

BUS STOPS AND BIKE LANES

Primer on the BC Design Guide for Bus Stops Adjacent to Cycling Infrastructure and Engaging the Accessibility Community



NEW WESTMINSTER

Agenda

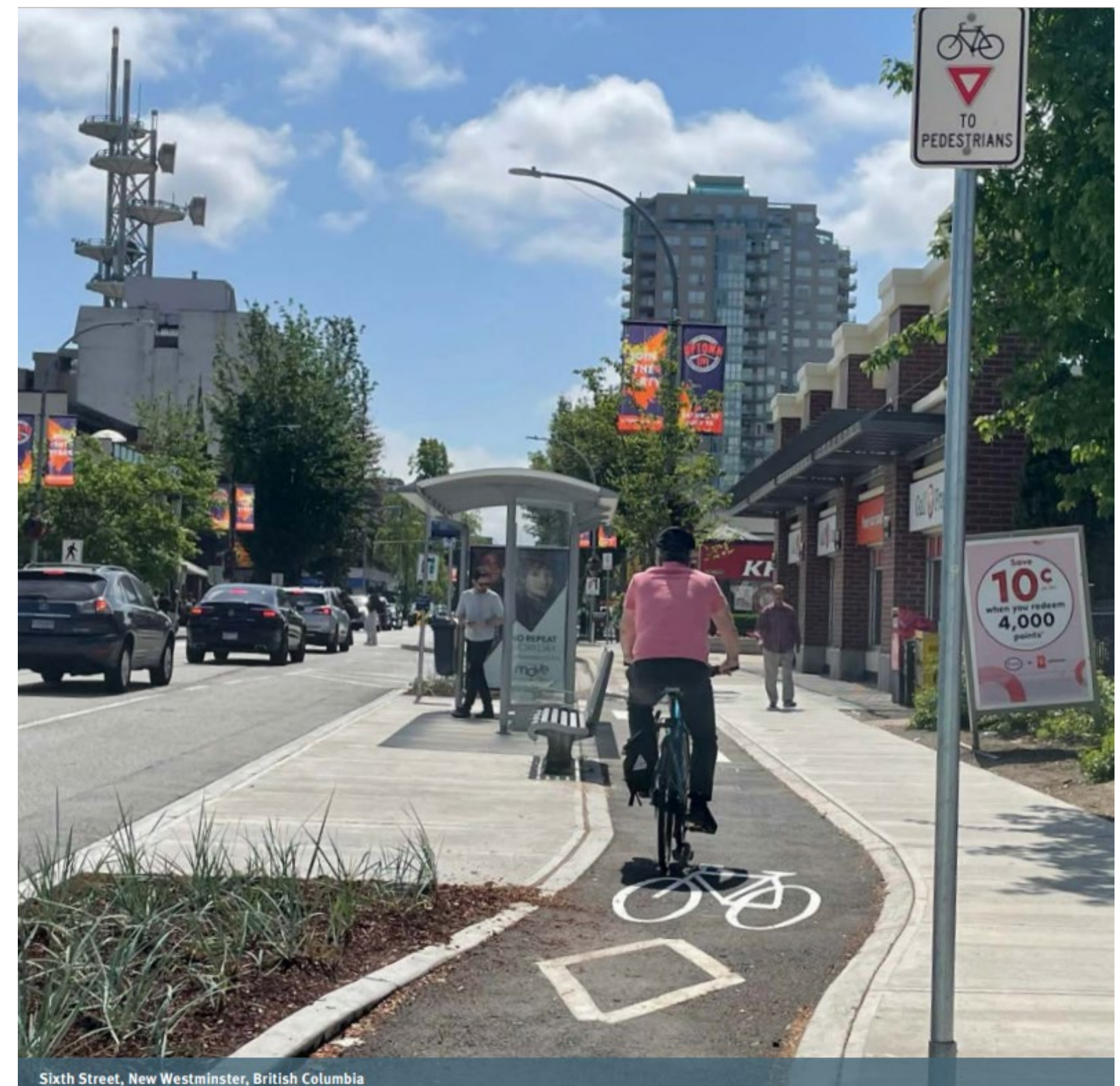
What is a floating bus stop?

