

Margaret Sexton - City Council December 16 2013 PG29.8 Review of City Protocol for Telecommunications Towers Under 15 Metres in Height AND PW27.10 Telecommunications - Authority to Permit the Installation of Stand-Alone Antenna Poles

PW 27.10.39

PG 29.8.9

From: Geoff Kettel <[REDACTED]>
To: city clerk <clerk@toronto.ca>
Date: 2013-12-13 2:22 PM
Subject: City Council December 16 2013 PG29.8 Review of City Protocol for Telecommunications Towers Under 15 Metres in Height AND PW27.10 Telecommunications - Authority to Permit the Installation of Stand-Alone Antenna Poles
CC: "Parker, Councillor John" <councillor_parker@toronto.ca>, councillor jay...
Attachments: PG29.8 Antenna siting protocol-1.docx; PW27.10 Antenna on public rights-of-way-4.docx; Attachment - antenna equipment box diagram-1.pdf

Dear Sir/Madam

This is to advise that that we are in support of the York Mills Valley Association recommendations with respect to these two items.

Please forward the letter to all Councillors and include it in the public record.

Respectfully submitted

Geoff Kettel for

Brian Athey

President

Leaside Property Owners' Assn

Recommendations

PG29.8 Review of City Protocol for Telecommunications Towers Under 15 Metres in Height

- 1. Council ask Industry Canada to update CPC-2-0-03 to include notification and consultation on <15m cell towers.**
- 2. Council ask Toronto Hydro to follow City "best practice" for antenna on its hydro poles.**
- 3. Council ask Health Canada to update its Safety Codes following international best practice standards.**
- 4. Council support Councillor Vaughan's Motion for signage of <15m cell towers**

PW27.10 Telecommunications - Authority to Permit the Installation of Stand-Alone Antenna Poles

Request that council vote against the proposal to allow <15m cell towers on public-rights-of-way.

York Mills Valley Association

Item: PG29.8 Review of City Protocol for Telecommunications Towers Under 15 Metres in Height

York Mills Valley Ratepayers Association [YMVA], thank City Planning for preparing this protocol ahead of the large-scale roll-out of <15m cell towers across GTA

Summary of Recommendations

1. Council ask Industry Canada to update CPC-2-0-03 to include notification and consultation on <15m cell towers.
2. Council ask Toronto Hydro to follow City "best practice" for antenna on its hydro poles.
3. Council ask Health Canada to update its Safety Codes following international best practice standards.
4. Council support Councillor Vaughan's Motion for signage of <15m cell towers

1. Request Industry Canada to change its notification protocol for towers <15m

The City hopes that the cell companies will **voluntarily** follow the notification process outlined in this document. Cell towers less than 15m in height are exempted under Federal regulation from notification or consultation.

We recommend that Council request Industry Canada that towers/antennae less than 15m in height no longer be exempted from CPC-2-0-03 "Radio-communication and Broadcasting Antenna Systems".

2. <15m Antenna mounted on Hydro poles

Antenna mounted on hydro poles will be the predominant <15m towers in Toronto

We believe that cell towers on hydro poles are likely to predominate throughout Toronto because Ontario Energy Board is requiring Toronto Hydro charge only \$22.35/year per antenna. This is a deeply discounted rate compared to the approx \$1,500/year per antenna paid by cell companies to private land owners. It is not in the best interests of Toronto residents for an economic disparity to exist between rates cell companies pay to private land owners and the rates paid to Hydro.

The hydro-mounted telecom antennae are likely to be divisive in most residential communities because, at 15 meters, the main beam of the antenna emits radiation into first floor/bedrooms of homes. Also, residents will be unhappy with the visual impact of the antenna on hydro poles/lamp posts. However, City of Toronto does not have jurisdiction to stop the deployment.

Since Hydro is a private company, it is not currently required to meet Toronto's Prudent Avoidance policy for radiation emissions. Nor is it required to follow Toronto's Cell Tower Antenna Placement Protocol [item PG29.8].

It is in the public's best interests, for antenna located on hydro poles meet Toronto best practice.

We recommend that Council ask Toronto Hydro that any antenna mounted on hydro poles or light fixtures meet the following requirements:

1. Antenna meet Toronto's Prudent Avoidance Health Standard for radiation emitted [some 100 times lower than Federal Safety Code 6]
2. Antennae are physically tested annually to make sure they meet Prudent Avoidance.
3. Antenna follow the full protocol outlined in PG29.8 and councillors/residents are notified ahead of installation and consultation occurs;
4. Toronto Hydro is fully indemnified against all harms from the antenna [including harm to health].

Note: Cell companies are “self” insured because they are unable to buy third-party insurance for health harm caused by wireless radiation. It is important that Hydro is explicitly not responsible for health harms as this is an important possible risk factor.

