

Construction Sites

Discussion paper about how to ensure safety for people impacted by blindness and low vision while navigating construction sites.

1. Introduction

Construction sites can often create barriers for people impacted by blindness and low vision and for wheelchair users to navigate. Therefore, regular maintenance check-ups to ensure paths of travel are clear from tripping hazards and that they are well-maintained is required. This discussion paper will present guidelines and recommendations to enhance construction sites to ensure they do not create accessibility issues for people impacted by blindness and low vision.

2. Regular Consideration

Paths of travel should be checked frequently for uneven surfaces and damage. Unit pavers such as bricks can provide effective textural contrast, but they must be checked regularly, as they often shift through the effects of settlement or frost heaving – causing tripping hazards. Ideally, unit paving should be installed over a concrete substructure to prevent movement. Identified problems should be repaired immediately and preferably at a time of low pedestrian traffic. When a path of travel requires repair or becomes unusable because of nearby construction, an alternate path should be provided. Whenever possible, provide notification on proposed maintenance activities in advance, so that pedestrians can plan an alternate accessible route. Temporary pathways should be laid out logically, following a right-angled design if possible. If the temporary pathways will be used for an extended period of time, they should incorporate directional cues, such as:

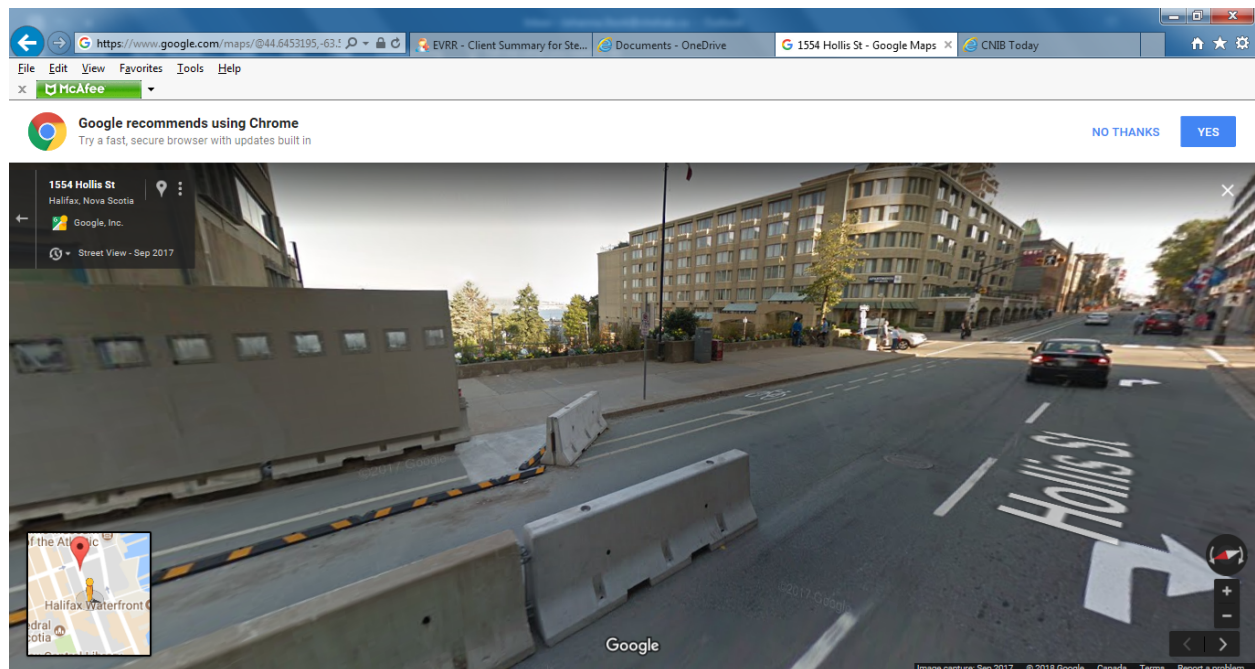
Textural changes on the ground surface

- Colour contrast
- Guidance TWSIs
- Auditory/tactile information to supplement signage and other wayfinding systems

Where temporary pathways direct pedestrians along a vehicular roadway, a physical barrier should be placed to separate pedestrians and vehicles.

3. Construction Sites

To make streets accessible and safe for all, construction sites should be completely closed to the public. Barricades that are detectable to long cane users in a colour that contrasts with the surroundings should be installed. When chain-link fencing is used, construction grade tarpaulin fabric should be used on the walkway side of the fence, to a height of 500 mm. This will prevent mobility canes from getting stuck in the chain-link fencing.



The temporary path of travel is separated from the construction by hoarding, which is a non-permanent structure of solid construction, erected around the perimeter of a construction site. The path of travel is separated from traffic by a temporary concrete barrier.

All construction equipment must be safely placed behind the barricades.

Construction barricades should be at least 1,070 mm high. Snow fencing is not an effective barricade because it's not solid and it can entangle long canes.

The erection of scaffolding or hoarding on pavements and public rights of way can narrow the walking space and can, unless properly protected, increase the risk of collision with protruding objects.

Where scaffolding is positioned over the pavement, clear headroom of 2,300 mm should be maintained. An overhead platform should be erected to the full width and length of any pavement to protect people below from falling objects.

The use of cross-bracing should be avoided below 2200 mm, unless it is located away from the route of pedestrian travel. Where cross-bracing is used, a tapping rail should be provided.

Any scaffolding that is not enclosed should be highlighted in a contrasting colour or tone so that it is clearly visible to all pedestrians.

Where a hoarding or scaffolding is erected on the footpath, and passage is restricted, an 1800 mm unobstructed width should be maintained in busy areas or a recommended width of 1200 mm in less populated areas to enable pedestrians to pass safely. Protruding parts such as pole ends should be minimized, but where they do occur, should be sleeved or boxed in. Hoardings should be highlighted with a contrasting band, at least 150 mm deep, and positioned 1400 mm to 1600 mm above ground level.

The provision of a continuous handrail should be 900 mm to 1000 mm above ground level which will assist pedestrians impacted by blindness and low vision in finding a safe route through scaffolding and to locate any public entrance.

If it is not practical to provide a safe route through the scaffolding, an alternative route should be provided.

Erect a barrier between pedestrian paths of travel and vehicular traffic and ensure that, at minimum, the temporary path of travel is at least 1200 mm wide.

If cycle lanes need to share the temporary path of travel, ensure that a barrier not less than 51 mm separates pedestrians from cycle traffic.

The barrier should be colour contrasted to the ground surface, ideally being yellow and black.

If pedestrians need to step off a sidewalk to enter a temporary path of travel, ensure that these access and egress points have appropriate cut-curbs and that these are clearly marked with colour contrasted tactile warning surface indicators.

When temporary paths of travel are erected to mitigate risks from construction sites, ensure that TWSIs are installed at the entry point; otherwise, pedestrians who are blind will have no means by which to detect a path of travel. This could potentially result in their walking into unprotected areas such as adjacent lanes of traffic or where heavy equipment is being operated.

