



Rogers Site C9849 – Hwy 401 & Cedar Creek II

Site Selection/Justification Report – Wireless Communications Site

Prepared for: Township of North Dumfries
Planning Department
(519) 632-8800 | planning@northdumfries.ca

Proposed: 60m Self Support Telecommunications Tower
Coordinates: 43.337985° , -80.441848°
PIN: 03848-0081 (LT) ARN: 300102000605357

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Introduction

Like all areas of the province, your community is experiencing an explosive demand for wireless services. As people rely more on wireless devices such as smartphones, tablets and laptops for business and personal use, network improvements are required to ensure high quality voice and data services are available.

This document outlines the site selection process in accordance with the requirements of Innovation, Science and Economic Development Canada's (ISED) Spectrum Management and Telecommunications Policy, CPC-2-0-03, Issue 6 (CPC) updated July 2022, and provides a description of the system associated with the proposed wireless communication installation on property owned by **FRANKOR CAPITAL CORPORATION**, known municipally as:

280 Waydom Dr, Ayr, Ontario N0B1E0

PIN: 03848-0081 (LT) ARN: 300102000605357

Legal Description: LT 49-50 PL 1408 NORTH DUMFRIES; S/T WS579409; NORTH DUMFRIES

The prosperity of Canadians depends on telecommunications services to do their jobs, conduct business, learn new skills and build communities. These services play an important role in the lives of all Canadians, enabling them to participate in today's digital economy and to access health care, education, government, and public safety services.

As a Tier 1 Carrier, Rogers' federal mandate is to fill coverage gaps such that all residents have access to wireless high speed broadband services.

Background and Coverage Requirement

A wireless telecommunications facility is a puzzle piece in a very complex radio network, whether that site is situated in an urban, suburban or rural setting. Customer demand and sound engineering principles direct where sites are required to be located. As people rely more on wireless devices such as smartphones, tablets and laptops for business and personal use, network improvements are required to ensure high quality voice and data services are available. For a wireless network to be reliable, an operator must provide "seamless" coverage so that gaps in the network are avoided. Gaps create dropped calls and overall poor service to customers. Rogers is committed and mandated by its license to ensure the best coverage and service to the public and private sectors.

The proposed site at *the above-noted location* will achieve the necessary engineering coverage objectives for our network. The location will also have the ability to provide much relied upon communication services in the area such as EMS Response, Police and Fire; improved wireless signal quality for area residents, those traveling along the major roads, as well as providing local subscribers with Rogers's 4G/5G wireless network coverage and capacity for products and services such as iPhones, smartphones, tablets and wireless internet through surrounding area.

Rationale for New Telecommunication Infrastructure

In identifying a potential new tower location and design, Rogers examined the surrounding area, assessed the visibility of the structure and considered possible host sitings. Rogers evaluated the best location for a new facility in compliance with protocol-established procedures, based on the following criteria:

ABBREVIATED SEARCH MAP

SITE NAME: HWY 401 & CEDAR CREEK RD II	LOCATION CODE: C9849
WAN Planner: Mario Massou / Vlad Smolyarenko	TELEPHONE #:
REVISION: A	DATE: 13-Dec-2023
Proposed Search Map Centre: Lat: 43.336166 Long: -80.435710	
<p>SITE DESCRIPTION: The desired candidate would be 60M site to match the current sites footprint</p> <p>Proposed Antenna Mounting Height: 60m Self support tower</p> <p>Candidates: The attached search map shows the limits of the proposed search ring.</p> <p>Potential candidates: the attached search map shows the limits of the proposed search ring.</p> <p>Collocates: N/A.</p> <p>Special Comments: Planning and RF Engineering to evaluate SCIP Candidates.</p>	

Candidate Search Area

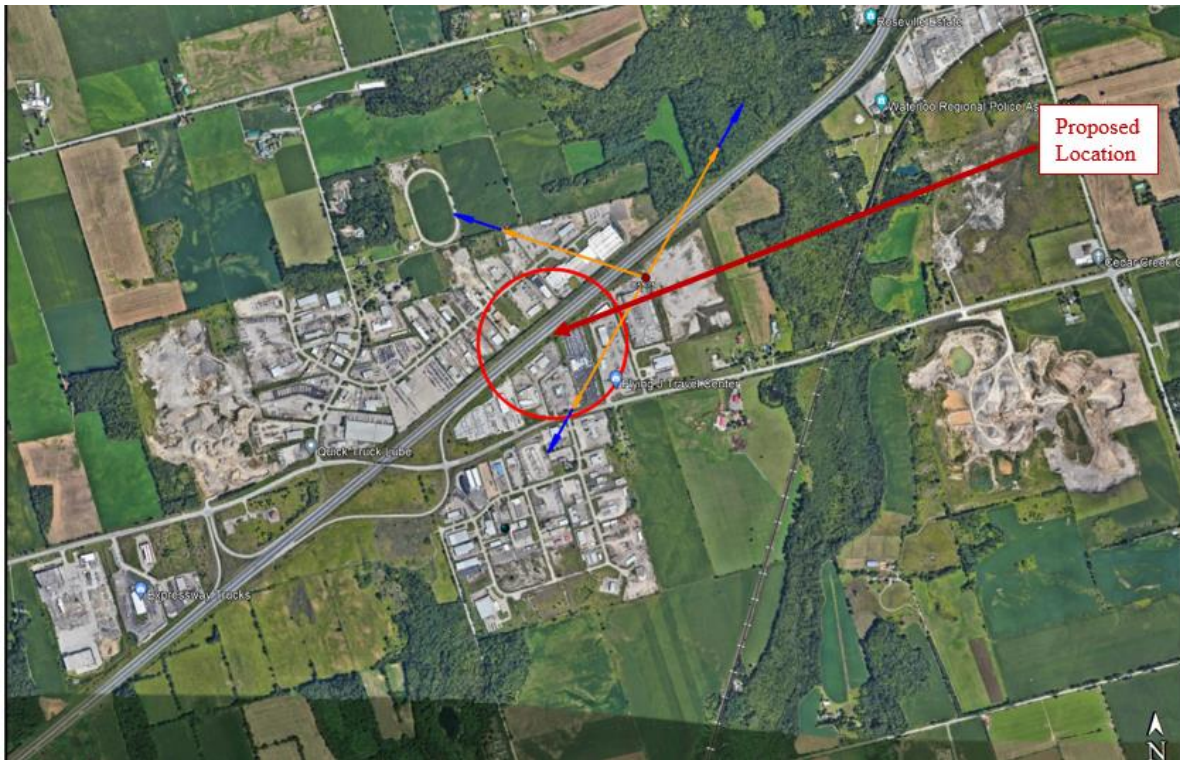


Figure 1: Technical Search Area Map

Above depicts the technical search area. Planning subsequently revised requirements to be north of Hwy 401 to ensure optimal coverage to the industrial area and Hwy 401 are achieved. The proposed search area is to relocate the existing Rogers tower that is set to be decommissioned.

Candidate Search Process

Before building a new antenna-supporting structure the proponent is required to first consider:

- Sharing an existing antenna system, modifying or replacing a structure, if necessary.
- Locate, analyze, and attempt to use any feasible existing infrastructure such as high-rise rooftops, water towers, etc.

Co-location opportunities on existing area carrier structures

- The following local coverage map depicts the local tower inventory of all carriers within a 2km (2000m) radius of the Search Centre.

