BUILDING YOUR IDEAS - INTO BIG PLANS
THE BIGLIERI GROUP LTD.

MEMORANDUM

To: **Caroline Kimble**

Date: June 8th, 2011

From: Tiffany Singh

Re: **Summary of the June 7th, 2011 Public Open House**

Project Name: **1535 Water Street, Peterborough (OPB1708)**

Project Number: 11201

Ms. Kimble,

Please see below a summary of the Public Open House held on June 7th, 2011; at 6:30pm in the cafeteria of Thomas A. Stewart Secondary School, in the City of Peterborough with respect to the proposed Communication Tower at 1535 Water Street, Peterborough.

- In total we counted approximately 10 people in attendance at the meeting and 2 Planners from the City of Peterborough. Please note that not all in attendance were neighbourhood residents, but were residents of Peterborough.
- 9 people in total signed our sign-in sheet.
- 82 copies of the Public Consultation Information Package were mailed out to the City of Peterborough staff to distribute to residents and local municipal staff on May 11th, 2011.
- Another copy of the Public Consultation Information Package was mailed to Industry Canada staff by the Planning and Development Services Department of the City of Peterborough.
- The Public Consultation circulation list was prepared by Peterborough Planning Staff (see attached) and was based on an approximately 160 metre radius around the property line of 1535 Water Street (3 times the tower height).

- An ad with respect to the proposed communication tower was also placed in the Peterborough Examiner on May 16th, 2011, advising residents of the upcoming Open House and the public commenting deadline on June 22nd, 2011.

- The approximate capacity of the cafeteria at Thomas A. Stewart Secondary School is for approximately 150 people and approximately 150 chairs were made available for residents with more in storage if needed

The Open House was scheduled for 6:30 -8:00pm, as per my discussion with Peterborough Planning Staff prior to the meeting. The meeting can be summarized as follows:

- TBG staff arrived at 6:00pm to set up for the information session
- In attendance from TBG Staff was Tay Ryuck, Rita Kostyan, and Tiffany Singh
- The session was set-up in an Open House format with 2 sets of large display boards in two rows within an open area of the cafeteria. One member of TBG greeted attendees, while the remaining two members walked individuals through the presentation material. The display boards included:

    1. Location Map and Site details
    2. Superimposed photo of proposed tower on subject site
    3. Othophoto of Subject Site and surrounding area with distance to the nearest residential dwelling
    4. Site Plan
    5. Elevation of proposed tower
    6. Close up of proposed compound

- Other information and handouts available to those that attended the meeting:

The full municipal submission package for review

1. A full printed copy of Industry Canada's *Spectrum Management and Telecommunications Client Procedures Circular – CPC-2-0-03 (2008)*
2. A full printed copy of Health Canada's *Safety Code 6* (2009)
3. Copies of the Public Consultation Package to take home
4. Comment sheets for attendees to write any questions or comments down and hand in to TBG to answer in the formal response package
5. A printed copy of Windmobile's RF Field Strength *Analysis– Validating Safety Code 6 Report*
6. Brochures and handouts to answer any concerns or questions were made available to residents to take home including:
    - *Radiocommunication Towers, Environmental Assessment and Safety Code 6: Frequently Asked Questions*, compiled by Industry Canada

- *Antenna Towers in Your Community,* compiled by Industry Canada
- *It's Your Health: Safety of Cell Phones and Cell Phone Towers*, compiled by Health Canada
- *Wireless Device Safety,* compiled by Health Canada

- People started to arrive at 6:30pm

- TBG Staff initially treated the session as an Open House welcoming attendees and walking them through the display boards and answering any questions.

- At around 7:15pm it appeared that the session would remain small as no new residents showed up and two had left. Tae Ryuck and Rita Kostyan continued to listen to comments and answer any questions through the open house format.

- Below is a summary of the questions heard and received from the comment page handout:

1. At what distance does the signal from the antenna exceed the Safety Code 6 Standard if operated at the maximum power level?
2. As an idea for the future, it would be good to have a chart showing the emission levels at various distances from the tower. This would help show that the levels are low at greater distances from the tower.
3. For future meetings, it would be ideal to have a representative with some technical expertise there to dispel myths about RF radiation. If they can't be there in person, a video could also be useful.
4. What is the power level of transmitted RF in microwatts/sq. cm. when all 4 antennas are operational?
5. Will there be a red light, or a flashing strobe light for air traffic on the top of this particular tower?
6. What is the safe RF exposure limit specified in Safety Code 6?
7. Health standards in Canada are far less than other countries. Are telecommunication towers really safe?
8. Could this tower potentially affect our property value?
9. Will this tower impact our Television reception? If this happens, will SBA Canada accept responsibility for this impact?
10. Why is this tower being erected in near a neighbourhood of high priced homes that bring in high tax revenues?
11. Recent research suggests that there is a possibility that cellphones may cause brain cancer. What does this indicate regarding cell towers?
12. Could this tower not locate on Trent University property? They have over 1500 acres of land that would be a good alternative location to consider.

13. Will this compound impact the roots of trees to neighbouring properties? If so, who will be liable if any of those trees were to fall and damage anything?
14. Will this compound be impacting vegetation of neighbouring properties?
15. Would it be possible to obtain height and cross section details regarding the proposed retaining wall?
16. There is an existing tower on Television Road and water towers (N.Milroy, High St., W.Sherbrooke) that could provide suitable sites for these antennas, why not use these existing structures?
17. With the recent World Health Organization's public release stating that cellphone use is possibly carcinogenic, should we not minimize public exposure to towers?

TBG staff answered the above questions to the best of their abilities and assured attendees that all questions received at the meeting will be forwarded to SBA Canada and we will follow up with detailed answers to their questions and comments in a formal response package once the commenting period has ended. TBG staff also assured attendees that all questions would be recorded and any technical questions beyond the expertise of TBG staff would be addressed in a detailed response letter to attendees. Attendees were also advised that they could submit further comments via phone or email up until the end of the commenting period on Wednesday, June 22nd, 2011.

TBG staff remained on the premises of the Thomas A. Stewart Secondary School until approximately 8:00pm to clean up the room. As well, TBG staff were the last people to leave the cafeteria of Thomas A. Steward Secondary School.

Should you have any questions or concerns please do not hesitate to contact me.

Thank you,

Tiffany Singh, *BES (Hons.), B.U.R.Pl. Candidate*
Student Planner

BUILDING YOUR IDEAS - INTO BIG PLANS
THE BIGLIERI GROUP LTD.

July 15, 2011

RE: Public Consultation with respect to Proposed Communications Tower
1535 Water Street, Peterborough, Ontario
TBG Project No. 11201

Dear Sir/Madam,

I am writing to you on behalf of SBA Canada, ULC, as a follow up to the Public Information Session/Open House held on June 7, 2011 in the Thomas A. Secondary School cafeteria, at 1009 Armour Road, Peterborough. Thank you for attending the Information Session/Open House regarding the proposed communication tower, at 1535 Water Street, Peterborough, and for expressing your questions/concerns.

This letter is intended to address, to the best of our abilities, any questions/concerns communicated to us by interested parties via email, mail and telephone prior to the end of the commenting period on June 22, 2011 or during the June 7, 2011 Information Session/Open House.

Please see the questions/concerns communicated to us during the public consultation period, in **bold**, along with our answers *italicized.*

PLANNING, DEVELOPMENT & PROJECT MANAGEMENT CONSULTANTS
20 Leslie Street, Suite 121, Toronto, Ontario M4M 3L4
Telephone: 416-693-9155 Facsimile: 416-693-9133
tbg@thebiglierigroup.com

A. Site Acquisition:

1. Why is this tower being erected near a neighbourhood of high priced homes that bring in high tax revenues?

There are many communication towers throughout Ontario municipalities and nationwide. There are a multitude of factors that may simultaneously impact property values and it is our understanding that there is no academically published proof that links telecommunication towers to property devaluation.

2. Could you demonstrate by diagrams and maps where other positions could be as effective or better?

Yes, an indication of the location of the nominal point, the subject site and alternate locations (sought out as a part of the process for siting the proposed communications tower) can be seen in Attachment 'A' – "Proposed SBA Monopole Tower Location" which is included in this package.

3. Could this tower not locate on Trent University property? They have over 1500 acres of land that would be a good alternative location to consider.

SBA Canada's tenants (cell phone carriers) review their existing networks of towers and identify any gaps in their networks. In order to fill the gaps and provide improved wireless service, cell phone carriers identify nominal points (ideal locations) for proposed communication towers in order to fill the gaps with the least number of towers possible. Cell phone providers then provide SBA Canada with the location of their nominal points and SBA further investigates the nominal point's suitability. If the nominal point is not an acceptable site location (owner is not interested, problematic terrain, etc.) SBA then investigates possibilities for a location within close proximity to this point.

Please see Attachment 'A' which indicates the location of the nominal point, the subject site and alternate locations that were sought out as part of the application process for siting the proposed communications tower. Ultimately, in this case Trent University was not interested in siting a tower on their property.

4. **Trent University nearby has 1463 acres of property. Many open fields etc.... and are cash strapped. Have you asked them?**

See response to Question #3.

5. **How did you identify this area (1535 Water Street) as in need of a new infrastructure as opposed to let's say Trent University? Show me the Research.**

In order to position a communications tower in the best possible location SBA Canada considers many variables as part of its selection process. These considerations include an evaluation of the radio frequency (RF) characteristics of an area based on terrain, existing structures, number of subscribers, distance from existing sites and the availability of a landlord to lease the land.

The ideal site location is identified according to existing gaps in the RF range across an entire network. This results in an optimal location (nominal point) for siting a tower, (centred on Water Street and Nassau Mills Road). SBA Canada investigated the suitability of all sites within a 500m radius of the nominal point. Once potential candidates are identified landowners in alternate sites are approached to discuss their interest in the project. Positioning a tower on the property so that it does not interfere with existing land uses and other factors are negotiated in the terms of lease.

