding co-location, site design, lighting and setbacks that have been identified thought out this report.

A virtual pre-consultation meeting with County of Brant staff was held on August 31, 2021.

# The Proposal:

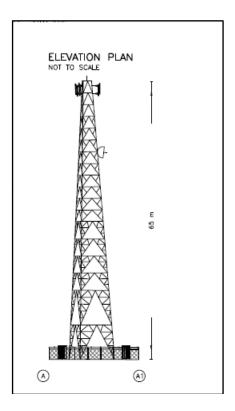
LandSquared is proposing a telecommunications tower installation at 447 Baptist Church Road, County of Brant (see Subject Property Plan).



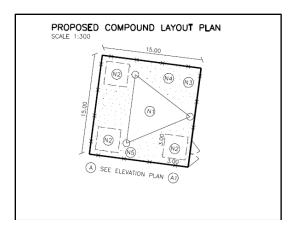
Page 2 of 15

The property is legally described as Part of Lot 23, Concession 2 East of Fairchild's Creed, Township of Onondaga, County of Brant.

The proposed telecommunication structure is a 65 metre tall steel self support tower with lightning protection system, situated within a compound area (see Elevation Plan).



The compound area is proposed to be  $15 \text{ m} \times 15 \text{ m}$  in area and will have a 1.8 m high chain link security fence (see Proposed Compound Layout Plan).



Access to the site will be from an existing driveway from Baptist Church Road onto a 2.177 ha property.

The proposed tower will be setback approximately 41.1 m from the roadway (see Site Plan).

The property currently has a residential dwelling and accessory structure.

No trees or vegetation are proposed to be removed to accommodate for the location of the proposed tower and the access.

The proposed tower is located outside of the Grand River Conservation Authority (GRCA) regulated area.

LandSquared confirms that it has entered into a lease agreement with the owner of the subject lands for the purpose of siting a telecommunication structure.

### Justification:

The tower location has been situated based on the anticipated current and future network improvement needs of the wireless telecommunication companies. Approval of this tower location would require carriers to co-locate upon the tower instead of constructing their own, single carrier installations.

The tower height and compound size will accommodate multiple wireless service providers, including licensed cellular carriers. The tower design will minimize the visual impact on the surrounding area.

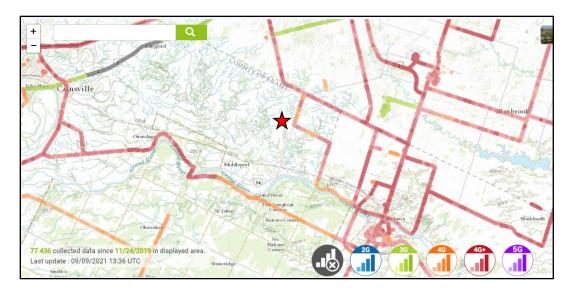
The tower is being designed to accommodate equipment, including space for their radio equipment cabinets within the fenced compound at the tower base. Space on the tower will also be made available for any fixed wireless internet tenants, as well as for municipal/public communication equipment purposes, hence the required tower height.

## Coverage Objective

The proposed installation is designed to improve wireless services in the surrounding area of the site.

The coverage of the service depends mainly on the carriers, their antennas and technology they choose to use.

The map below illustrates the current coverage in the area for Rogers Communications (subject site with red star).



## Site Selection / Land Use Considerations

LandSquared has identified the area targeted for improved coverage. The proposed tower location will enable delivery of signal into the surrounding area while maximizing setbacks from current and future property lines to the extent possible and minimizing visibility of the site from highly trafficked roadways.

In addition, the property is a residential parcel in a rural area and is suitable for a tower installation.

Alternative properties were considered; however, this was deemed to be the most suitable for the installation given its current use (see winter and summer photo simulations).

# Key Map



View 1– Before



View 1 - After



Page **7** of **15** 

View 2 – Before



View 2 - After



Page **8** of **15** 

The location of the tower has been selected to preserve as much of the land as possible along with any natural heritage features and farmland in the area.

The proposed tower location is in an already disturbed area of the property, to be located at the rear yard of the residential parcel, next to the accessory structure.

The proposed tower is an appropriate distance away from existing and proposed residential dwellings in order to minimize the impact on the urban and rural environments.

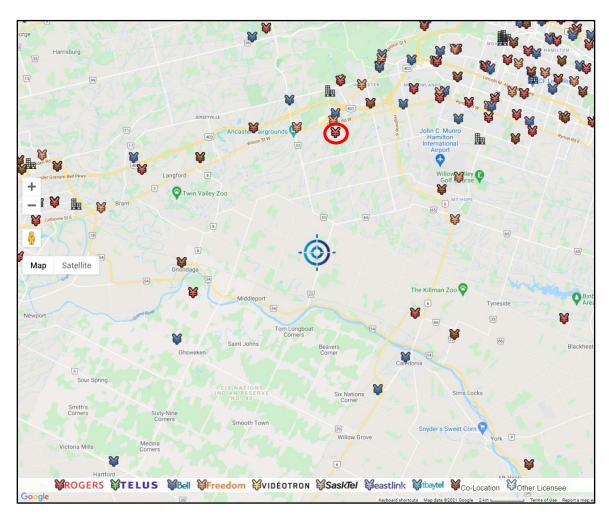
The setback from the nearest residential building, from the proposed tower, is approximately 103.90 m to the northwest (see Air Photo).



