



November 3, 2015

Wayne Turner, Landscape Design Technician

Lisa Parker, Parks and Greenways Planner

City of North Vancouver

141 West 14th Street

North Vancouver

Re: East Keith Road and Grand Boulevard Green Necklace and Associated Cycling Infrastructure Improvements

Dear Wayne and Lisa,

HUB has reviewed the initial design for the East Keith Road and Grand Boulevard Green Necklace and associated cycling infrastructure. We appreciate the opportunity to provide our feedback on the preliminary design. We already have provided a letter of support to help the City obtain funding for the project from TransLink.

East Keith Road

We appreciate the reduced width of vehicle travel lanes, which should help decrease excessive traffic speeds and improve safety for all users and neighbourhood livability.

However, we believe there are safer design options than the proposed unprotected bike lanes that place people cycling between parked cars and moving traffic. The risk with that design is people on bikes being hit by opening car doors and/or swerving into traffic to avoid them^{1,2}. This design does not encourage cycling, nor is it safe.



We also have concerns about the proposed shared, multi-use path. Risks include obstacles such as bollards, curbs, conflicts with pedestrians and pets, and potentially reduced sight lines on a curvy path^{1,2}. Our biggest concern is that the multi-use path is proposed for two-way cycling and crosses intersections. Riding in the direction opposite to motor vehicle traffic increases crash risk and injury severity¹. Drivers do not expect bikes, especially those coming the opposite way on a two-way path.

In terms of encouraging more residents to bike, marked bike lanes next to parked cars are one of the least desirable route types³. Paved multi-use paths are desirable to many people³ but present serious safety concerns, especially if the path crosses side streets without signal control¹.

Recommendation

To encourage cycling and to keep people safe, we recommend protected one-way bike lanes on both sides of Keith Road². Protected bike lanes would make Keith Road an All Ages & Abilities (AAA) bike route.

If a section of Keith Road does not have the space for protected bike lanes, travel lanes and on-street parking, consider moving the curbs. Alternatively, build a more space efficient two-way protected bike lane on one side of Keith Road and install signals at all intersections or divert side street traffic away from them.

In both cases, the proposed greenway on the north side of Keith could then be narrowed for pedestrian use only, similar to Grand Boulevard where walking and cycling are separated.



Grand Boulevard

We like the off-street one-way bike lanes along the edges of Grand Boulevard Park in this design and really appreciate their addition. These AAA facilities will encourage people to cycle for transportation.

One thing to note about one-way lanes is that unless the path connections at both ends are equally good and easily accessible, you may not get compliance and the risk of collisions and injury could increase. If, for example, one of the Grand Boulevard bike paths is more easily accessible than the other, more cyclists will take it for both way travel. Good connections to nearby bike routes are key to avoiding this outcome.

Intersection Design

We strongly support improved lighting at all intersections. Lighting increases visibility and therefore safety.

Parallel paths should be clearly marked to indicate where each mode should cross. People walking and biking should focus on looking out for cars, not each other. Ideally, cycle crossings would include "green paint" found throughout the City of Vancouver at intersections, laneways and driveways. This is becoming a standard easily recognized by drivers.

Do not use bollards on bike paths at intersections. They create a distraction and increase harm from collision⁴.

We have some specific comments on the following intersections:

East Keith and St. Andrew's

Today, this intersection is awkward and difficult for cyclists with two stop signs within a few metres of each other -- especially when biking uphill on the St. Andrew's bike route. Consider installing stop signs on Keith Road and making St. Andrews a through street. Stop signs would also help to slow traffic on Keith and improve pedestrian safety. A second, much safer



option is to extend the boulevard along Keith and divert north-south traffic from St. Andrews, while permitting only walking and cycling across Keith at St. Andrews.

East Keith and St. David's

We recommend eliminating the slip lane from Keith eastbound to St. David's southbound. This will reduce the crossing distance for people walking and cycling, improving their safety. Without the slip lane cars, would slow down more when turning from Keith into St. David's instead of driving across the proposed bike lane at higher speeds. Reduced vehicle speeds result in increased safety for vulnerable road users.

East Keith and Grand Boulevard / Queensbury

Safe, direct cycling connections from Queensbury to the proposed northbound bike path along West Grand Blvd, and from the East Grand Blvd bike path down to Queensbury are essential. This intersection is awkward and presents dangers to all road users. It would benefit greatly from a complete redesign. Queensbury has the closest commercial services for the neighbourhood. Ensuring safe access to the shops would encourage more people to cycle and walk to shops instead of driving.

Grand Boulevard and East 19th Street

Consider a right turn signal for traffic on Blvd Crescent to separate people on bikes and people walking from southbound cars turning right on 19th. Vehicle speeds are high in this location and drivers do not always check for other road users before turning right. This is of particular concern at an intersection close to two schools, Sutherland secondary and Queensbury elementary. Dedicated signal phases for pedestrians, cyclists and motor vehicles would improve safety.



Thank-you for the opportunity to provide feedback to these designs. We are pleased to support the City in its efforts to improve conditions for all road and public space users. If you have any questions about the above recommendations and observations, please contact the HUB North Shore Committee. We would be happy to discuss the suggested improvements with you and share our experience to build the best product for all road users.

Sincerely,

Tony Valente,
Chair, HUB North Shore Committee

References

- 1 <http://cyclingincities-spph.sites.olt.ubc.ca/files/2014/04/Bicycling-Safety-Evidence-Sheet.pdf>
- 2 <http://cyclingincities-spph.sites.olt.ubc.ca/files/2012/10/BICEstudyBrochure.pdf>
- 3 <http://cyclingincities.spph.ubc.ca/files/2012/08/OpinionSurveyBrochure.pdf>
- 4 http://www.fhwa.dot.gov/environment/recreational_trails/guidance/accessibility_guidance/bollards_access.cfm

CC.

Mayor and Council, City of North Vancouver
Integrated Transportation Committee, City of North Vancouver
Dragana Mitic, Manager Transportation, City of North Vancouver
Doug Pope, City Engineer, City of North Vancouver
Grand Boulevard Ridgeway Residents Association
North Shore Safe Routes Advocates