Property owned by Trent University is within the search radius for a suitable site. Trent University was identified and approached by SBA Canada as a potential candidate for the subject site of this proposal with which they showed no interest.

6. There is an existing tower on Television Rd & water towers (N.Milroy, High St, W. Sherbrooke) that exist. Why not use these sites for these antennas?

As mentioned in our Planning Justification Report, WIND Mobile is interested in providing continuous coverage and service to its customer base in the area centered on Water Street and Nassau Mills Road. Given this ideal location, a field agent searched outward by a 1km radius for an ideal site. The proposed communication tower must be located within a 1km radius of the ideal location, as there is a limit to how far radio waves can travel while still being consistent. Once the requirement for a new tower has been determined the site selection process involves the evaluation of the radio frequency (RF) characteristics of an area, based on characteristics such as terrain, existing structures, the number of subscribers, distance from existing sites and the availability of a landlord to lease the land.

The search for an ideal site includes searching for existing infrastructure (other towers, rooftops, and taller structures, all possibilities that meant geographic requirements were then reviewed in detail. Existing communication structures found closest to the ideal site are all located well outside of the 1km radius search area. Existing structures include a Telus tower, located approximately 1.5 km to the northeast, and a television tower located approximately 2.5 km directly south that hold both Telus and Rogers antennas. For the wireless demands and coverage needs, it was determined that other infrastructure was either not available or could not be used. Again, please note that there are no existing communication towers within the 1 km radius search area.

In regards to your suggestions of using existing water towers, unfortunately North Milroy, High Street, and West Sherbrook are all well outside of the 1km search radius, ranging between 4-9km away in distance from the ideal site location.

7. Have you asked the P.U. Commission if they wish to have it on their lands? What was their response?

It is our understanding that the Peterborough Utility Commission does not have land within the search radius for this proposal and therefore were not contacted with regards to this proposal. (See response to Question #6 for more detail about the site selection process).

B. Structural & Service:

8. What is the power level of transmitted RF in microwatts/sq. cm. when all 4 antennas are operational?

Tenants wishing to co-locate on an SBA tower must provide proof that their equipment will abide by Safety Code 6 (SC-6). The exact output has not been determined yet, but will comply to SC-6 as per requirements from Industry Canada.

The power level of transmitted radio frequency (RF) operating at full capacity is modeled using SC-6 validation software. It uses the simulation technique based on adaptive modeling of the antennas. An RF field strength analysis is conducted to ensure that the proposed tower complies with Industry Canada's standards for the limits of exposure which are set by Health Canada (Safety Code-6). The Safety Code 6 Site Validation report concludes that the RF emission level at 2m above ground was found to be 1% (100 times lower) of the SC-6 limits for exposure in an uncontrolled environment (for general public). Therefore, the site is in full compliance to SC-6 Limits.

According to Health Canada, the amount of RF Energy that is emitted from base stations (communication towers) is thousands of times below the limits for public exposure. The limits of public exposure according to Health Canada standard, Safety Code 6, are based on frequencies that range from 3 kHz to 300 GHz. For frequencies in the 100KHz to 300 GHz range, a change in body temperature of 1°C at SAR (Specific Absorption Rate) of~4W/kg is detrimental to one's health. Health Canada instituted a safety margin of 50 that has been incorporated for exposures in uncontrolled environments to protect the general public, resulting in a whole body average SAR limit of 0.08W/kg, the proposed tower is well below this rate. Therefore, living anywhere in the vicinity of the proposed compound is safe as limits of RF Energy emitted from the proposed communication tower will be well below the Health Canada standard for public exposure.

Please note that Safety Code 6 is "based on an ongoing review of published scientific studies on the health impacts of radio frequency electromagnetic energy" (Safety Code 6, 2009, page 3).

Finally, according to Health Canada, "the typical RF energy that you find coming from base stations, including cell phone towers, are thousands of times below the limits of public exposure. The specific limits for public exposure apply to everyone including the elderly, individuals with health concerns, children and pregnant women – and allow for continuous, 24/7 exposure" ("Health Canada, Wireless Device Safety Brochure", Attachment 'B'). For more information, please see www.healthcanada.gc.ca/radiation.

9. If this is within the "zone" where a new tower could increase effectiveness of phone service, what is the radius of that zone?

Several variables affect the specific coverage or "zone" that a telecommunications tower can reach. This is a process that engineering technicians look to determine how best to service an area. Topography, building height and height of the tower are some examples that are taken into consideration.

10. Will this tower impact our Television reception? If this happens, will SBA Canada accept responsibility for this impact?

Television signals and cellular signals transmit at different frequencies, as television is usually broadcasted digitally via cable or the Internet. Digital television is not affected by cellular signals, and Canadian broadcasters are in the final stages of transitioning from analog to digital transmission with a deadline of August 31, 2011.

Analog signals are usually received via an outside antenna or "rabbit ears" inside, and are also unlikely to be affected by the proposed telecommunications tower.
The Canadian Radio-television and Telecommunications Commission (CRTC) has set a deadline for broadcasters to cease over-the-air broadcasting in analog by August 31, 2011.

CTV currently has a tower operating a transmitter broadcasting Analog Channel 54 which is being switched to Digital Channel 35. It is anticipated that this transition to digital broadcasting will happen on or before August 31, 2011.
http://www.crtc.gc.ca/eng/archive/2010/2010-719.htm

11. Looking at this 175ft. tower super imposed on the car wash building is a major error. Judging from my calculation that suggested pole is about 75 to 80ft. not 175ft. Would you correct this photo with a professional engineer to show the exact "real" view that one would have from that photograph's position. I think it would be about twice the height! The revised photo should be mailed to all residents.

The photograph is meant as a representation only. The rendering was adjusted, though by our calculations the previous photo indicated that the tower was around 30m (100ft) tall (judging based on the height of an average vehicle- 1.5m). The photo has been readjusted so that it is approximately 55m (above the actual tower height of 53.4m) tall, based on the assumption of the vehicle being 1.5m high (the average height for a mid-sized SUV).
(See Attachment 'C' – "Superimposed Representation of Proposed Tower on Subject Site")

12. In terms of the proposed retaining wall, what are the details (construction materials, height etc.)?

The design for the proposed retaining wall along the south western portion of the compound is yet to be determined. The existing retaining wall runs along the edge of asphalt and that the design will incorporate the existing retaining wall and proposed compound. However, an engineering plan would be submitted for the municipality to review.

13. Could you provide details concerning the retaining wall – dimensions, etc… of the wire fence, etc.?

The wall will be reinforced concrete with fencing to meet the aesthetic requirements as specified by the City of Peterborough. As with Question #12, the specific details are finalized after council makes their final decision.

14. What is the suggested lifespan of the tower?

It is in SBA's interest to make the tower last as long as possible, although the actual lifespan of an individual tower is dependent on the carrier needs.

15. Is it earthquake resistant?

Yes, SBA Canada's towers are built to specifications which address earthquakes and other natural disasters.

16. If the tower falls – who insures that it does not, who pays if it does?

SBA has the appropriate insurance that provides for the necessary comprehensive and liability assurances.

17. Will this compound affect neighbouring tree roots or vegetation? If so, who will be liable for any of those trees that were to fall and damage anything?

The appropriate engineering drawings for all the work will be submitted to the municipality. Based on our discussions with SBA's engineering department the tree roots will not be affected. In terms of liability, SBA has obtained the appropriate insurance.

18. Will this compound be impacting vegetation of neighbouring properties?

SBA has obtained the appropriate insurance that provides for the necessary comprehensive and liability assurances.

19. Who will be liable if the neighbouring trees fall into the compound?

As stated in Question #18, SBA has obtained the appropriate insurance that provides for the necessary comprehensive and liability assurances.

20. How is the easement obtained? From the property owner? If a new owner does not want the tower, what happens?

The access easement is obtained through an application for consent through the municipality. The easement would be registered on title. If a new owner does not want the tower, those discussions would take place at the end of the lease term. The new owner signs the lease and is completely aware of the terms of the contract.

21. What does the "future lease area" mean & how many providers can be on one pole?

SBA Canada is a provider of towers that allow more than one tenant to use a single tower. This ability to provide space for more than one tenant is referred to as co-location. The proposed tower in this case can facilitate up-to four tenants. At this time WIND mobile has agreed to lease one of the four spaces. Future lease areas therefore refer to the spaces that remain for WIND or another tenant to lease in the future. Providing additional space on a single tower aims to prevent the future need of additional communication towers in the area.

By providing space on their tower for future tenants interested in providing new or better services in the area, it will eliminate the need for any additional communication towers within the surrounding area.

22. In terms of the lease, what are the arrangements, how long is it and how much rent does the property owner receive?

The lease agreement is proprietary information that we are not permitted to release.

23. What material? Concrete?

The proposed tower will be constructed of galvanized steel with a reinforced poured concrete foundation.

24. Explain 6 ft diameter and flexibility?

We are unable to provide an answer for this question, as there is no context.

25. Will this pole be standing alone? No supports?

Yes the proposed tower consists of a single self-supporting design; no guy-wires are required to support this type of structure. This type of tower is called a monopole. The monopole tower has a vertical tubular shape, similar to a flag pole in shape, colour and appearance. The slim tubular design of the proposed tower uses minimal space while possessing a solid and stable structure that can hold additional tenants. Due to its slim shape, this type of tower minimizes visual impact and is most compatible with the context of the surrounding area (See Attachment 'D'- "Comparison of Tower Types and Coverage").

26. What is the diameter at the base and each 25 ft level?

The diameter of the monopole tower was measured in 7.5m increments, which is approximately 25 ft. (see figure 1 below):

Height (m)	*Diameter (m)*
7.5	1.6
15	1.4
22.5	1.4
30	1.2
37.5	1.2
45	1.2
53.4 (top)	1

Figure 1: Diameter of Proposed Monopole tower

27. Will there be a red light, or flashing strobe light for air traffic on top of this particular tower? Will this thing be lighted? Intensity and When? Daylight as well as night?

