

9.1 STREET FURNITURE AND STREETSCLAPING

York Region has a number of existing standards and guidelines regarding the provision of street furniture and planting. These include:

- York Region Streetscape Standards
- South Yonge and Yonge/Davis Streetscape Master Plans
- York Region Transit Street Furniture Design Guidelines
- York Region Street Tree Preservation and Planting Design Guidelines

This section addresses street furniture and planting from the perspective of active transportation users. In particular, it discusses how street furniture and vegetation play a role in creating an attractive and safe environment for the use of active transportation.

9.1.1 Street Furniture

Street furniture plays an important role in encouraging the use of active transportation. In addition to increasing user comfort, it helps to enhance the vibrancy of the street and instill a sense of place. The street furniture most commonly used by pedestrians and cyclists includes benches, trashcans, public transit shelters, and bicycle racks. Other street furniture which passersby may use include mailboxes, newspaper distributors, public telephones, and parking meters.

Placement of Furniture

Street furniture must be carefully placed in the boulevard to be accessible to pedestrians and cyclists without encroaching into operating spaces, so as not to create obstacles or hazards.

Any vertical object must be a minimum of 0.25 m away from the edge of the pedestrian clearway. The required clearance for cycling facilities, including multiuse paths, is considerably wider, given that cyclists have a larger operating space and move faster than pedestrians. The following lateral clearance from the edge of the facility are recommended:

- 0.5 m preferred clearance from the edge of the facility for non-linear, fixed objects more than 750 mm high
- 0.25 m minimum clearance from the edge of the facility for non-linear, fixed objects 100 to 750 mm high

The only exception to the above is posts with pushbuttons, for activating crosswalk and crossside signals. These may be placed at 0.25 m for the edge of the facility, to be within easy reach for pedestrians and cyclists. Minimum lateral clearances for pedestrian and cycling facilities are discussed in more detail in Section 4.5.

Placement of benches and seat walls

Public benches and seat walls allow passers-by to sit down, rest and socialize. Benches are most frequently placed parallel to the street and oriented to face a pedestrian clearway or multiuse path. However, benches at bus stops are often oriented towards the roadway. On a street with a very wide planting and furnishing zone, it may also be possible to place benches perpendicular or at an angle to the street.

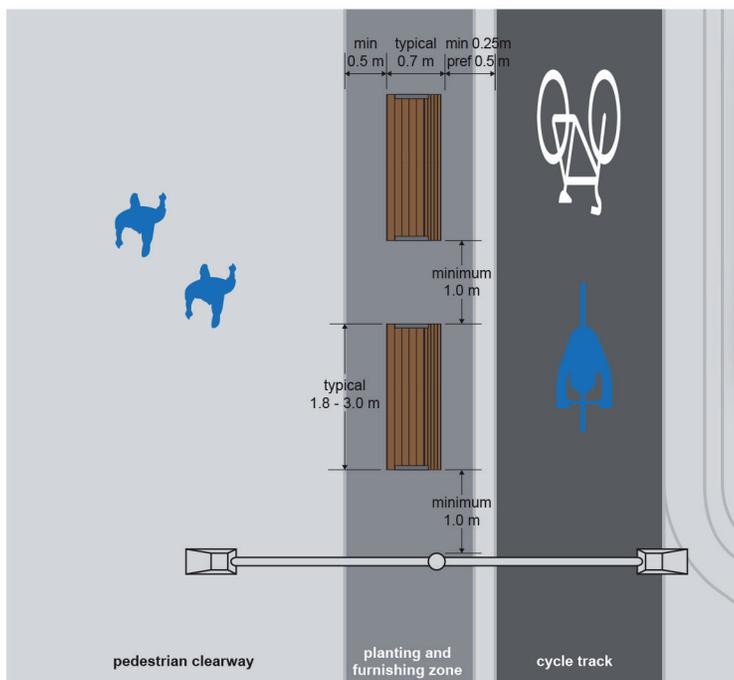
Benches come in different lengths however most require a space that is at least 1.5 m deep. The front edge of the bench should set back at least 0.5 m from the edge of a pedestrian clearway so that user’s legs don’t protrude into the clearway. Similarly, a seat wall should be set back at least 0.5 m.

If there is a roadway behind or next to the bench, it should be placed outside the prescribed edge zone, as required by the Designing Great Streets guidelines. If there is a cycling facility beside the bench, the clearance between the edge of the cycling facility and the bench should follow the general rules provided above—preferably 1.0 m from the edge of the cycle track and at minimum of 0.5 m from the edge in a constrained situation.