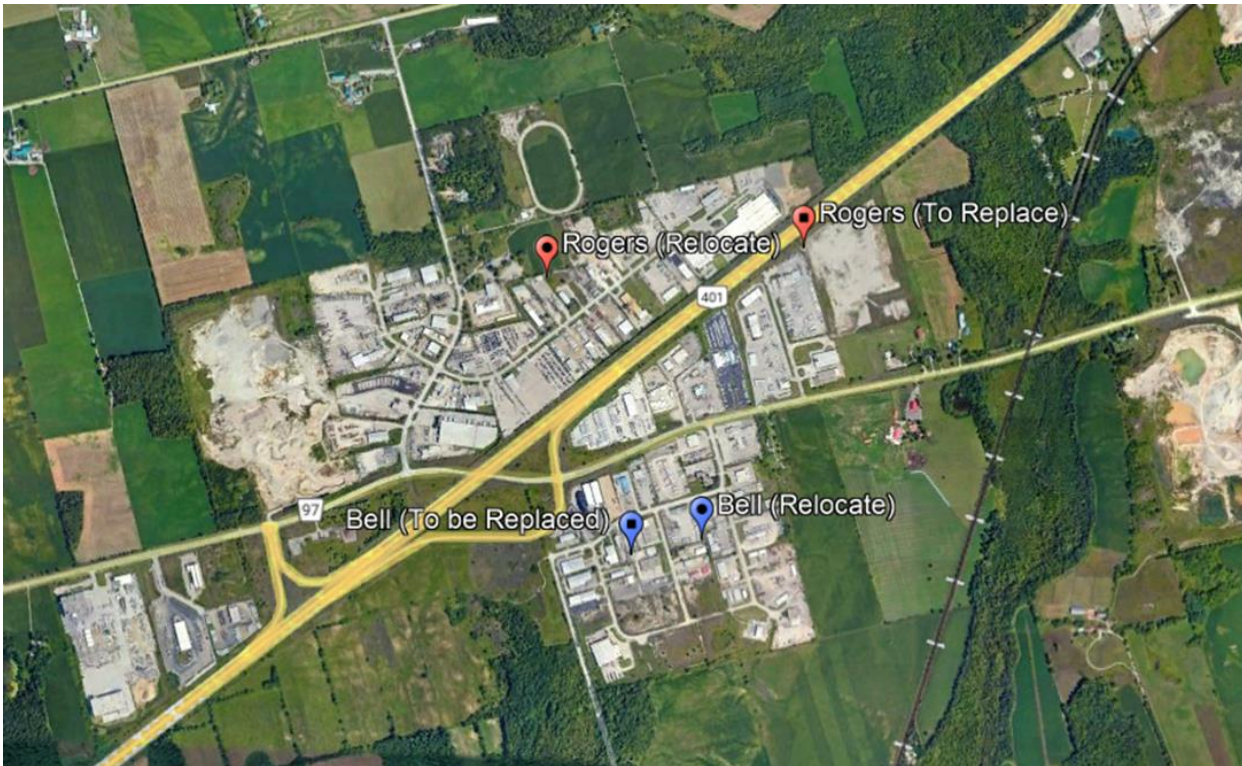


Figure 2: Existing towers within 2000m

Closest structures evaluated:

Structure	Location	Distance	Reason for disqualification
Proposed Rogers Tower	43.338° -80.442°		Proposed new tower location
Rogers tower	43.339° -80.431°	0.9km	Existing Rogers tower to be replaced
Existing Bell tower	43.329° -80.438°	1km	Rejected because tower is too far south to satisfy coverage requirements & tower will be replaced imminently
Proposed Bell tower	43.331° -80.402°	1km	Rejected because the tower is too far south to satisfy coverage requirements

The proposed tower is a replacement tower for the existing Rogers tower site which is going to be decommissioned. Because the tower is a replacement, it is essential to maintain coverage to the area to ensure there is not a large gap to the Highway 401 corridor and industrial area. There are no other telecom towers within 2km. No existing structure is able to satisfy the coverage requirements as the Bell towers are too far south from the existing and proposed site.

Evaluation of Other Local Existing Structures / Rooftops

After disqualifying any colocation opportunities, the proponent next evaluates existing structures that are located within the specific geographical area offering the required height and that may be available to support new equipment or to use for co-location.

Existing Structure Notes:

During the site selection process for this proposed, Rogers determined that no other existing infrastructure opportunity was available in our target area that was suitable for our network.

Consideration of municipal surplus properties

Within the Proponent search area, the Proponent sought to identify any surplus municipal properties that may have been satisfactory to meet the coverage objectives.

- ☒ No suitable municipal properties were found
☐ Suitable municipal properties were identified:

Aeronautical Issues

The below image depicts the 4 closest airports and aerodromes to the proposed site. The proposed site is 5.9km north-east of the Ayr/Sargeant Private Airfield and 9.36 km north-east of Plattsville Aerodrome CLB2. The proposed site is 13.7 km southeast of the Grand-River Hospital Heliport and 14.2 km southwest of Waterloo International Airport YKF. Accordingly, the proposed site is outside of any airport zoning or safety restrictions.

Prior to tower build and following municipal approval, tower specifics will be sent to Nav Canada and Transport Canada for review and approval.

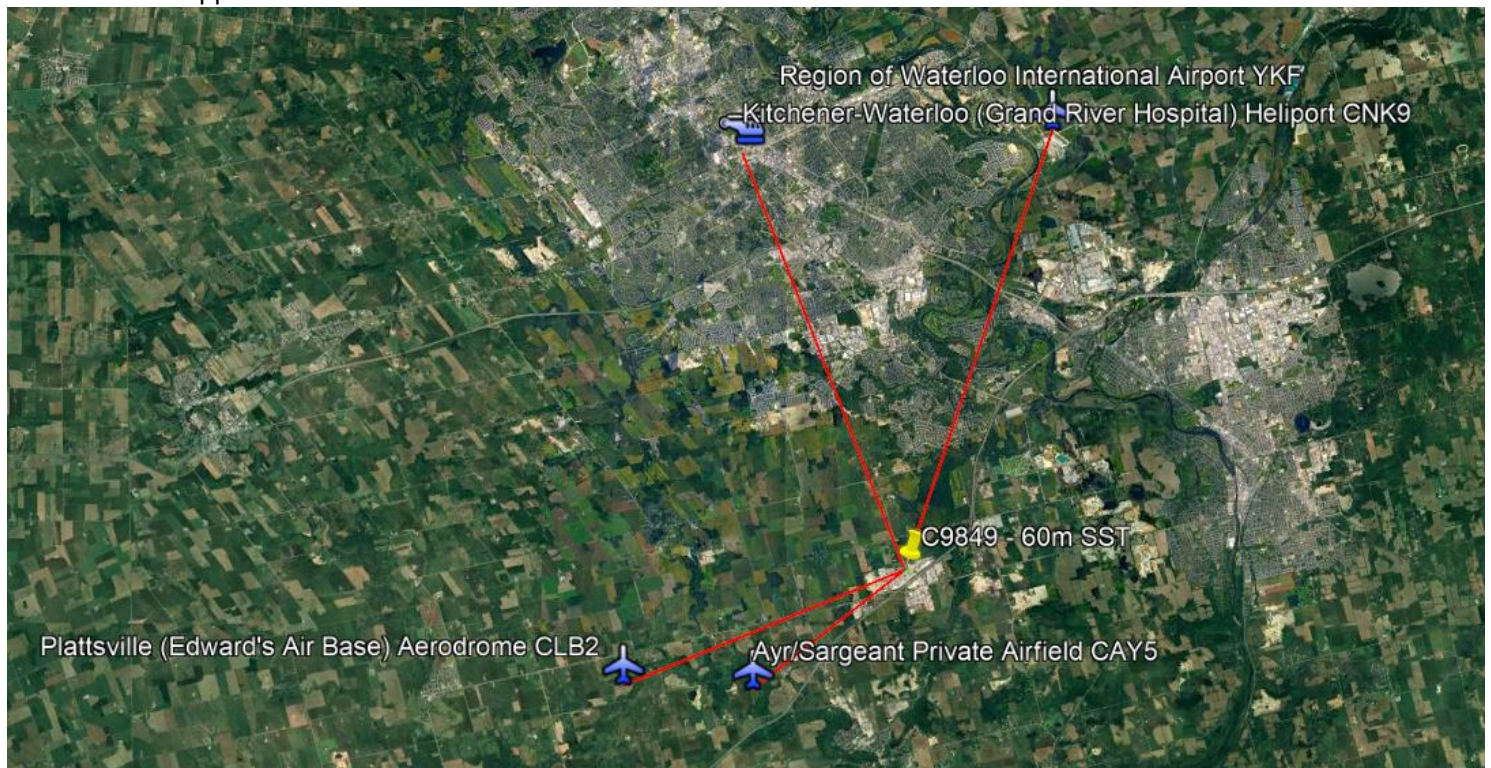


Figure 3: Aeronautics review of existing structures

Private Candidate Review Process

Having identified an initial, qualified candidate from the preceding exercise, secondary candidates are then evaluated. Private candidates are reviewed starting with the center of the search area and moving out in a radial pattern until a large enough commercial, industrial or agricultural property option was available that could mitigate public concern to the greatest extent possible within the technical coverage limitations.

In every case, of all candidates reviewed that were determined to fall within the necessary search area for technical coverage requirements, 6 candidate properties were short-listed for detailed study.

Of these candidates, each was reviewed and scored to determine which mitigated all defined factors of public concern to the greatest extent possible within the following primary constraints:

- a) proximity to Search Nominal coordinates and optimization of ground elevation
- b) RF and Transmission Qualification to meet the federal coverage mandate
- c) Civil scoring and qualification, assessing soils, access, utilities and land availability
- d) Willing landlord and clearance of property title issues
- e) Compliance to the greatest extent possible with Land Use Authority Planning objectives within the restraints of technical coverage
- f) optimization of the above to mitigate all factors of public concern to the greatest extent possible within the technical restraints of the combined local environment.

The selected candidate site is defended as the candidate property most suitable to minimize the local impact of necessary infrastructure to the greatest extent reasonably possible, in view of the mitigative measures available and undertaken for the stipulated factors of good siting methodology.

The following picture depicts the available real estate opportunities which were assessed for candidate suitability and technical sufficiency to meet the Proponent's coverage requirements.

There are extremely limited property options with the footprint required to support a telecommunications tower in this area.

