



Temporary Conditions Bike Lanes/Cycle Track

Bike Lanes

Current industry standard guidelines exist detailing best practice when requiring the temporary occupancy of bike lanes (*OTM Book 7, 2.6.3 Cyclist Safety Considerations, 2.6.3.1 Directing Cyclists through the Work Zone, 2.6.3.2 Cyclist Detours around the Work Zone, 2.6.3.3 Diversion of Cyclists onto Sidewalks*); and (*OTM Book 18, Cycling Facilities, 5.10 Temporary Conditions*). Therefore, requests for the temporary use of bike lanes should be referred to these documents. Permit fee may apply.

Cycle Track (one-way streets)

Due the contraflow operation of Cycle Track adjacent to one-way street such as Cannon Street and Hunter Street, standard guidelines cannot be followed as cyclists travelling in the opposite direction of flow cannot merge with traffic. In response to this unique situation, the following guidelines were created,

Normal Operations (< 10 min)

OK for obstructions of this duration (as per any bike lane anywhere - signed NPA)

Short Duration (10 min to 1 day)

Signage (City designed sandwich board) required at each end of block (both directions) to notify cyclists, set up by resident or utility staff creating blockage – no permit fee.

Long Duration (> 1 day)

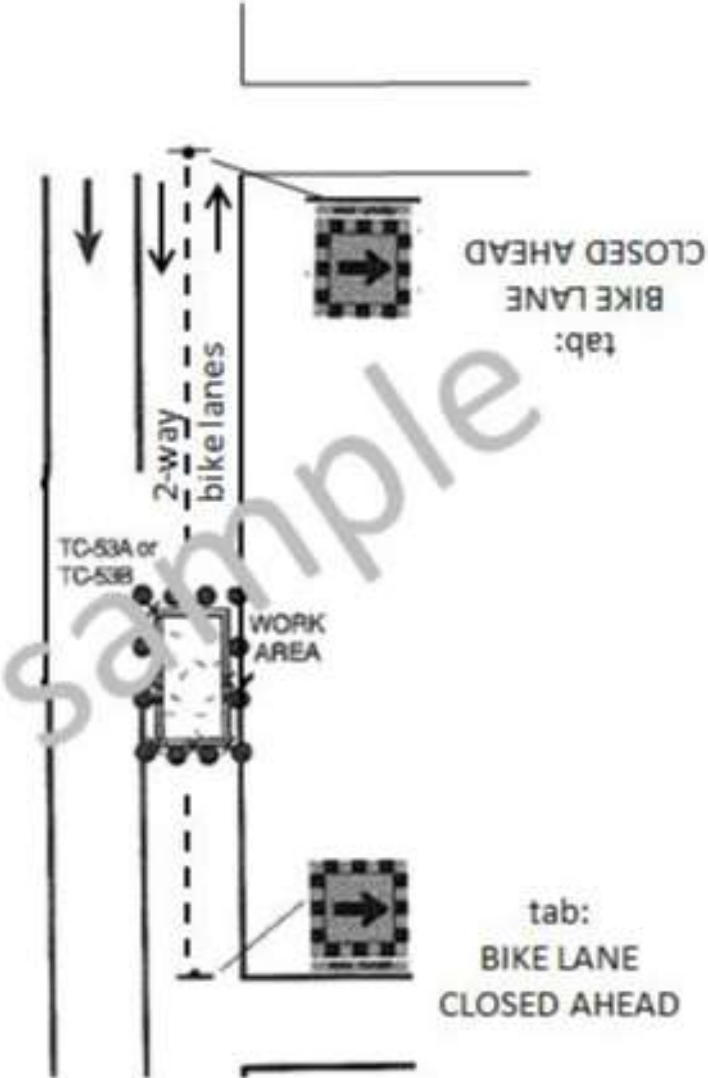
Signage (City designed sandwich board) required at each end of block (both directions) to notify cyclists, set up by resident or utility staff creating blockage – permit fee may apply.

Enforcement

Occupancies not following the above mentioned criteria, or those without a required permit, are subject to the following City of Hamilton Bylaws, *Traffic: Bylaw 01-215 "BICYCLE LANES"*, and *Parking: Bylaw 01-218 "BICYCLE LANE PARKING PROHIBITION"*.

Typical Layout

Sample layout for works in two-way bike lanes:



Note

Cyclists should be directed through the work zone where practicable.