Setbacks from Existing Tower Sites / Co-location Opportunities

Before proposing a new telecommunication tower, LandSquared reviewed the location of existing telecommunication installations.

The closest existing tower to the proposed STCO079 facility (blue circle below) is a Rogers (CO678) tower located on Lot 36, Concession 4, approximately 7.06 km to the southwest (red circle below) at a peak height of 52 m.



There are no existing structures available in the immediate vicinity of the proposed tower to provide a co-location alternative to a new tower, including existing barns, silos, etc.

The proposed tower will be engineered specifically to accommodate co-location by multiple service providers / as many carries interested. Specifically, this tower will be able to accommodate all 4 national incumbents and municipal services that would benefit from this location.

Compound space at the base of the tower has been designed for the typical equipment cabinet / shelter sizes of the major wireless service. If more space is required, it will be upon request.

## Design

A steel self support tower design is proposed at this location with lightning protection system. Paint colour and lighting is subject to Nav Canada requirements.

Designs, in most case, makes co-location of 2 or more carriers troublesome where in most cases we have found it would require further tower reinforcement to support the shroud and extra equipment required by the incoming carrier.

The tower design has been selected to provide maximum co-location potential with a relatively small footprint and limited visual impact on the immediate surroundings, including nearby settlement areas.

The proposed design is a compatible design with the rural character of its immediate area. The design allows views through the tower which blends well with the sky.

### Control of Public Access

The site facility proposes to locate the radio equipment within a fenced compound that is electronically monitored.

The fence is proposed to be 1.8 m in height with chain link security topped with barbed wire surrounding the compound area.

# Health Canada's Safety Code 6 Compliance

Health Canada's role is to protect the health of Canadians, so it is the Department's responsibility to research and investigate any possible health effects associated with exposure to electromagnetic energy, such as that coming from cell phones and base stations.

Health Canada has developed guidelines for safe human exposure to Radio Frequency (RF) energy, which are commonly known as Safety Code 6. Safety Code 6 has been adopted by ISED and is included in their regulatory documents on radio communication licensing and operational requirements. ISED requires all proponents and operators to ensure that their installations and apparatus comply with the Safety Code 6 at all times.

LandSquared attests that the radio antenna system will comply with Health Canada's Safety Code 6 limits, as may be amended from time to time, for the protection of the general public including any combined effects of additional carrier co-locations and nearby installations within the local radio environment.

For more information on Safety Code 6, please visit the following Health Canada site: www.healthcanada.gc.ca/radiation.

### Canadian Environmental Assessment Act

LandSquared attests that the radio antenna system located by its tenants will comply with the Canadian Environmental Assessment Act, as the facility is exempt from review.

The proposed location creates no impact on area environmental features. It is located on an already disturbed area of the property.

No trees or vegetation is being removed to accommodate the installation of the leased area.

# Transport Canada's Aeronautical Obstruction Marking Requirements

LandSquared attests that the radio antenna system placed by its tenants will comply with Transport Canada / NAV CANADA aeronautical safety requirements. When Transport Canada / NAV Canada have determined if any aeronautical safety features are required for the installation, such information will be provided to the Municipality.

For additional detailed information, please consult Transport Canada at:

http://www.tc.gc.ca/eng/civilaviation/regserv/cars/part6-standards-standard621-512.htm

# **Engineering Practices**

LandSquared attests that the telecommunications structure as proposed for this site will be constructed in compliance with the Canadian Standard Association (CSA), and comply with good engineering practices including structural adequacy.

### Contact Information

As a representative of LandSquared, you can contact me at the following:

Tracey Pillon-Abbs, RPP 1375 North Service Road East, Unit 104, Oakville, ON, L6H 1A7 (226) 340-1232 tracey@landsquared.com

# **Municipal Consultation Process**

LandSquared builds and operates shared wireless telecommunications infrastructure, designed to ensure that service providers can address their customers' needs in the most efficient manner.

As a federal undertaking, LandSquared is required by ISED to consult with land-use authorities in siting telecommunication infrastructure locations.

The consultation process established under ISED authority is intended to allow the local land-use authorities the opportunity to address land-use concerns while respecting the federal government's exclusive jurisdiction over the siting and operation of wireless and data systems.

LandSquared welcomes comments from the municipality and its agencies to address any expressed comments that are deemed relevant by ISED CPC-2-0-03 Issue 5.

# Innovation, Science and Economic Development Canada

Please be advised that the approval of this site and its design is under the exclusive jurisdiction of the Government of Canada through ISED.

LandSquared is participating in this consultation in accordance with ISED guidelines CPC-2-0-03 Issue 5.

For more information on ISED public consultation guidelines including CPC-2-0-03 contact <a href="http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08777e.html">http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08777e.html</a> or the local ISED office:

ISED, Western and Central Ontario District 4475 North Service Road, Suite 100 Burlington, ON L7L 4X7 1-855-465-6307 ic.spectrumcwod-spectredcoo.ic@canada.ca

General information relating telecommunication is available on ISED website:

http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/home

### Conclusion

LandSquared sustains that the proposed site is ideally located to address and improve wireless voice and data services for the area.

The proposed site is also situated and designed to minimise impacts on surrounding land uses, as the proposed tower aims to accommodate multiple wireless carrier equipment. It will also minimize the need for multiple additional tower infrastructures in the area in the future.

LandSquared looks forward to working with the County of Brant in providing improved wireless services in the area.

# SITE PLAN

(under separate cover)