Each of the private candidate sites were disqualified/qualified for the following reasons:

1	038480081	Offers compatible use over 120 meters from residential areas, meets civil specifications for access and hydro, provides adequate space without impacting business operations, maintains a sufficient setback from MTO Property on Hwy 401, effectively mitigates public concerns, and features an agreeable landlord; Selected candidate
2	038480059	Although this candidate satisfies coverage requirements and maintains a proper setback from MTO Property, the proximity to a water feature raises concerns about soil quality, which may not support the necessary infrastructure. Additionally, the presence of multiple leaseholds complicates land use and could adversely impact existing businesses, making it a less favorable option; disqualified.
3	038480060	While this site meets coverage requirements and adheres to setback regulations, the limited space available for the compound could disrupt current business operations. The negative impact on existing activities outweighs the benefits of coverage, leading to disqualification.
4	038510063	This location is outside the designated Rogers search area and does not provide effective coverage for the targeted regions on both sides of Hwy 401. Additionally, its classification as prime agricultural land raises significant land use concerns, making it unsuitable; disqualified
5	038480075	Similar to candidate 4, this site falls outside the Rogers search area map, which

		compromises its potential to deliver the required coverage. Its geographical limitations render it ineffective for the project's objectives; disqualified
6	038480084	Despite meeting coverage requirements, this candidate lacks sufficient space for the compound without negatively impacting business operations. The adverse effects on current activities lead to its disqualification.
7	038480095	While this site meets coverage requirements, it fails to maintain an adequate setback from MTO Property on Hwy 401. The insufficient distance poses regulatory risks and potential public concern, making it a non-viable option; disqualified

Private Candidate Map

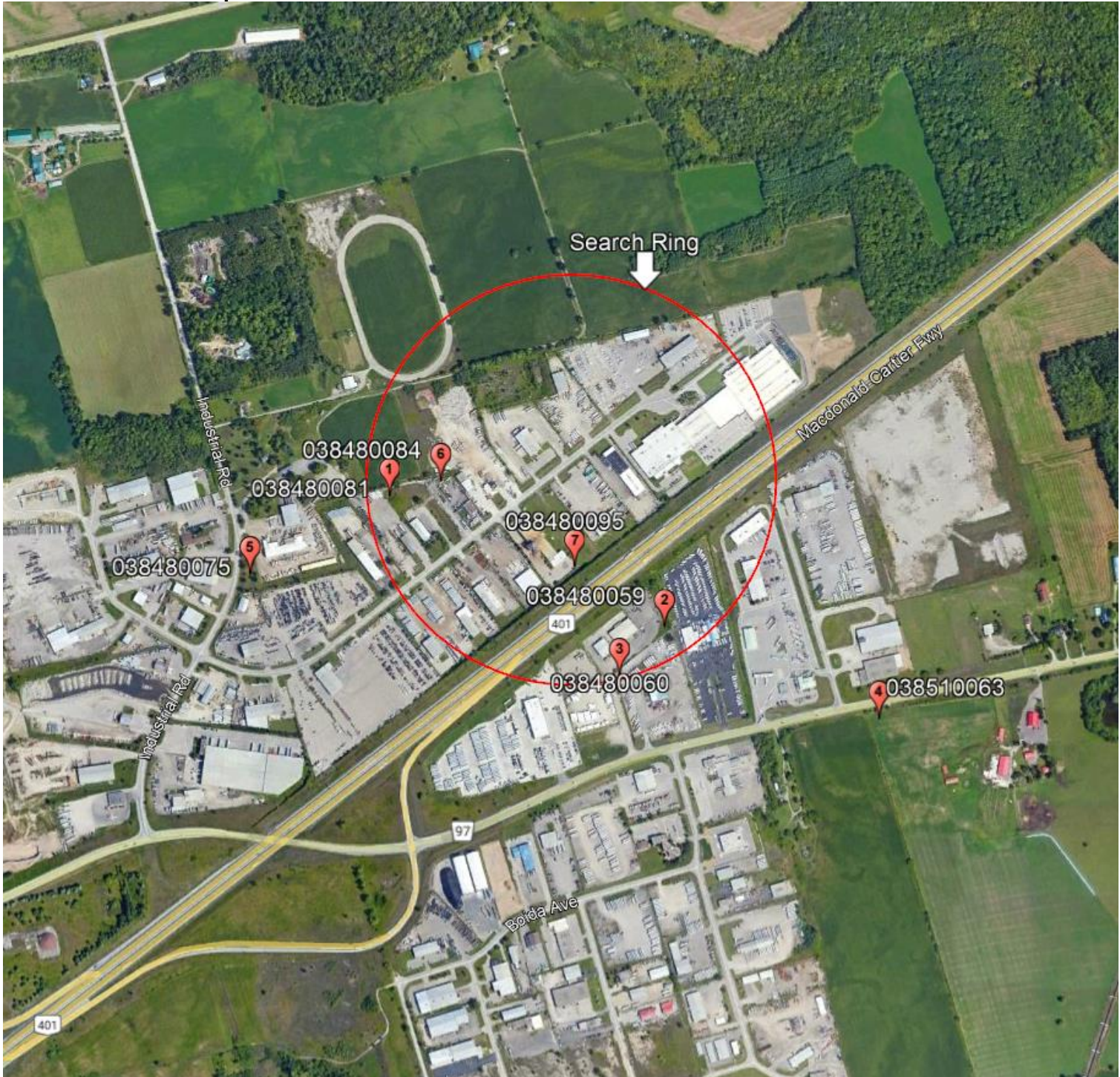


Figure 4: Private Candidate Review

Proposed Facility Location and Site Sketch

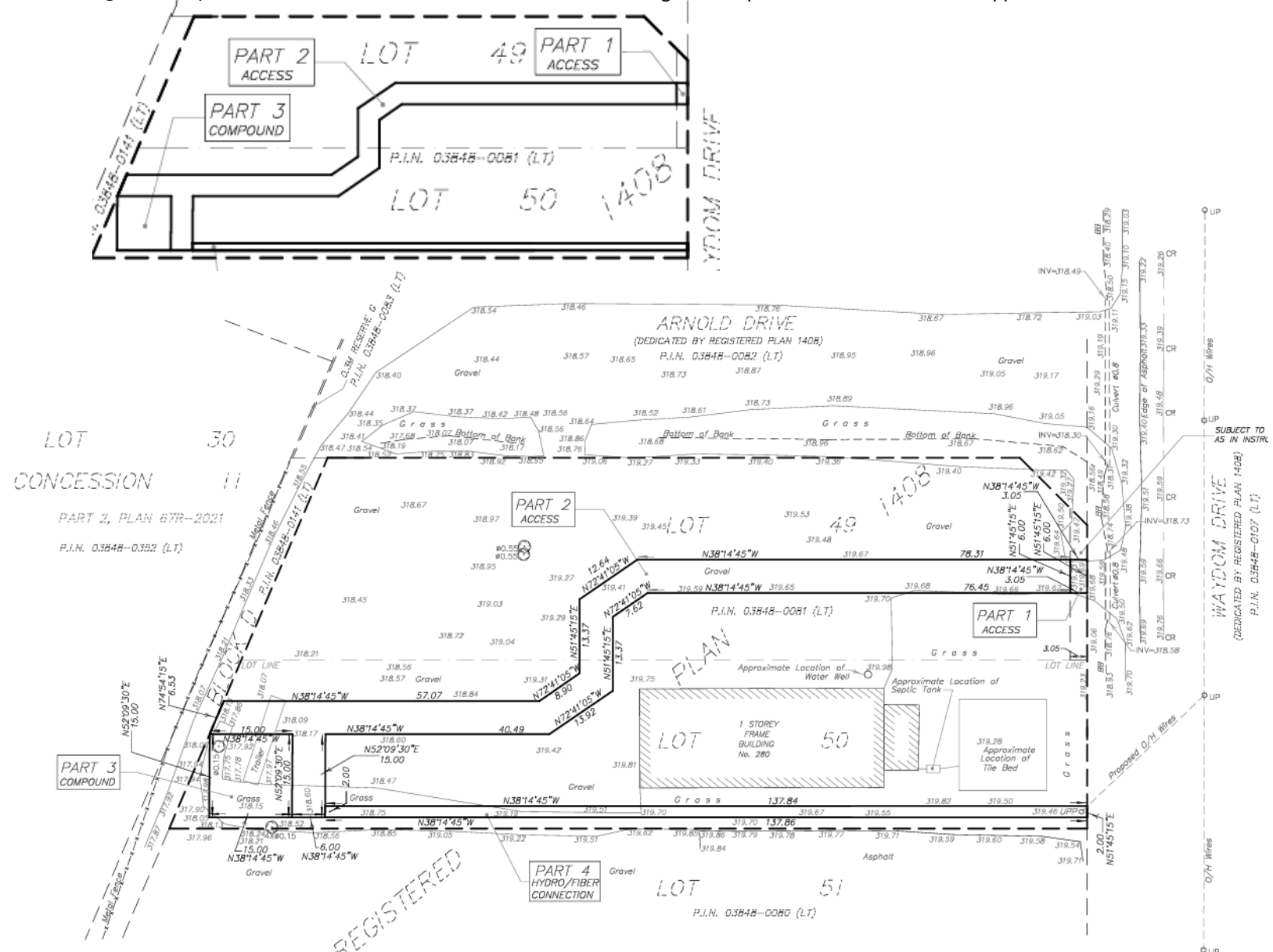


Figure 5: Proposed Site Location



Representative Photo

Figure 6: Representative Photo of Self Support Tower



Coverage Map

The coverage map below depicts the general “4G/5G Good Coverage Radius” for the selected candidate, together with other local Rogers facilities. The red shows the existing towers, with the green depicting the new proposed tower, to replace the existing 60m self support tower, just to the right of the proposed.