There will be no lighting required on top of the proposed communication tower as per the approvals received from Transportation Canada.

C. Health & Safety:

28. At what distance does the signal from the antenna exceed the Safety Code 6 Standard if operated at the maximum power level?

Equipment will always comply with Health Canada's Safety Code-6 standards, which states 0.8 W/kg as the maximum output that will not have an effect on one's health. Each antenna would be well below this standard and each tenant must comply; therefore the signal will never exceed these standards, even at the maximum level. (See response to Question #8 for more information).

29. Health standards in Canada are far less than other countries. Are telecommunication towers really safe?

According to Health Canada, the amount of RF Energy that is emitted from base stations (communication towers) are thousands of times below the limits for public exposure.
According to Health Canada, the amount of RF Energy that is emitted from base stations (communication towers) are thousands of times below the limits for public exposure.
The limits of public exposure according to Health Canada standard, Safety Code 6, are based on frequencies that range from 3 kHz to 300 GHz. For frequencies in the 100 KHz to 300 GHz range, a change in body temperature of 1°C at SAR (Specific Absorption Rate) of ~4W/kg is detrimental to one's health. Health Canada instituted a safety margin of 50 that has been incorporated for exposures in uncontrolled environments to protect the general public, resulting in a whole body average SAR limit of 0.08W/kg. This tower is well below this rate, as is required by Industry Canada. Therefore, living anywhere in the vicinity of the proposed compound is safe as limits of RF Energy emitted from the proposed communication tower will be well below the Health Canada standard for public exposure.
www.rfsafetysolutions.com/PDF%20Files/Health%20Canada%20Safety%20Code%206%20Standard_2009.pdf

Please note that SC-6 is "based on an ongoing review of published scientific studies on the health impacts of radio frequency electromagnetic energy" (Safety Code 6, 2009, page 3).

According to Health Canada, "the typical RF energy that you find coming from base stations, including cell phone towers, are thousands of times below the limits of public exposure. The specific limits for public exposure apply to everyone including the elderly, individuals with health concerns, children and pregnant women – and allow for continuous, 24/7 exposure" (See Attachment 'B'- "Health Canada, Wireless Device Safety Brochure").

If you are interested in viewing or learning more about Health Canada's Safety Code 6, please view following link: www.hc-sc.gc.ca/ewh-semt/pubs/radiation/radio_guide-lignes_direct-eng.php

30. With the recent World Health Organization's public release stating that cellphone use is possibly carcinogenic, should we not minimize public exposure to towers?

In order to fully understand what the IARC (International Agency for Research on Cancer) of the WHO meant when they issued a press release in May 2011, telling the world that they classified RF-EMF (radiofrequency electromagnetic fields) as 'possibly carcinogenic to humans,' the actual report which was published in the Lancet Oncology in July 2011 was reviewed extensively. This report explained the methodology of the study as well as the results and conclusions made by the team of independent scientists from all over the world. The report focused on the effects of personal mobile and cordless phone use and its link to brain tumours. After examining numerous studies (people and animal) the Working Group decided that there was 'limited evidence', and therefore classified RF-EMF as 'possibly carcinogenic to humans.' The report did mention cell phones towers, and said the following, "Typical exposures to the brain from rooftop or tower-mounted mobile-phone base stations and from TV and radio stations are several orders of magnitude lower than those of global system for mobile communications (GSM) handsets." Interestingly, while the study concluded there was 'limited evidence' of carcinogenicity cause by personal mobile or cordless telephone use, it stated, "In reviewing studies that addressed the possible association between environmental exposure to RF-EMF and cancer, the Working Group found the available evidence insufficient for any conclusion." According to this report published by the IARC, there is 'insufficient evidence' of cell phone towers having an effect

on one's health, as opposed to the 'limited evidence' linking mobile cell and cordless phone use to cancer. For more information, please refer to the report at:
http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(11)70147-4/fulltext?version=printerFriendly

31. What is the safe RF exposure limit specified in Safety Code 6?

See response to Question #29.

32. Recent research suggests that there is a possibility that cellphones may cause brain cancer. What does this indicate regarding cell towers?

According to Health Canada there is no scientific evidence linking communication towers to the cause of cancer. Please note that every carrier that is to locate on SBA's towers must provide a certification that asserts that their equipment abides by Safety Code 6 (Health Canada regulation). All towers and radiocommunication systems are regulated by not only Industry Canada but also Health Canada. (Additionally, see response to Question #28).

If you would like more information on Radiofrequency Energy and Health, please follow the following link: http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

33. A recent press release from the WHO identified cell phones as possibly carcinogenic. What does that indicate regarding cell phone towers?

See response to Question #30.

34. At what distance does the signal from the antenna exceed the Safety Code 6 standard if operated at the maximum power level?

See responses to Question #8 and #28.

35. Will it have any effects on our IPZ#1 of the water filtration system which is beside the tower? This tower is in the IPZ#1 of the river.

After reviewing the Trent Conservation Coalition's 'Drinking Water Source Protection: Act for Clean Water', the subject site for the cell phone tower is in the IPZ-2 zone, what the document describes as a "secondary protection zone". According this publication, "drinking water issues exist where the concentration of a contaminant at the intake may result in the deterioration of the quality of the water for use as a source of drinking water." The proposed monopole tower as well the compound that surrounds it, does not produce any kind of runoff that would be toxic to the environment. In addition, this document lists "significant drinking water threats" and they include waste disposal sites, sewage systems, farming pesticides, road salt and livestock grazing. This document does not identify anything to do with the tower as posing a threat to the water filtration system in Peterborough. The issue of contaminants seeping into groundwater is more likely to be due to the self-serve car wash that uses cleaning chemicals, or due to the gas station, which could leach gas and chemicals as well into the soil. In terms of blocking run-off, the compound does not pose any significant impact- not only is the area it covers small in comparison to buildings (8m x 20m) but before precipitation would reach the river, it would be blocked by the existing car wash and other buildings on the site.

If you would like more information on Trent Conservation Coalition, please follow the following link:
http://www.trentsourceprotection.on.ca/yourdrinkingwater/opspa/pdf/OPSPA_Peterborough.pdf

D. Property Devaluation:

36. Could this tower potentially affect our property value?

It is our understanding that there is no scientific proof linking communication towers to property devaluation. There are a multitude of other factors impacting property values simultaneously. There are many communication towers throughout municipalities across Ontario and nationwide, and it is our understanding property values have not been negatively impacted by communication towers. There is no academically published evidence that links telecommunication towers to property devaluation.

37. The car wash operator gains the dollars, the cell phone people gain the dollars and we the residents get a black eye and loss of property value. Fair?

See response to Question #22.

E. Conservation/Natural Heritage Features:

38. Has Otonabee Regional Conservation Authority (ORCA) been notified?

The site plan application for telecommunications facilities is regulated federally and therefore is not processed under the provisions of the Planning Act. Municipal staff is required to determine whether the proposal conforms to the Official Plan and meets zoning requirements. Based on this, the Conservation Authority can be consulted, and to make comments on the file. No comments were received from ORCA for this application.

39. Has an environmental survey been completed?

According to the Canadian Environmental Assessment Act, an environmental survey is not required for the proposed communication tower.

40. Has an archaeological survey been completed?

An archaeological survey is not required for the proposed communication tower as the redevelopment of the car wash site was not deemed archaeologically significant by the municipality.

41. Would the tower have any impact on populations of migrating birds- such as Canada Geese, which are prominent in the area?

It is our understanding that a cell phone tower does not have an effect with the migration patterns of birds.

F. Process, Guidelines & Community Consultation:

42. A new bridge has been proposed to cross the river at this very point. Does the Department of Transportation have anything to say in regards to a tower at this same proposed location?

We have not received any comments from either the Transportation Department or the Planning Department that raise any concerns in this regard.

43. What is legally required by the Municipality in terms of a search radius?

At the time this proposal was being submitted to the staff at the City of Peterborough, we were required to use the City of Peterborough's Telecommunications Structures Draft Procedure, Section 4.9 a) Public Notice, stated that notice must be given to all property owners located within the greater of 120m or three times the tower height of the property line of the proposed site. In this case the notification packages went out to houses located within a 160m (3 times the tower height) from the proposed tower site. These packages were mailed out by the City of Peterborough on our behalf.

44. Your public notification should be a much wider radius – what is the legal requirement?

See response to Question #43.

45. Please provide survey proof that the subject site is 295ft. from the nearest house. What did staff say? Where is their report? Could I have a copy?

SBA Canada submitted engineering and survey maps in accordance with Industry Canada, and has met the City of Peterborough's policies regarding telecommunications towers. The 295 ft. distance from the nearest house was determined via the City's scaleable mapping.

46. If 120m outside Zone R1 – you can't place it there. It is built on a lot line of an R-1 zone and a house that is only 150 ft away from it. Your tower does not fit these criteria.

We are unsure where the above described requirements and distances have been pulled from. However, we will try our best to answer this question.

First off, SBA follows the protocols adopted or prescribed by the City of Peterborough. In this case we have followed the City of Peterborough's Telecommunication Structures Procedure –P01. Section 4.2a) (2) that states "regardless of the zoning of the proposed site, new telecommunication structures are strongly discouraged within 120m of any land zoned to permit residential use or on lands where an elementary or secondary school is located, unless required for reasons of engineering or network objectives. If a new telecommunication structure is to be located within 120m of land zoned to permit residential use or a school, a detailed rationale for the necessity of this location must be provided in the Site Selection and Justification Report."

We have provided a detailed rationale for the proposed site in our Site Selection and Justification Report, explaining the coverage needs and demands, as well as the search radius and process for the potential site that was conducted.

Secondly, in regards to City of Peterborough Staff and their opinion, they have produced a draft report that is currently being circulated internally. We do not have a copy of this draft report, nor has it been released to the public at this time. Once released publically you will be able to obtain a copy of the City of Peterborough's municipal website or by contacting John Kennedy, the Clerk at their office.

