

## **Riverside Drive Road Reconstruction**

### **How does the final design address vehicle speeds and volumes?**

The final design features a number of measures that together help address vehicle speed by encouraging drivers to obey the posted limit of 30 km/hr. They include:

- Narrowing the pavement width from the current 9 -10 metres down to 7.2 metres (m).
- Extending the curb at key locations to narrow the roadway to the minimum 6.0 m allowable by Fire Services.
- Realigning Riverside Drive at the Riverside Trail intersection to tighten the turning radius and installing raised intersection to reduce vehicle speeds. Using roadway pavers on the approaches to and within the intersection, to increase visibility of the intersection.
- Adding roadway pavers at various locations along Riverside Drive as a cue to drivers to slow their speed.

The above-noted features help to reduce vehicle speeds, making Riverside Drive less attractive as a cut-through route, resulting in reduced traffic volumes.

### **What is a curb extension?**

A curb extension is where the curb extends out beyond the typical curb alignment. It serves to visually and physically narrow the roadway, while providing space to add trees and plantings.

Along Riverside Drive, curb extensions will be featured at key intersections and several mid-block locations to slow drivers travelling along the street.

### **Won't curb extensions be dangerous to drivers entering and exiting their driveways or adjoining streets?**

City staff have looked closely at driveways and sightlines to ensure sufficient separation is maintained allowing for safe entry and exit from driveways and at intersections.

### **Why can't Riverside Drive be designed as a woonerf?**

While interest has been expressed in applying a woonerf, or shared street design on Riverside Drive, the conditions on the street do not make Riverside Drive a suitable candidate. A woonerf or shared street mixes all modes together and prioritizes pedestrians, with the expectation that all users travel no faster than walking speed. For this reason, woonerfs or shared streets are typically limited to streets that are quite short, with high pedestrian volumes and low vehicle volumes.

### **Why are curbs being added?**

Curbs serve several functions on a street, they help manage and channel stormwater; provide delineation for the edge of pavement; and provide protection for pedestrians on the sidewalk.

In order to maintain a rural cross-section on Riverside Drive, proper ditches would need to be constructed. A rural cross-section with ditches requires more width than an urban cross-section with curbs. A rural cross-section on Riverside Drive would have major impacts on the existing private landscaping and mature trees; and in some locations of the street, there is not a large enough right-of-way to accommodate a rural cross-section.

Even though the design proposes an urban cross-section on Riverside Drive, rolled curbs will be used instead of the standard barrier curb. Rolled curbs are lower (125 mm instead of 150 mm of a standard barrier curb) and flatter, which will mitigate the aesthetic impact of an urban cross-section.

**Will there be changes to the intersection at South Kingsway and Riverside Drive?**

The City is keeping the existing intersection configuration, including the right-turn channel, although minor improvements will be included in the road reconstruction.

**How will the intersection of Riverside Drive and Mossom Road be improved?**

The intersection of Riverside Drive and Mossom Road will be realigned with Mossom Road meeting Riverside Drive at an approximate 90-degree angle. This will improve sightlines for drivers on Mossom Road and allow them to see oncoming traffic and pedestrians more easily, without having to turn back and look over their shoulders. Mossom Road, on approach to Riverside Drive, has also been narrowed to 6.6 m, which helps to reinforce Mossom Road as a one-way street and reduces the crossing distance for pedestrians. The removal of excess asphalt allows for a bioswale area and additional streetscaping to be installed.

**What improvements will be made to the intersection of Riverside Drive and Riverside Trail?**

Riverside Drive will be realigned at Riverside Trail with a tightened curve, along with a raised intersection. Both of these geometric features will help to reduce vehicle speeds. Further enhancements will include the use of concrete roadway pavers on the approaches to and within the intersection, which will increase the visibility of the intersection and help to reinforce to drivers that they have to stop at the intersection.

**Will pavers be added in the road?**

Pavers will be implemented at several locations along Riverside Drive. Two types of roadway pavers will be used: permeable roadway pavers will be installed at Lucy Maud Montgomery Park and roadway pavers on a concrete base will be installed at all other locations.

Roadway pavers provide a change in materiality from the asphalt surface and provide visual and audible cues to alert drivers to bring their attention back to the roadway.