Figure 8: 4G/5G Good Coverage Radius Map

As shown on the image above, the existing towers are too far apart to meet coverage requirements, necessitating the construction of a new tower to address this coverage gap. The proposed tower will be strategically positioned between the current Rogers towers, effectively covering the entire industrial area. The only region not covered by this new tower, compared to the tower to the one it will replace, is already served by the Rogers tower to the northeast.

Residential Use Setback Map



- The proposed site is located 2388m from Rural Residential to the west of the site
- The proposed site is located 1832m from the Rural Residential zoned land to the south of the proposed site
- The proposed site is located 3400m from the Rural Residential area to the northeast of the site

Figure 9: Setback to Residential Uses

Compliance with Zoning Intent

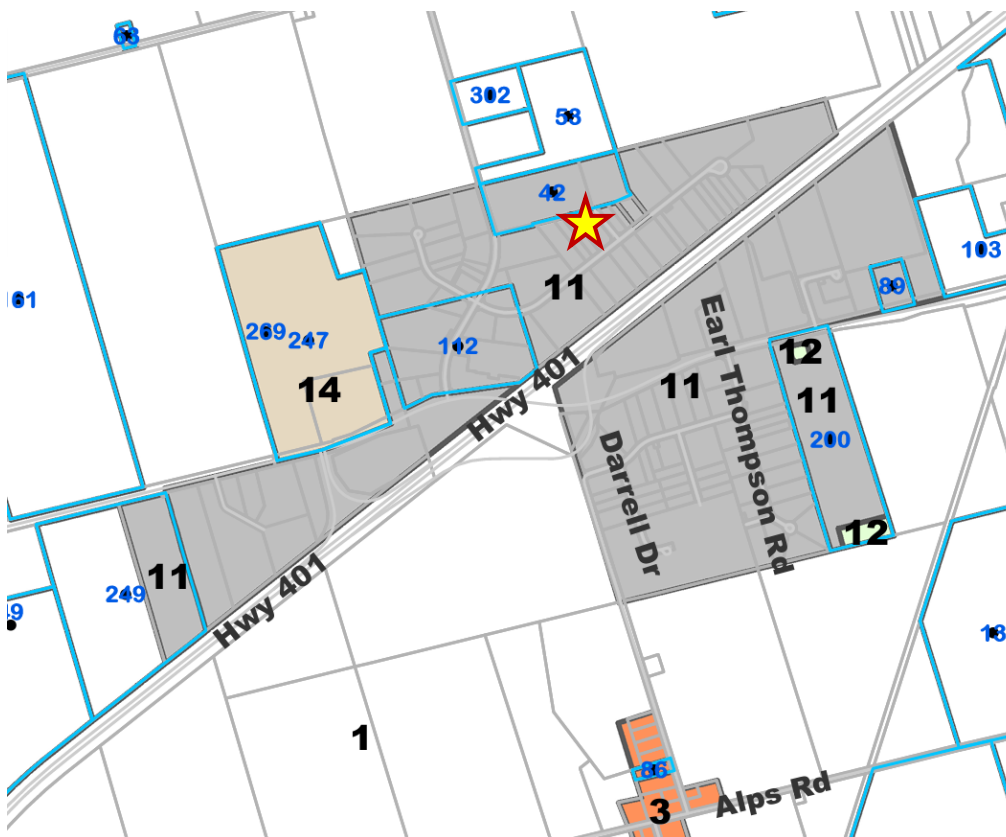


Figure 10: Township of North Dumfries Zoning Map with Proposed Tower Location

Zoning Code Text Symbol

Zone Code	Zone Code
[White Box]	Zone 1 - Agriculture
[Light Orange Box]	Zone 2 - Rural Residential
[Orange Box]	Zone 2a - Rural Residential
[Orange Box with Diagonal Lines]	Zone 2af - Rural Residential (flood plain)
[Dark Orange Box]	Zone 3 - Rural Residential
[Dark Orange Box with Diagonal Lines]	Zone 3f - Rural Residential (flood plain)
[Light Purple Box]	Zone 4 - Urban Residential
[Light Purple Box with Diagonal Lines]	Zone 4f - Urban Residential (flood plain)
[Purple Box]	Zone 4a - Urban Residential
[Pink Box]	Zone 4b - Urban Residential
[Pink Box]	Zone 4c - Urban Residential
[Pink Box]	Zone 4d - Urban Residential
[Yellow Box]	Zone 5 - Urban Residential
[Yellow Box]	Zone 5a - Urban Residential
[Light Blue Box]	Zone 6 - Urban Commercial
[Light Blue Box with Diagonal Lines]	Zone 6f - Urban Commercial (flood plain)
[Blue Box]	Zone 7 - Rural Commercial
[Blue Box]	Zone 8 - Service Station
[Light Gray Box]	Zone 9 - Industrial
[Light Gray Box with Diagonal Lines]	Zone 9f - Industrial (flood plain)
[Gray Box]	Zone 10 - Industrial
[Gray Box]	Zone 11 - Industrial
[Light Green Box]	Zone 12 - Open Space
[Light Green Box]	Zone 12a - Environmental Protection 1
[Light Green Box]	Zone 12b - Environmental Protection 2
[Light Green Box]	Zone 12c - Environmental Protection Overla
[Red Box]	Zone 13 - Institutional
[Brown Box]	Zone 14 - Mineral Aggregates
[Brown Box]	Zone 15 - Mobile Home Development

Although federal undertakings are exempt from the application of zoning bylaws, sitings consider the intent of locating on non-residential properties with optimal setbacks from residential use. This siting is located in Zone 11 – Industrial, and abutted on all sides by Zone 11 – Industrial, with By-Law exemptions to the north.

The site candidate fully complies in all respects with good siting design tenets and guidelines, and in particular, all optimum design criteria of the CPC, and local protocol.

Local Properties in Notification Radius (18 properties identified)

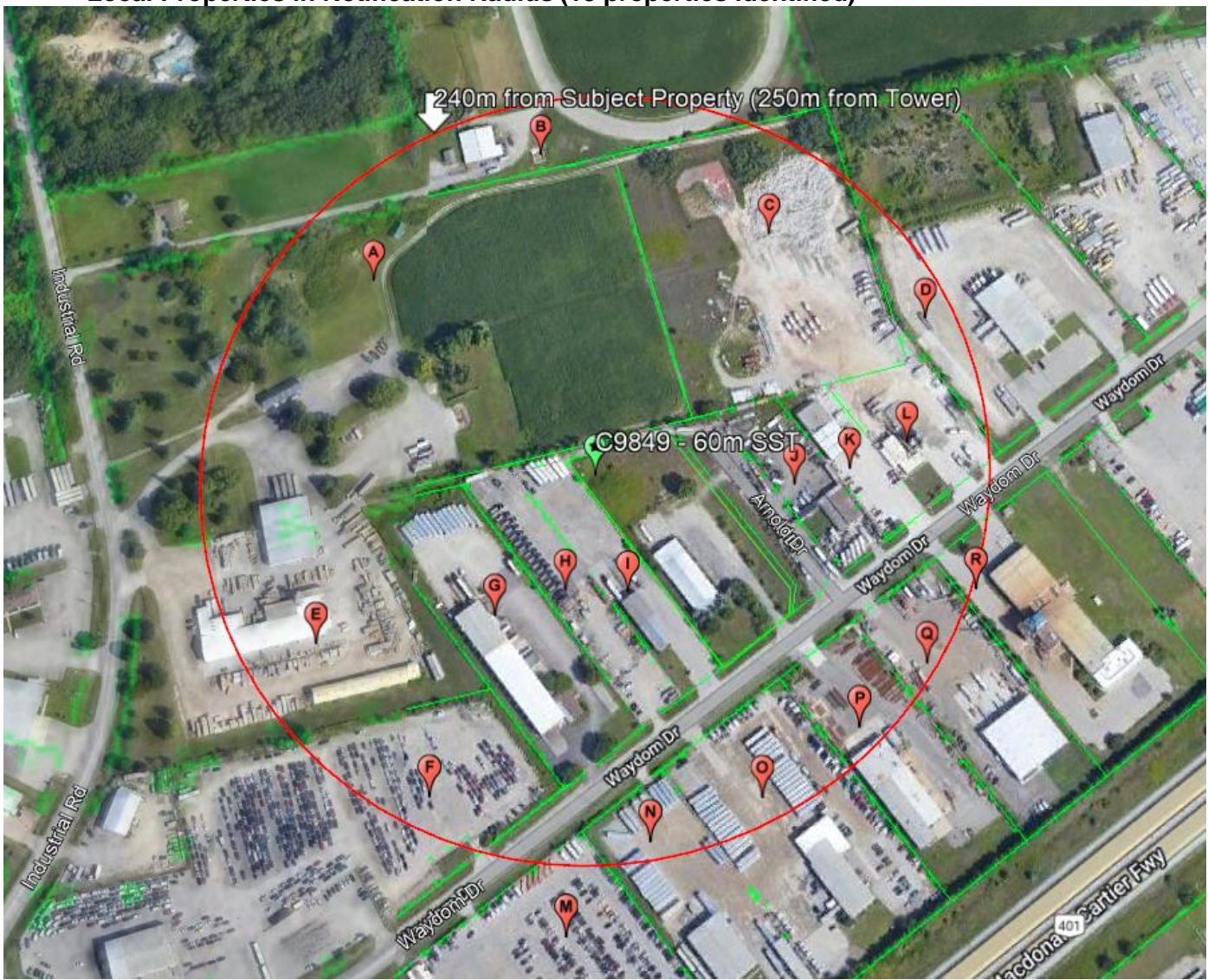


Figure 11: Local Notification Radius - 240m from compound, 250m from tower

There are ten (10) private-owned properties that fall within CPC's stipulated notification radius of three times tower height ($60\text{m} \times 3 = 180\text{m}$).