Primer on the BC Design Guide for Bus Stops Adjacent to Cycling Infrastructure

Challenges with floating bus stops

East Sixth Avenue Project

Engaging with the Accessibility Community



Sixth Street, New Westminster, British Columbia

What is a floating bus stop?

Also known as a bus boarding island

Bus stop separated from the sidewalk by a bike lane



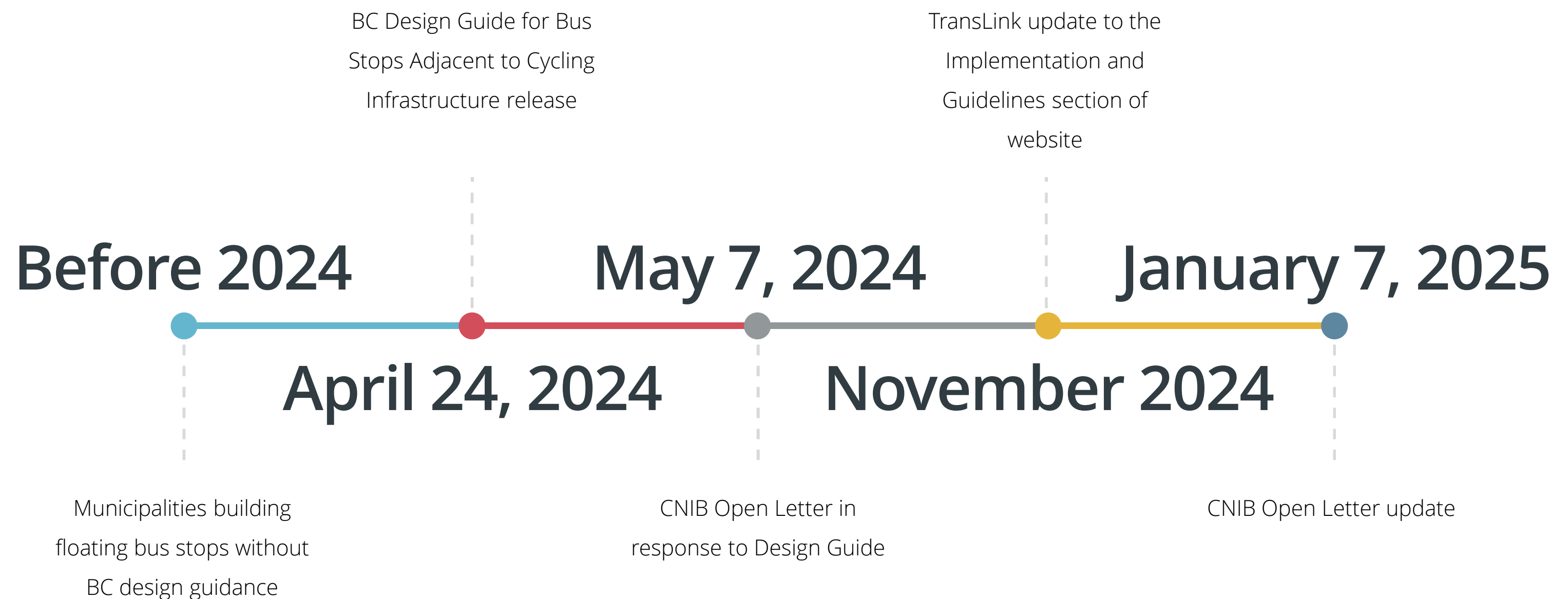
ACCESS FOR EVERYONE

Every person has the right to travel safely and comfortably however they choose to do so regardless of their ability.

SUSTAINABILITY

Integrating sustainable forms of transportation to work together to provide a range of options for people's every day trips.