2.6.1 Cyclist Safety Considerations

Specific traffic control and/or accommodation for cyclists may be necessary through a temporary work zone. Under the HTA, cyclists have the same right to safe passage as motor vehicles (except where bicycles are legally prohibited), and should only be required to dismount and travel as pedestrians where absolutely necessary. Cyclists are also obliged to operate as vehicles, and generally do not require special signage unless [a] dedicated cycling facilities are affected or [b] specific actions are prescribed (e.g., follow bicycle detour, dismount and walk, caution due to rough surfaces).

However, the potential for cyclists to respond differently than motor vehicle operators to certain conditions should be anticipated and considered. For example, cyclists may not readily tolerate delays or restrictions that drivers accept. Unexpected conditions may be more problematic for cyclists than motor vehicle users. As a best practice:

- provide early notice of projects that could cause significant inconvenience to cyclists (e.g., long detours), making use of cyclist organizations or user groups where available.
- provide notification signs for all road users in advance of temporary conditions, consistent with general practice. Include distance tabs as appropriate.
- ensure that signs do not intrude into the travel path of cyclists or pedestrians; if intrusion is unavoidable, maximize sign visibility.

Cyclists should be directed through the work zone where practicable. However, if an acceptable width of a shared lane, bike lane, or paved shoulder cannot be provided, or acceptable surface conditions cannot be maintained, detour cyclists around the work zone or divert cyclists to a pathway or sidewalk.

2.6.1.1 Directing Cyclists through the Work Zone

When a cyclist is directed through the work zone, consideration must be given to the surface conditions. Safe cycling requires a higher standard of travel surface than motor vehicle operation.

- provide a smooth, hard travel surface at all times. Asphalt is ideal, but a compacted granular surface is acceptable for temporary use if well

Safe cycling requires a higher standard of travel surface than for a motor vehicle.

Note

maintained. avoid loose gravel, compacted aggregate, sand, mud, and standing water. sweep surfaces regularly, especially the outer 2.0 m of the curb lane.

- ensure that temporary surfaces (e.g., steel plates, timber decking) are skid-resistant with smooth joints at right angles to the travel path.
- minimize vertical discontinuities. Where cycling volumes are high and discontinuities are unavoidable (e.g., at road cuts, raised ironworks, steel plates that are not recessed into the pavement), consider mitigating them with asphalt ramps. use reflective paint and place devices (such as barriers, barrels or cones) to direct cyclists away from unramped grade changes.
- Where appropriate, use signs to notify cyclists of any variance from a smooth asphalt condition.

Roads with bike lanes or paved shoulders

Where cyclists approach a work zone in a bike lane or designated paved shoulder, it is preferable to maintain those facilities within the work zone, especially if cyclist volumes are high. if required, the alignment of bike lanes or paved shoulders may be diverted within the right of way.

- provide a minimum bike lane width or paved shoulder of 1.2 m (1.5 m preferred).
- if motor vehicles are diverted into a bike lane or paved shoulder, notify cyclists that the bike lane or facility ends and shared lane operation begins with the appropriate orange and black signs. apply with distance tabs in advance of lane closure, where appropriate.

Roads with shared lanes

Where cyclists approach the work zone in a shared curb lane, take care to preserve an acceptable shared lane width through the work zone.

- notify cyclists of any reduction in shared lane width in the work zone and reaffirm the shared lane condition. no other treatment is generally needed if the shared lane width in a work zone is at least 3.5 m and operating speeds are 60 km/h or less.
- Consider shared lanes wider than 3.75 m where the concentration of heavy vehicles (trucks or buses) is significant or operating speeds exceed 60 km/h.
- Where the shared lane is the only travelled lane in that direction and its width is less than noted above, consider prohibiting motor vehicles from

passing cyclists and posting a reduced speed limit. Where the shared lane is one of two or more travelled lanes in that direction and its width is less than noted above, consider either posting a sign to instruct motorists to change lanes to pass cyclists, or providing a detour for cyclists.

- Cyclists may need additional lateral clearance when the cycling surface is rough. If so, consider providing a separate bike lane rather than a shared lane through the work zone.

Traffic control by using traffic control persons (TCPs) or temporary signals

in work zones where an alternating one-way traffic flow is controlled by TCPs or temporary signals, lower speeds of cyclists should be considered to enable them to safely clear the work zone.

- TCPs should communicate to each other about the presence of cyclists in the work zone.
- The timing of temporary signals should take into account the time required for cyclists to travel through the work zone. Cyclists operating speed, used to calculate clearance time, should consider the surface treatment, the available lines of sight, and the existence of potential refuge areas for cyclists in the work zone.