In accordance with the Township of North Dumfries local protocol, mail notice of a proposed communication tower and communication antenna site is to be provided to all municipally assessed property owners located within a 120 metre radius of the subject property that is located in a designated settlement area and within a 240 metres radius of the subject property that is located in a designated rural area as well as a radius of the leased area boundaries that is equal to or greater than three (3) times of the proposed communication tower and communication antenna measured from its base. In this case, 240m is greater than three (3) times of the proposed communication tower and communication antenna measured from its base. Accordingly, direct (mailing) notice of the proposal is required to be circulated to property owners within 240m of the proposed tower, as it is in the locally defined notification radius.

There are eighteen (18) private-owned properties that fall within the local stipulated notification radius of 240m from the proposed communication tower and communication antenna measured from its base.

The facility **is not** located within 3x tower height from a neighbouring municipality. Accordingly, notice of the proposal is not required to be circulated to additional LUAs.

Description of Proposed Tower:

Specifics:

60m Self Support Tower enclosed in a 15m x 15m (fenced) secured Compound. This site will be built to accommodate antennas and equipment for future technology services and provide for colocation with other carriers.

ELEVATION PLAN NOT TO SCALE

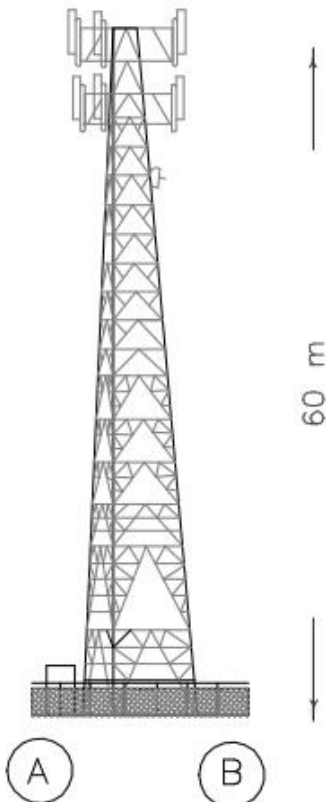


Figure 12: Proposed Tower Type and Height

PROPOSED COMPOUND LAYOUT PLAN SCALE 1:300

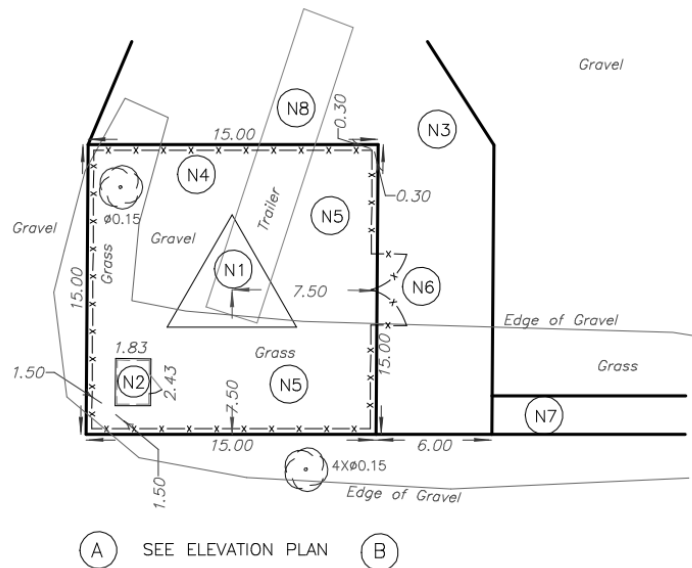


Figure 13: Proposed Compound Layout

NOTES

- (N1) PROPOSED STEEL SELF SUPPORT TOWER.
PAINT COLOUR SUBJECT TO NAV CANADA REQUIREMENTS.
ANTENNA NUMBER AND LOCATIONS TO BE DETERMINED.
FOUNDATION DESIGN PENDING SOIL REPORT.
- (N2) PROPOSED WALK IN RADIO EQUIPMENT SHELTER ON REINFORCED CONCRETE SLAB.
- (N3) PROPOSED ACCESS WAY.
- (N4) PROPOSED 2.4 m HIGH CHAIN LINK SECURITY FENCE TOPPED WITH BARBED WIRE SURROUNDING THE COMPOUND.
- (N5) REMOVE EXISTING TOPSOIL, PROOF ROLL SUBGRADE AND PLACE 300 mm GRANULAR ACROSS COMPOUND AREA.
MATCH INTO EXISTING GRADES ADJACENT TO THE COMPOUND.
PROVIDE POSITIVE DRAINAGE AWAY FROM THE TOWER, SHELTERS AND HYDRO PAD TOWARDS THE NATURAL SLOPE OF THE SITE.
REINSTATE ALL DISTURBED AREAS.
EXISTING GRAVEL TO BE REMOVED.
- (N6) PROPOSED CHAIN LINK GATE.
- (N7) PROPOSED HYDRO/FIBER CONNECTION.
- (N8) EXISTING TRAILER TO BE RELOCATED.

Figure 14: Proposed Tower and Survey Notes

Compliance with Local Protocol Section 4 Preferred Location Guidelines

In general, the Township prefers that the following options be considered (in order) when a communication tower and communication antenna site proposal is submitted to the Township in pursuit of a statement letter of concurrence:

- I. *Co-location on an existing facility (tower, building or structure), unless the existing facility is to be located in a Residential Area, or within three times the tower height (measured from the base of the tower) from a Residential Area, in which case a new single user tower located an appropriate distance away from the Residential Area is preferred.*

Co-location option have been explored and outlined on page 5. There are no options for co-location in this area.

- II. *New Locations on an existing facility.*

There are no options for utilizing an existing facility. Specifically, there are no water towers, rooftops, or other existing structures that satisfy the 60m antenna mounting height requirement in this area.

- III. *Siting a new tower in an industrial area (Employment Area) that is 120 metres away from Residential Areas, Natural Heritage System Features, and other sensitive land uses.*

Chosen option. The proposed tower is proposed in an industrial area, greater than 120m from residential uses and other sensitive uses.

- IV. *Locating a new communication tower and communication antenna site in or on Institutional Facilities, Parks and Recreation Areas as well as facilities, buildings, lands, properties and/or structures of a Public Agency or Authority, which is supported by a satisfactory business case, that is 120 metres away from Residential Areas, Natural Heritage System Features, and other sensitive land uses. Where the Township owns lands within the Proponent's search area that is suitable for the proposed communication tower and meets the Proponent's technical requirements, the Township prefers to be the landlord of first choice, and the Township agrees that any such sites will be according to the usual commercial terms and will not be unduly delayed.*

Option iii chosen. No Township owned land that could accommodate a telecom tower in the area.

- V. *Monopoles with Co-location capability located on lands at least 120 metres away from Residential Areas.*

Option iii chosen instead, outside of residential areas.

- VI. *Disguised Installations within 120 metres of Residential Areas, Natural Heritage System Features and sensitive land uses where deemed appropriate.*

Option iii chosen instead, outside of residential and sensitive use areas.

A. General Location Preferences

(a) The proponent will select a location in order to minimize the total number of communication tower and communication antenna sites required in the Township as a whole.

The proposed tower is strategically located between an existing 90 m Rogers tower to the southwest and a 51 m tower to the northeast. By optimizing both location and height, the tower ensures continuous and reliable coverage within the industrial area, avoiding the need for another tower between the two existing sites and minimizing overall infrastructure in the Township.

(b) The proponent will be encouraged to use existing communication tower and communication antenna sites, where appropriate.

There are no options for utilizing an existing facility. There are no options for co-locating new antennas on an existing tower or other structure in the area.

(c) It is preferred that new communication tower and communication antenna sites be located outside of Residential Areas, Natural Heritage System Features and other sensitive land uses, preferably in areas designated and zoned to permit employment, industrial, commercial, rural land uses or on facilities, buildings, lands, properties and/or structures of a Public Agency or Authority.