BC Design Guide for Bus Stops Adjacent to Cycling Infrastructure



Key bus stop elements in BC Guide

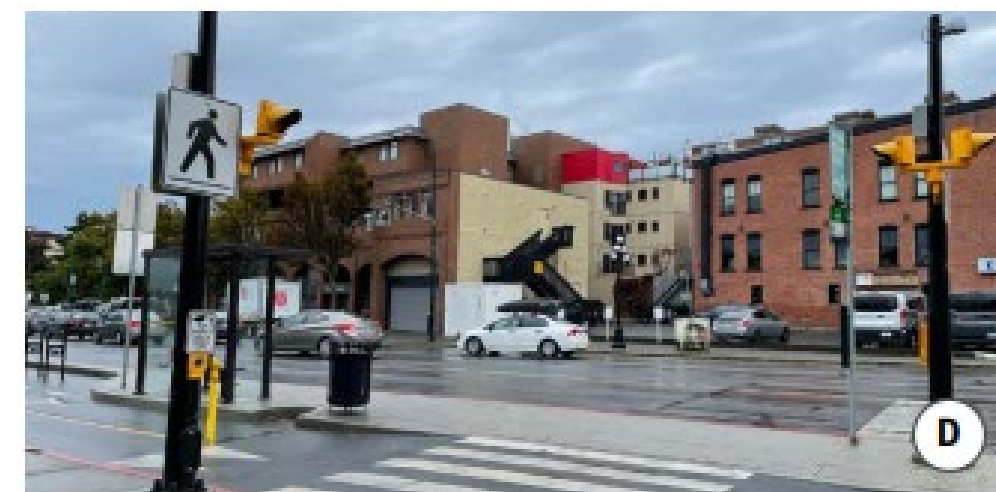


▲ **Island Platform** where transit users can wait to board and alight the bus, and which may include amenities such as a shelter, benches, bicycle parking, garbage receptacles, and other amenities.

▶ **Wheelchair Pad** to allow passengers using mobility devices to board and alight the bus via a mechanical ramp or lift that is deployed from one of the bus doors.



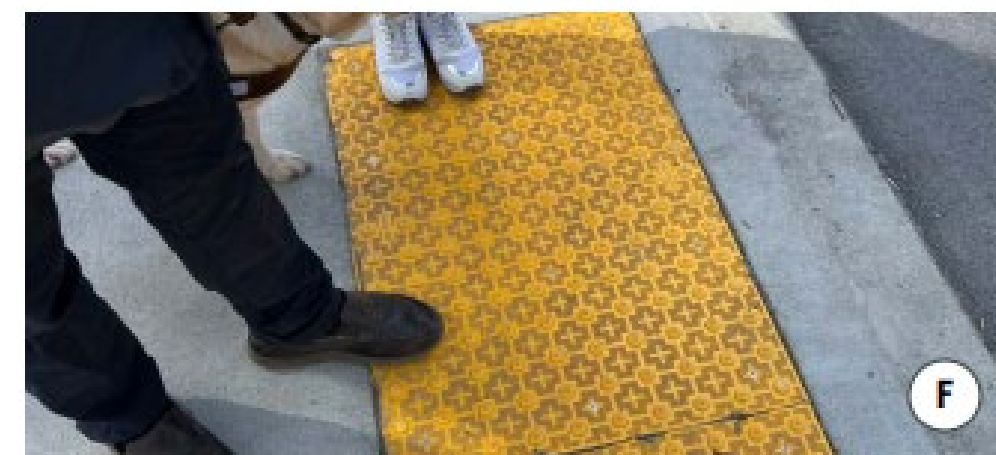
◀ **Bikeway** that is located between the island platform and the sidewalk, and which can often be raised or narrowed through the bus stop interaction zone.



◀ **Marked Pedestrian Crossings** to direct people to cross the bikeway at designated locations between the bus stop platform and the sidewalk.