3. Request that City Council write to Health Canada about Safety Code 6 review process

Health Canada’s Safety Code 6 is out of date

Since 2002, Toronto Public Health has required that cell towers on municipal land meet the City of Toronto’s Prudent Avoidance policy for radiation emitted. Cell companies are asked to “voluntarily” meet Prudent Avoidance policy though City has no jurisdiction to enforce this.

Health Canada’s safety code for radiation emitted from cell towers is out of date. Safety Code 6 was originally designed for federal buildings and personnel. It was not “purposed” for public policy yet it has become the default standard across Canada for public policy.

Safety Code 6 is currently undergoing a review which will culminate in 2014. The process underway does not meet international standards for public policy. In the meantime, Toronto residents are experiencing rapidly increasing exposure levels.

We recommend that Council write to Health Canada to update its Safety Codes and process to follow international best practice¹ standards

Improvements are needed in the following areas:

1. **Transparency, Public Input, publication;**
2. **Rigorous systematic reviews;**
3. **Inclusion of biological effects [rather than thermal effects only];**
4. **Permitted exposure levels comparable to global best practice [eg Switzerland].**

Since the majority of the cell towers currently in Toronto are required to meet Safety Code 6 and exposure levels are rapidly rising, this input to Health Canada is important.

4. Community concern about the health effects from wireless radiation is growing

Federal safety code [SC6] is out of date. Toronto adopted Prudent Avoidance policy for cell towers in 2002 which is some 100 times lower than SC6. Concerns about the health effects from this radiation has been growing for a long time. In 2011 WHO IARC recommended 2B [possible] carcinogen rating for this radiation. Dr. Anthony Miller, one of Canada’s foremost cancer epidemiologists deputed to PWIC on item 27.1. Dr. Miller told PWIC members that if IARC were to review wireless radiation research today a 2A [probable] classification would be applied [1 is the most carcinogenic rating].

In addition to cancer, high quality scientific studies are showing a relationship between wireless radiation and male fertility, behavioural problems in children, cardiac symptoms and ADD/ADHD/autism in pre-natal exposed children, Electro Sensitivity – among many other health issues.

We recommend that Council support Councillor Vaughan’s Motion for signage of <15m cell towers

¹ Good examples of international best practice in the review process include:

- Centre for Practice-changing research in Ottawa is a world leader in systematic review methodology.
- US National Toxicology Program has formalized an international best practice approach to “weight of evidence” approach to science.
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York Mills Valley Association

Item: PW27.10 Telecommunications - Authority to Permit the Installation of Stand-Alone Antenna Poles

York Mills Valley Ratepayers Association [YMVA], request that council vote against the proposal to allow <15m cell towers on public-rights-of-way.

We support continuation of the existing policy of:

- specifically **allowing** cell companies to install above-ground structures on non-public rights-of-way; and
- specifically **preventing** cell companies from installing stand-alone, above-ground structures on public rights-of-way.

Structures are ugly and inappropriate for our residential neighbourhoods

The <15 meters towers proposed for public rights-of-way are standalone structures with separate equipment boxes [see attachment 2]. These towers will primarily be deployed in neighbourhoods with underground hydro service and will be an eyesore.

Rogers Contract is not dependent on approval of these structures

Approval item PW27.10 is not required for Renewal of Rogers Contract outlined in item GM26.8.

Community concern about the health effects from wireless radiation is growing

Federal safety code [SC6] is out of date. Toronto adopted Prudent Avoidance policy for cell towers in 2002 which is some 100 times lower than SC6. Concerns about the health effects from this radiation has been growing for a long time. In 2011 WHO IARC recommended 2B [possible] carcinogen rating for this radiation. Dr. Anthony Miller, one of Canada's foremost cancer epidemiologists deputed to PWIC on item PW27.10. Dr. Miller told PWIC members that if IARC were to review wireless radiation research today a 2A [probable] classification would be applied [1 is the most carcinogenic rating].

In addition to cancer, high quality scientific studies are showing a relationship between wireless radiation and male fertility, behavioural problems in children, cardiac symptoms and ADD/ADHD/autism in pre-natal exposed children, Electro Sensitivity – among many other important health issues.

Financial implications are unknown

Only a small number of these cell towers are likely to be deployed. Rogers estimates 50 such structures in Toronto [likely 200 across Toronto when all cell companies are included]. In other countries, the revenue from these cell towers barely covers the costs of planning/notification/approval over a 2 year horizon.

