



City of Richmond

Report to Committee

To: Public Works and Transportation Committee **Date:** April 6, 2021
From: Lloyd Bie, P.Eng. **File:** 10-6360-03-01/2021-
Director, Transportation Vol 01
Re: **Sidewalk Width Standards for Major and Minor Arterial Roads**

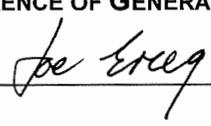
Staff Recommendation

That staff be directed to update the City of Richmond’s Engineering Design Specifications to increase the sidewalk width from 1.5m to 2.0m on arterial roadways, as described in the report titled “Sidewalk Width Standards for Major and Minor Arterial Roads” dated April 6, 2021 from the Director, Transportation.



Lloyd Bie, P.Eng.
Director, Transportation
(604-276-4131)

Att. 1

| REPORT CONCURRENCE | | |
|-----------------------------------|---|--|
| ROUTED TO: | CONCURRENCE | CONCURRENCE OF GENERAL MANAGER |
| Engineering | <input checked="" type="checkbox"/> |  |
| Development Applications | <input checked="" type="checkbox"/> | |
| Policy Planning | <input checked="" type="checkbox"/> | |
| Sustainability | <input checked="" type="checkbox"/> | |
| SENIOR STAFF REPORT REVIEW | INITIALS:  | APPROVED BY CAO  |

Staff Report

Origin

At the November 30, 2020 meeting of the General Purposes Committee, the following referral was carried:

Staff to evaluate sidewalk width standards and report back with recommendations.

This report responds to the referral.

This report supports Council's Strategic Plan 2018-2022 Strategy #4 An Active and Thriving Richmond:

An active and thriving community characterized by diverse social and wellness programs, services and spaces that foster health and well-being for all.

4.2 Ensure infrastructure meets changing community needs, current trends and best practices.

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.3 Build on transportation and active mobility networks.

Analysis

Current City Standards for Sidewalk Widths

The City's current standard for new sidewalk construction considers the location and volume of pedestrian activity anticipated to use the facility. New sidewalks within the City Centre, Steveston Village and streets within a 400m radius of a Neighbourhood Centre have a minimum sidewalk width of 2.0m (where site conditions permit) to accommodate the higher number of pedestrians. All other streets have a minimum sidewalk width of 1.5m. These existing standards are minimums and may be wider in high pedestrian activity zones where warranted.

Older road designs typically have a 1.5m sidewalk with an adjacent 0.6m-0.8m utility strip between the sidewalk and curb (Figure 1). Although the combined width may appear to comprise the extent of the pedestrian facility, the utility strip is populated with a variety of infrastructure that impedes pedestrians (e.g., hydrants, street lights, signage, and utility poles) and thus is not calculated as part of the walking area.

City policies and design standards support improvements to the streetscape to foster a walkable community. Accordingly, the upgrade of older road designs pursued as part of a redevelopment or capital project include a new cross-section for road frontages (Figure 2, outside City Centre). Generally, the 0.6m-0.8m utility strip is replaced with a minimum 1.5m landscaped boulevard

behind the road curb that accommodates above-ground utilities and street trees within this buffer strip. The new sidewalk at the appropriate width is relocated to behind the boulevard instead of next to the adjacent travel lane.



Figure 1: Before - Older Design with Utility Strip and 1.5m Sidewalk



Figure 2: After - Current Design with Boulevard/Utility Strip and 1.5m Sidewalk

If a sidewalk is envisioned to accommodate cyclists (i.e., a multi-use path), the minimum width for the shared facility is 3.0m. Cyclists are not legally permitted on sidewalks per the provincial Motor Vehicle Act unless otherwise signed or by bylaw.

Best Practices Review

Staff reviewed the current sidewalk policies of peer municipalities (Table 1).

Table 1: Comparison of Sidewalk Width Standards of Metro Vancouver Municipalities

| Municipality | S/W Width Classification | Preferred Width (Minimum Width under Constrained Circumstances) | | | | | | |
|-----------------|--------------------------|--|--------------------|-------------------------|----------------|-------------------------------------|----------------|--------------------|
| | | General | | City Centre / Steveston | | Within 400m of Neighbourhood Centre | | |
| Richmond | Area Plans | 1.5m | | 2.0m | | 2.0m | | |
| Maple Ridge | General | 1.5m | | - | | - | | |
| Burnaby | General | 1.5m | | - | | - | | |
| Municipality | S/W Width Classification | Local | | Collector | | Arterial | | Commercial |
| Surrey | Road Type | 1.5m | | 1.8m | | 1.8m | | - |
| Delta | Road Type | 1.5m | | 1.5m | | 2.2m | | 2.2m |
| Langley | Road Type | 1.5m | | 1.5m | | 1.8m | | 1.8m |
| Municipality | S/W Width Classification | Single Family | Multi-Family | Single Family | Multi-Family | Single Family | Multi-Family | Commercial |
| Coquitlam | Land Use / Road Type | 1.5m | 1.8m | 1.5m | 2.5m | 2.0m | 2.0m | - |
| Vancouver | Land Use / Road Type | 1.8m (1.8m) | 2.1-2.4m (1.8m) | 2.1-2.4m (1.8m) | 2.4m (2.1m) | 2.1-2.4m (1.8m) | 2.4m (2.1m) | 3.0-4.0m (2.4m) |
| Municipality | S/W Width Classification | Single Family | | Multi-Family | | Commercial | | |
| New Westminster | Land Use | 1.5m | | 1.8m-2.0m | | 2.5m | | |