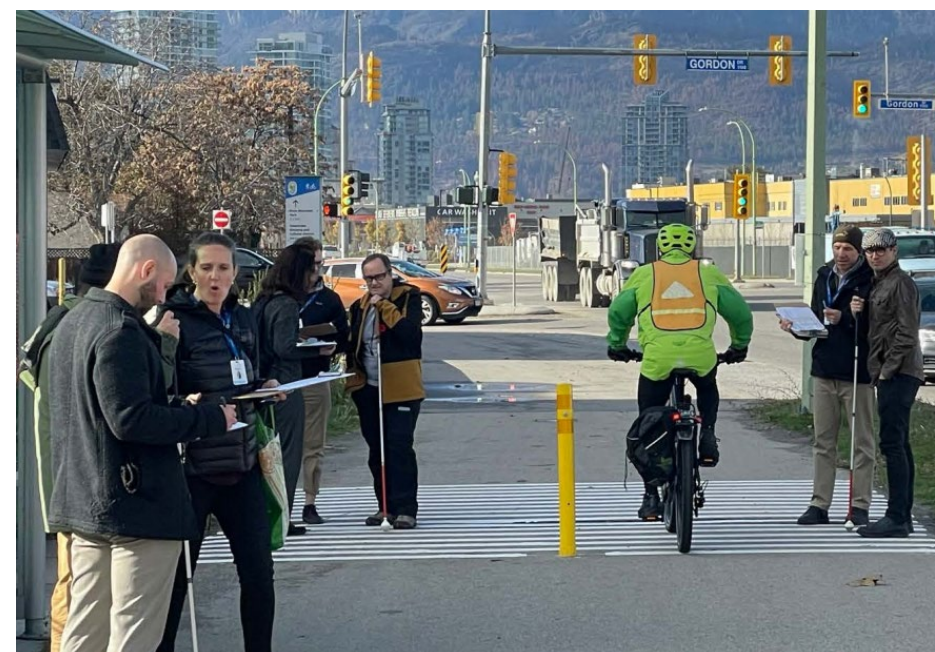


◀ **Edge Treatments** between the bicycle lane and the sidewalk and the bus stop platform that are detectable by people with sight loss.



◀ **Tactile Attention Indicators** at marked pedestrian crossings to notify people with sight loss of a crossing point.

