

**ON-TABLE
ITEM 4A
DELEGATION
C. BRADBURY -
Cell Tower**

Lions Bay Cell Phone Coverage Survey Nov 2019 RESULTS – March 2020

The survey received 60 responses representing approximately 11% of the homes in Lions Bay.

There were no obvious trends, however there were some findings of interest.

These are the results from respondents who are '**Generally Satisfied with their Service**'

- 70% of respondents are generally satisfied with their service.
The majority of these people live in
Upper and Lower Oceanview Road,
Below the Highway, South of Harvey Creek
Above the Highway, between Harvey Creek and Alberta Creek.
- The providers that perform most satisfactorily in this group are:
29% Telus
24% Fido
21% Rogers
17% Bell
- 100% of respondents said their homes were primarily constructed from wood.
- 68% of respondents said there is no difference in/outside their home in relation to call quality.
- 24% of respondents had a metal roof, 76% did not.
- 78% of respondents had a direct line of sight to Bowen Island, 22% did not.

These are the results from respondents who are **'Generally DISsatisfied with their Service'**.

- 30% of respondents are generally UN-happy with their service.
The majority of these people live in
Upper and Lower Oceanview Road,
Below the Highway, South of Harvey Creek
Above the Highway, North of Alberta Creek.
- The providers that perform most poorly in this group are:
55% Telus
22% Bell
16% Rogers
- 100% of respondents said their homes were primarily constructed from wood.
- 65% of respondents said they get a better cell service outside their home.
- 48% of respondents had a metal roof, 52% did not.
- 72% of respondents had a direct line of sight to Bowen Island, 28% did not.

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After reviewing the data on a means basis, I then examined either end of the spectrum.

These are the results from respondents who have identified having an 'Excellent Service'.

The survey showed:

- 30% of respondents have an excellent service.
The majority of these people live in
Upper Oceanview Road
Above the Highway, between Harvey Creek and Alberta Creek.
Lower Oceanview Road
- The providers that perform most satisfactorily in this group are:
39% Telus
22% Fido
17% Bell
- 100% of respondents said their homes were primarily constructed from wood.
- 89% of respondents said there is no difference in/outside their home in relation to call quality.
- 17% of respondents had a metal roof, 83% did not.
- 82% of respondents had a direct line of sight to Bowen Island, 18% did not.

These are the results from respondents who have an **'Unusable Service and need to rely on Wifi Calling when at home'**.

The survey showed:

- 7% of respondents have an unusable service.
The majority of these people live in
Lower Oceanview Road.
Upper Kelvin Grove.
- The providers that perform most poorly in this group are:
50% Telus
25% Rogers
25% Bell
- 100% of respondents said their homes were primarily constructed from wood.
- 50% of respondents said there is no difference in/outside their home in relation to call quality.
- 33% of respondents had a metal roof, 66% did not.
- 75% of respondents had a direct line of sight to Bowen Island, 25% did not.

CONCLUSIONS:

Although there are no obvious trends relating to call quality based on Village location (which was the one pattern I hoped would become apparent), there are definitely some useful take-aways from this data.

1. Fido, appears highly rated in both the 'satisfied' and 'excellent' searches and either minimally or not at all in the 'dissatisfied' and 'unusable' search.
2. Upper Oceanview Road residents appear in the excellent search but not the unusable search prompting the question whether this would be the most successful placement of a tower to serve dissatisfied residents.
3. A higher percentage of respondents have metal rooves and a poor reception in both 'dissatisfied' and 'unusable' searches, compared to the opposite searches.
4. A higher percentage of respondents have a direct line of sight to Bowen Island and a good reception in both 'satisfied' and 'excellent' searches, compared to the opposite searches.

**Notable quotes from '5G Wireless is Not Safe'
by Frank Clegg, former President of Microsoft Canada and co-founder
of Canadians for Safe Technology.**

"5G is not just an incremental number on our cell phones, in fact over 230 scientists and researchers from 41 countries have formerly written to the United Nations, their Member Nations and WHO to expressing their concern over their planned roll-out of 5G technology."
[Note: 304 signatories now: <http://www.5gappeal.eu/signatories-to-scientists-5g-appeal/>]

"I am not aware of any research or studies by my industry or related industries that deal at all with the health or safety effects of wireless technology. 5G technology has not been tested. I am not aware of a single study that shows that 5G technology is safe."