The proposed tower is proposed to be located in Zone 11 – Industrial.

(d) New communication tower and communication antenna sites will be strongly discouraged within or within 120 metres of Residential Areas, Natural Heritage System Features and other sensitive land uses as well as on listed and/or designated heritage buildings and sites.

The proposed tower is proposed to be located over 1.8km away from the closest residentially zoned property, and away from other sensitive land uses.

(e) When selecting a site for a new communication tower and communication antenna site, the following will be considered:

- i. maximizing distance from Residential Areas;*
Greater than 1500m from residential areas
- ii. maximizing distance from Natural Heritage System Features;*
Proposed site is located far away from any natural heritage system features, and more than 800m from wetlands.
- iii. maximizing distance from listed heritage buildings and sites;*
Away from heritage buildings and sites, located in industrial area
- iv. avoiding sites of topographical prominence, where possible;*
Avoids a site of topographical prominence, as it is located on land of similar elevation to the surrounding area and away from scenic viewpoints.
- v. avoiding sites that would obscure public views and vistas of important natural or human-made features;*
Proposed tower is placed at back of property away from road and other public views
- vi. ensuring compatibility with adjacent uses; and*
Tower type and fencing are compatible with surroundings being in an industrial area, with other chain-link fence nearby, within an industrial area.
- vii. access.*
Access has been modified in accordance with Township criteria, utilizing existing access at front of property.

B. Co-Location

(a) The Township expects proponents to share communication tower and communication antenna sites (co-locate), where possible, unless the existing facility is to be located in a Residential Area, or within three times the tower height (measured from the base of the tower) from a Residential Area, in which case a new single user tower located an appropriate distance away from the Residential Area is preferred and co-location is not required, in order to minimize the impact on the Township's urban and rural environments.

The proposed tower is a replacement tower for the existing Rogers tower site which is going to be decommissioned. Because the tower is a replacement, it is essential to maintain coverage to the area to ensure there is not a large gap to the Highway 401 corridor and industrial area. No existing structure is able to satisfy the coverage requirements as the Bell towers are too far south from the existing and proposed site.

(b) Proponents will comply with Industry Canada's requirements with respect to co-location so as to minimize the total number of communication tower and communication antenna sites in the Township as a whole.

The tower is designed for the loading requirements of Tier 1 carriers and made to accommodate the equipment loading of another carrier.

(c) Proponents for a new communication tower and communication antenna site will be required to submit a Site Selection / Justification Report, prepared by a certified engineer or land use planner. The report should identify all communication tower and communication antenna sites within a radius of 1500 metres of the proposed location. It should also include details with respect to the coverage and capacity of the existing communication tower and communication antenna sites in the surrounding area and provide detailed documentary evidence as to why collocation of an existing communication tower and communication antenna site is not a viable alternative to a new communication tower and communication antenna site. The report should also document the site selection process followed by the proponent for selecting this site in accordance with this protocol. In recognition of the sensitive nature of such information, Township staff will, subject to the requirements of this protocol in respect of public notice and public consultation and the Municipal Freedom of Information and Protection of Privacy Act, maintain confidentiality of information where requested by the proponent.

This document serves as the Site Selection / Justification Report. As outlined on page 5, nearby collocation opportunities within a 1500 m radius were reviewed and determined to be unviable due to coverage limitations and technical constraints. The proposed tower is being designed to accommodate future collocation by other carriers. The site selection process, including justification for this specific location, is documented in the sections above in accordance with Township protocol.

(d) Any exclusivity agreement which limits access to a communication tower and communication antenna site by other proponents is unacceptable. A signed undertaking is to be submitted to the Township stating that the proponents will comply with Industry Canada's requirements with respect to co-location.

Proposed tower is made to comply with Industry Canada's requirements with respect to co-location and supports co-location of other carriers.

C. Site Preferences

Further to the General Location Preferences and Co-location subsections noted above, it is the Township's preference that:

(a) A new communication antenna mounted on a building or structure such as an existing communication tower, hydro transmission tower, utility pole or water tower, is to be explored by the proponent before any proposal is made for the construction and development of a new communication tower and communication antenna site.

All existing structures within the area—including communication towers, utility poles, and other potential mounting locations—were reviewed and found unsuitable due to insufficient height, structural limitations, or inadequate location to meet the required coverage objectives.

(b) The construction and development of a new communication tower and communication antenna site in locations 120 metres or greater outside of a Residential Area is generally encouraged. The construction and development of a new communication tower and communication antenna site in locations within 120 metres or less of a Residential Area, Natural Heritage System Features, and other sensitive land uses is generally discouraged and will be accepted only when all other options to accommodate the new communication antenna on existing buildings, facilities, structures and towers are not viable. The construction and development of a new communication tower and communication antenna site within 120 metres of a Residential Area, Natural Heritage System Features, and other sensitive land uses shall be restricted to a disguised, monopole installation where possible and, where appropriate and practical, should be designed with future co-location capacity.

The proposed tower is located over 1500 metres from any zoned Residential Area, well beyond the 120 metre minimum separation guideline. The site is also not in proximity to Natural Heritage System Features or other sensitive land uses, aligning with the Township's siting preferences. Additionally, the tower is designed to support co-location by other carriers.

(c) Where co-location is not possible, the construction and development of a new communication tower and communication antenna site will be designed to minimize visual impact and to avoid disturbance to Natural Heritage System features and areas of topographic prominence.

The proposed tower is located in an industrial zone, at the back of the property away from the road, on land with similar elevation to the surrounding area. The compound uses a chain-link fence, matching existing infrastructure, and the self-supporting structure blends with the industrial setting. The site is far from Natural Heritage System features, minimizing visual impact and disturbance to sensitive areas.

(d) The construction and development of a new communication tower and communication antenna site will have due regard for the height restrictions in vicinity of any airport and airfield as may be required by Transport Canada and Nav Canada. The proponent of a new communication tower and communication antenna site will provide detailed documentary evidence to this effect to the Township as part of the submission of their Communication Tower Application.

Airport restrictions have been reviewed and considered, and the proposed tower is located outside any restricted airspace. Additionally, prior to construction, NAV Canada and Transport Canada certifications will be obtained, as required, following municipal approval.

D. Design and Landscaping

Further to the General Location Preferences, Co-location and Site Preferences subsections noted above, it is the Township's preference that:

(a) Architectural principles will be incorporated into the design and landscaping of a new communication tower and communication antenna site to ensure the compatibility of the site with the surrounding buildings and area, where possible.

The proposed tower is located in an industrial area, where it blends with the surrounding environment. The compound features a chain-link fence, consistent with existing infrastructure, and is situated in a non-prominent location, minimizing visual impact. The design ensures compatibility with the industrial setting, aligning with the area's character.

(b) Disguised, monopole installation will be used where a new communication tower and communication antenna site must be located within 120 metres of a Residential Area, Natural Heritage System Features, and other sensitive land uses, where possible.

The proposed tower is located more than 1500 metres away from any residential area, well beyond the 120 metre threshold, making a disguised monopole installation unnecessary.

(c) New communication tower and communication antenna sites will be setback an appropriate distance from all property lines and public road allowances such that line of sight is not obstructed and functionality of the public road is not adversely affected, whenever possible.

The tower is located at the back of the property, away from the road, ensuring no obstruction of sightlines or functionality. The compound is fenced to prevent hazards, and existing access at the front of the property is utilized, requiring no new access points.

(d) One parking space will be provided at each new communication tower and communication antenna site with access from a public right-of-way at a location acceptable to the Township. Where parking is provided for another use on the site and this parking is within 90 metres of the communication tower and communication antenna site, the parking space for the site is not required (parking spaces need not be exclusively devoted to communication tower and communication antenna site usage). This policy may be waived when the site is located on land owned by the Township or its agencies, boards and/or commissions.

As shown in the site survey, a parking space is included in the plan for the proposed tower, ensuring compliance with the parking requirements.

(e) All reasonable efforts will be made to decrease the size and visibility of all communication towers and communication antennas so that they will blend in with the surroundings. To ameliorate the scale and visual impact of communication tower and communication antenna sites, mitigation measures should include consideration of: design features, structure type, design, colour, materials, landscaping, screening and decorative fencing. In general and where possible, communication towers, communication antennas, associated equipment and infrastructure shall have a non reflective surface and be of a neutral colour (e.g. light grey) which is compatible with the sky and the surroundings. Where appropriate, a communication tower and communication antenna site will be designed to resemble features commonly found in the surrounding urban and rural areas, such as a flagpole, clock tower, silo or streetlight. For installations within 120 metres of a Residential Area, Natural Heritage System Features, and other sensitive land uses, an unobtrusive design, such as a monopole or stealth design, should be considered. The proposed tower is located in an industrial area, utilizing a self-supporting structure to blend with the surroundings. It will feature a non-reflective surface and a neutral colour to minimize visual impact and complement the sky and environment. The tower is situated close to the existing self-support tower being replaced and near Bell's self-support tower, ensuring it aligns with the industrial setting and visual character.