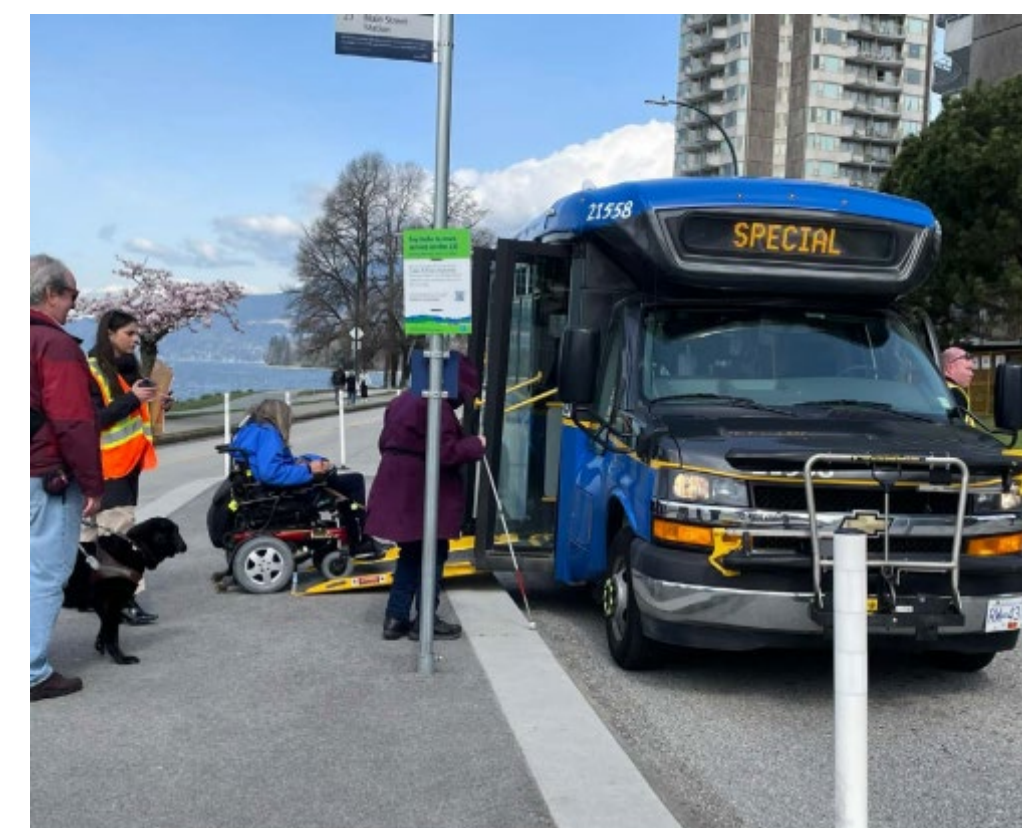
Challenges of floating bus stops



**PED-BIKE CONFLICT
PARTICULARLY WHEN
MID-BLOCK OR BI-
DIRECTIONAL**



**RISK OF PEOPLE
GETTING STUCK IN
THE BIKE LANE**

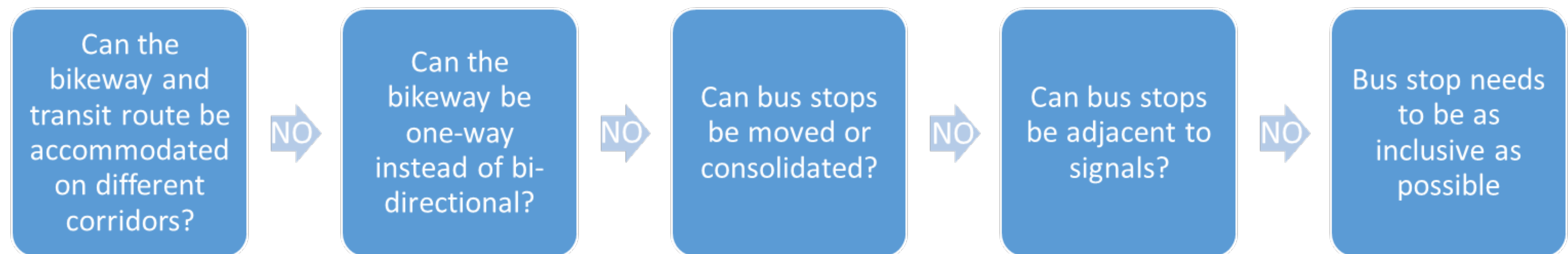


**DIFFICULT TO NAVIGATE
- PEOPLE WITH MOBILITY
CHALLENGES AND PEOPLE
WITH NO VISION/LOW
VISION**

East Sixth Avenue Project

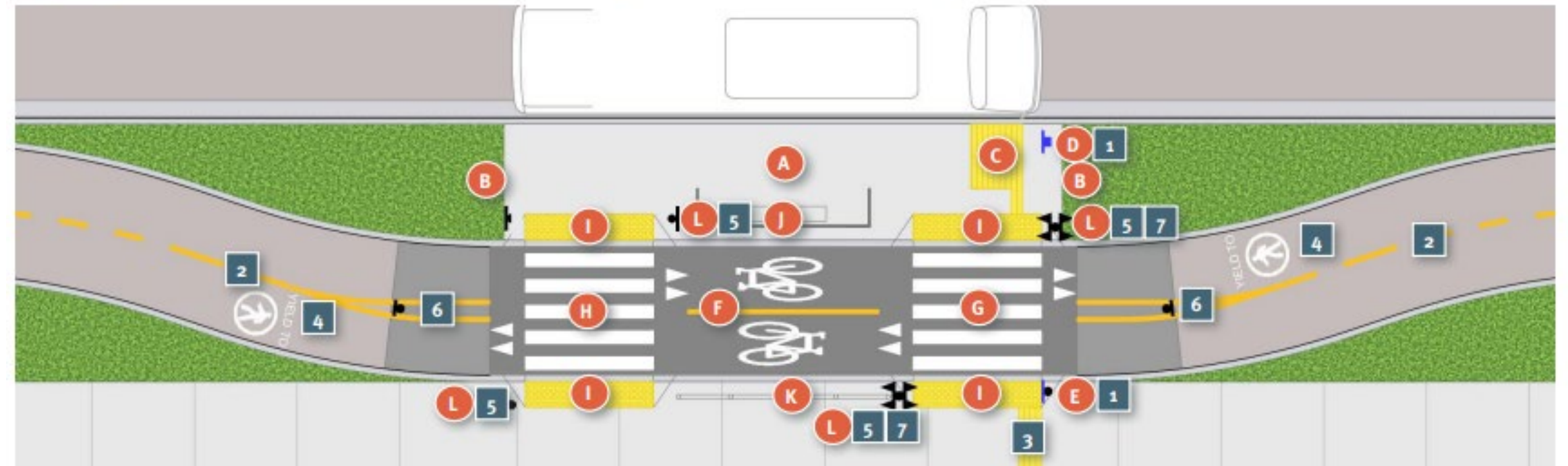


BC Guide recommends avoid conflicts or minimize conflicts



Consultant proposed floating bus stop as per BC Design Guide

Figure 47: Conventional Island Platform Without Crosswalk Integration (Bi-Directional Protected Bicycle Lane)



Core Treatments

- A** Island platform with desired width of 3.0 metres (minimum 2.3 metres)
- B** Detectable 'bookends' at start and end of island platform
- C** Tactile Directional Indicator Mat and Passenger Landing Pad clear of obstructions at front door of bus
- D** Primary bus stop ID pole with enhanced braille and raised tactile letter signage at front of island platform
- E** Secondary bus stop ID pole with enhanced braille and raised tactile letter signage on sidewalk
- F** Bicycle lane raised to sidewalk level or intermediate level and/or narrowed through bus stop zone
- G** Marked pedestrian crossing at front of island platform
- H** Marked pedestrian crossing at rear of island platform
- I** Tactile Attention Indicators at all marked pedestrian crossings