As well, as stated in the City of Peterborough's Telecommunication Structures Procedure – P01 in section 2.2 "the City, in its capacity as the local land use authority, only has the authority to state preferences for the siting, design, size, and other important features of telecommunication structures. The City is also able to provide a framework for public

consultation, subject to any limitations imposed by Industry Canada." Ultimately, the Federal Government has exclusive jurisdiction over the installation or modification of antenna systems in Canada. Industry Canada is the approval authority for proposed communication facilities but, in an attempt to involve local municipalities in the siting process, requires that proponents of telecommunication facilities consult with the Local Land-use Authority as part of their licensing process. The legislative requirement to consult can be found in Industry Canada's document, Client Procedure Circular (CPC), "Radiocommunication and Broadcasting Antenna Systems" CPC-2-0-03, Issue 4, dated January 1, 2008. Finally, it should be noted that the Federal Government has exclusive jurisdiction with respect to Communication Tower Siting.

G. Miscellaneous Questions and Comments:

47. This may not be of topographical prominence to you but it is to us. – This is the most compelling reason for not having your aerial blotching the skyline. The Otonobee may not be Niagara Falls but it is to us. We appreciate the nature and attempt to protect scenic vistas. It is worth far more than the money your non-residents make.

SBA Canada has taken every care to respect the natural heritage features of the beautiful community of Peterborough while servicing an ever growing market for telecommunication services and in order to allow for improved and additional wireless service in your community, SBA Canada actively promotes co-location on their towers for all potential users, thus minimizing unnecessary tower sites. The slim monopole shape is also painted grey to minimize any visual impact. The nearest residential property is located on a ridge overlooking the subject site. This ridge is 22m above the compound which blocks the bottom 22m of the tower. This is further blocked by 8-10m high trees that grow all the way up the ridge as well as at the rear of the closest residential properties. This blocks a further 8-10m, leaving approximately 20m of the tower potentially visible.

48. In future, it would be beneficial to have a chart showing the emission levels at various distances from the tower. This would help show that the levels are low at greater distances from the tower.

This has been noted and documented.

49. For future meetings, it would be ideal to have a representative with some technical expertise there to dispel myths about RF radiation. If they can't be there in person, a video could also be useful

This has been noted and documented.

To further address your questions, please see enclosed brochures "Radiocommuncation Towers, Environmental Assessment and Safety Code 6: Frequently Asked Questions" (*Attachment 'E'*) and "Safety of Cell Phone Towers" (*Attachment 'F'*).

Thank you again for taking the time to express your concerns. Should you have any questions or concerns please do not hesitate to contact me by **Friday, August 5th, 2011,** 21 days from the date of this correspondence, as per Industry Canada guidelines.

Yours truly,

THE BIGLIERI GROUP LTD.

Murray White, B.U.R.Pl.
Planner

Cc: Caroline Kimble, City of Peterborough
Joel Dubois, Industry Canada
Alex Lallitto, SBA Canada (via Email)

1535 Water Street, Peterborough ON – Proposed SBA Monopole Tower Location

ATTACHMENT 'B' - Health Canada's Wireless Device Safety Brochure

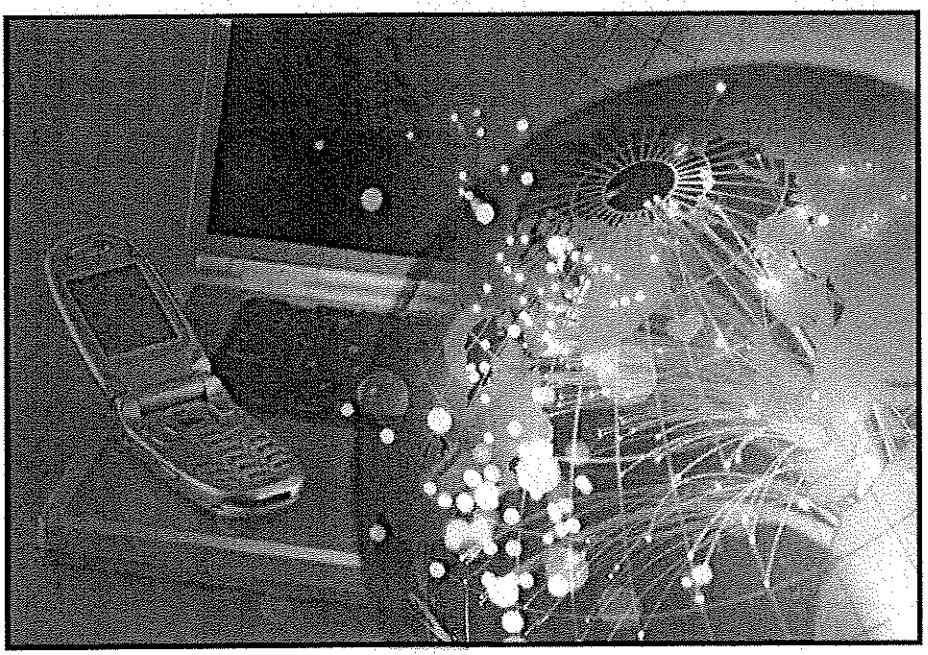
Wireless Device Safety

Over the past decade, millions of Canadians have come to rely on wireless telecommunication technology, including cell phones, hand-held devices and wireless laptop computers.

All of these applications depend on the network of base stations set up across the country to transmit the radio signals necessary to operate these services. Base stations consist of electronic equipment and wireless antennas installed in buildings or on rooftops, towers and utility poles. A cell phone tower and a home computer's wireless router are both examples of base stations. Without such devices, what have become our everyday necessities and conveniences simply could not exist. As Canadians become increasingly connected electronically, it is also increasingly important that they remain confident in the safety of these systems.

Health Canada's Radiofrequency Energy Guidelines (Safety Code 6)

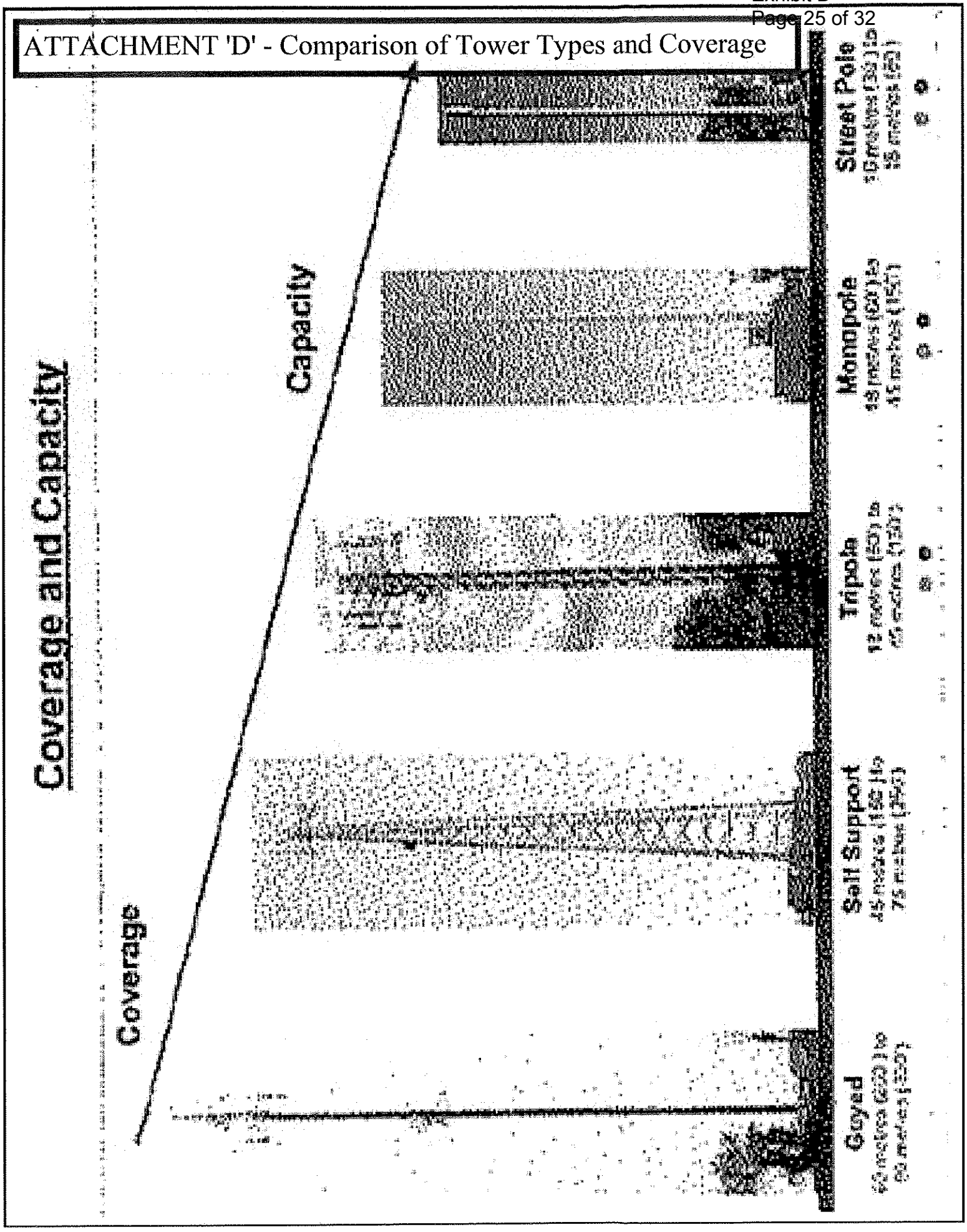
Health Canada is committed to protecting the health and safety of Canadians. That is why we have developed safety guidelines that set limits for safe human exposure to electromagnetic energy from radiofrequency (RF) devices, including cell phones and base stations. Industry Canada, the national telecommunications regulator, requires that levels of radiofrequency energy coming from cell phones and cell phone towers fall below Health Canada's RF exposure limits.