"Millimeter waves are used by the US and Israeli Governments in their Active Denial Systems which are used for CROWD CONTROL."

[Verifying source: <https://jnlwp.defense.gov/Press-Room/Fact-Sheets/Article-View-Fact-sheets/Article/577989/active-denial-technology/>]

"We have no idea what impacts will be on human health if that kind of millimeter waves technology is used and we are exposed to it 24/7.

There are significant proven health effects from wireless technology and wireless devices, these include:

- Insomnia
- Headaches
- Fatigue
- Heart Palpitations

All caused by the exposure to wireless devices and the radiation from them.

More serious conditions include:

- Heart Arrhythmia
- Infertility
- Tinnitus
- Numbness and Tingling in the Extremities
- Diabetes
- Cancer
- Permanent DNA damage.

MENTAL HEALTH is also impacted with:

- Increased Anxiety
- Depression
- ADD/ADHD
- Autism
- Mood Swings

Emotional Instability.

In fact, all these health factors and condition HAVE RISEN EXPONENTIALLY over the past 30 years, with hundreds of studies that show proof of biological harm from wireless devices. Most recently in 2018 the National Institute of Health's, National Toxicology Programme released the findings of a 14 year, \$25m study that showed clear evidence of harm in terms of cancer and permanent DNA damage. This study, several months later, was verified by the prestigious Ramazzini Institute of Italy which found the same results."

[Verifying Source https://ntp.niehs.nih.gov/ntp/htdocs/lt_rpts/tr595_508.pdf]

"The FCC is made up of previous telecoms executives, lawyers and engineers, it does not have any scientists or doctors which you would expect to be involved in the regulation of potentially harmful products. In fact, the FCC guidelines ARE 20 YEARS OUT OF DATE without any major significant improvement. Countries such as China, Russia, Italy and Switzerland have safety guidelines that are 100x safer, for their citizens."

[Verifying Source

https://transition.fcc.gov/Bureaus/Engineering_Technology/Orders/1996/fcc96326.pdf]

"The FCC guidelines are based on small, short-term, infrequent exposure. They do not worry about the accumulated effects of multiple devices, they don't measure or monitor exposure 24/7 and they have no special consideration for children, pregnant women or those that have shown environmental sensitivities to wireless radiation."

"The telecommunications industry is self-policing."

"Federal Telecommunications Act of 1996 prohibits any telecommunications company to be sued on the basis of the safety or the health of their products. So basically there is no liability from the telecommunications industry of any of the impacts of their products."

[<https://transition.fcc.gov/Reports/tcom1996.pdf> Section 253 (b)]

"By 2030 60 devices per person!"

[<https://www.swissre.com/institute/research/sonar/sonar2019/SONAR2019-off-the-leash.html>]

"Many communities in the US and around the World, are passing moratoriums preventing the roll-out of 5G technology until it is proven safe."

[Verifying Source: <http://www.5gappeal.eu/category/news-articles/>]

"There is no incentive or funding to look for safer alternatives."

Millimeter Wave Further Research.

I did a further bit of research regarding Frank Clegg's concern over the US Military's use of Millimeter Waves as part of their Active Denial Systems.

Originally referred to as a Heat Ray, the system developed by Raytheon, a US Defence Contractor and used by the US military in Afghanistan can reach up to a distance of 1000m, that's pretty much all of Lions Bay. Raytheon also create a pared down version called the 'Silent Guardian' which can reach 250m, see image.

