
Present:

Councillor Nagra, Chair
Councillor Patton, Vice-Chair
Councillor Guerra
Charan Sethi
Ted Dawson

Regrets:

Diana Dilworth, Homebuilders
Association Vancouver
(HAVAN)
Nathan Hildebrand

Agency Representative:

Jay Chadha, Homebuilders Association
Vancouver (HAVAN)
Jeff Fisher, Urban Development Institute
(UDI)

Guests:

T. Killey, Canadian Automatic Sprinkler
Association
M. Osburn, Canadian Automatic Sprinkler
Association
J. McKenzie, Canadian Automatic Sprinkler
Association

Staff Present:

L. Thomas, Fire Chief
J. Cairney, Deputy Fire Chief
R. Dube, Acting General Manager, Planning and
Development
J. Thibaudeau, Manager, Business Transformation
S. Lau, Manager, Land Development
Y. Yohannes, Manager, Utilities
L. Blake, Administrative Assistant

A. ADOPTIONS**1. Adoption of the Agenda**

It was Moved by Councillor Guerra
Seconded by Councillor Patton
That the Development Advisory Committee
meeting agenda of July 6, 2021, be adopted.

Carried

2. Adoption of the Minutes

It was Moved by Councillor Guerra
Seconded by Councillor Patton
That the minutes of the Development
Advisory Committee meeting held June 1, 2021 be adopted.

Carried

B. DELEGATIONS

1. Nuances and challenges of providing voluntary fire sprinklers in residential properties
Tim Killey, BC Regional Group Chair, Jamie McKenzie, National Training Manager,
and Matthew Osburn, National Communications Manager
Canadian Automatic Sprinkler Association

Tim Killey, BC Regional Group Chair, Jamie McKenzie, National Training Manager, and
Matthew Osburn, National Communications Manager, Canadian Automatic Sprinkler
Association (CASA), provided a PowerPoint presentation regarding Fire Sprinkles Systems
in Homes and Residential Construction. The following information was highlighted:

- CASA was established in 1920 to enhance the level of life safety and property conservation from the effect of fire through the use of fire sprinklers. CASA representatives sit on various code development committees such as the National Building Code Committee and works closely with the Fire Department, as well as architecture and building officials.

- There can be issues related to voluntary sprinkle installation. The delegation reviewed the following examples:
 - Owners wanted to voluntarily sprinkler their home located in the Agricultural Land Reserve (ALR). The City would not accept a sprinkler permit without fire flow data, but would not provide fire flow data as the property was in the ALR. The City would also not allow the property to use the existing water service pipe, so the owner would have to implement a self-contained pump, which would have required additional maintenance and resulted in a loss of interior floor space. The costs became too cost prohibitive and the owner did not move forward with voluntary sprinklers.
 - A townhouse development was required to sprinkler two buildings according to the BC Building Code and municipal bylaws. The developer wanted to go above and beyond and sprinkler all the units, but would have been required to install two water lines, one for fire hydrants and one for the water supply. Despite having adequately sized lines for each water line, the developer was not permitted to move forward.
- Home fire sprinklers provide affordable, reliable and effective protection and save lives, reduce property loss and can reduce home insurance premiums. A combination of smoke alarms and fire sprinklers reduce the risk of death due to fire by 82%, relative to having neither device installed. Sprinklers allow additional time for residents to leave a building, as well as more time for Fire Services to arrive on the scene.
- Fire sprinklers closest to the fire will activate, spraying water directly on the fire. 90% of fires can be contained by just one sprinkler head. Sprinklers use a fraction of the water used by Fire Department hoses and are as reliable as any other home plumbing system. Modern sprinklers can be installed flush with walls or ceilings, making them aesthetically pleasing.
- Other municipalities allow for single service water lines on private land. CASA's goal is to work with the City to review and potentially allow water supply configurations that would allow a single common feed into residential homes that would serve both the domestic water supply and fire sprinkler system. These configurations reduce costs, maintenance requirements and help prevent accidental closures of valves that would prevent a sprinkler system from operating.

In response to questions from the Committee, the delegation provided the following information:

- Issues associated with implementing sprinklers are generally when they are voluntarily installed as opposed to when sprinklers are required as part of a development.
- CASA has worked with the Insurance Bureau of Canada and key insurance companies on discount policies for sprinklers. It can be a challenge to explain the insurance benefits of sprinkler systems.
- While there will be water damage associated with sprinklers, damage without them would likely be greater.

- Areas of improvement for sprinkler systems include better training for maintenance staff, including locations of shut off valves, and implementing alarming systems.

In response to a question regarding the above noted example of the house in the ALR, Yonatan Yohannes, Manager, Utilities, advised that the situation was a site servicing issue. *Surrey Waterworks Regulation and Charges By-law, 2007, No. 16337* specifies that the City cannot supply the amount of water needed for ALR properties.

In response to a comment regarding a multi-family building fire in Fleetwood, Fire Chief Larry Thomas advised that the property was sprinklered prior to recent Building Code amendments. A key factor in the fire was that it started on a balcony where there are no sprinklers present, and then travelled to the attic which also did not have sprinklers. As the roof was impermeable, water from fire hoses could not travel down into the attic space. Fire Service has been lobbying for NFPA 13R to include sprinklers on balconies and void locations.

The Committee provided the following comments:

- Dry powder sprinkler systems would prevent water damage while providing fire protection.
- Further work needs to be done to prevent fires during the construction phase of a development.
- All houses, regardless of their location, should be permitted to have sprinklers.

The Committee recommended that the delegation meet with Planning & Development staff to discuss sprinkler policies and practices to maximize safety.