**Will on-street parking be permitted on Riverside Drive?**

On-street parking will be permitted on one side of the street along sections where the roadway width is 7.2 m, alternating between both sides. Parking will not be permitted at curb extension locations, where the roadway width is 6.0 m.

**Will the new road be safe for cycling?**

The speed and volume of motorized traffic is a key factor in creating bicycle friendly streets. The road has been designed to slow down vehicular traffic to the posted 30 km/h speed and the travel lanes are sufficiently wide to accommodate cyclists at the same time. Where the roadbed is narrowed to 6.0 m at the curb extensions, vehicles should permit cyclists travelling in the same direction to proceed or 'take the lane' where there is not a sufficient buffer between the vehicle and cyclist.

**Why does Riverside Drive need a sidewalk?**

A sidewalk offers a dedicated space for pedestrians, particularly for the most vulnerable. It promotes walkability, enhances pedestrian safety and comfort, and improve accessibility.

The City's practice is to build a sidewalk on at least one side of a local road during reconstruction. In recognizing the character of Riverside Drive as a Discovery Walk and to minimize removal of healthy trees, the City is installing a sidewalk with a separated grassed boulevard on only one side of the road, with plans to plant over 120 new trees in this boulevard.

**Which side of the street will the sidewalk be added to?**

A sidewalk will be installed on the east side of Riverside Drive for the following reasons:

- There are more homes that the sidewalk can serve on the east side of the street
- There is existing lighting on the east side of the street
- The west side of the street, along the retaining wall at the south end, does not provide sufficient space to construct a sidewalk
- A sidewalk on the east side of the street will connect with the existing sidewalk at Mossom Place, Mossom Road, and the south end of Riverside Drive
- A sidewalk installed on the west side would require pedestrians to cross more side streets (at Riverside Crescent, north and south of Lucy Maud Montgomery Park, Riverside Trail, and Brule Gardens) than on the east side (Mossom Place, and Mossom Road).

Additionally, the City will construct a viewing strip, approximately 1.2 metres in width, along the west side, next to the retaining wall at the south end of Riverside Drive. The viewing strip will allow people to walk along and view the Humber River. Unlike the sidewalk on the east side, this viewing strip will not be plowed in the wintertime.

**What material will sidewalk be made of?**

The sidewalk will feature a unique design constructed of concrete, with a grid pattern that will be saw cut into the concrete to resemble a unit paver pattern.

Permeable pavers are not recommended by the City as a walking surface and are used only in boulevards. To be effective, a significant gap is needed between the pavers (at least 6 to 10 mm) in order to allow for water to pass. Wide gaps make the walking surface uneven and uncomfortable for pedestrians who use strollers, walkers or mobility devices. As well, pavers are more expensive to purchase and install, are more likely to present trip hazards if installed on sidewalks, and are more expensive to maintain over time.

**What is the City doing to manage stormwater?**

A number of elements are included in the redesign of Riverside Drive that promote improved stormwater management, such as:

- The installation of bio-retention areas at the intersection of Riverside Drive and Mossom Road, and at Lucy Maud Montgomery Park.
- The use of permeable pavers in the roadway at Lucy Maud Montgomery Park. Permeable pavers at this location are part of a pilot project that will help the City determine maintenance and operational needs associated with various green infrastructure, including permeable pavers.
- Planting more than 120 new trees in the east-side boulevard between the roadbed and the sidewalk.
- Converting a large amount of the existing hard surface on Riverside Drive to grassed surfaces, when taking into account the reduction in the roadway width, the introduction of curb extensions, and the removal of excess asphalt pavement at intersections, especially at Mossom Road. These new grassed surfaces will add to existing soft surfaces that help to manage stormwater and promote infiltration.

**Will the City ensure that new trees do not affect sightlines?**

The City has reviewed the placement of trees to ensure that they do not cause sightline issues for residents. The City has also taken into consideration requests made by homeowners about the location of trees in front of their property.

**Will any existing trees be affected in the reconstruction?**

There are 102 trees that are located within the construction zone. Unfortunately there is one tree that may be affected by the construction and will be reviewed by an arborist to see what measures can be taken to preserve it.

**How long is construction expected to take?**

Construction is expected to take 5 to 8 months to complete. Notification will be provided ahead of construction and will confirm timing and project delivery.