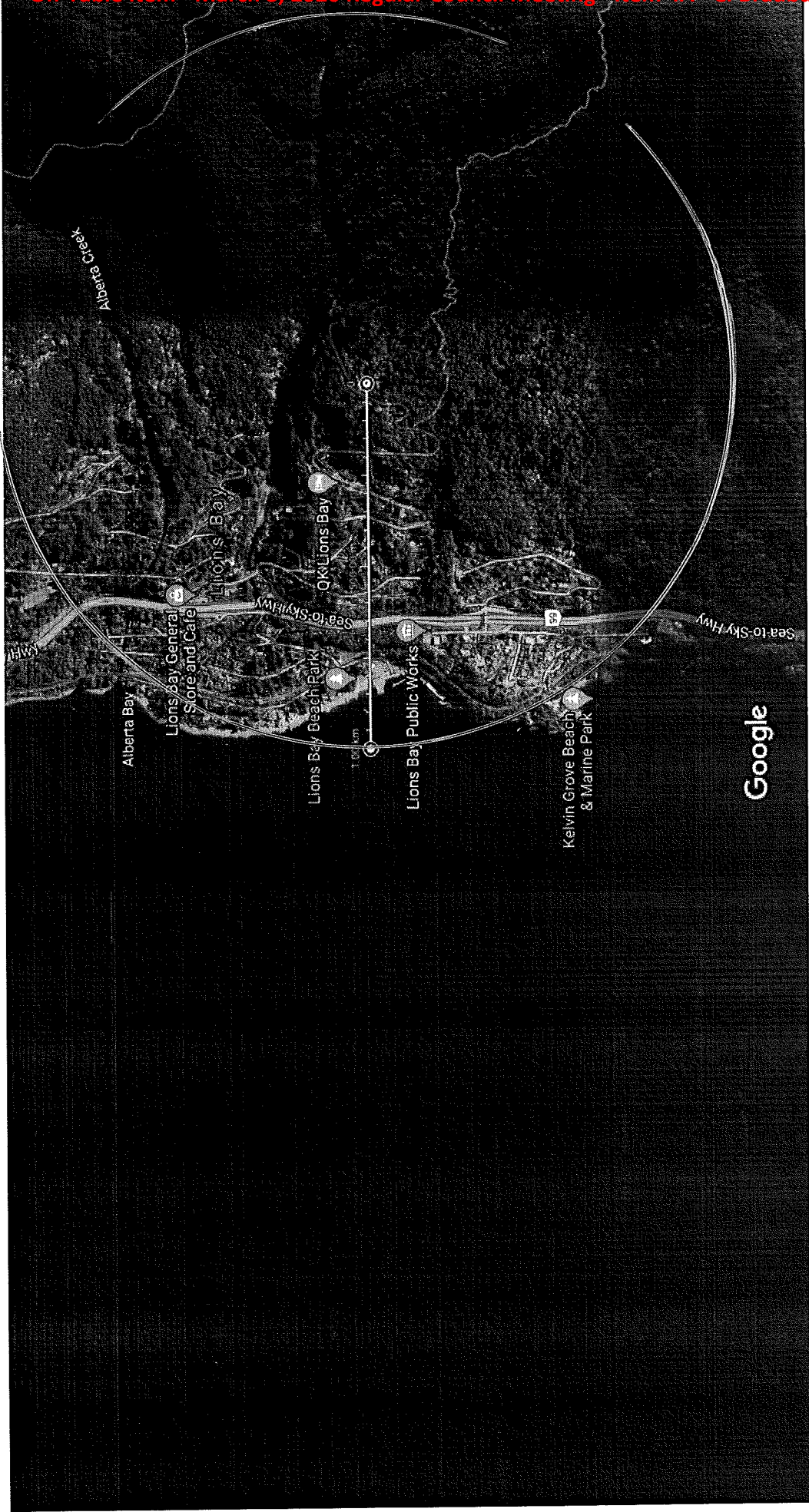
Do we really want this technology in our backyards?

Lions Bay should remain committed to a tower free, radiation free, millimeter wave free environment for the health of its citizens, wildlife and environment.

