December 11, 2014

Ashok Bhatti District Manager, Lower Mainland Ministry of Transportation and Infrastructure 310 - 1500 Woolridge Street Coquitlam, BC V3K 0B8

## RE: Stanley Park Causeway Pedestrian and Cycling Safety Improvements

Dear Mr. Bhatti,

On behalf of HUB Cycling staff, Board and volunteer committees, we would like to express our appreciation to you and your staff for the responsiveness and progress related to the consultation, planning and design processes for pedestrian and cycling safety improvements along the Stanley Park Causeway.

We appreciate the opportunities to participate in discussions to date with other stakeholders, including the public consultation on December 2, 2014. This letter provides our feedback for design refinement as requested, including recommended amendments, and suggested final steps for the design process to ensure your project objectives are met.

Some of these details have been shared with Ministry staff previously in letters of February 7, 2014 and July 4, 2014.

#### Proposed Amendment – West path passing lanes

We recommend the implementation of four 'official' and signposted passing zones, based on our review of the proposed designs and feedback from causeway users and stakeholders expressing concern about variations in cycling speeds on this considerable downhill grade:

- The two passing lanes in the proposed design
- The 'sorting' area just south of the bridge deck, as currently specified in the proposed design (with passing zone signage and demarcation)
- The third passing lane, specified in the proposed design as an 'option'

#### Proposed Amendment - East path cyclist-pedestrian shared use

Our primary concern is minimizing safety risks posed to all path users, based on assessments of the different types of potential user conflicts that can be anticipated in a constrained space. Physical separation of cyclists and pedestrians is the safest for both types of users.

However, given the minimum path widths required for physically separated paths, and the space

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1-828 West 8th Ave. Vancouver, BC V5Z 1E2 Canada 604.558.2002 currently allocated in the proposed design, this is not a viable option; where minimum path widths are lacking, physical separation should not be 'squeezed in', as this increases the risk of safety to all path users.

We recommend project staff take into account the following set of guiding principles when finalizing the design of this path:

- Rules about path use including those accounting for any changes in prescribed movement patterns should be indicated via surface markings and signage
- Markings and signage used to communicate rules about path use should employ pictograms, symbols and simple 'plain English' wording
- Rules about path use should be as consistent as possible along as much of the causeway and Lions Gate Bridge as possible; the same demarcation and direction of path use should be applied to the Ironworkers Memorial Bridge and its approach paths

## Further safety considerations - technical design and implementation

We would also like to express concern over three sets of safety considerations which we believe can have serious impacts on cycling safety (and, for the east path, directly or indirectly affecting pedestrian safety):

## Fence Design

The current, proposed fence design presents the potential for consequential serious injuries or fatalities as a result of cyclist collision with the fence poles. This is a particular concern on the west side in the higher speed areas.

We are fully supportive of the physical separation between the sidewalk path and the roadway. We strongly recommend further research into fence design, both for this project and to establish a standard (or set of standards) for other projects. We ask that the Ministry considers the following safety considerations::

- Maintain the 'rub rail' at the top of the 1.4 metre fence; add an additional rub rail below the top of the fence in order to protect cyclists.
- Location of horizontal deflection elements positioned on the path side of the posts so as to provide protection to cyclists from the posts. Possible solutions include the use of black or dark coloured mesh or chain link that has little visual impact and is commonly used in park settings.
- Sufficient safety barrier along the bottom of the fence to ensure that smaller cyclists or the limbs or heads of larger cyclists cannot slide under in case of a fall.

## Obstacles

The proposed design calls for the movement of some obstacles.

- Any obstacles close to the path, especially on the west path and in higher speed areas, should be removed if possible; this includes light poles and utility boxes
- If an object cannot be moved, adequate crash mitigation should be applied:
  - to absorb impact; or
  - $\circ$   $\;$  to deflect the user away from the object

# Joints and other surface treatment variations

We continue to have concerns relating to joints and varying surface textures that will be the result of

incorporating new pavement with existing concrete sidewalks for widening paths on either side. We have also heard concerns about surface treatments from cyclists, and its impacts specifically during inclement weather.

Even if joints are minimal or flush after construction, different materials are likely to wear and age differently. The west side path is minimal width, and any variation in surface will be hazardous. Taking additional steps to eliminate the joints and surface variation will make the path safer, so we encourage that this be done, especially on the steeper downhill sections of the path.

### Crossings of ramps to Park Drive

We have concerns about the emergence of the conflict zones and lack of clarity regarding right of way rules at all crossings and on/ off ramps to Park Drive; this has been addressed on the east side, but not yet on the west side. This concern has also been expressed by open house attendees and other cyclists.

Our preferred approach includes:

- 'Jug handle' design (currently in the Stanley Park Cycling Plan)
- Raised crossings
- Improved signage/road markings
- Rumble strips

#### Post-implementation monitoring and evaluation

We believe the implementation of a complete solution is an important milestone for Stanley Park, the City of Vancouver and active transportation stakeholders across the region, but the impact of these changes will not be fully known for months or years. Individual behaviours and usage patterns will also change both immediately, and more gradually over time.

We strongly recommend that your staff put in place monitoring mechanisms to understand usage over time, and be able to more proactively respond to safety issues as they arise. We would like to work with you to establish monitoring and evaluation milestones for the timelines associated with this project.

The ultimate goal of implementing this new facility for cycling and walking is to accommodate user growth while mitigating (or eliminating) the most egregious and containable safety risks, as has been accomplished in many jurisdictions around the world. As cycling and walking volumes increase, so too should the health and welfare of your constituents. A well-designed solution for the Stanley Park causeway can be a model for similar projects across British Columbia.

We look forward to your feedback on our recommended amendments and considerations.

#### Sincerely,

Jeff Leigh & Lisa Slakov Co-Chairs Vancouver / UBC Committee HUB Cycling vancouver@bikehub.ca Antje Wahl Chair North Shore Committee HUB Cycling northshore@bikehub.ca Arno Schortinghuis Co-Chair Regional Advisory Committee HUB Cycling arno@telus.net



# CC:

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