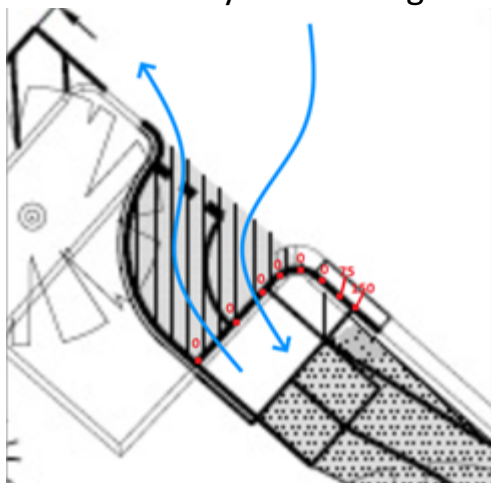


From: Fay <fay.patterson@bisa.asn.au> **Sent:** Friday, 14 June 2019 10:51 AM **To:** 'Ian Radbone' <ian@bisa.asn.au> **Cc:** Chris Bentick <cbentick@charlessturt.sa.gov.au>; portadbug@gmail.com; katie.gilfillan@bisa.asn.au **Subject:** RE: Outer Harbor Greenway Safety Improvement - Intersection of Belmore Terrace and David Terrace, Woodville Park

Hi,

Sorry, taken me a little while to get to this. Good project, Sam's comments are good. I do have some additional feedback.

The kerb ramp is transitioned to road level at the existing edge of kerb, on the eastern side of an existing car park space. This means that the design turn path for cyclists coming off the path into the road or vice versa is limited to the width of the car space – which does seem wider than a normal space, at around 3m. This means cyclists travelling to/from the path have to do a fairly tight turn to get on/off the path. In truth, they'd be likely to use the entire path width to give a smoother travel path, but this wouldn't be an option if they encounter a cyclist coming the other way.



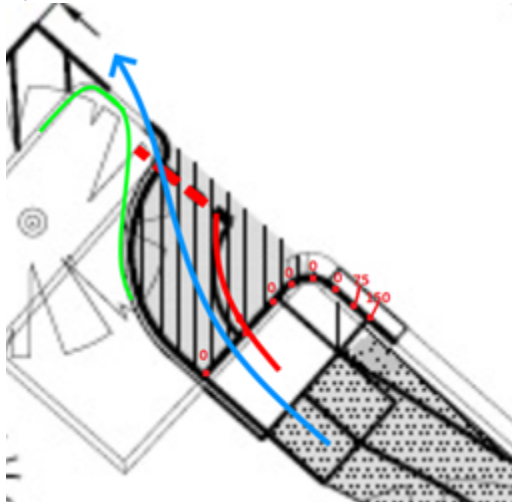
The grades at the wing should help the cyclist on the inside curve i.e. City-bound, which is good. (I've shown paths as if they're following the nominal edge of path.) However, the travel path for the other direction is still a bit tight.

I'd suggest the engineers consider two options:

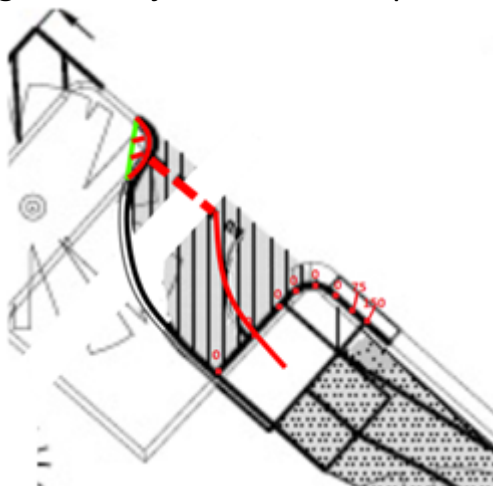
- 1) Cut off the corner of the kerb where it's formed around the existing tree protection area.

This would allow a smoother travel path for the cyclist, including eliminating any risk of clipping the corner, as may happen when they're a bit distracted – like, by looking for cars turning into Belmore

Tce from the southern side of David Tce, which means a head check to see what's behind them. Reflect the change through the line-marking – and, dare I say, line-marking that reflects the actual expected use of space in both directions.

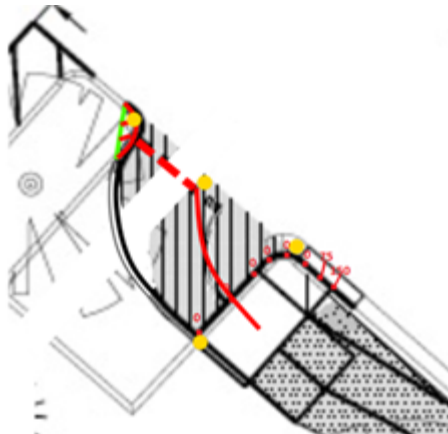


2) If there's a feeling that this would introduce cyclists into Belmore Tce a bit too fast, too close to the rear of a parked car (the design includes some line-marking to encourage a car to position away from the ramp, but...), or encourage them to exit without doing the important looking behind, an option might be to shift the entire ramp/ transition east by 0.5-1.0m i.e. don't set up its parameters according to the kerb of the car space, but the needs of the cyclists. This should similarly allow for a smoother path of travel but set the manoeuvre space back ever so slightly from the actual entry to Belmore Tce, giving an alignment when they enter which is more conducive to checking and yielding to traffic. Though TBH, I'd still cut back the corner a little bit, even if it means line-marking it back in – guess I'm just the sort of person who'd clip the kerb!



