

**2. Designing Neighbourhood Collector Streets**

**Conception des routes collectrices dans les quartiers**

**Committee Recommendations**

**That Council:**

- 1. approve the Designing Neighbourhood Collector Streets document, as detailed in this report and attached as Document 1; and,**
- 2. delegate authority to the General Manager of the Transportation Services Department to approve minor amendments to the guidelines as required, and to report those amendments through the Transportation Services Department's annual Delegated Authority Report.**

**Recommandations du Comité**

**Que le Conseil :**

- 1. approuve le document Conception des routes collectrices dans les quartiers, décrit dans le présent rapport et joint à titre de document 1; et**
- 2. délègue au directeur général des Transports le pouvoir d'approuver au besoin les modifications mineures à apporter aux lignes directrices et d'en faire état dans le rapport annuel de décision par délégation de la Direction générale des transports.**

**For the Information of Council**

The committee also approved the following Direction to staff:

That Staff provide an opportunity for Members of Council to be briefed and ask questions on this matter prior to it rising to the September 25 Council meeting.

Pour la gouverne du Conseil

Le comité a également approuvé la directive au personnel ce que suit:

Que le personnel donne l'occasion aux membres du Conseil de s'informer et de poser des questions à ce sujet avant que ce point ne soit présenté à la réunion du Conseil du 25 septembre.

Documentation / Documentation

1. General Manager's report, Transportation Services department dated September 4, 2019 (ACS2019-TSD-PLN-0004)  
  
Rapport du Directeur général, Direction générale des transports, daté le 4 septembre 2019 (ACS2019-TSD-PLN-0004)
2. Extract of draft Minutes, Planning Committee, September 12, 2019  
  
Extrait de l'ébauche du procès-verbal, Comité de l'urbanisme, le 12 septembre 2019

Report to  
Rapport au:

Planning Committee  
Comité de l'urbanisme  
12 September 2019 / 12 septembre 2019

and Council  
et au Conseil  
25 September 2019 / 25 septembre 2019

Submitted on September 4, 2019  
Soumis le 4 septembre 2019

Submitted by  
Soumis par:  
John Manconi, General Manager/Directeur général, Transportation Services  
Department/Direction générale des transports

Contact Person  
Personne ressource:  
Vivi Chi, Director/Directrice, Transportation Planning/Planification des transports  
(613) 580-2424 x21877, [vivi.chi@ottawa.ca](mailto:vivi.chi@ottawa.ca)

Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE      File Number: ACS2019-TSD-PLN-0004

**SUBJECT: Designing Neighbourhood Collector Streets**

**OBJET: Conception des routes collectrices dans les quartiers**

## **REPORT RECOMMENDATIONS**

That the Planning Committee recommend that Council:

1. Approve the *Designing Neighbourhood Collector Streets* document, as detailed in this report and attached as Document 1; and,
2. Delegate authority to the General Manager of the Transportation Services Department to approve minor amendments to the guidelines as required,

and to report those amendments through the Transportation Services Department's annual Delegated Authority Report.

## RECOMMANDATIONS DU RAPPORT

Que le Comité de l'urbanisme recommande au Conseil :

1. d'approuver le document *Conception des routes collectrices dans les quartiers*, décrit dans le présent rapport et joint à titre de document 1; et
2. de déléguer au directeur général des Transports le pouvoir d'approuver au besoin les modifications mineures à apporter aux lignes directrices et d'en faire état dans le rapport annuel de décision par délégation de la Direction générale des transports.

## BACKGROUND

In 2008, Council approved the *Road Corridor Planning and Design Guidelines: Urban & Village Collectors and Rural Arterial & Collectors*. Since that time there have been advances and updates to City policies, plans, and operating standards. The 2013 Transportation Master Plan (TMP) identifies the need to "update road design guidelines, standards and processes to reflect complete streets principles" (Action 7-2), and the 2017 Building Better Smarter Suburbs (BBSS) study strengthened the complete streets approach with respect to streets in new neighbourhoods. Furthermore, technical guidelines from the Province, transportation industry and utility providers have also been updated over the years.

The new *Designing Neighbourhood Collector Streets* document addresses these evolving influences specifically for collector street design to provide up-to-date technical guidance for planners, street designers and land development partners. The document incorporates best practices and reflects lessons learned designing and implementing collector streets in recent years while aligning with existing City plans (e.g. TMP, Official Plan), studies (e.g. BBSS), technical guidelines (e.g. Transportation Association of Canada *Geometric Design Guide for Canadian Roads* 2017) and utility technical requirements (e.g. off-sets for electrical transformers).

The existing 2008 *Road Corridor Planning and Design Guidelines* will continue to provide guidance for village collector streets, as well as rural arterial and collector roads.

