



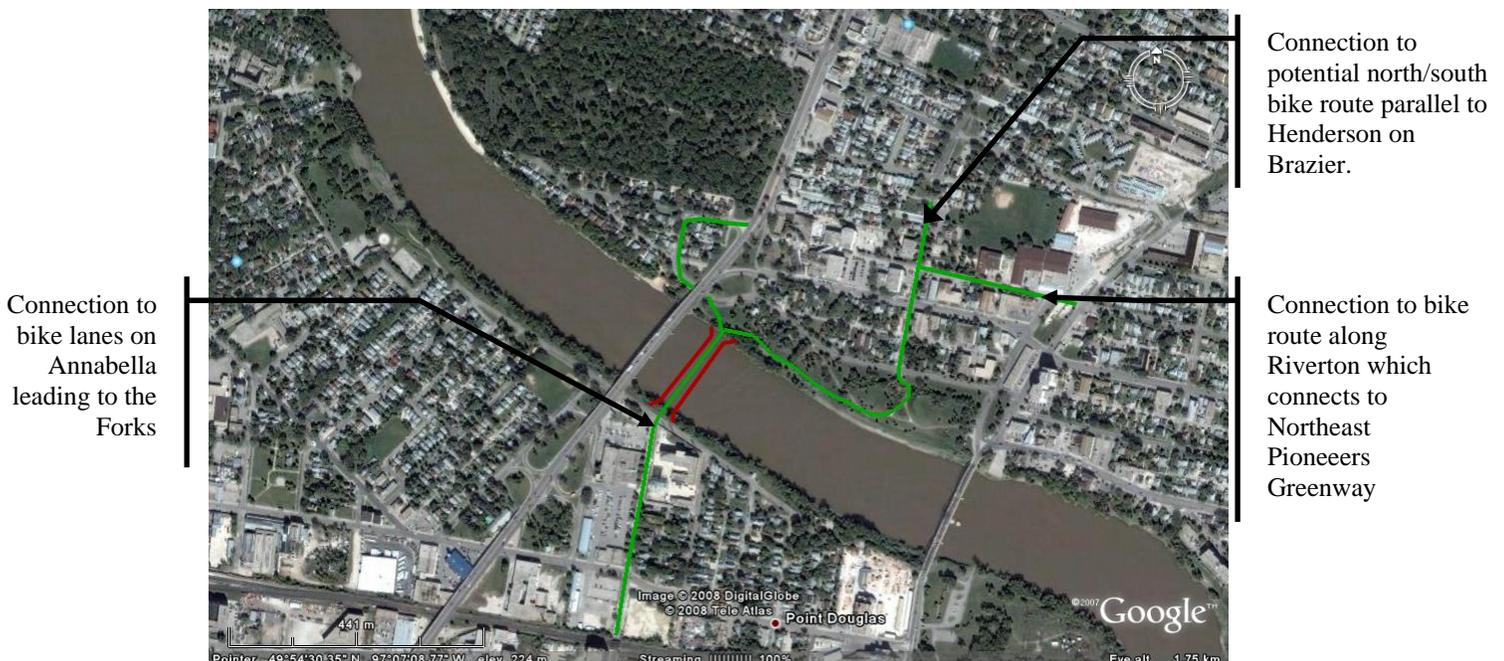
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Bike to the Future Position on the Disraeli Bridge Rehabilitation Project