Benches should be placed at least 1.0 m from other furnishings and street trees so as not to impede pedestrian movement and maintenance operations. Benches can be removed in the winter so that they do not impede snow clearing and removal operations. If benches are to be left in place, they should be made of weather-resistant and water-repellent materials.

These dimensions are illustrated in Exhibit 9-1.

Exhibit 9-1. Placement of benches



9.1.2 Trees and vegetation

Trees and other vegetation planted along streets have more than just an aesthetic function. They have a direct impact on active transportation users' comfort and safety. Trees and shrubs must be carefully selected and placed within boulevards and medians to maximize the comfort and attractiveness of the street for active transportation users while also ensuring their safety.

The most elementary function of trees is to provide shade, which is especially valuable to pedestrians and cyclists on bright and hot summer days. Planting areas along streets also accumulate less heat than paved surfaces and can provide localized relief the urban heat island effect, which is also of value to pedestrians and cyclists.

Trees, shrubs, and planters can also be used to provide separation between different traffic streams. When planted along the edge of a roadway, they can help buffer pedestrians and cyclists in the boulevard from the noise and air pollution generated by vehicles on the roadway. For retrofit projects, planters can be placed on the roadway to create a protected bicycle lane. This approach is possible only if a sufficiently wide buffer can be provided between the cycle track and the adjacent travel lane, although emerging designs of self-watering planters can be placed in buffers as narrow as 0.5 m. Although these types of treatments are less likely on Regional roads, they may be considered in retrofit situations.

Trees and other vegetation planted between a pedestrian clearway and a raised cycle track can provide a clear visual barrier between the two facilities and discourage pedestrians and cyclists from encroaching into each other's spaces. This kind of robust separation between the pedestrian and cycling realms is desirable where high volumes of either pedestrians or cyclists or both are expected.

Exhibit 9-2. Planters provide physical separation on a retrofit cycle track



Source: IBI Group

Exhibit 9-3. Tree planting between a raised cycle track and pedestrian clearway



Source: Bartek Komorowski/Vélo Québec

Placement of Trees and Vegetation

As with furniture, trees and other plants must be positioned carefully in relation to pedestrian and cycling facilities. Key considerations include:

- Avoiding encroachment of trunks or branches into pedestrians' and cyclists' operating spaces
- Maintaining required lateral clearances from the edge of the pedestrian and cycling facilities
- Avoiding obstruction of sight lines at intersections, driveways, transit stops and other potential points of conflict

Trees

Tree trunks must be outside the required lateral clearance from the edge of a pedestrian clearway, multiuse path or cycling facility. The York Region Street Tree Preservation and Planting Design Guidelines (2013) require that trees be planted at least 1.0 m and preferably 1.5 m from the edge of a sidewalk. However, in very constrained ROWs, an offset as small as 0.5 m from the edge of a sidewalk can be tolerated. The same is recommended for distance from the edge of a cycling facility or multiuse path.

To avoid encroachment into the pedestrian and cycling operating space, a minimum vertical clearance of at least 2.1 m between the surface or the sidewalk, cycle track, or multiuse path and the lowest overhanging branch is necessary. This vertical clearance must be maintained throughout the tree's lifecycle, from the moment the tree is planted to full maturity. Overhanging branches may need to be pruned if they encroach into pedestrian or cyclist operating space.

Ground Cover

Protrusion of grass and other short ground covering plants into pedestrian and cycling facilities is less of a risk than it is for trees and shrubs. Nevertheless, it is preferable to select slow growing varieties that do not require frequent trimming and watering operations, which can interfere with walking and cycling.

Planters

Planters can add a touch of greenery to streets otherwise dominated by asphalt, concrete and other hard, impermeable surfaces. Planters may be hung from lampposts or placed on a painted buffer or median on the roadway, atop a concrete median, or in a hardscaped space within the boulevard.

Planters must be placed so as not obstruct the free flow of pedestrians, especially wheelchair users. Sidewalk planters must therefore be positioned outside of the pedestrian clearway and beyond the required lateral clearance from a cycling facility. Hanging planters should be at least 2.5 m above the ground.

References

For more detailed guidance on street furniture, trees and vegetation in York Region, planners and designers should consult the York Region Streetscape Standards and the York Region Street Tree Preservation And Planting Design Guidelines. Some location specific guidance is also provided in the South Yonge and Yonge/ Davis Streetscape Master Plans.