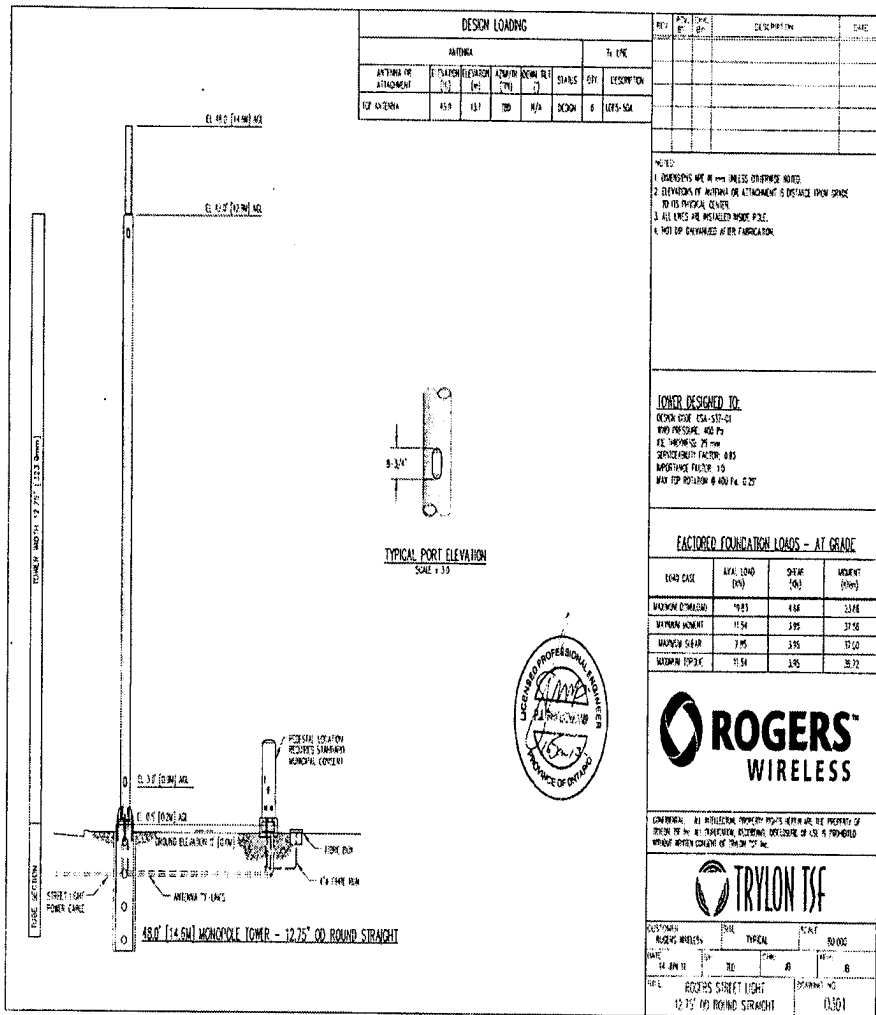
Given the lack of public support for these cell towers, City resources could be deployed more effectively elsewhere.

We request that council vote against proposal PW27.10 to allow <15m stand-alone cell towers on public-rights-of-way.

Attachment 2

Slim Pole under 1.5m in height with cabinet on ground

(Not to Scale)



DESIGN LOADING					
ANTENNA					TO USE
ATTACHMENT	HEIGHT (m)	WEIGHT (kg)	WIND DRAG (m ²)	STATUS	DESCRIPTION
TOP ANTENNA	4.5	13.1	0.7	0.5	0.5M - 0.5M

REV	DATE	DESCRIPTION	DATE

NOTES:
 1. DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED
 2. ELEVATIONS OF ANTENNA OR ATTACHMENT IS DISTANCE FROM GRADE TO ITS PHYSICAL ELEMENT
 3. ALL LINES ARE UNLESS INDICATED OTHERWISE
 4. NOT TO SCALE UNLESS OTHERWISE NOTED

TOWER DESIGNED TO:
 DESIGN CODE: CSA-S11-S1
 WIND PRESSURE: 402 Pa
 ICE: 100MM SL 75mm
 SEVERITY FACTOR: 0.85
 IMPORTANCE FACTOR: 1.0
 MAX. TOP ROTATION: 0.0014 RADIANS

FACTORED FOUNDATION LOADS - AT GRADE			
LOAD CASE	WIND LOAD (kN)	SEMI (kN)	MOMENT (kNm)
WINDWARD WINDLOAD	11.83	4.46	33.68
WINDWARD MOMENT	11.54	3.95	37.58
WINDWARD SHEAR	7.95	3.95	17.00
WINDWARD TORSION	11.54	3.95	38.72



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CUSTOMER	PROJECT	SCALE
ROGERS WIRELESS	TRYPAL	80/000
DATE: 14 JUN 11	REV: 01	DATE: 08
FILE: ROGERS STREET LIGHT	SYMBOL: 40	SCALE: 0.301

Slim Pole Equipment Cabinet

(Not to Scale)