Canada

ATTACHMENT 'C' - Superimoised Representation of Tower on Site

ATTACHMENT 'D' - Comparison of Tower Types and Coverage



ATTACHMENT 'E' - Radiocommunication Towers, Environmental Assessment and Safety Code 6 FAQ's

Why should I read this brochure?

This brochure answers the most common questions about radiocommunication facilities (antennas and towers). This side of the brochure answers questions about Industry Canada's procedures for tower location, environmental concerns and community consultation.

Industry Canada is responsible for authorizing devices that use radiofrequencies (RF) to provide many different kinds of telecommunications services. Before a radio station is installed, consideration is given to how an antenna and its supporting structure may affect the surrounding area. Consideration is also given to effects on: the environment, other radio users, and local land use.

Industry Canada also requires that radio facilities be operated in accordance with the guidelines set by Health Canada to protect people who live or work near a radiocommunication facility. Please turn to the other side of the brochure for answers to health and safety questions.

Why are towers necessary?

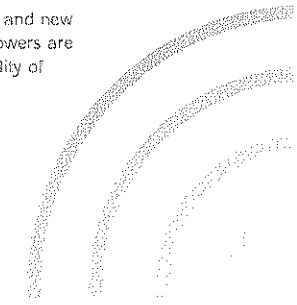
A radio antenna and a tower are the two most important parts of a radiocommunication system. The antenna is needed to send and receive signals for the radio station. The tower raises the antenna above obstructions such as trees and buildings so that it can send and receive these signals clearly.

Each radio station and its antenna system (including the tower) provide radio coverage to a specific geographic area, often called a cell. The antenna system must be carefully located to ensure that it provides a good signal over the whole cell area, without interfering with other stations.

In areas where there are many cells, the antennas do not need to be very high. Where the cells are larger, the antennas must be higher above the ground to provide good radio coverage for the whole area.

If the station is part of a radio telephone network, the number of stations needed also depends on how many people are using the network. If the number of stations is too small, people may not be able to connect to the network, or the quality of service may decrease.

As demand increases for mobile phones and new telecommunication services, additional towers are required to maintain or improve the quality of service to the public.



Why was this location chosen and why can't they use an existing tower?

Industry Canada encourages radio station proponents to locate a proposed antenna on an already existing structure whenever possible. However, technical and other considerations may make it impossible for two stations to share the same structure. For example, the size of the area to be covered, or the specific technical requirements for the proposed station, may make it impossible to use an existing structure.

Should I be concerned about the tower falling and damaging my property?

No – this should not be a concern. Towers are designed and built using good engineering practices. Special requirements for a specific site are also taken into consideration when designing the tower.

Why must the tower be painted and have lights?

The height of a tower may pose a hazard for aircraft. Paint and lighting requirements are set by Transport Canada to ensure aeronautical safety.

How does Industry Canada deal with environmental concerns related to radiocommunication installations?

The *Canadian Environmental Assessment Act* (CEAA) requires Industry Canada to consider environmental concerns when reviewing licence applications. The first step is to determine whether an environmental assessment is required.

Most radiocommunication antennas and their supporting structures have no significant effect on the environment. As a result, the CEAA excludes them from environmental assessment (CEAA: *Exclusion List Regulations*).

What should I do if I am concerned about a proposed tower in my community?

Industry Canada recognizes that the local community may have concerns about the location of a radiocommunication tower. As a result, the Department requires proponents of significant antenna structures to consult with municipal land-use authorities. If you have concerns about a proposed tower in your community, you may wish to make your views known to your local municipal officials. Local concerns can be taken into consideration during the consultation process with the proponent of the radiocommunication facility.

What does Industry Canada expect from the consultation process?

The consultation process ensures that local municipal land-use authorities have the opportunity to influence the location of radiocommunication antenna structures. Industry Canada expects that all involved parties will examine the proposal, consider each other's concerns and attempt to arrive at alternative solutions that do not unduly restrict the antenna structure. The consultation process attempts to resolve concerns at the local level.

Must towers comply with local zoning by-laws?

Industry Canada encourages all proponents of radiocommunication facilities to comply with local zoning by-laws where they exist. However, local by-laws cannot prevent a radiocommunication facility from being built as Industry Canada has the final authority over radiocommunication towers and facilities under the *Radiocommunication Act*.

Will my radio and TV reception be affected by the proposed tower?

Television or radio reception is not usually affected by a new radiocommunication facility. If you do experience interference, we suggest that you contact the operator of the station. Industry Canada encourages operators to work with their neighbours to resolve interference problems as quickly as possible.

What is the role of Industry Canada in evaluating exposure to radiofrequency fields?

Industry Canada licenses and approves equipment and facilities that emit radiofrequency fields. Since the area of health is not in our mandate, we rely on Health Canada for advice on safe levels of exposure to radiofrequency fields.

Industry Canada requires that all radio stations be operated within the guidelines established by Health Canada's Radiation Protection Bureau in its publication, *Limits of Exposure to Radiofrequency Fields at Frequencies from 10 kHz - 300 GHz*. This document is also known as Safety Code 6.

Health and safety questions are discussed on the reverse side of this brochure.

Industry Canada Reference and Contacts:

Reference:

Client Procedures Circular, CPC 2-0-03, *Environmental Process, Radiofrequency Fields and Land-Use Consultation*

Contacts:

If you want more information: Consult your nearest Industry Canada Spectrum Management office.

You may also obtain additional information on the internet at http://strategis.ic.gc.ca.

Catalogue Number C2-319/1997E
ISBN 0-662-25638-7

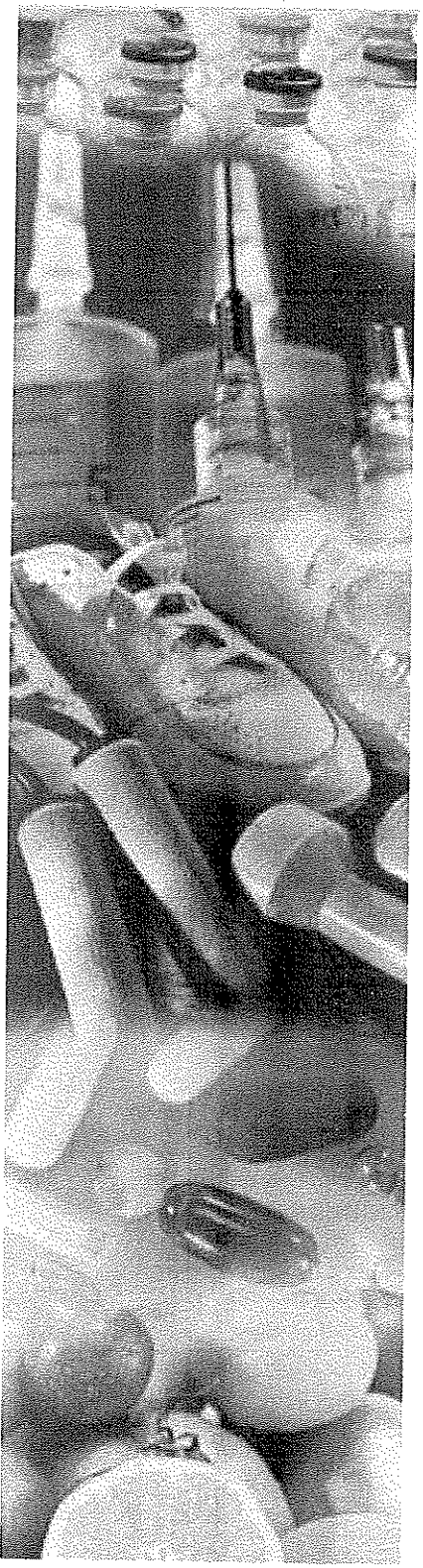
Aussi disponible en français
No. de catalogue C2-319/1997F
ISBN 0-662-81979-9

Printed in Canada

Health Canada Santé Canada
Your health and safety... our priority. Votre santé et votre sécurité... notre priorité.

Safety of Cell Phones and Cell Phone Towers
Updated
May 2009

IT'S YOUR HEALTH



Safety of Cell Phones and Cell Phone Towers

The Issue

With the growing popularity of hand-held cellular phones (or cell phones), questions have been raised about the safety of being exposed to the radiofrequency (RF) electromagnetic energy they emit. Some members of the public have also expressed concern about the possible health effects caused by living near cellular base stations, which are often called cell phone towers.

Background

Cell phones are portable devices that transmit and receive radio signals from a network of fixed, low-power, base stations. The base stations are usually located on rooftops, towers and utility poles. The transmitting power of a cell phone varies, depending on the type of network and its distance from the base station. The power generally increases the further you move away from the nearest base station.

The number of cell phone users in Canada rose from 100,000 in 1987 to more than 21 million by the end of 2008. To meet the demand for new wireless services, cellular base stations have been put up across the country. Along with the rapid increase in cell phone use, there have also been some alarming media reports and Web sites suggesting there may be a link between certain health problems and cell phone use and/or living near base stations. As a result, some members of the general public are concerned about potential health effects from long-term exposure to RF energy.

The RF electromagnetic energy given off by cell phones and base stations is a type of non- ionizing radiation. It is similar to the type of energy used in AM/FM radio and TV broadcast signals. Unlike ionizing radiation (as emitted by X-ray machines), RF energy from cell phones and other wireless devices cannot break chemical bonds. This means it is unlikely to damage your body's genetic material.

Health Risks from Cell Phones and Base Stations

Some of the RF energy emitted by cell phones is absorbed in your body. The amount of energy you absorb depends on many factors, such as how close you hold the cell phone to your body and how strong the signal is. So far, the weight of evidence from animal, cell culture and human studies does not indicate that the energy emitted by cell phones is strong enough to cause serious health effects.

Health Canada Santé Canada

Your health and safety... our priority. Votre santé et votre sécurité... notre priorité.

Safety of Cell Phones and Cell Phone Towers

Updated

May 2009

IT'S YOUR HEALTH

and regulations with respect to these devices.

Need More Info?