2.6.1.2 Cyclist Detours around the Work Zone

detours do not require special signage for cyclists unless it is a bicycle specific detour. Bicycle specific detours should be considered if work zone or motor vehicle detour conditions cannot be made acceptable for cycling, or if a potential detour route for cyclists exists that is safer or more convenient than the detour route for motor vehicles.

- provide advance notice of the detour.
- provide guidance along the detour route.

2.6.1.3 Diversion of Cyclists onto Sidewalks

in situations where it is appropriate to divert cyclists onto sidewalks:

- in most circumstances, require cyclists who are diverted onto a sidewalk to dismount and travel through the work zone as pedestrians, walking beside their bicycles.

Note

Where alternating one-way traffic flow is controlled by TCPs or temporary signals, lower speeds of cyclists should be considered.

Note

- in some circumstances, consider allowing cyclists to ride on the sidewalk. Contributing factors may include the reduction in cyclist delay compared to dismounting and walking, and the ability to preserve sidewalk safety in view of the sidewalk width and volume of pedestrians and cyclists. note that sidewalk railings adjacent to hazards (e.g., on bridges) may require modification to achieve a minimum height of 1.5 m.

Care must be taken to ensure that lighting used to illuminate the work site is not aimed at drivers.

5.10 Temporary Conditions

When a roadway with a bicycle facility requires the development of a work zone for construction, maintenance or other temporary activities, every effort should be made to minimize disruption to the bicycle facility. This means that closing the bike facility and requiring cyclists to dismount should be avoided wherever possible. Cyclists should be encouraged to use general traffic lanes, and motorists should be advised to share the road if a bike facility cannot be maintained or relocated.

If a work zone in or adjacent to the cycling facility is required, temporary condition signs should be used to guide cyclists through or around the work zone. The application of these signs requires the development of a Traffic Control Plan for the work zone. Practitioners should refer to *OTM Book 7 – Temporary Conditions* for the fundamental principles of developing a temporary work zone.

All signs used for temporary conditions for bicycles should be sized appropriately for interpretation by both motorists and cyclists, and should conform to the TAC *Bikeway Traffic Control Guidelines for Canada – 2nd Edition* (January 2012). Where motorists and cyclists share the same detour route, separate detour signage for bicycles is not required. However, where a roadway with a narrow lane width is used on a bikeway detour or through a work zone, Share the Road signs Wc-19 (OTM), Shared Use Lane Single File signs WC-20 (TAC) or Motor Vehicle Passing Prohibited signs RB-33 (TAC) may be used. Refer to **Section 4.1.1.2** for the application of these signs and their supplementary tabs. Even when there is no formal cycling facility on roadways with significant cycling volumes, motorists and cyclists should be provided with positive guidance to share the road and be extra courteous.

Bicycle Lane Closed Sign

The Bicycle Lane Closed sign TC-68 (TAC) must be used to warn cyclists that the reserved bicycle lane is temporarily closed. Where a separate bicycle detour is provided, this sign should be accompanied by the appropriate Bicycle Lane Detour Markers as described below.

Figure 5.48 – Bicycle Lane Closed Sign



Tc-43 (OTM)
(450 mm x 450 mm)

Bicycle Lane Detour Markers

Bicycle Lane Detour Markers TC-70 (TAC) guide cyclists along a separate alternate route where work zone activities require the closure of a bicycle lane. These markers should be placed in advance of and at intersections to indicate to cyclists the direction of the detour route. A marker may be placed between intersections to confirm the detour route to the cyclist. A Bicycle Detour Ends Marker TC-71 (TAC) may be installed to indicate the conclusion of the detour.

Figure 5.49 – Bicycle Lane Detour Markers



Tc-41 (OTM)
(450 mm x 450 mm)

Tc-41AR (OTM)
(450 mm x 450 mm)



Tc-41R (OTM)
(450 mm x 450 mm)



Tc-42 (OTM)
(450 mm x 450 mm)

Figure 5.50 – Grooved Pavement Sign



Tc-19 (OTM)
(600 mm x 600 mm)

Figure 5.51 – Distance Advisory Tab Signs



Tc-11tA (OTM)
(300 mm x 600 mm)



TC-3tA (OTM)
(300 mm x 600 mm)

Grooved Pavement Sign

The Grooved Pavement sign Tc-19 (OTM) may be used to provide warning to road users, including motocyclists and cyclists, where the pavement has been milled or grooved. This sign may be accompanied by Distance Advisory Tab signs Tc-11tA or TC-3tA (IOTM) to indicate the distance or length of the expected condition.