This report will highlight the key features of the new *Designing Neighbourhood Collector Streets* document. Next, it will discuss how the document was developed by engaging key technical experts and stakeholders involved in collector street design, construction and operations, to ensure that the intended benefits of the designs can be fully realized through construction and operation. Lastly, the report will summarize how the guidelines will be implemented and where they will be used.

## **DISCUSSION**

Collector street design guidelines are primarily used by City staff and the development industry when planning new subdivisions and designing road projects. The new *Designing Neighbourhood Collector Streets* document provides up-to-date design guidelines specifically for collector streets, whether new construction or renewal projects, to reflect the City's complete streets framework. The document was developed as part of a consensus-building consultation process with key stakeholders, including industry representatives, utility providers and City staff.

### Highlights of the Designing Neighbourhood Collector Streets Document

The key feature of the *Designing Neighbourhood Collector Streets* document is the set of nine "pre-vetted" collector street designs. These designs, developed in consultation with stakeholders, illustrate street spaces balanced among competing elements such as cycling facilities, parking, sidewalks, utilities and landscaping, within the existing typical right-of-way widths (22, 24 and 26 metres).

Generally, the pre-vetted cross-sections in the document include separated cycling facilities, enhanced landscaping opportunities, and integrated speed management. Most also accommodate street parking on one side, which is a departure from the current typical standard. Pavement widths account for transit service and road maintenance operational requirements. Design considerations for accessibility and vulnerable users include physically separate cycling facilities and sidewalks coordinated with bus stops, shelters and benches. Also included are emerging design considerations for intersections, including roundabouts and 'protected intersections' that provide dedicated space for cycling and pedestrians while minimizing crossing distances. Many of the street designs include space for larger sized trees, even in areas with sensitive clay soils, not only for aesthetics but to mitigate heat impacts at the street level, provide habitats for birds and pollinators, and absorb carbon and rainwater.

Where the pre-vetted cross-sections may not be completely applicable, the document also includes design considerations to guide proponents who wish to pursue customized designs for a specific context. Guidance is provided about the many factors that must be considered including: the function of the street in the community, the type of adjacent land uses, walking and cycling requirements, the frequency of transit service, the amount of on-street parking, the desired level of maintenance standards, and the arrangement of elements in the boulevard including utilities, trees and sidewalks.

### Consensus-Building Stakeholder Engagement

A consensus-building stakeholder engagement process resulted in comprehensive designs with a tightly woven relationship among the competing street elements including the surface elements (e.g. sidewalks, cycling facilities and traffic lanes) and sub-surface elements (e.g. utilities, planting areas). This coordinated engagement effort resulted in an efficient use of the right-of-way, without the need for further widening. Stakeholders included representatives from the land development industry, consulting engineers, utility providers and a technical working group of City staff from various departments.

Early in the consultation process, stakeholders identified issues to be addressed. The development industry expressed interest in designs that respond to the planned land use context and allow for more street trees. The industry also expressed interest in streamlining the design and review processes for transportation facilities. Utility providers noted that existing guidelines do not reflect updated regulations, best practices, standards and operational norms for items such as the location and off-sets required for electrical transformers.

Broad public engagement was not undertaken for this technical assignment. City staff ensured that known public interests are captured in the document, such as: the accommodation of sidewalks and protected cycling on collector streets; improved opportunities for tree plantings; and, efficient winter maintenance and transit operations.

All concerns, comments and suggestions provided by stakeholders were reviewed, discussed and logged. The outcome of the engagement process is the set of pre-vetted cross-sections included in the document. The pre-vetted designs are intended to provide consistency of design by all collector roadway designers and help streamline the overall technical design and review process of future projects.

### Implementing the Guidelines

The *Designing Neighbourhood Collector Streets* document will inform the design and development of new collector streets built by land developers as part of a Plan of Subdivision. The document will help to clearly identify the right-of-way requirements for the streets, as well as the types of street amenities and facilities to be included while helping to coordinate utility services in the right-of-way. It will similarly inform right-of-way protection and street design in strategic plans such as Community Design Plans and Secondary Plans, which provide a framework for changing an area over time with respect to land use, circulation and modes of transportation. For City staff, the document will inform designs for the renewal of existing urban collector streets and support technical updates to the City's standard engineering detail drawings for roads.

The document will need to be periodically updated as City policies and industry technical guidelines continue to evolve. Updates would be made under the authority delegated to the General Manager, Transportation Services, and the Director, Transportation Planning, to make minor and administrative amendments to City planning and design guidelines related to transportation infrastructure (by-law 2018-397). For example, minor amendments to the document might include updates to lateral offsets within the existing right-of-way widths and/or references to policies and other technical documents. Updates will be reported through the Transportation Services Department's annual Delegated Authority Report.

### Cost and Benefits

The new document informs the design of new collector streets to be constructed by land developers as part of a Plan of Subdivision, as well as the renewal of existing collector streets undertaken by the City. While the rights-of-way have not changed, there are more facilities included in the new collector road designs at the surface level, such as cycling facilities, trees and elements for vehicle speed management. Depending on the pre-vetted design chosen, there is an increase in construction costs in the range of 5 to 15 per cent for the surface elements when compared to the current 24-metre right-of-way design.

