
TO: CITY MANAGER **DATE:** 2016 November 14

FROM: DIRECTOR PLANNING AND BUILDING **FILE:** 42000 20
Reference: Small Cell Antenna

SUBJECT: SMALL CELL ANTENNA INSTALLATIONS ON CITY INFRASTRUCTURE

PURPOSE: To propose text amendments to the *Burnaby Zoning Bylaw* and *Burnaby Street and Traffic Bylaw* to permit small cell antenna installations in City road rights-of-way.

RECOMMENDATIONS:

1. **THAT** Council authorize the preparation of a bylaw amending the *Burnaby Zoning Bylaw*, as outlined in Section 2.2 of this report, and that the bylaw be advanced to First Reading on 2016 November 21 and to a Public Hearing on 2016 December 13 at 7:00 pm.
2. **THAT** Council authorize the preparation of a bylaw amending the *Burnaby Street and Traffic Bylaw*, as outlined in Section 2.3 of this report, and that the bylaw be advanced to First, Second, and Third Readings on 2016 December 12.

REPORT**1.0 INTRODUCTION**

On 2015 July 06, Council authorized staff to review the provisions of the *Burnaby Zoning Bylaw* and the *Burnaby Street and Traffic Bylaw* in relation to the installation of small cell and other antennas on City street infrastructure. The need for the review arises from a proposal from Telus to provide for the installation of small cell wireless communication devices on City street infrastructure. Council approved an agreement with Telus, subject to an independent bylaw amendment process to follow.

Installation of the small cell stations on City infrastructure requires text amendments to the *Burnaby Zoning Bylaw*, which currently permits commercial antennas as a principal use only in the P2 Administration and Assembly District, or on buildings (in all Districts except R Districts) subject to conditions. It also requires text amendments to the *Burnaby Street and Traffic Bylaw* to specify general terms and conditions for installing the small cell stations.

2.0 PROPOSED ZONING BYLAW AMENDMENTS

2.1 Small Cell Installations

Small cell wireless communications stations are antenna installations that provide additional wireless capacity in high usage areas, and additional coverage in areas with challenging features, such as trees or other obstacles that may block signals. Small cell installations are mounted on poles and consist of an approximately 1 ft², 5-inch deep [0.01 m³ (0.35 ft³)] antenna unit and an associated electrical box of similar size, mounting equipment, conduit, and cabling. The typical placement height is approximately five to six meters from ground level, but can be lower or higher. Each unit is connected to the core network through power and fiber lines that run through the pole and into underground conduit.

Small cell installations are a relatively unobtrusive means to improve wireless service. The small size of the antennas and associated electrical boxes, and their integration on existing infrastructure, is considerably less intrusive than freestanding antennas or, in many cases, rooftop antennas. Given their inconspicuous design and the minimal energy output from the antennas, these installations are suitable for placement on infrastructure in road right-of-ways in all areas of the City, including residential areas.

2.2 Zoning Bylaw Text Amendment – Small Cell Antennas

Currently, the Zoning Bylaw permits antennas in the following circumstances:

- On lots in the P2 Administration and Assembly District, subject to CD Comprehensive Development District zoning; or
- On buildings (except in R Districts) subject to specific siting and design criteria outlined in Section 6.21; or
- As an accessory use to a principal permitted use.

The placement of antennas on City street and traffic light poles, or other infrastructure in road rights-of-way, is not supported by any of the above provisions. Few Zoning Bylaw regulations apply to road rights-of-way, as all of the District schedules and most of the Supplementary Regulations (Section 6) apply only to “lots.” Road rights-of-way do not meet the definition of a “lot,” which is

an area of land designated as a separate and distinct parcel on a legally recorded subdivision plan or description filed in the Land Registry Office, and having a principal frontage upon a public street or place.

However, road rights-of-way are located within zoning districts, whose boundaries extend from the adjacent lots to the centerline of the road. This distinction is pertinent, as Section 6.21, which regulates antennas outside of the P2 District, states

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*An antenna is permitted in any **zoning district** except the R Districts if it has been given preliminary plan approval and meets the following qualifications... [emphasis added]*

Because zoning districts include both lots and road rights-of-way, under Section 6.21, antennas can only be located in road rights-of-way if they are attached to a building and meet all other siting and design criteria. Therefore, in order to permit small cell installations on City street and traffic light poles, Section 6.21 must be amended to distinguish between antennas in road rights-of-way and those on lots.

Recommended Zoning Bylaw Amendment

THAT Section 6.21 be amended to add provisions similar to the following (proposed additions are underlined):

- (1) An antenna is permitted on any lot in any zoning district except the R Districts if it has been given preliminary plan approval and meets the following qualifications...*
- (2) An antenna is permitted in any road right-of-way in any zoning district, subject to compliance with the Burnaby Street and Traffic Bylaw and all other applicable legislation.*

2.3 Street and Traffic Bylaw Text Amendment

The *Burnaby Street and Traffic Bylaw* regulates the use of City streets, including infrastructure within the City road right-of-way. In order to permit the installation of small cell wireless communications stations on street infrastructure, it is necessary to amend the Bylaw to specify the conditions under which this may be done. The proposed amendment specifies the types of infrastructure subject to the provision, and stipulates prerequisites to installation, including entry into a written licence agreement with the City, and consideration to consist of provision of optical Ethernet services or other non-monetary consideration as may be acceptable to Council. Under this approach, the Director Engineering will be responsible for the specific siting and design of installations and the resolution of any issues. It is noted that while the proposed amendment accommodates the proposed Telus installations, it would apply to any conforming antenna system, provided the carrier installing the system has entered into a written licence agreement with the City.

Recommended Street and Traffic Bylaw Amendment

THAT a new section be added similar to the following:

No person shall install or affix a cellular telecommunication station for the transmission of wireless communications in, on or to a City structure or street, including without limitation a:

- *street light standard,*
- *traffic light pole,*

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- roadway,
- sidewalk,
- boulevard,
- transit shelter,
- sign, or
- unopened road allowance,

within the area of a street unless the person first enters into a written licence agreement approved by City Council and agrees that in consideration for the licence the person must provide optical Ethernet services to City buildings, structure or facilities, for the benefit of the City and the City's invitees or agents or such other non-monetary consideration as may be approved by City Council for each station installed or affixed by the person.

3.0 CONCLUSION

This report presents *Burnaby Zoning Bylaw* text amendments in order to permit the installation of small cell antenna installations on City street and traffic light poles and other infrastructure within road rights-of-way. It also presents amendments to the *Burnaby Street and Traffic Bylaw* to provide the necessary prerequisites for installation of the small cell stations on City infrastructure.

It is recommended that Council approve: a) the proposed Zoning Bylaw amendments, as outlined in Section 2.2 of this report, for advancement to First Reading on 2016 November 21 and Public Hearing on 2016 December 13 at 7:00 pm; and b) the proposed amendment to the Street and Traffic Bylaw, as outlined in Section 2.3 of this report, for advancement to First, Second and Third Readings on 2016 December 12.



Lou Pelletier, Director
PLANNING AND BUILDING

LF:sla

cc: Deputy City Manager
Director Engineering
Director Finance
City Solicitor
City Clerk