



## Metro Vancouver's Cycling Advocates

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May 24, 2011

City of North Vancouver  
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Port Metro Vancouver  
100 The Pointe, 999 Canada Place  
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**Dear Mayor and Council, Port Metro Low Level Road Project Team**

**Re: Low Level Road Project**

On February 21, The Vancouver Area Cycling Coalition - North Shore Committee– submitted our comments on the then proposed Low- Level Road project to the Consultation Team. As plans have progressed and we have become more familiar with the project, we are writing today to submit further comments based on our presentation to the City of North Vancouver Council on April 18, 2011 and on further consultation with the project team (May 17, 2011).

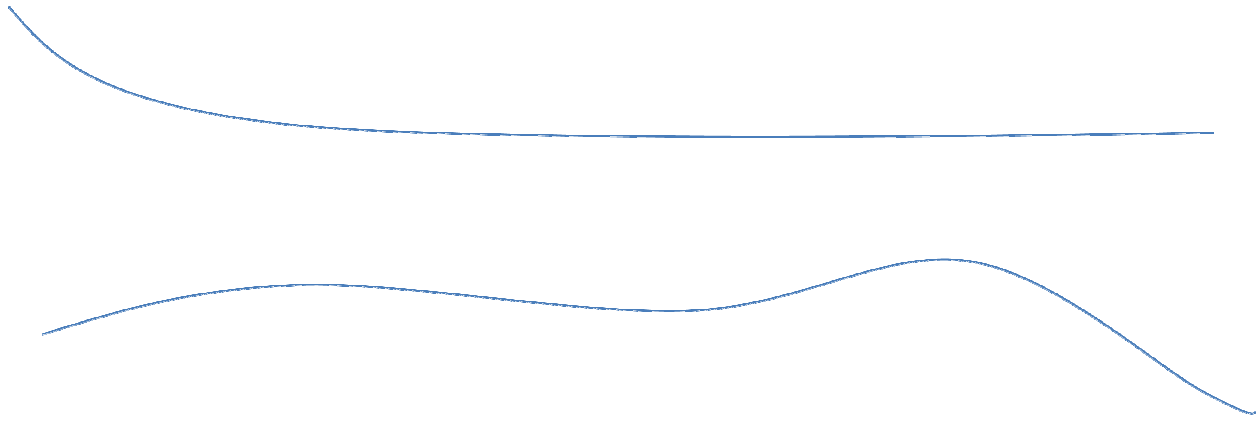
First, please let me express that the Vancouver Area Cycling Coalition – North Shore Committee does not seek to stop the re-alignment; rather we want to ensure the safety of cyclists and that new roadway does not compromise the ability of current or future cyclists to use the route by introducing hills of too stiff a grade.

### **SUMMARY OF RECOMMENDATIONS**

1. Engineer hills so that grades do not exceed 4%
2. Include physical barriers separating vehicles from cyclists and if that is not feasible, use separation striping and a green lane.
3. Include design features that reduce vehicle speed
4. Reduce vehicle speed
5. Create new connections to Moodyville

#### **1. Introduction of Hills**

A review of drawings for the project leads us to believe that two new hills will be introduced where none existed. Currently, the Low Level Road is the only flat east-west connection in the area. On every other route (3rd Street, Keith Road or trails) cyclists must climb very steep hills. Figure 1. below shows a rough comparison of the profile for the existing and proposed Low- Level route moving from West to East.