Sources: <https://jnlp.defense.gov/About/Frequently-Asked-Questions/Active-Denial-System-FAQs/>

https://en.wikipedia.org/wiki/Active_Denial_System

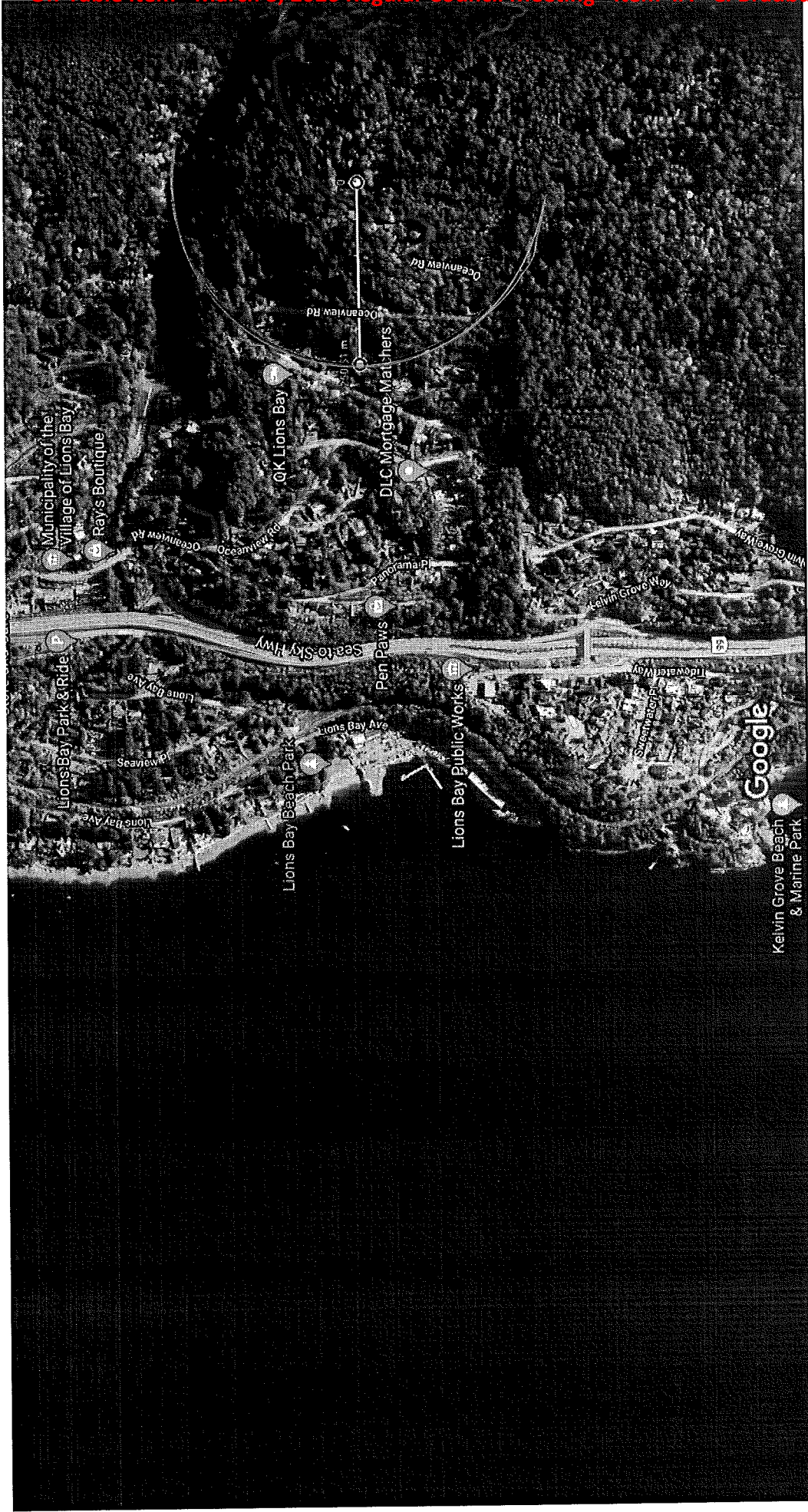
Google Maps Tower to ADS @ 1000m.



Imagery ©2020 CNES / Airbus, IMTCAN, Maxar Technologies, Province of British Columbia, SCRD, Map data ©2020 200 m

Measure distance
 Total distance: 1.00 km (3,289.82 ft)

Google Maps Tower to 250m radius.



Imagery ©2020 CNES / Airbus, IMTCAN, Maxar Technologies, Province of British Columbia, SCRD, Map data ©2020 100 m

Measure distance
Total distance: 250.51 m (821.88 ft)