The findings indicate that the City’s current sidewalk width standards are generally comparable with other municipalities and appropriate (i.e., the standard is wider for areas with anticipated

higher levels of pedestrian demand). However, there is opportunity for the City to increase sidewalk widths along major and minor arterial roads to better align with prevailing standards in other municipalities.

Recommendation

To support the City's Official Community Plan modal share target for 2041 (18% of trips by walking) and advance achieving this target to 2030 as outlined in the City's Community Energy and Emissions Plan 2020-2050 Directions, staff recommend updating the City's Engineering Design Specifications to increase the standard width of sidewalks on major and minor arterial roadways from 1.5m to 2.0m. Based on staff's observations, the current standard of a 1.5m sidewalk width is functioning adequately; however, the recommended increased width to 2.0m will better:

- allow appropriate pedestrian facilities to be provided in coordination with adjacent land uses redeveloped at higher densities (multi-family and commercial) with correspondingly more residents and higher pedestrian activity,
- align with transit corridors and encourage walking connections to transit facilities, and
- enhanced accessibility for persons in mobility assistive devices.

The revised standard will apply to major and minor arterial roadways outside the City Centre, Steveston Village and streets within a 400m radius of a Neighbourhood Centre with the exception of arterial roadways located adjacent to the Agricultural Land Reserve (Attachment 1).

Proposed Implementation

The recommended standard of 2.0m for new sidewalk construction on major and minor arterial roads will be secured primarily through road dedication via the rezoning process consistent with the current practice for frontage upgrades. The maximum incremental increase in road dedication above and beyond the current frontage requirement for new developments will be up to 0.5m depending on the existing setback behind the road curb and property line. For example, for older arterial road designs, the minimum setback from road curb to property line typically yields a road dedication for frontage upgrades of 1.0m to accommodate a 1.5m sidewalk. Hence, the proposed wider 2.0m sidewalk standard at the same location will require a 1.5m dedication. This modest change is not considered to have a significant impact on development potential although it may result in front yard setback variance requests to off-set the increase road dedication.

Application of the increased width will be context-sensitive and on a case-by-case basis to allow for existing site conditions (e.g., tree preservation). The additional 0.5m width can also be considered as a transportation demand management measure to support a reduction in the required number of on-site parking spaces to be provided.

For arterial roadways where current Planning Policies do not support redevelopment or where rezoning applications are not anticipated (e.g. within the ALR), the recommended sidewalk width will be applied through future City capital projects.

This requirement will apply to all new Rezoning, or Subdivision applications located on major and minor arterial roads submitted after Council endorsement of the recommended sidewalk

width standards and the update of the City's Engineering Design Specifications. The requirement will not apply to sidewalk widths approved prior to the update (i.e., the requirements will not apply retroactively to existing sidewalks).

If a Servicing Agreement has already been identified as part of an approved Rezoning application but the Servicing Agreement has not yet been entered into, the City will work with the applicant to achieve the new standard where possible.

If an acceptable rezoning application has been submitted to the City prior to the update of the design standards, City staff will work with the developer to accommodate the additional sidewalk width if possible.

Upon update of the Engineering Design Specifications, an information bulletin will be prepared and posted on the City's website to advise of the new sidewalk width requirements for major and minor arterial roads. Pending Council endorsement, staff will advise the Urban Development Institute of the updated standard.

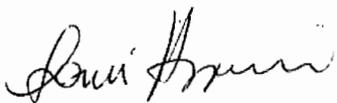
Future City capital projects will be designed based on the new standard where applicable. The proposed 2.0m sidewalk width is anticipated to result in a thirty percent increase in cost for new sidewalk construction. The next update of the City Development Cost Charges program will incorporate the new standard sidewalk widths.

Financial Impact

None.

Conclusion

The recommended increase to the City's standard sidewalk width for major and minor arterial roads from 1.5m to 2.0m supports multiple City plans and strategies (e.g., Official Community Plan, Community Wellness Strategy, Community Energy and Emissions Plan) to foster a culture of walking for transportation and health, and enhance the pedestrian facility network.



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Att. 1: Major and Minor Arterials where Recommended Revised Sidewalk Widths will Apply

Major and Minor Arterials where Recommended Revised Sidewalk Widths will Apply

Road Classification Map *Bylaw 9901 2018/09/04*