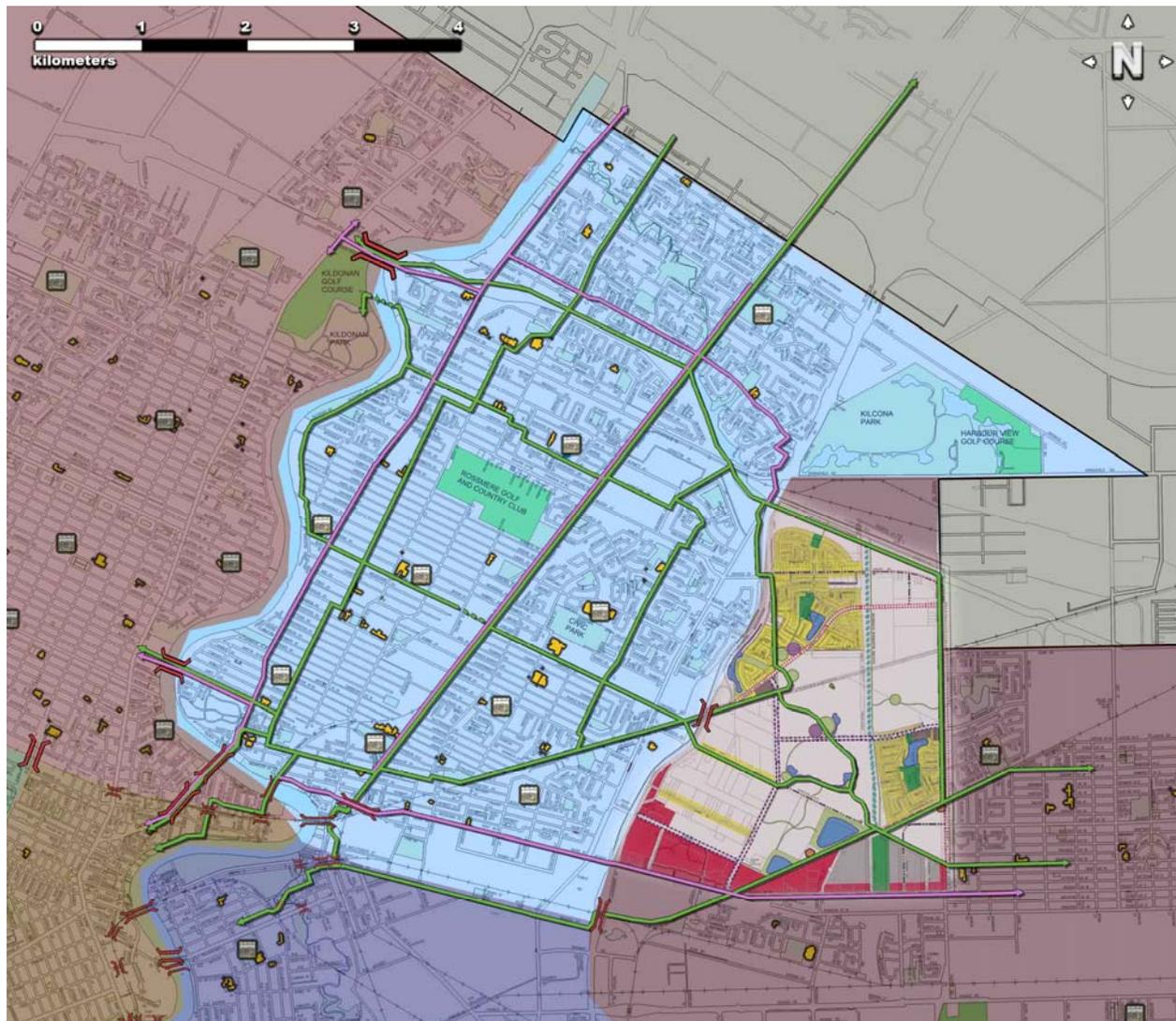
Bike to the Future has been following the discussions and proposals concerning the Disraeli Bridge rehabilitation project with interest. As the result of community consultations, which we participated in along with many others, three concepts for the bridge design have been laid out for public input. While all of these options are an improvement over the existing facilities, we feel none of them is the right design if the goal is to make cycling or walking the best transportation choice for Winnipeggers. Of the options presented for public input, we feel a modified version of Concept C offers the best compromise for cyclists. Still, many potential cyclists who are unwilling to travel in the same road with fast moving traffic will be forced to cross Disraeli/Henderson to traverse the bridge in spite of the extra width, as will pedestrians who will be left with a sidewalk on only one side of the bridge.

Bike to the Future's Ideal Concept for the Bridge

We believe pedestrians and cyclists would be best served by a separate pedestrian/bicycle bridge linking Midwinter to Annabella (possibly via Rover). Such a bridge would link bike routes along Riverton (connecting from the North East Pioneers Greenway) and Brazier (as a bike boulevard parallel to Henderson Highway) to the bike lanes on Annabella leading to Waterfront Drive and the Forks (see map on next page). With this bridge in place, a sidewalk on the Northwest side of the span could serve pedestrians on this side of Henderson while the pedestrian/bicycle bridge serves pedestrians on the Southeast. The cost of the project could be offset by a reduction in costs of the Disraeli Rehabilitation project that we feel would otherwise require widening the piers as in Concepts B and C.



Location of potential Pedestrian/Bicycle Bridge Linking Bike Routes



Potential Bike routes identified by the River East Commuter Cycling Group
(<http://groups.google.com/group/rivereastcycling>)

Evaluating the 3 Concepts Brought Forward for Public Input

Concept A

While concept A is the cheapest of the 3 options, and would improve conditions for commuter cyclists traveling over the bridge, we feel that this concept is unacceptable because of its failure to address cyclists who lack the confidence to ride with traffic. From bike counts done in 2007 (and being repeated for 2008), we know that the majority of cyclists in Winnipeg are choosing to cross bridges on sidewalks or multi-use pathways rather than on the roadway. We should expect this to continue in the future, and design accordingly under the assumption that 50% or more of cyclists traversing the bridge will continue to choose a separated path over the roadway, regardless of whether or not an appropriate path exists. With just the one 1.8m sidewalk offering a path separated from traffic, this option would be a recipe for conflict between pedestrians and cyclists.