(f) Lighting of communication towers and communication antennas is prohibited unless required by Nav Canada. Lighting of a communication tower and communication antenna site is prohibited at grade unless for the health and safety of the Proponent's employees and contractors. In this regard, lighting of the site at grade shall adversely affect surrounding land uses. Details to this effect should be provided by the proponent at the time of submission of the Communication Tower Application.

No lighting will be used on the proposed tower, except for what is required by Nav Canada. Nav Canada's approval and requirements will be obtained following municipal concurrence, but it is anticipated that the lighting will be consistent with what is currently used on existing towers in the area.

(g) Communication towers will accommodate only communication antennas. Only identification or information signs or other material directly related to the identification or safe operation of this equipment will be permitted on the tower. A small plaque must be placed at the base of the structure, (or at the main entrance to the site where the site is not accessible under normal circumstances), identifying the owner/operator of the structure and a contact telephone number. No third party advertising, or advertising or promotion of the proponent or the proponent's services shall be permitted. Notwithstanding the foregoing, signage shall be permitted where such signage is incorporated into the design of a stealth design communication tower structure, provided such signage complies with the Township Sign By-law. The Township agrees that any applications required under the Sign By-law in connection with such a communication tower structure will be processed expeditiously, and that such application by the proponent relates solely to the proposed signage and does not constitute acquiescence by the proponent to provincial jurisdiction with respect to any part of the federal undertaking.

The proposed tower will only accommodate telecom equipment. Only identification or informational signs related to the operation and safety of the equipment will be used, including a plaque identifying the owner/operator and providing a contact telephone number. No other signage or advertising will be utilized.

(h) Where equipment shelters are on roofs of buildings, they shall be encouraged to maintain a setback of a minimum of 3.0 metres to the roof edge and to a maximum height of 4.0 metres, where possible.

The proposed tower and any related equipment are not located on a rooftop.

(i) Where a new communication tower and communication antenna site is proposed to be located on a roof of building, the proponent is encouraged to be a minimize height from roof level and maximize the set-back from the roof edge to ensure the compatibility of the site with the surrounding buildings and area, where possible.

The proposed tower and any related equipment are not located on a rooftop.

Need for Tower Height & Type

The proposed tower has been designed to stand at a height of 60 meters. This height is essential due to significant coverage gaps and capacity limitations in the network within this area, and replaces the existing tower that is also 60m in height. It is crucial for providing optimal coverage, ensuring seamless service delivery, and filling existing coverage gaps.

A self support tower has been chosen for this industrial area to replace the existing self support tower as it is the structure that is best suited for supporting a height of 60 metres. Additionally, a tower of this height can accommodate multiple carriers or broadcasters installing their equipment. This practice is not only encouraged by the ISED CPC protocol but also beneficial as it reduces the need for additional towers in the future.

Protocol

The Township of North Dumfries does have a locally enacted protocol, entitled *Township of North Dumfries – Telecommunication Tower Application Process Telecommunication Tower and Telecommunication Antenna Preferred Location Protocol* and therefore adapts ISED Canada's default protocol CPC-2-0-03 Issue 6 (July 2022) "Radiocommunication and Broadcasting Antenna Systems" to address issues in the local environment. Accordingly, the Proponent is required to follow the terms of the default federal CPC in addressing general and specific requirements. One of the key concerns of this process is that such installations are deployed in a manner that considers the surroundings in exercising the mandate to deploy necessary infrastructure.

CPC Protocol i5: <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html>

The policy outlines the land use consultation process relevant to evaluating federally mandated wireless communication installations. In accordance with the *CPC*, proponents must provide a notification package to the local public (including nearby residences, community gathering areas, public institutions, schools, etc.), neighbouring land-use authorities, businesses, and property owners, etc. located within a radius of 3-times tower height from the outermost limit of the tower structure. **In this case, there are eighteen (18) other properties outside of the beneficial ownership of the Landlord that fall within the local 240m notification radius, requiring direct notice.**

Other Municipal Considerations

As we are regulated under federal policy, provincial legislation such as the Ontario Building Code and the Planning Act including zoning by-laws and site plan control do not apply to these facilities.

Additional Public Consultation Obligations

Pursuant to CPC section 4.2, since the tower exceeds 30m in height, the Proponent is required to place a Public Notice in the local community newspaper, inviting comments about this proposal from the public, and participation in the stipulated Public Comment and Reply process.

In accordance with the local protocol, an information session will be held, with details regarding registering for the information session being included in the public notification package mailed to property owners within the notification radius. The information session will schedule this in consultation with the Planning Department.

Compliance with Environmental Obligations

Canadian Impact Assessment Act

We note that pending updates to the ISED (formerly Industry Canada) CPC 2-0-03 protocol have not yet been formalized, and such updates will recognize that, among other changes, the CEAA(2012) was repealed in 2019 and superseded by the Impact Assessment Act (S.C. 2019, c. 28, s. 1).

ISED requires that the installation and modification of antenna systems be done in a manner that complies with appropriate environmental legislation. This includes the Canadian Impact Assessment Act, 2019 (CIAA 2019), where the antenna system is incidental to a physical activity or project designated under CIAA 2019 or is located on federal lands.

In addition, notices under ISED's default public consultation process require written confirmation of the project's status under CIAA 2019 (e.g., whether it is incidental to a designated project or, if not, whether it is on federal lands).

- **Rogers Communications Inc. attests** that the radio antenna system as proposed for this site is not located within federal lands or forms part of or incidental to projects that are designated by the *Regulations Designating Physical Activities* or otherwise designated by the Minister of the Environment as requiring an environmental assessment. **In accordance with the Canadian Impact Assessment Act, 2019, this installation is excluded from assessment.** For additional detailed information, please consult the Canadian Impact Assessment Act. <https://laws.justice.gc.ca/eng/acts/I-2.75/index.html>

Species at Risk and Migratory Birds Convention Act

In addition to CIAA requirements, proponents are responsible to ensure that antenna systems are installed and operated in a manner that respects the local environment and that comply with other statutory requirements, such as those under the ...*Migratory Birds Convention Act, 1994*, and the *Species at Risk Act*, as applicable.

ISED CPC-2-0-03 Section 4.2 requires that

"...the steps the proponent took to ensure compliance with the general requirements of this document including the *Impact Assessment Act* (CIAA), *Safety Code 6*, etc." be addressed by the proponent in Public Reply Comments relating to this matter.

Steps taken to address concerns

The Ministry of Natural Resources and Forestry (MNRF), The Natural Heritage Information Centre (NHIC), manages a list of over 17,000 records associated to Natural Heritage Areas in Ontario. Rogers tower site locations are overlayed with national heritage areas in Ontario and presented in a table and map format.

A study is prepared for each tower location's surrounding natural areas contained within the 1km x 1km grid from Natural Heritage Information Centre (NHIC) data which includes:

- Ontario's rare species
- plant communities
- wildlife concentration areas
- natural heritage areas

The data in this table means that sometime in the last 50 years - someone reported seeing the species within the grid.

This study demonstrates that:

- **The proposed site is not within 120m from ANSI designations**
- **The proposed site is not within 120m from PSW designations**
- Within the greater local environment of 1km, *Eastern Meadowlark* is noted as threatened species. These species are reported frequently through out Eastern Ontario on the SAR table, but are not provided suitable habitat within the tower field.
- As it relates to migratory bird strikes, the available evidence recognizes the minimal impact from structures lower than 100m in height.