As a thought, the lighting probably isn't the best out there. I'd

suggest adding some solar LED cateyes on either side of the entry point and in the middle, to give some guidance at night. And maybe one at the top of the kerb after the manoeuvre area. As per yellow blobs below. Would you believe, they've now got holographic ones which are installed flush with the surface but throw out light as if they were raised? That would certainly ensure they don't present a path hazard! TBH, the dome-shaped ones like the ones we had trialled on Linear Path seem fine and I'm sure these are cheaper. Hmm, guess they can't be specified as RRPMS if they're not raised or retro-reflective...



And/or they could try glow-in-the-dark paint on the kerb and line-marking, but I'd think this would be a maintenance issue – the solar cateyes are set-and-forget for about 10 years. You can buy a can of glow-in-the-dark spray paint at Bunnings, I believe, so they wouldn't have to be at the mercy of contractors to supply/install it – at least on raised kerbs as the stuff at Bunnings isn't suitable for line-marking. It is also possible just to buy the material and mix it with an industrial varnish and coat it over the top of paint, which is apparently what the contractors are now doing since not mixing it with paint allows the glow to work better.

Cheers,
Fay.

Chris Bentick <cbentick@charlessturt.sa.gov.au>

RE: Outer Harbor Greenway Safety Improvement - Intersection of Belmore Terrace and David Terrace, Woodville Park

To: Fay <fay.patterson@bisa.asn.au>

Cc: Sam Powrie <portadbug@gmail.com>, Katie Gilfillan <katie.gilfillan@bisa.asn.au>, Ian Radbone ian@bisa.asn.au

Hello Fay

We have considered the recommended amendments and have shaved off some of the corner to reduce the risk of clipping the kerb (I should also point out that the proposed edge kerb is median kerb, not upright, so it should be more sympathetic to inadvertent impacts).

We are reluctant to amend line marking to further reduce the angle of entry because:

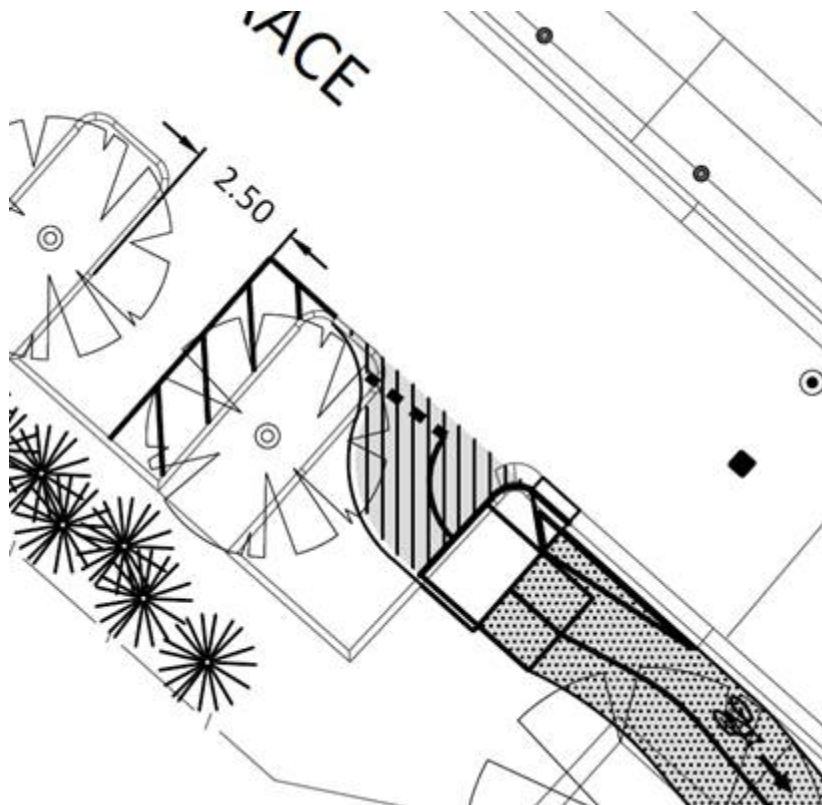
- 1 Cyclists entering Belmore Terrace are being sent into a 3.2 travel lane, not a designated cycle lane and, in our view, should be encouraged to approach the road 'squarely', in a position where they can check over their right shoulder for traffic in Belmore Terrace. Reducing the angle of entry to the road reduces the ability to observe northwest-bound traffic in Belmore Terrace.
- 2 In our view, cyclists entering the path from Belmore Terrace shouldn't be encouraged to cut the corner and travel against the flow of traffic to enter the ramp.

It really is a matter of striking the balance between safety and convenience. When we create conditions for fast and convenient entry and exit to the path, we also create conditions by which path users are less able and likely to adequately respond should there be conflict with motor vehicles in Belmore Terrace. We regard the ultimate design as maintaining that balance.

We have decided to keep the exit ramp where originally proposed. At 3.2m wide, the parking bay which will be used for the exit is regarded as sufficiently wide. Shifting by ramps to the southeast by 1.0m will be relatively costly with only marginal benefit.

We will be upgrading the lighting in the area next year, so lighting near the ramps will be significantly improved.

Again, thank you for your feedback. Please contact me if you have any queries or comments.



Thank you and kind regards

Chris Bentick Transport Engineer Engineering Strategy and Assets

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