Concept B

While Concept B improves access for pedestrians, we feel that by limiting the width of the sidewalks to 1.8m, cyclists and pedestrians will continue to come into conflict as they share the sidewalks.

Concept C

We feel that a modified version of Concept C will best meet the needs of cyclists and pedestrians utilizing the bridge. In conversation with project manager Bill Ebenspanger and other members of the team at the open house on Saturday May 1st, the possibility of increasing the width of the multi-use path included in this concept from 2.5m to 3.5m was discussed as a feasible improvement to the Concept that would not lead to a significant increase in the overall price of the project. We feel that a multi-use path of just 2.5m would not be wide enough to meet the needs of two way bike traffic in combination with pedestrian trafficⁱ. While this is the maximum width sidewalk that the city’s maintenance truck can reach over, a 3.5m path would allow the maintenance truck to operate from the path itself, negating the need to reach over the sidewalk. This might require some extra reinforcement of the underlying bridge, but we understand that this is quite feasible. This extra meter of width on the multi-use path can be attained by narrowing the curb lanes for commuter cyclists from 4.75m to 4.5m (the recommended maximum width for a sharrow lane under Transportation Association of Canada guidelines) and widening the surface width of the structure by 0.5m from 21.4m to 21.9m (which would still leave it narrower than the 22.1m width for Concept B). With this configuration, the total width of the structure would be as follows:

<i>Handrail</i>	<i>0.15m</i>
<i>Shy Distance</i>	<i>0.30m</i>
<i>Curb lane with Sharrows</i>	<i>4.50m</i>
<i>Standard Travel Lane</i>	<i>3.50m</i>
<i>Shy distance</i>	<i>0.30m</i>
<i>Centre barrier</i>	<i>0.45m</i>
<i>Shy distance</i>	<i>0.30m</i>
<i>Standard Travel Lane</i>	<i>3.50m</i>
<i>Curb Lane with Sharrows</i>	<i>4.50m</i>
<i>Shy distance</i>	<i>0.30m</i>
<i>Barrier</i>	<i>0.45m</i>
<i>Multi-use Path</i>	<i>3.50m</i>
<i>Handrail</i>	<i>0.15m</i>
<i>Total Width of Structure</i>	<i>21.90m</i>

Recommended Lane Widths for Disraeli Bridge

Under this configuration, the sharrow marking could be centered 0.80m from the curbside barrier, leaving 0.90m of clearance for a 2.6m bus passing in the same laneⁱⁱ.

While we realize that approaches may not be included in construction costs, it is our sincere hope that the public works department can consider ways that a shared use path on the Disraeli overpasses might be connected into cycling routes either as a part of the rehabilitation project or as separate projects coordinated alongside the Disraeli overpass rehabilitation project. In particular, we would like to see connections to:

- 🚲 Midwinter at the North end of the Red River overpass as it connects to Braizier, a potential North/South route parallel to Henderson Highway.
- 🚲 Annabella via Rover or possibly Gladstone at the South end of the Red River Overpass, since Annabella is part of the bike route to the Forks
- 🚲 Waterfront Drive at the South end of the Railway Overpass, again as a connection to the Forks.

Other Recommendations

Other recommendations we have for the rehabilitation project are as follows:

- A request to have the curb lanes swept as a priority to make sure debris does not accumulate in the lane, with inclusion in the Operating Budget implications of the bridge.
- Photo enforced speed on the bridge to keep motorist speeds down.
- Wheel guides on any stairways leading up to the shared use path to help cyclists coming from Rover or other streets gain access to the path.
- Boards at handlebar height to make sure handlebars don't get caught in guard rails.
- Transition zones onto and off of the shared use path.

ⁱ Measurements are based on a standard 1m bicycle design envelope (0.6m wide at the handlebars + 2 x 0.2m essential manoeuvring space required for weaving required to keep a bicycle upright and moving forward), plus a shy distance of 0.25m from a vertical barrier, and 0.5m shy distance between two passing cyclists.

ⁱⁱ With the cyclist positioned in the middle of the sharrow marking centred at 0.50m from the lanes edge (0.80m from the barrier), the bicycle design envelope would occupy the first meter of the curb lane, so that a 2.6m design vehicle such as a bus or heavy truck would have $4.5 - 1.0 - 2.6 = 0.9\text{m}$ clearance available in the curb lane.