See the following Health Canada Web sections:

Health Canada's Consumer and Clinical Radiation Protection Bureau, at: www.hc-sc.gc.ca/ahc-asc/branch-dirgen/hecs-dgsesc/psp-psp/ccrpb-bpcrpcc-eng.php

Health Canada's RF exposure guidelines (Safety Code 6): www.hc-sc.gc.ca/ewh-semt/pubs/radiation/99ehd-dhm237/index-eng.php

Base Stations, at: www.hc-sc.gc.ca/ewh-semt/radiation/cons/stations/

Also, see the following:

Health Canada and Industry Canada FAQ on Radio Frequency Fields, at: www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08792.html

Industry Canada, Consumer Trends Update - The Expansion of Cell Phone Services, at: www.ic.gc.ca/eic/site/oca-bc.nsf/eng/ca02267.html

Industry Canada's Guidelines for the Protection of the General Public in Compliance with Safety Code 6, at: www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf05990.html

Industry Canada's Radio Standards Specification 102, at: www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01904.html

Industry Canada's Client Procedures Circular CPC-2-0-03, at: www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08777.html

World Health Organization, Electromagnetic fields and public health: mobile telephones and their base stations, at: www.who.int/mediacentre/factsheets/fs193/en/

World Health Organization, Electromagnetic fields and public health: base stations and wireless technologies, at: www.who.int/mediacentre/factsheets/fs304/en/index.html

For additional articles on health and safety issues go to the It's Your Health Web section at: www.healthcanada.gc.ca/iyh

You can also call toll free at 1-866-225-0709 or TTY at 1-800-267-1245*

Original: May 2003

Catalogue # H50-3/102-2004E-PDF
ISBN # 0-662-37565-3

Canada

BUILDING YOUR IDEAS - INTO BIG PLANS
THE BIGLIERI GROUP LTD.

August 22, 2011

RE: Public Consultation with respect to Proposed Communications Tower
1535 Water Street, Peterborough, Ontario
TBG Project No. 11201

Dear Ms. Kimble,

Please accept this letter as a formal confirmation to the City of Peterborough to inform you that since mailing out our initial response to public questions and comments The Biglieri Group have received no further questions or comments regarding this application.

A response letter was mailed out on July 15th 2011 to address questions and comments that arose from the notifications and the open house which was held for this project. The letter also stated that the deadline for further comments was Friday August 5th, 2011, which is 21 days from the date of correspondence - as per Industry Canada's *Radiocommunication and Broadcasting Antenna Systems* protocol (CPC-2-0-03).

Also, as discussed earlier today via email, I understand that The City of Peterborough did not receive any further comments on this application. Could you please inform us if this item will be added to the Planning Committee Agenda for October 11th, 2011.

Yours truly,

THE BIGLIERI GROUP LTD.

Murray White, B.U.R.Pl.
Land Use Planner

PLANNING, DEVELOPMENT & PROJECT MANAGEMENT CONSULTANTS
20 Leslie Street, Suite 121, Toronto, Ontario M4M 3L4
Telephone: 416-693-9155 Facsimile: 416-693-9133
tbg@thebiglierigroup.com

City of Peterborough 500 George Street North, Peterborough Ontario, K9H 3R9

Planning & Development Services Department - Planning Division
Phone 705-742-7777, ext. 1710, Fax 705-742-5218
email: kpayne@peterborough.ca

September 9, 2011

By Fax: 416-693-9133

The Biglieri Group Ltd.
c/o Murray White
20 Leslie Street
Toronto, ON M4M 3L4

Dear Mr. White:

Re: Application CT-03-11 – 1535 Water Street

The Communication Tower application has been circulated to utilities and agencies, as well as, all concerned City departments. The Communication Tower Committee has completed their review of the development proposal, and we have the following comments:

1. The applicant must ensure that lighting levels proposed for the communication tower do not adversely impact neighbouring properties.

2. The applicant shall designate a temporary area on-site for the purpose of construction staff parking and the storage of construction materials and equipment. The parking of vehicles or the storage of construction materials on the adjacent public road allowance is not permitted. This area should be outlined on the plan. We suggest this area be fenced off as not to endanger the general public.

3. The Peterborough Utilities Services Inc. (P.U.S.I.) has requested confirmation that this proposed tower will not interfere with their existing SCADA communications equipment between the water treatment plant, various pumping stations and storage facilities. Please contact of the Gary Craig, Water Utility Engineer PUSI, at 705-748-9300.

4. Due to a Site Plan Agreement being registered on this property, we will require the applicant to provide an updated Site Plan and Site Grading & Servicing Plan, to amend the schedules of the site plan agreement. These plans should indicate details of the proposed retaining wall (material, height, etc.), as well as proposed

City of Peterborough

grading and drainage changes to the property caused by the addition of the communication compound and proposed retaining wall. The Site Plan must indicate the extent of excavation required to construct the retaining walls around the proposed communication tower compound. If excavation is required on abutting property, the applicant must provide permission in writing by the owner of the abutting property.

I would be pleased to discuss these comments with you further.

Please complete the revisions, provide the additional information requested, and submit four (4) copies of the amended set of drawings. Please respond in writing indicating how each point in this letter has been addressed.

Yours truly,

Keith Payne, P.Eng.
Technologist, Urban Design

Cc: Joel Dubois, Industry Canada Eastern Ontario District
160 Elign Street, 11th Floor, Suite C-100
Ottawa, ON K2P 2P7

F:\PLN\D10-Communication Towers\1535 Water Street\ Letter CT-03-11.doc

Site Selection and Justification Report

City of Peterborough

Proposed Communication Tower

1535 Water Street
City of Peterborough

Prepared For: City of Peterborough

Prepared By: The Biglieri Group Ltd. on behalf of SBA Canada

May 2011

BUILDING YOUR IDEAS - INTO BIG PLANS
THE BIGLIERI GROUP LTD.
PLANNING, DEVELOPMENT & PROJECT MANAGEMENT CONSULTANTS

Site Selection and Justification Report

Proposed Communication Tower

1535 Water Street
City of Peterborough

Prepared For: City of Peterborough

May 2011

BUILDING YOUR IDEAS - INTO BIG PLANS
THE BIGLIERI GROUP LTD.
PLANNING, DEVELOPMENT & PROJECT MANAGEMENT CONSULTANTS
20 Leslie Street, Suite 121, Toronto, Ontario M4M 3L4
Telephone: 416-693-9155 Facsimile: 416-693-9133
tbg@thebiglierigroup.com

TABLE OF CONTENTS

1.0 INTRODUCTION

Wireless services, such as mobile phones and broadcasting, are increasingly consumed by and important to Canadians. The services are used daily by consumers, business people, police, fire fighter and ambulance services, as well as government, air navigation systems and national defence.

For wireless to work effectively and meet demand, antenna systems composed of towers and rooftop sites are required to deliver services to a given coverage area. Industry Canada, the federal government department which regulates the deployment of antenna systems, including towers, encourages the building of multi-tenant towers and antenna site sharing.

SBA's business is built on sharing.

SBA currently owns 9,112 towers and manages 5,500 telecommunication sites worldwide. As Canada's focused and independent tower company, SBAhas over 400 towers and managed sites across Canada. These are promoted and offered to all radio network users, including mobile phone operators, broadcasters, police services, utilities and municipalities.

SBA is committed to bringing customers the very best in tower and antenna site services. They operate in accordance with all applicable policies, work hard to maintain effective community liaisons, and want to be closely involved with all stakeholders as we go forward.

The Biglieri Group Ltd. has been retained by SBA Canada to coordinate the planning applications and approvals necessary to permit the proposed communication tower siting and to prepare this Site Selection and Justification Report in support of the proposed communication tower.

2.0 PURPOSE OF SBA'S PROPOSAL

There is ever-growing consumer demand for wireless products in Canada. Additional mobile operators are bringing attractive new choices for consumers, and new technologies allow for a richer, "high speed" wireless experience (indeed, we are all witnessing the rapid advances in mobile data allowed by "smart phone" devices such as RIM's Blackberry and Apple's iPhone).

To support these new and improved services, additional antenna sites and communications facilities are often necessary at specific geographical locations. SBA is continually seeking to augment their portfolio in order to provide quality antenna site services to wireless operators, who in turn can introduce or improve their network capabilities for the benefit of a community's residents and businesses.

SBA has identified the area surrounding 1535 Water Street, within the City of Peterboroughas an area in need of new wireless infrastructure in order to support the requirements for improved service and additional mobile service providers. To accomplish this, they have applied to build a new communications tower.

SBA has worked to identify an acceptable tower location that will provide improved wireless coverage. To that end, the purpose of this document is to provide further information about SBA's proposed tower, the technical details of the proposal, and SBA's efforts to find an appropriate location in the area surrounding 1535 Water Street in the City of Peterborough.

3.0 JURISDICTION

The Federal Government has exclusive jurisdiction over the installation or modification of antenna systems in Canada. Industry Canada is the approval authority for proposed communication facilities but, in an attempt to involve local municipalities in the siting process, requires that proponents of telecommunication facilities consult with the Local

Land-use Authority as part of their licensing process. The legislative requirement to consult can be found in Industry Canada's document, Client Procedure Circular (CPC), "Radiocommunication and Broadcasting Antenna Systems"CPC-2-0-03, Issue 4, dated January 1, 2008. The purpose of the consultation with theLocal Land-use Authority, accordingto the CPC, is to ensure that land-use authorities are aware of significant antenna structures and/or installations proposed within their local surroundings.It should be noted that the Federal Government has exclusive jurisdiction with respect to Communication Tower Siting.General information relating to antenna systems is available on Industry Canada's Spectrum Management and Telecommunications website http://strategis.ic.gc.ca/antenna.

SBA Canada is committed to consultation with the local Land-use Authority. In this case the City of Peterborough has an existing draft *Communications Facility Policy* (TFP*)* as identified inthe draft policy document entitled *Telecommunication Structures Procedure.* This Justification Report is intended to provide the necessary information as required by the aforementioned draft municipal procedure for the City of Peterborough to review and provide a Letter of Recommendation.