- J** Bus shelter with no side panels or clear panels
- K** Fence, landscaping, and/or other continuous amenities to provide detectable edge treatments and to channelize pedestrians to marked crossings
- L** "Pedestrian Crosswalk" and/or "Bicycles Yield to Pedestrians" signage

Optional Treatments

- 1** Enhanced sign with tactile map of bus stop layout
- 2** Horizontal deflection of bicycle lane at start and end of bus stop zone
- 3** Tactile Directional Indicators across sidewalk
- 4** "Bicycles Yield to Pedestrians" and/or "Advance Yield to Pedestrians" pavement markings
- 5** Enhanced and/or dynamic "Bicycles Yield to Pedestrians" signage
- 6** Flexible delineator posts with "Bicycles Yield to Pedestrians" signage
- 7** Actuated flashing beacons

Engaging the accessibility community

Site constraints, project history, and partner agency requirements may require the design of a mid-block bus stop and a bi-directional protected lane



HEAR CONCERN(S)

How can you guarantee a cyclist will stop at a floating bus stop?

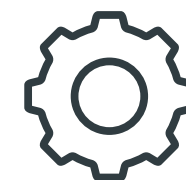
The BC Design Guide doesn't address our concern



VISIT SITE TOGETHER

Invite people with lived experience

Hired an orientation and mobility specialist to provide safe navigation during the site visit



TAILOR DESIGN

Based on feedback received, tailor the bus stop design to prioritize universal accessibility

Likely means departing from published BC Design guide

Questions?