April 15, 2014

Dear UBC Students and Campus Community:

Like many communities in British Columbia, the University of British Columbia ("UBC") is experiencing a growing demand for wireless service. TELUS is proposing to improve 4G high speed wireless service that supports the operation of smart phones, computer tablets and laptops by proposing to install a new telecommunications facility on the roof of the north building of the Tapestry residential building at 3338 Wesbrook Mall. Following the UBC Planning Department's Development Permit consultation process, TELUS is reaching out to the community to answer any questions and provide information regarding the proposed installation with the delivery of this information package.

TELUS has consulted with UBC Campus + Community Planning ("C+CP") and has moved forward with the Development Permit application. As part of the Development Permit process, which ensures that all new projects are consistent with the vision of the UBC Land Use Plan and Wesbrook Neighbourhood Plan, you are invited to comment on the TELUS proposal at an Open House that will be held at the Wesbrook Village Welcome Centre, 3378 Wesbrook Mall on **Tuesday April 29, 2014 between 4:00 PM – 6:00 PM**. TELUS representatives and UBC Campus + Community Planning staff will be there to answer any of your questions and receive your feedback on the proposed installation.

Enclosed is information you may find helpful.

TM Mobile Inc. (TELUS)

Debra Pankratz

Real Estate & Government Affairs

Proposed Rooftop Telecommunications Facility

What exactly is TELUS proposing?

TELUS is proposing to install nine (9) panel antennas and ancillary radio equipment including radio cabinets on the rooftop of the Tapestry building to better service the neighbourhood. This installation aims to be in service mid-2014 to improve wireless communications to local businesses and residences in this community. To provide coverage, TELUS is proposing to extend the existing mechanical penthouse by 3.2 metres and flush mount the antennas to the exterior wall. To better blend the antennas with the rooftop, TELUS is proposing to paint the antennas and mechanical penthouse extension to match the existing penthouse structure. The TELUS rooftop design includes space for an additional nine (9) antennas that may or may not be installed in the future.

Why this location?

In short, TELUS is responding to demand for wireless service in the immediate neighbourhood. If current wireless usage trends continue, TELUS will start running out of capacity in the area within a few months. This site will help provide fast and reliable wireless service for years to come.

TELUS has been in communication with the UBC Campus + Community Planning to determine an appropriate location and design to support this required community infrastructure to improve wireless service in this neighbourhood. This location was considered appropriate as TELUS is proposing to integrate the antennas into an existing structure. Effort has been made to propose a design that will have minimal visual impact from street level views.

Is placing antennas in proximity of a residential area appropriate?

As more Canadians rely on wireless devices in their day-to-day lives, the need for servicing residential areas become as important as commercial or business areas of the community. As a result, these community infrastructures are integrated in residential, commercial and industrial zones of the community. Today, it is not unusual to find antenna installations on rooftops everywhere across Canada.

Will the installation be visible?

Only the top of the mechanical penthouse supporting antennas will be visible from certain views along Wesbrook Mall. The radio equipment will not be visible, nor the antennas from the roundabout on West 16th Avenue and Wesbrook Mall. To reduce this visibility, TELUS has, through discussion with the UBC planning staff, agreed to paint the antennas to match the exterior wall of the mechanical penthouse.

What will the installation look like?

At the back of this information package is a copy of the preliminary design plans that include details on the installation including initial and future antennas. Further, below are photo simulations from various views in and around Westbrook Mall.

Photo Simulations

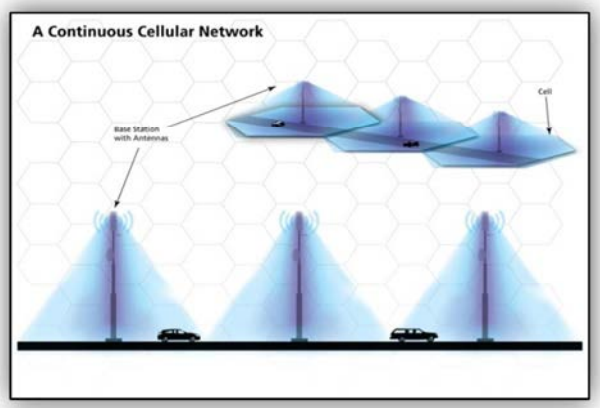
Before Construction	After Construction
	
View: Looking east.	
	