4.0 SITE JUSTIFICATION

Two of the most important parts of a radiocommunication system are the antenna and the tower.The antenna is essential as it sends and receives signals from the radio station. The tower allows the antenna to be raised above obstructions such as trees and buildings to ensure that it can clearly send and receive communication signals. Each radio station and its antenna system (including the tower) provide radio coverage to a specific geographic area, often called a cell.Telecommunication providers must ensure that antenna systemsare carefully located and that they provide a clear signal over the whole cell area, without interfering with other stations.

If the station is part of a radio telephone network, the number of stations needed also depends on how many people are using the network. If the number of stations is too small, people may not be able to connect to the network, or the quality of service may decrease. As demand increases for mobile phones and new telecommunication services, additional towers are required to maintain or improve the quality of service to the public.

SBA Canada, in conjunction with the anchor tenant, Wind Mobile, has determined that Wind Mobile's new network deployment will needcommunication towers in the City of Peterborough, to provide continuous coverage and service to Wind Mobile'scustomer base in the area centered onWater Street and Nassau Mills Road.Given this ideal location, a field agent searched the area (within a 1 km radius) for potential candidates who are interested in leasing a portion of their land to SBA Canada for the purposes of communication tower siting. In order to provide high quality of service to the public, the proposed communication tower must be located within a1 km radius of the ideal location, as there is a limit to how far radio waves can travel while still being consistent. Once the requirement for a new communication tower has been determined the site selection process involves the evaluation of the radio frequency characteristics of an area, based on characteristics such as terrain, existing structures, the number of subscribers, distance from existing sites and the availability of a landlord to lease the land.

In SBA's search for antennas system solutions in the local community, the suitability of existing infrastructure (other towers, rooftops, and taller structures) was reviewed in detail. Existing communication structures found are well outside of the 1 km radius search area of the proposed tower nominal point. Existing structures include a Telus tower, located approximately 1.5 kilometers to the northeast, and a television tower located approximately 2.5 kilometers to the south that hold both Telus and Rogers antennas. For the wireless demands and coverage needs, it was determined that other infrastructure was either not available or could not be used. Also, please note that there are no existing communication towers within the 1 km radius search area.

Based on the investigation into signal strength and where towers are needed to be located in order to deploy a successful network, it was determined that 1535 Water Street in Peterborough represents the most preferred location for the new communication tower given its location within the context of other existing and proposed communication towers and other antenna locations. Throughout the site selection process, special care has been taken to maximize distance from existing residential dwellings, while maintaining the function of the existing commercial plaza.

It is the intention of SBA Canada to build communication towers where more than one tenant will be locating, in order to promote co-location. The proposed communication facility will allow for future sharing opportunities with various telecommunication providers. The new communication tower will allow for the co-location of up to four (4) telecommunication providers. The construction of a telecommunication facility that permits co-location will eliminate the need for any additional communication towers within the surrounding area.

The following table summarizes how the proposed communication tower will address the municipal policies.

Figure 1: City of Peterborough's Site Selection Guidelines and SBA's Response

	PETERBOROUGH'S DRAFT SITE SELECTION GUIDELINES	**SBA'S RESPONSE**
1	Minimizing the overall number of sites required within the City.	The proposed communication tower will allow for the co-location of up to 4 telecommunication providers and this will eliminate the need for any additional communication towers within the surrounding area.
2	Utilizing existing support structures located on lands not zoned to permit residential use and on lands at least 120 metres outside of lands zoned to permit residential use.	Please note that there are no existing tall structures within the identified search area that would be appropriate for an alternative tower structure. The proposed communication tower will be located on a property zoned for Commercial uses, with no residential uses permitted. SBA Canada has taken special care

		to maximize distance from existing residential dwellings, while maintaining the function of the existing commercial plaza. The proposed communication tower will be located approximately 90 metres of the nearest residential dwelling to the northwest.
3	Size and configuration that will allow for flexibility in the orientation of the telecommunication structure.	The diameter of the proposed monopole, at the base of the tower, is approximately 1.5 metres wide allowing for flexibility in the orientation of the structure.
4	Appropriate landscaping and screening.	The proposed facility will be screened heavily by existing trees and shrubs to the north and to the west. The proposed compound will also be partially screened from the south and southeast by the existing carwash on the property. The proposed communication tower and compound will be partially visible from the east through the paved laneway along the east side of the carwash facility.
5	Maximizing distance from lands zoned residential.	SBA Canada has taken special care to maximize distance from existing residential dwellings, while maintaining the function of the existing commercial plaza.
6	Maximizing distance from environmentally sensitive land use areas.	The proposed communication facility will not be located adjacent to environmentally sensitive land uses.
7	Maximizing distance from listed heritage buildings and sites.	The proposed communication tower will not be located adjacent to listed heritage buildings and sites.
8	Avoiding lands containing sites located within Parks and Open Space Areas (with the exception of sites zoned to permit utilities).	The proposed communication tower will be not located within Parks and Open Space Areas.
9	Avoiding sites of topographical prominence.	The proposed communication tower is not located in an area of topographical prominence.

10	Avoiding sites that would obscure public views and vistas of important natural or cultural significance.	The tubular design of the proposed tower and its resemblance to flagpoles will mitigate any impact public views. The proposed tower will not obscure public views and vistas of important natural or cultural significance.
11	Avoiding natural hazards.	The proposed communication tower is not located near natural hazard areas.
12	Ensuring compatibility with adjacent uses.	The proposed monopole tower will look, similar to a flag pole in shape, with its vertical tubular shape, colour, and appearance. The slim, tubular design of the proposed tower will minimizes visual impact and will be compatible with the context of the surrounding area.
13	Access for maintenance purposes.	Access to the leased area will be through a 6.1 metre wide access and utility easement from Water Street.

5.0 SITE LOCATION

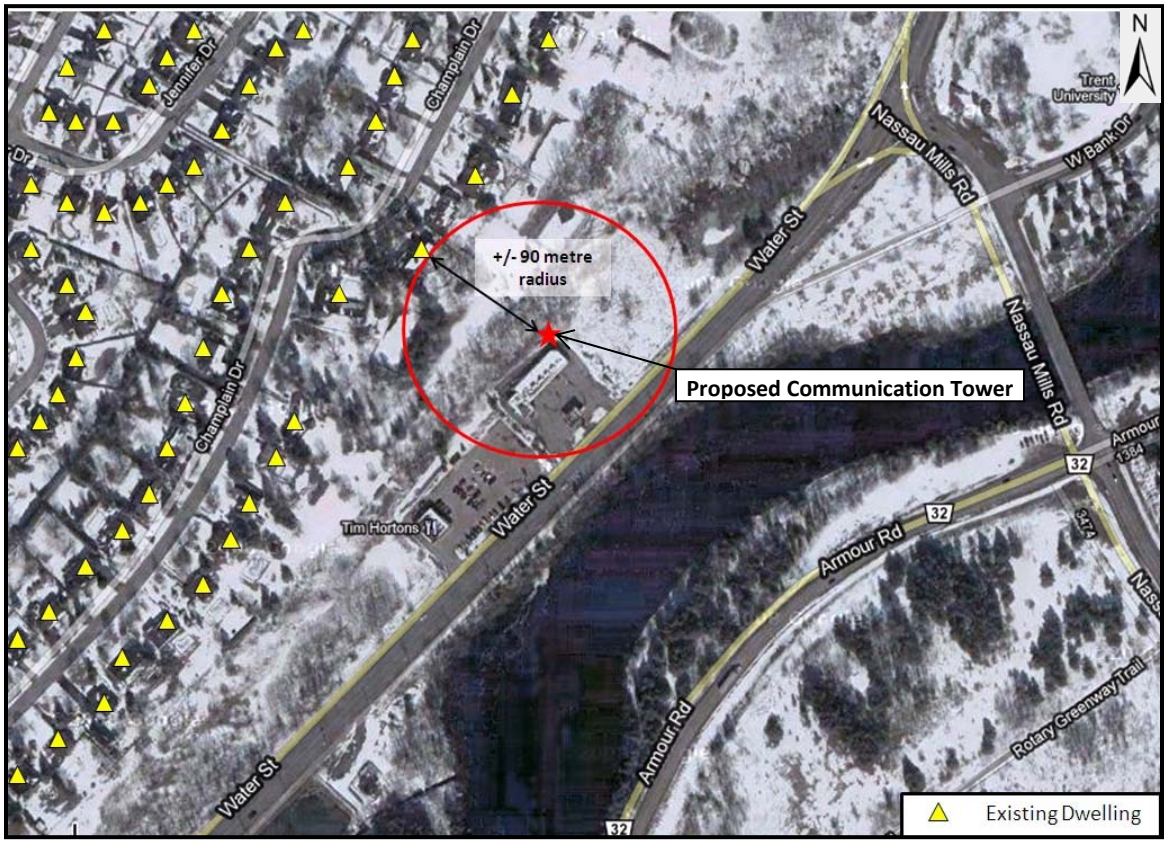
The proposed communication tower is located southwest of the Water Street and Nassau Mills Road intersection (see Figure 2). The proposed communication facility will be located at 1535 Water Street in the City of Peterborough (Subject Site), on the northern portion of Kawartha's Finest Touchless Car Wash. The Subject Site is currently zoned for Commercial uses.

Figure 2: Site Location Map

Mapquest, 2011

The Subject Site is surrounded by Institutional uses to the northeast, residential uses to west and the northwest, commercial uses to the southwest and open space to the southeast.