2. Adaptable Units Housing
Ann McLean, City Architect
City of Surrey

Ann McLean, City Architect, provided a PowerPoint presentation and recommendations regarding the construction of adaptable units housing (including the dwelling unit interior layout and design), based on BC Building Code Standards. A copy of a presentation on this topic previously presented to the Committee in November 2017 is attached to the agenda package. The following information was highlighted:

- Adaptable housing refers to designing and building homes with features that can be modified at minimal cost to meet changing needs of occupants. Adaptable housing helps people stay in their homes through illness, injury and/or ageing, provides accessible housing options and reduces renovation costs to accommodate changing abilities. The standards for adaptable housing are included in the 2018 British Columbia Building Code (BCBC) and applies to single-storey suites in new residential multi-unit buildings. The BCBC also outlines multi-unit building basic access requirements for common areas and entries. Municipalities can adopt and require the use of adaptable standards.

- Adaptable housing features include: wider doorways, lever handles for doors, "latch side" clearance for doors, minimum clearances for entryways and bathrooms, single lever faucets, reinforcements around showers, tubs and toilets for grab bar installation, lower electrical outlets and wiring for visual (strobe) fire alarms. Accessible units are designed with these features, as well as knee space under cabinets in the kitchen and bathroom, grab bars installed in the shower and bathtub and visual fire alarms.
- Adaptable housing targets the population's current and future needs. The senior population is expected to increase from 14% to 25% of the population by 2036, which is almost triple the amount in BC and Surrey, with the population in Surrey expected to increase from 65,000 to 186,00. It is anticipated that many of these seniors will have mobility issues.
- Adaptable housing does not look much different from the standard building requirements, with a little additional space in the entry and bathroom(s).
- The additional construction costs for Adaptable Housing Standards (AHS) are minimal, anticipated to be approximately \$4500, ranging from an additional 1.5-2.1% increase for wood construction and 1.8-2.6% increase for concrete construction. In a study, it was found that most existing developments would not have required additional floor space in order to incorporate adaptable units. It would cost approximately \$40,000 to convert an adaptable unit to be accessible, while it would cost approximately \$70,000 to convert a market unit to an accessible unit.
- 70% of Metro Vancouver municipalities have some type of AHS. The requirements usually apply to a specific percentage of units in the development.

In response to questions from the Committee, Ms. McLean and Remi Dube, Acting General Manager, Planning & Development, provided the following information:

- The City does not currently have any requirements for adaptable units in multi-family developments. Some developers include adaptable units on a voluntary basis and usually do 5% of the total number of units.
- The BCBC has adaptable unit standards. A Surrey-specific adaptable standard might cause issues, specifically for the design community, as they will be familiar with the standards as outlined in the BCBC.

The Committee expressed support for adaptable housing but noted that 100% requirement for all developments may be too much. The following comments were provided:

- In addition to potential Floor Area Ratio (FAR) exemptions for adaptable units, Development Cost Charge (DCC) exemptions, based on a square footage basis, could be considered.
- It is important to understand the specific access needs of an individual when designing an accessible space. For example, a senior individual in a walker will have different needs than an individual in a wheelchair.

The Committee suggested that adaptable features that do not impact floor space, such as bathtub and shower reinforcement, wiring, light switch and electrical outlet placement and door swing direction could be implemented but did not recommend moving forward with specific percentage requirements for adaptable units at this time. The Committee directed staff to report back at a future meeting regarding potential options and impacts for implementing the BCBC AHS.

C. NEW BUSINESS

1. Foundation Inspections for Single Family Homes

Councillor Nagra, Chair, reported that other municipalities do not conduct in person foundation inspections for single family homes; instead, foundation inspections are conducted virtually, and collect all required letters, such as survey and engineering letters. It was noted that a structural engineer will have already inspected the foundation. Implementing this change could save time for inspectors.

The Committee requested that staff provide a report on the pros and cons of implementing virtual foundation inspections for single-family homes.

2. Metro Vancouver Regional Growth Strategy

The Committee requested a presentation from City or Metro Vancouver staff regarding the Metro Vancouver Regional Growth Strategy.

D. OUTSTANDING BUSINESS

This section had no items to consider.

E. ITEMS REFERRED BY COUNCIL

This section had no items to consider.

F. CORRESPONDENCE

This section had no items to consider.

G. INFORMATION ITEMS

This section had no items to consider.

H. OTHER BUSINESS

1. Comments on the Market

- The development industry is not able to produce the amount of housing needed, especially as immigration is expected to reopen as the COVID-19 pandemic concludes. The foreign student population is especially expected to increase.
- Surrey is the ideal location for development due its land and resources. Development processing times need to be decreased. It was suggested that developers could pay additional costs in order to have development processing times reduced (a processing fee). The Committee requested that a fast tracking process for development projects at an additional cost be included on a future agenda for discussion.
- Building costs are increasing while revenue seems to have stabilized.
- Dawson + Sawyer recently completed work on the Crescent Beach Swim Club. The project opened on time and 1000 families will be able to enjoy the facility. Appreciation was expressed to the City and its staff for their assistance on the project and the Committee commended the project for its benefit to the community.

I. NEXT MEETING

The next meeting of the Development Advisory Committee is scheduled for Tuesday, September 7, 2021, at 6:00 p.m.

J. ADJOURNMENT

It was

Moved by Councillor Guerra
Seconded by Councillor Patton
That the Development Advisory Committee

meeting adjourn.

Carried

The Development Advisory Committee adjourned at 7:25 p.m.

Jennifer Ficocelli, City Clerk

Councillor Mandeep Nagra, Chair