View: Looking north.	
	
View: Looking west.	

Photo Simulation is a close representation and is for conceptual purposes only – not to scale.
Proposed design is subject to change based on final engineer plans
The rooftop will be marked in accordance with Transport Canada Obstruction Marking and NAV Canada requirements.

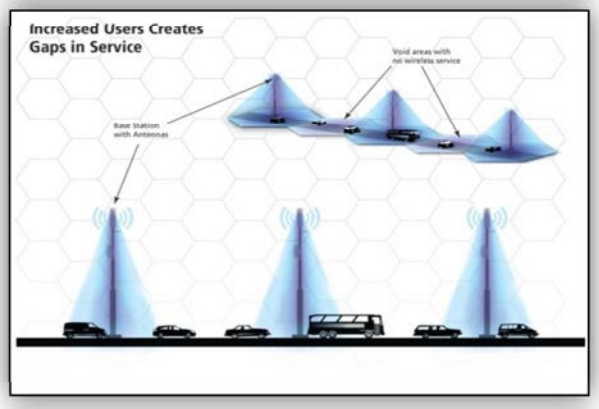
How do wireless networks work?

Wireless networks work by dividing geographic areas into “cells”. Each cell is served by a base station (in this case, a rooftop supporting antennas and radio equipment). Mobile devices communicate with each other by exchanging radio signals with base stations.

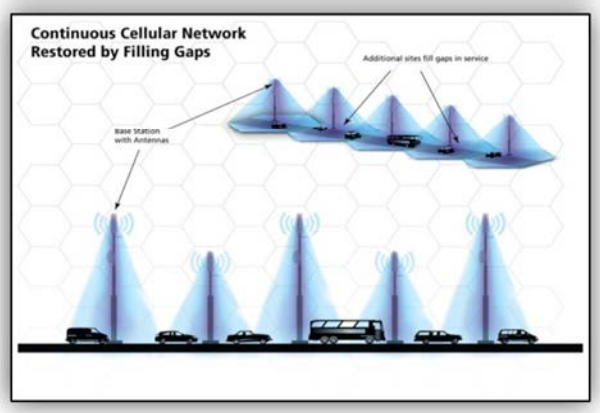
As more mobile phones and devices use the network, the “footprint” of service offered by a base station shrinks. This results in reduced coverage and gaps in service. Gaps in coverage can result in dropped calls and unreliable service. The drawings below illustrate how gaps in service develop as well as how additional equipment (or the addition of base stations) will enhance service.



A network is a series of interconnected cells each containing a base station (antennas and radio equipment). A high quality network offers continuous wireless service by placing base stations in specific geographical locations that allow us to use wireless devices.



When a base station reaches maximum capacity, the coverage footprint shrinks in order to handle volume.



New base stations must be built to fill in the void areas and restore continuous wireless service.

How strong will the signal be?

Industry Canada requires all wireless carriers to operate in accordance with Health Canada's safety standards, called Safety Code 6. This code is based on current, accepted scientific data. This site will put out a signal several times below what is allowed by current standards, because that's all that's required to provide service.

TELUS relies on the health experts to set radio frequency standards and oversee acceptable levels. As a wireless provider, TELUS is responsible for ensuring that all of these safety standards are met and maintained.

In Canada, Industry Canada has adopted Health Canada's Safety Code 6, which establishes the safe limit for all devices that emit radio frequency waves and ensures public safety. The consensus among Canadian health organizations and the scientific community is that wireless antennas are safe.

For more information on health and safety of wireless facilities, please see:

- **Fact Sheet: What is Safety Code 6?**

www.hc-sc.gc.ca/ahc-asc/media/ftr-ati/_2014/2014-023fs-eng.php

Where can I go for more information on telecommunication facilities?

The following web links are provided for your information. We are also happy to answer any questions you may have.

- **Telecommunication Systems**

www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01702.html

- **Canadian Wireless Telecommunications Association**

www.cwta.ca

How else may I participate in this consultation process?

In reviewing this information package, you are welcome to ask questions or provide feedback to TELUS and UBC Campus + Community Planning at the Open House on April 29, 2014. Alternatively, if you have any questions or comments about the proposal, please contact Karen Russell, Manager Development Services, Campus + Community Planning, by **Friday, May 2, 2014** by telephone at 604-822-1586 or e-mail karen.russell@ubc.ca.