This cost differential will be less when considering the full cost of road construction (including the surface and sub-surface elements). These one-time costs would be offset by the resulting safer and more appealing neighbourhood streetscapes that homeowners are looking for. Utility providers and the City stakeholders benefit from

improved operations and maintenance, including clearances for winter maintenance and the long-term viability of trees (which would also be of interest to home builders).

## **RURAL IMPLICATIONS**

This report does not have direct impact on the rural area. The new draft guidelines apply to urban collector streets. The 2008 *Road Corridor Planning and Design Guidelines: Urban & Village Collectors and Rural Arterial & Collectors* will continue to be used for village collectors, rural arterials and collector roads.

## **CONSULTATION**

The consultation process engaged the following existing stakeholder groups on many occasions throughout the project:

- Building Better Smarter Suburbs Working Group, (including representation from the Greater Ottawa Home Builders Association);
- Development Review Sub-Committee (including representation from private consultants and land developers); and,
- Utility Coordination Committee (including representatives from Ottawa Hydro, Bell, Rogers, Enbridge Gas, etc.).

A technical working group of City staff met four times and included staff from across branches and departments (including OC Transpo and Emergency and Protective Services) who contribute to the planning, design, approval, construction, maintenance and operation of new urban collector streets.

The Accessibility Advisory Committee was consulted, as was the Canadian Institute for the Blind (CNIB) at the Committee's request.

There was no broad public engagement as this is deemed to be a technical undertaking directed at collector road designers. The document will be made available to the public online.

## **COMMENTS BY THE WARD COUNCILLOR(S)**

Not Applicable



## **ADVISORY COMMITTEE(S) COMMENTS**

At its June 18, 2019 meeting the Accessibility Advisory Committee received a staff presentation about the proposed guidelines. Committee members were supportive of the project and appreciative that illustrations within the document include people with disabilities.

The Committee suggested that staff consult with the Canadian Institute for the Blind (CNIB). Subsequently, a draft document was made available to the CNIB and the Accessibility Advisory Committee for review and staff followed up with correspondence.

## **LEGAL IMPLICATIONS**

There are no legal impediments to approving the recommendations as outlined in this report.

## **RISK MANAGEMENT IMPLICATIONS**

There are no risks associated with this report.

## **ASSET MANAGEMENT IMPLICATIONS**

The recommendations documented in this report are consistent with the City's [Comprehensive Asset Management \(CAM\) Program](#) objectives. The implementation of the CAM program results in timely decisions that minimize lifecycle costs and ensure the long-term affordability of assets. To fulfill its obligation to deliver quality services to the community, the City must ensure that assets supporting City services are managed in a way that balances service levels, risk and affordability.

Creating a set of nine “pre-vetted” collector street designs is consistent with the objectives of the CAM program. These designs will result in street spaces being balanced among competing elements such as cycling facilities, parking, sidewalks, utilities and landscaping, and will serve to deliver the desired infrastructure to urban neighborhoods.

## **FINANCIAL IMPLICATIONS**

There are no financial implications with the approval of the recommendations in this report.

## **ACCESSIBILITY IMPACTS**

These guidelines implement the City's Complete Streets objectives to plan, design, construct, operate and maintain for everyone's safety and comfort regardless of people's age, ability, or mode of transportation. The document illustrates that there is enough space on collector streets for such things as wide sidewalks, rest areas and tactile indicators to implement the City's *Accessibility Design Standards* and fulfill Accessibility for Ontarians with Disabilities Act (AODA) requirements.

## **ENVIRONMENTAL IMPLICATIONS**

Some of the collector street designs have additional hard surface area within in the right-of-way compared to current standards. This is offset by the added environmental benefits such as larger consolidated soft surface green areas that can support larger more viable street trees and accommodate Low Impact Design (LID) features such as bioswales or rain gardens. The designs have specific accommodation for healthy and environmentally responsible travel choices including walking, cycling and transit. The potential for large trees can contribute to cooling and shading the street, providing habitat for birds and pollinators, and absorb carbon to help reduce greenhouse gases (GHG).

## **TERM OF COUNCIL PRIORITIES**

The 2018-2022 Term of Council Priorities have not yet been approved by Council.

## **SUPPORTING DOCUMENTATION**

Document 1 – Designing Neighbourhood Collector Streets (*distributed separately*)

## **DISPOSITION**

Following Council's approval of this report, the Transportation Services Department will finalize the Designing Neighbourhood Collector Streets document and make it broadly available. Staff will refer to this document when updating urban street policies in the Official Plan and the Transportation Master Plan, during the preparation of Community Design Plans and Secondary Plans, during the review of development applications, and when updating the City's engineering design standards for urban collector streets.