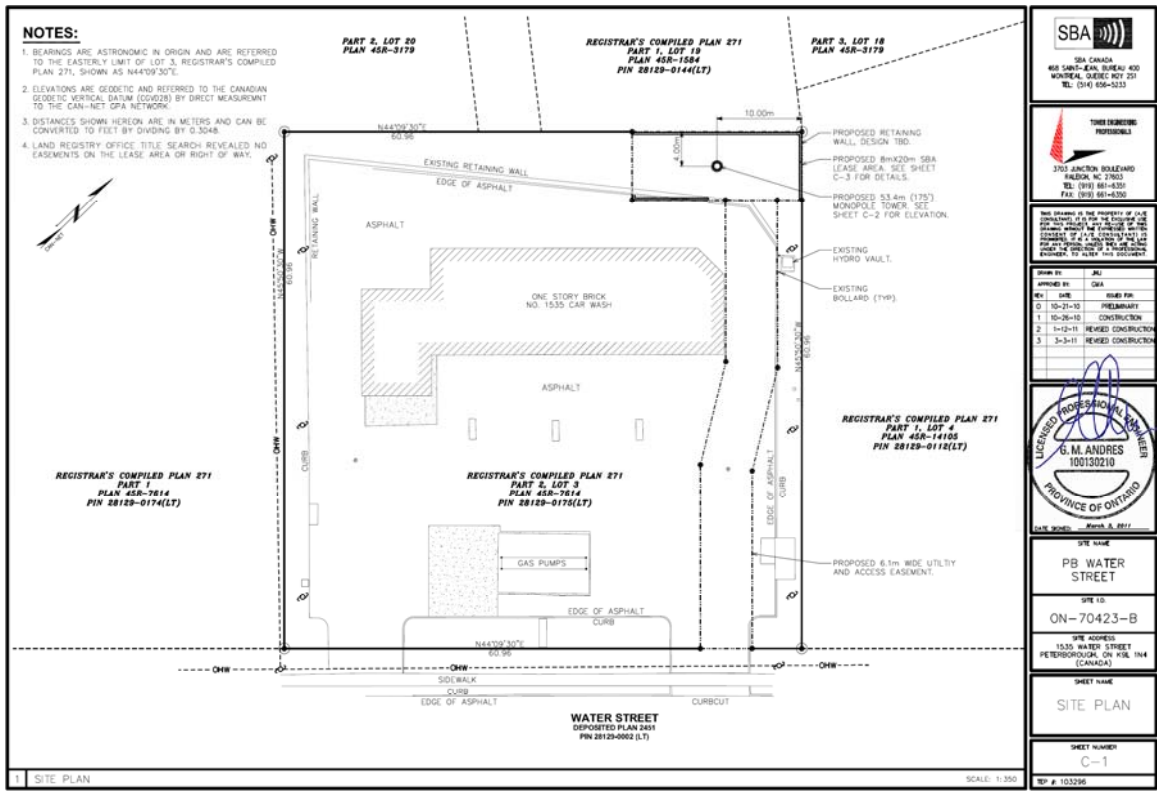
Figure 3: Orthophoto Indicating Distance to Nearest Residential Dwelling



The proposed communication tower will be located approximately 90 metres away from the nearest residential dwelling (see Figure 3). SBA Canada has made every effort to locate the proposed tower as far away from existing residential dwellings as possible while ensuring that the tower location will provide cellular customers with continuous coverage and maintaining the function of the existing commercial plaza.

The proposed communication towerwill be located in the northern portion of the Subject Site within an 8 metre by 20 metre leased parcel (see Figure 4). Access to the leased parcel will be through an existing access road from Water Street.

Figure 4: Proposed Site Plan



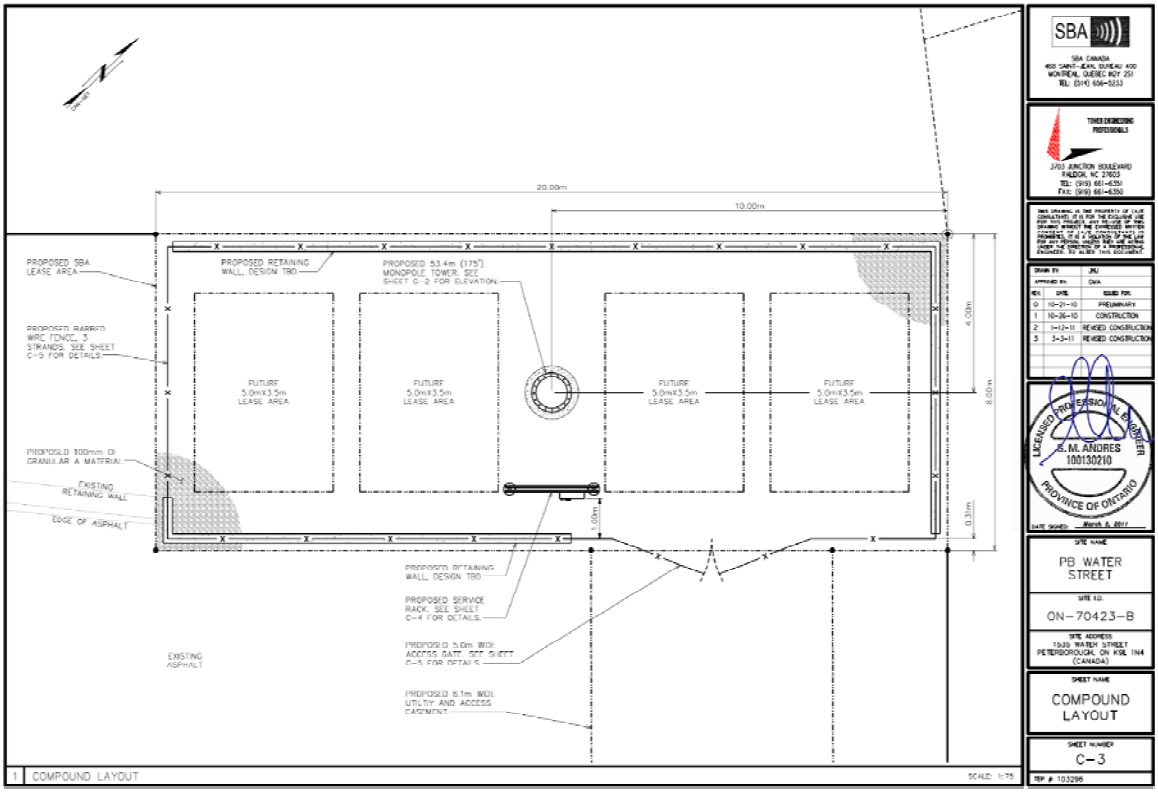
6.0 DESCRIPTION OF COMMUNICATION FACILITY

The proposed communication facility will consist of a 53.4 metre (175 foot) monopole tower within a compound to house radio equipment. The monopole tower is a vertical tubular shape, (see Figure 5), similar to a flag pole in shape, colour and appearance. The slim tubular design of the proposed tower minimizes visual impact and is compatible with the context of the surrounding area. The monopole tower and compound will be screened heavily by existing trees and shrubs to the north, west, southwest, and northeast. The proposed compound will also be screened from the south by the existing carwash establishment on the property and it will be partially visible from the east through the paved laneway along the northeast side of the carwash facility.

Figure 5: Photographof Subject Site with Monopole Tower Superimposed

Access to the site will be further controlled through secure fencing and a locked gate. The entire communication facility compound will be located on aleased area measuring 8 metres by 20 metres, which will not have a significant impact on the existing commercial uses of the lot containing a carwash establishment. The proposed compound has been strategically located in the northern corner of the existing commercial lot to minimize impact on the existing function of the plaza.

Figure 6: Proposed Compound Layout



7.0 ATTESTATION TO COMMUNICATION TOWER QUALITY

SBA attests that the proposed tower structure will be designed to CSA specification *S37-01, Antennas, Towers & Antenna Support Structures* and shall be fabricated & erected by Canadian companies that adhere to CSA fabrication & safety standards.

8.0 COMPLIANCE WITH HEALTH CANADA'S SAFETY CODE 6

SBA attests that the wireless communications facility described in this consultation package will be installed and operated on an ongoing basis so as to comply with Health Canada's Safety Code 6, as may be amended from time to time, for the protection of the general public including any combined effects of nearby installations within the local radio environment.

9.0 FEDERAL AERONAUTICAL CLEARANCES

NAV Canada and Transport Canada are the federal agencies responsible for determining the impact of tall structures on air navigation systems. These federal agencies also determine whether any marking/lighting requirements are necessary to proposed structures. The proposed communication tower will meet all necessary aeronautical obstruction marking requirements, including painting and lighting, as instructed by Transport Canada and NAV Canada, per standard TP-382/CAR 621.19.

All necessary applications have been submitted to Transport Canada and NAV Canada on behalf of SBA Canada.

10.0 CANADIAN ENVIRONMENTAL ASSESSMENT ACT

The *Canadian Environmental Assessment* Act ensures that the installation and modification of antenna systems is done in a manner that complies with appropriate environmental legislation.

SBA attests that the radio antenna system described in this notification package is excluded from environmental assessment under the *Canadian Environmental Assessment Act.*

11.0 CONCLUSION

SBA Canada has conducted a thorough and comprehensive investigation of potential sites for new communication antennas and has determined that a new communication tower is necessary since there are no suitable alternative structures (e.g. rooftops, flag poles) in the vicinity of 1535 Water Street in the City of Peterborough. The tower shall be a slim, white monopole, similar to a flag pole, which minimizes its visual impact. Throughout the site selection process, SBA Canada has taken special care to ensure that the proposed

tower is strategically located to maximize the distance to all existing residential dwellings in the surrounding area, while ensuring that the quality of signal strength is maintained. In locating the proposed communication tower, SBA Canada also ensured that the traffic circulation and parking of the existing establishments remained functional.

Overall, the proposed communication tower will benefit the residents and businesses in the City of Peterborough by improving mobile communication service in the area. The proposed communication tower will not have a significant negative impact on vistas, existing uses, or natural heritage features.

We trust you will find all in order, however if you have any questions or require furtherinformation, please do not hesitate to contact the undersigned.

Respectfully submitted,
THE BIGLIERI GROUP LTD.

Anthony Biglieri, MCIP, RPP
Principal

Rita Kostyan, B.A.(Hons.), B.U.R.Pl.
Planner