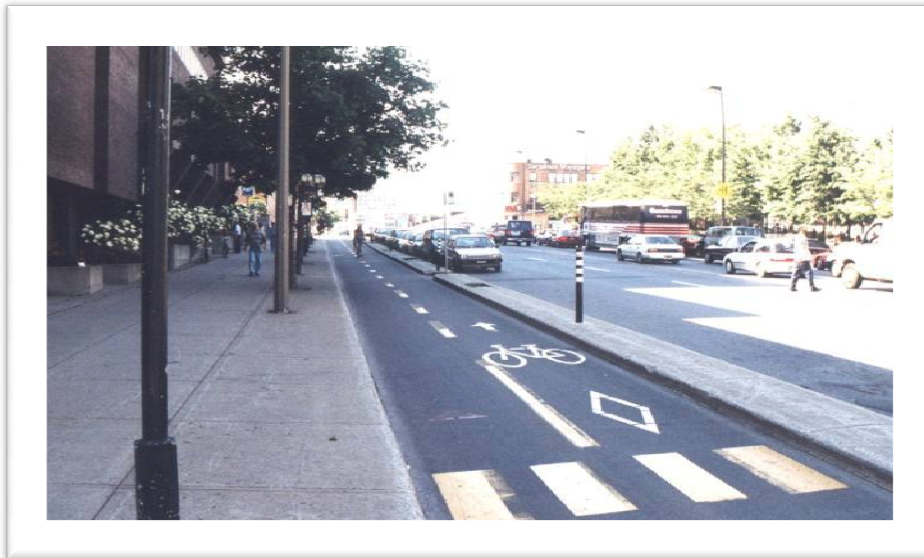


**Figure 1. West to East profile existing vs. proposed.**

In the drawings we have seen recently (May 17, 2011) the grades have been flattened significantly and the steepest grade would be around 6.4%. This is a definite improvement over the previously proposed 8%. However hills with a grade of 5% will serve as barriers to some cyclists and to people in non-motorized wheel chairs. We recommend grades of no steeper than 4%. To achieve this, the project would need to start further east.

## **2. Further Comments on Separation from Traffic**

The current design calls for a 2 m wide at-grade cycling lane. To improve safety, this design should incorporate physical barriers between cyclists and vehicular flow. Permanent barriers are preferred over painted lines. There are barriers that provide a visual cue and physical deterrent that discourage vehicles from penetrating into cycling lanes and at the same time allow emergency vehicle access, which was the main reason given to VACC by the project team for not considering physical barriers. See Figures 2 and 3 below for examples of this kind of barrier.



**Figure 2. Example of a physical barrier that does not prevent emergency vehicle access**



**Figure 3. Example of a physical barrier that does not prevent emergency vehicle access**

Another objection to separation barriers is that separate maintenance equipment and person hours will require funding. If existing equipment cannot be used and more maintenance would be incurred and that is the only thing that makes the separation barrier impractical, we suggest the three North Shore municipalities jointly purchase and operate a compact maintenance vehicle that would work for smaller areas such as sidewalks, separated bike lanes and the Spirit Trail. Does the City plan to have no separated bike lanes on the basis of maintenance costs?

If separation barriers are not feasible, then a separation strip and a green lane would be preferable to a 200mm painted white line. (see Figure. 4 below)



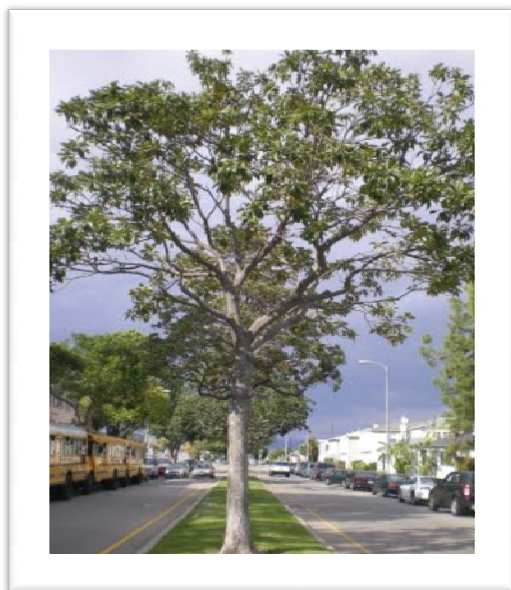
**Figure 4. Separation Stripe and Green Lane**

### **3. Engineering Traffic Calming**

The realignment and widening of the road along with improved lighting will lead to an increase in driving speed by car and truck drivers. The higher the speed, the more separation and distance cyclists require from motorized

traffic. We suggest that the road be designed not for a speed of 60 km/hour, but for 50 km/hour. The City can also post the speed at 50 km/hour. In any case, the new road should incorporate design elements that reduce traffic speed, not promote it.

