



CI-0202

TAB 2: SITE INFRASTRUCTURE AND DEVELOPMENT Station Sites



PEDESTRIAN AND BICYCLE PATHS

- > Provide dedicated and continuous routes for pedestrians throughout the station and connections to surrounding areas.
- > Pedestrians should not be required to cross the parking lot in order to access the station building.
- > Ensure pedestrian pathways are separated from vehicular traffic whenever possible.
- > Walkways shall be minimum 1.5 m wide.
- > When an entrance is provided from a recreational trail, a clear opening between 850 mm to 1000 mm is required, whether the entrance includes a gate, bollard, or other barrier.
- > The exterior path must meet the following requirements:
 - It must have a 1:2 bevel at changes in level between 6 mm and 13 mm.
 - It must have a maximum running slope of 1:8, or be designed as a ramp, at changes in level greater than 13 mm and less than 75 mm.
 - It must have a maximum running slope of 1:10, or be designed as a ramp, at changes in level greater than 75 mm or less than 200 mm.
 - It must be designed as a ramp, meeting all requirements and codes pertaining to ramps at changes in level greater than 200 mm.
- > Sidewalk and walkways shall be raised and constructed of hard and sustainable level materials that are slip resistant. They shall be smooth with few joint connections (similar to standard sidewalk pads and asphalt).
- > Provide curb cuts at all crossings to enable access for people using mobility devices.
- > Provide dedicated or shared bicycle lanes along primary vehicular roads leading to and from the station. Depending on the station configuration, it may be preferable to introduce a separate bicycle entrance. The width of a dedicated bike lane shall be no less than 1.5 m.
- > The bike route shall be distinguished with specially coloured paving, line painting, or graphic.
- > Ensure bicycle access routes are free of obstacles such as curbs and signs. Provisions for bicycle ramps and gutters shall be considered where barriers are unavoidable.



CI-0202

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SHARED PEDESTRIAN/CYCLISTS PATH

Design Use:

- > Shared pedestrian/cyclists paths are to be used, on a site by site case, where it is determined to promote a safe and visible alternate mode of transportation at stations.
- > Shared paths should provide connectivity from the main municipal access points, surrounding neighbourhoods and to existing recreational paths, where applicable.
- > Shared paths are to be implemented in conjunction with and leading to bicycle shelters and racks.

Design Intent:

- > A “shared path” is considered to be a single lane of travel, delineated for pedestrians and a single lane of travel delineated for cyclists.
- > Newly constructed shared-use paths should be built to provide access for people with disabilities and provide sufficient width to accommodate the potential condition of two wheelchairs having to pass, side by side.
- > The shared path should have a centreline pavement marking, to reduce the cyclists’ perception of freedom to manoeuvre between lanes.
- > Key features to be considered include trail access points, grade, cross-slope, street crossings, curb ramp design, railings, and signage.

Design Requirements:

- > The shared path width should be minimum 3 m wide.
- > Surfaces must be constructed of hard and sustainable level materials that are firm, stable, and slip-resistant. They shall be smooth with few joint connections (similar to standard sidewalk pads and asphalt).
- > Grades should generally be less than 5 percent. Level landings or rest areas should be provided at appropriate intervals on grades steeper than five percent.
- > Cross-slopes for drainage or super elevated curves should be no greater than two percent.
- > The shared path should have a 100 mm solid, standard yellow, painted centreline pavement marking.
- > See Figure – Typical Cross Section for Shared Pedestrian/Cyclist Path



CI-0203

TAB 2: SITE INFRASTRUCTURE AND DEVELOPMENT

Parking Infrastructure

- > The use of concrete, masonry, galvanized steel, stainless steel, anodized aluminium and other low maintenance materials is preferred. The mixing of different materials, including fastening systems, shall be avoided. One material shall be used for any given application and the fastening system shall be the same material.
- > Refer to the GO Signage and Branding Guidelines for detailed guidelines on exterior signage and branding elements.

EXTERIOR PAVEMENT & WALKWAYS

- > Walkways shall be constructed of hard and sustainable materials that are slip resistant and capable of clearing during winter months and shall include cantilevered canopies as directed by GO. They shall be smooth with few joint connections (similar to standard sidewalk pads and asphalt).
- > Pavement patterns are to follow and assist in defining entrances, ramps, stairs, and pedestrian paths.
- > Exterior pavement and walkways should be suitable for wheelchair and mobility device usage, physical delineation of walkways is preferred.

STRUCTURAL DESIGN

- > The parking structure must be designed to withstand the loading to which is it subjected in the completed state as well as when it is partially complete during construction, and also during maintenance.
- > The design shall be based on the most cost effective structural system when considered in the context of both the capital cost of construction and the projected life-cycle cost of the parking garage with a design service life in accordance with the latest CSA standards.
- > Ideal structural bays that allow for maximum number of parking spaces and flow of automobiles dependent upon site and structure should be designed.
- > The ground level parking slab shall be concrete slab on grade. The designer will consider the geotechnical information in the selection and design of the foundation system and structure type and consideration and recommendations will also be required for any special conditions that may exist at the site, such as slopes or adjacent land features.
- > Various miscellaneous features of the parking structure must be included in the structural design. Each feature must be designed to accommodate the proper functioning and maintenance of the item in question, including installation and removal as appropriate.