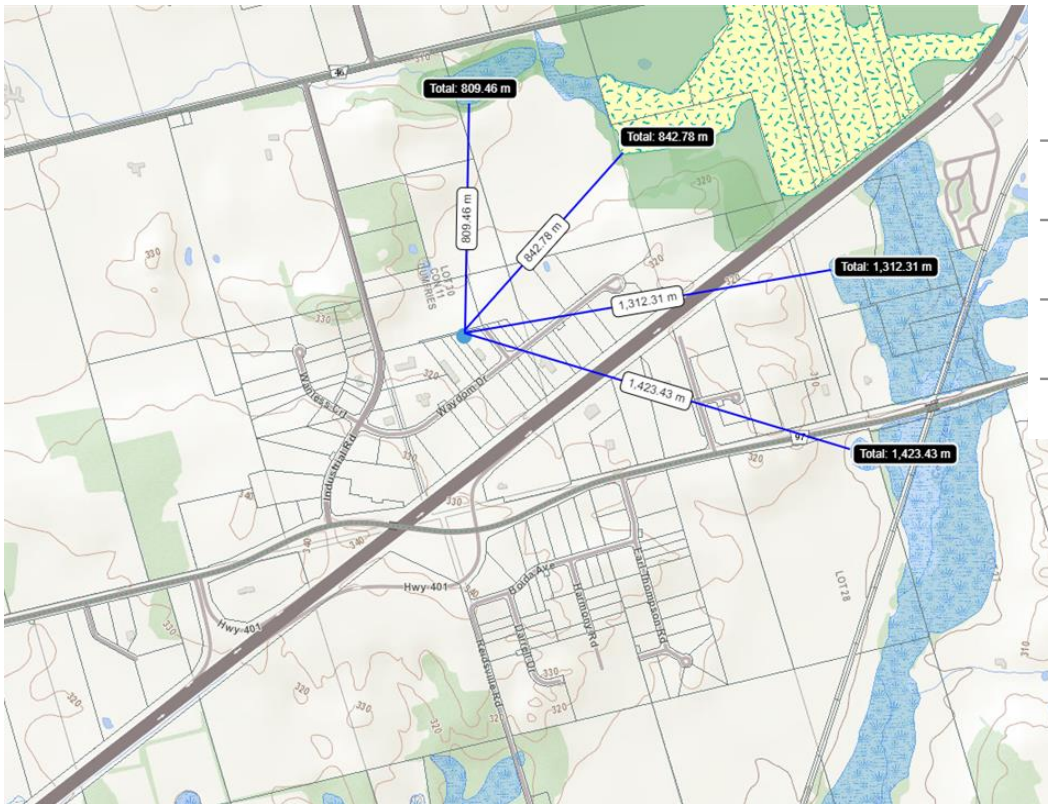



Figure 15: Natural Heritage Areas Map

Assessment Parcel	
Assessment Parcel	
ANSI	
ANSI	
Earth Science Provincially Significant/sciences de la terre d'importance provinciale	
Earth Science Regionally Significant/sciences de la terre d'importance régionale	
Life Science Provincially Significant/sciences de la vie d'importance provinciale	
Life Science Regionally Significant/sciences de la vie d'importance régionale	
Wetland	
Evaluated Wetland	
Provincially Significant/considérée d'importance provinciale	
Non-Provincially Significant/non considérée d'importance provinciale	
Unevaluated Wetland	
Woodland	
Woodland	
Conservation Reserve	
Conservation Reserve	
Provincial Park	
Provincial Park	
Natural Heritage System	
Natural Heritage System	

While the environmental impact is insufficient to preclude the installation of a tower at this location, the Proponent nonetheless recognizes these natural heritage concerns and takes additional steps in advising construction teams that they need to look for nesting birds prior to the start of ground clearing. Appropriate remedies are deployed which may include delaying construction until nesting season ends, at which point any impact is eliminated.

Environmental Reporting By Tower Location

Tower Information			Maps	Environmental Parameters			
Tower Name	Tower Type	Site Type		ANSI (120m)	PSW (120m)	Species at Risk	Federal lands
C9849 – Hwy 401 & Cedar Creek	Self Support	Relocate		N	N	See table below	N

OGF ID	Element Type	Common Name	Specific Name	SRank	SARO Status	COSEWIC Status	ATLAS NAD83 IDENT	COMMENTS
946892	SPECIES	Eastern Meadowlark	Sturnella magna	S4B,S3N	THR	THR	17NH4598	

Federal Requirement: Attestations

In addition to the requirements for consultation with municipal authorities and the public, Rogers must also fulfill other important obligations including the following:

Canadian Impact Assessment Act

ISED requires that the installation and modification of antenna systems be done in a manner that complies with appropriate environmental legislation. This includes the Impact Assessment Act, 2019 (IAA 2019), where the antenna system is incidental to a physical activity or project designated under CIAA 2019 or is located on federal lands.

- ***Rogers Communications Inc. attests*** that the radio antenna system as proposed for this site is not located within federal lands or forms part of or incidental to projects that are designated by the Regulations Designating Physical Activities or otherwise designated by the Minister of the Environment as requiring an environmental assessment. ***In accordance with the Canadian Impact Assessment Act, 2019, this installation is excluded from assessment.*** For additional detailed information, please consult the Canadian Environmental Assessment Act <https://laws.justice.gc.ca/eng/acts/I-2.75/index.html>

Transport Canada's Aeronautical Obstruction Marking Requirements

Aerodrome safety is under the exclusive jurisdiction of NAV Canada and Transport Canada. An important obligation of Rogers' installations is to comply with Transport Canada / NAV CANADA aeronautical safety requirements. Transport Canada will assess the proposal with respect to potential hazards to air navigation and notify Rogers of any painting and/or lighting requirements for the antenna system.

- ***Rogers Communications Inc. attests*** that the radio antenna system described in this notification package will comply with Transport Canada / NAV Canada aeronautical safety requirements.

For additional detailed information, please consult Transport Canada.

<https://tc.canada.ca/en/corporate-services/acts-regulations/list-regulations/canadian-aviation-regulations-sor-96-433>

Engineering Practices:

- ***Rogers Communications Inc. attests*** that the radio antenna system as proposed for this site will be constructed in compliance with the National Building Code and The Canadian Standard Association and comply with good engineering practices including structural adequacy.

Health Canada's Safety Code 6 Compliance

Health Canada is responsible for research and investigation to determine and promulgate the health protection limits for Exposure to the RF electromagnetic energy. Accordingly, Health Canada has developed a guideline entitled "Limits of Human Exposure to Radiofrequency Electromagnetic Field in the Frequency Range from 3kHz to 300 GHz – Safety Code 6".

The exposure limits specified in Safety Code 6 were established from the results of hundreds of studies over the past several decades where the effects of RF energy on biological organisms were examined. Radiocommunication, including technical aspects related to broadcasting, is under responsibility of the Ministry of Industry (Innovation, Science and Economic Development Canada), which has the power to establish standards, rules, policies and procedures. ISED, under this authority, has adopted Safety Code 6 for the protection of the general public. As such, ISED requires that all proponents and operators ensure that their installations and apparatus comply with the Safety Code 6 at all times.

- **Rogers Communications Inc. attests** that the radio antenna system described in this notification package will at all times 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.

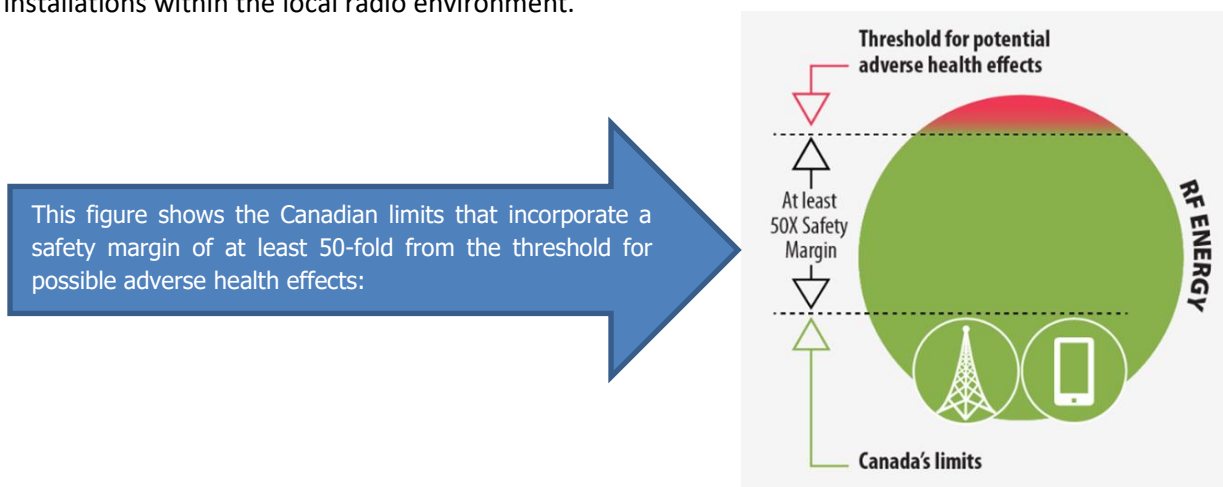


Figure 16: Canada's RF Energy limits

More information in the area of RF exposure and health is available on the Health Canada's website under Health Canada's Radiofrequency Exposure Guidelines.

<https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/radiation/safety-code-6-health-canada-radiofrequency-exposure-guidelines-environmental-workplace-health-health-canada.html>

<https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11467.html>

Proponent Contact Information

Rogers Communications Inc.

c/o Simpson-McKay Inc.

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(519) 890-7153 j_mckay@rogers.com

Conclusion

Reliable wireless communication services are a key enabler of economic and social development across Canada. They facilitate the growth of local economies by providing easy access to information, and connectivity for residents and business alike.

The infrastructure proposed is suitable for the development over the long term and protects public health and safety.

In response to this growing demand for wireless services, Rogers has worked to find the most suitable location for a new telecommunications structure in our efforts to provide improved wireless services to residents, businesses and the traveling public.

In addition to meeting consumer needs, technological upgrades are also critical to ensuring the accessibility of emergency services such as fire, police and ambulance. Wireless communications products and services used daily by police, EMS, firefighters and other first responders, are an integral part of Canada's safety infrastructure.

Rogers feels that the proposed site is well situated to provide improved wireless voice and data services in the targeted area and designed to have minimal impact on surrounding land uses and meets the intent of the governing protocol.

*Rogers looks forward to working with the Township to
provide improved wireless services to the community.*

Should you have any further questions or comments, please feel free to contact me via email at j_mckay@rogers.com, or via phone at (519) 890-7153.

Yours truly,

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