- The VACC suggests that living trees or lower growing shrubs might form a natural barrier between cyclists and motorists. These could be spaced far enough apart to accommodate emergency vehicle access. This approach (see Figure 5) would serve the triple purpose of bringing nature into an otherwise sterile landscape, separating cyclists from traffic and reducing vehicle speed.

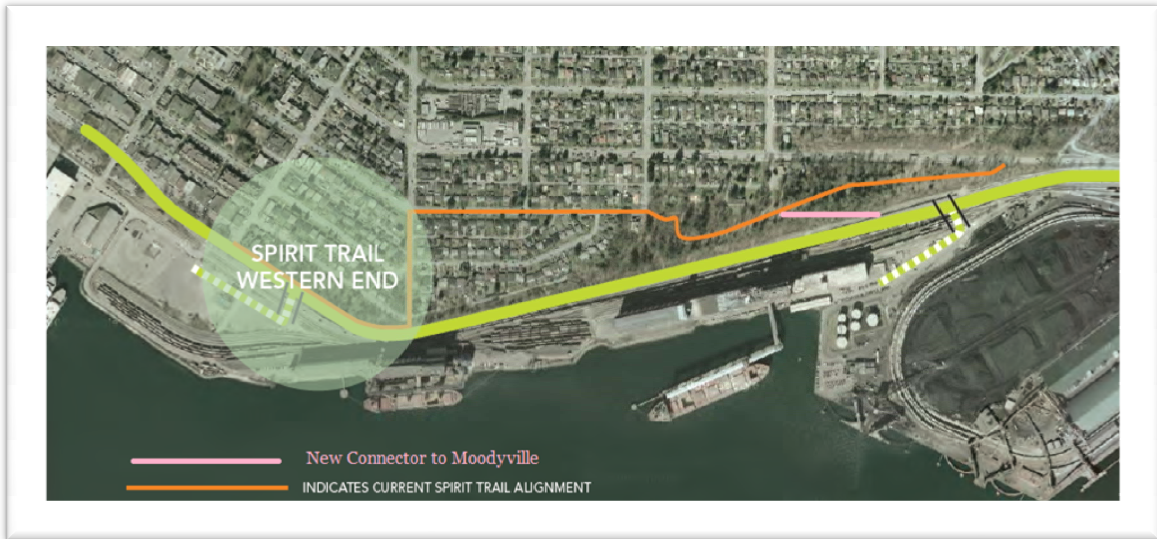


**Figure 5. Trees or low growing shrubs can offer a natural separation barrier**

- The design might also include bump-outs – thinned portions of the roadway – where pedestrian landings might include benches and interpretative signs that explain the history of Moodyville, the port, the First Nations at this site and the natural history of the escarpment and of the beach underneath the present-day port.

#### **4) Consider a new connector to Moodyville on the North Side**

The Low-Level road is effectively sealed from any Northerly penetration. Cyclists who wish to travel North to Moodyville might be better served to ride the new Low-Level road and take a transition path up to the Spirit Trail. The alternative is to ride up 3<sup>rd</sup> Street, which is very steep. The VACC recommends the project office consider implementing a connector trail to the Spirit Trail to the North into Moodyville as in Figure 6.



**Figure 6. New Connector to Spirit Trail in Moodyville**

We thank Port Metro and the City of North Vancouver for continuing this dialogue with the VACC and for hosting the stakeholder and public meetings in order to gather our feedback to the Gateway plan improvements to the Low Level Road in the North Shore Trade Area.

We welcome any correspondence with regard to this submission and offer our ongoing assistance in project reviews as detailed designs become available.

Best Regards,

A handwritten signature in black ink, appearing to read "Heather Drugge".

Heather Drugge, Member,  
Vancouver Area Cycling Coalition -- North Shore Committee

cc/  
Steve Ono, City Engineer  
Tony Barber, Manager, Engineering, Planning and Design  
The B.C. Ministry of Transportation and Infrastructure  
TransLink  
Andrew Saxton, MP  
Naomi Yamamoto, MLA