

25 May 2018

Parramatta NSW 2124

By Email:

Dear

As discussed on the phone on 9 May, I have prepared a report containing information on a crash involving a cyclist at Peninsula Road over Easter.

The Report notes:

- The median strip installed at Peninsula Road, Valley Heights, last winter, is a trip hazard for cyclists.
- Mr [REDACTED] crashed on 2nd April 2018 after colliding with the median strip at Peninsular Road.
- Mr [REDACTED] was hospitalised as result of his injuries and we are advised his specialist has informed him he will require future surgery.
- The crash was recorded on video from a 'go pro' camera fitted to the bike [REDACTED] was riding.
- Penrith Cycling Club, Bicycle NSW and the Member for the Blue Mountains each made RMS aware of the risk of a crash involving a cyclists when the median strip was newly installed.
- A potential solution to the problem is identified and discussed in the attached report. This solution focuses on regulating access to and from the BP and the establishment of an integrated safe system of work. It is safe access to and from the BP which, after all, is the problem that needs to be fixed.

RMS has responsibility to install appropriate road treatments to improve safety for road users, including cyclists at Peninsular Road and can act unilaterally, notwithstanding BP's position, the matter. On that basis RMS is accountable. We note, however, that BP's obligations as a person conducting a business or undertaking (PCBU) under the *Work Health and Safety Act 2011* includes section 20 of that Act. That section provides that the person with management or control of a workplace must ensure, so far as is reasonably practicable, that the workplace, the means of entering and exiting the workplace and anything arising from the workplace are without risks to the health and safety of any person.

It seems to us that given the manager/ controller of the BP premises has statutory duties as a PCBU, RMS should have a reasonable expectation that the PCBU will cooperate with RMS, to achieve an integrated safe systems approach which would include appropriate road treatments supported through RMS.

Whilst we look forward to your written response to the attached report, we would also be like to hear your preliminary response as we are keen to see what action will be taken quickly to protect more cyclists from crashing as a result of hitting the median strip. Please call to discuss.

The BMCSF will work RMS to help find a better outcome for cyclists and other road users at Peninsula Road, Valley Heights.

Yours Faithfully

David Tritton
Coordinator, BMCSF

CRASH INCIDENT REPORT AND PROPOSED TREATMENTS FOR PENINSULA ROAD, VALLEY HEIGHTS

Facts Summary

The Blue Mountains Cycling Safety Forum (BMCSF) understands the facts of the crash are briefly as follows:

- The cyclist who crashed is [REDACTED].
- The crash occurred on 2nd April (Easter Monday).
- [REDACTED] was riding in a 'bunch ride' from Castle Hill to Springwood.
- On the return trip along the Great Western Highway, [REDACTED], who was a lead rider, was concentrating on a vehicle turning right onto the highway from Peninsula Road at Valley Heights.
- He and the other lead riders braked as the vehicle turned right onto the highway in front of their path.
- Although the vehicle cleared the intersection in time, [REDACTED], who was travelling closer to the kerb edge of the break-down lane (and in the direct path of the protruding median strip), hit the median strip. He did not see it as he was concentrating on the traffic and in particular the right-turning vehicle.
- [REDACTED] went over the handlebars and landed heavily in the gutter on the BP garage side of Peninsula Road. He landed on his left side head first, then shoulder and chest. His helmet probably saved him from serious head injuries.
- An ambulance was called and he was taken to Nepean Hospital
- [REDACTED] injuries included a snapped cruciate ligament from his clavicle in the shoulder. He also has 3 cracked ribs and cuts to both knees, elbows and shoulder.
- A specialist has advised [REDACTED] that he will require surgery to realign his left shoulder with the right. Essentially they need to attach a "strut" to realign it.

Description of Road Environment

As RMS is aware, the concrete strip protrudes about 1.4 metres into the break down lane/ intersection (which is approximately half the width of the break down lane). The strip extends 1.4 metres in front of the stopping line for traffic turning left or right onto the GWH from Peninsula Road. No warning signs or line markings are present to alert cyclists of the median strip hazard. The GWH near Peninsula Road is a downhill section and riders are typically travelling at around 35-40km per hour as they approach the intersection where the median strip is located.



Photo 1 shows the median strip looking east.



Photo 2 shows the median strip looking west.

Penrith Cycling Club wrote to RMS warning them of the hazard to cyclists

On 28 August 2017 the Penrith Cycling Club (PCC) wrote to [REDACTED], Manager RMS (West Precinct) to make RMS aware of the risk to cyclists arising from the then newly installed median strip. The PCC followed this up with an email to [REDACTED] Director RMS (West Precinct) on 30 August 2017.

When the PCC did not hear back from either of the officers, they asked Bicycle NSW to follow up. Ray Rice from Bicycle NSW did this on 19 September. This email was replied to on the same day and the receipt of the earlier emails was also acknowledged in that email.

Furthermore, in a subsequent phone conversation, RMS informed the BMCSF that it would use a special paint to make the strip easier to see at night but otherwise RMS considered that the strip was the best option for that location.

The PCC has also provided the BMCSF with written confirmation from the Member for the Blue Mountains chief of staff, to the effect that the matter was raised with RMS by Trish Doyle MP, as well.

The Median Strip poses an obvious and foreseeable risk of which RMS had prior knowledge

This crash is unfortunate, but reinforces the point made by the PCC in their correspondence with RMS that the median strip is **a trip hazard** placed in the pathway of cyclists who are moving at speeds between 30km - 40km (eg. speed is easy to achieve as the area is a down slope).

Furthermore, the crash was foreseeable. Cyclists concentrating on vehicles turning into the GWH

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from Peninsula Road (or concentrating on any potential hazard for that matter) cannot reasonably be expected to see the median strip and take evasive action.

RMS should reconsider alternatives

In light of this crash the BMCSF requests RMS consider and implement alternative treatments to the median strip. Whilst we do not believe your options are limited to any particular number – we have prepared a proposed treatment for consideration.

Options for consideration may include but should not be limited to the following:

Regulating Access to the BP garage

There are two driveways providing highway access to and from the BP garage (see photo 3). There is a third access from Peninsula Road. The access driveways are not regulated by BP in any particular fashion which means theoretically a vehicle may enter or exit from any driveway. This is the hazard which RMS has sought to manage (albeit indirectly) through the placement of the median strip at right angles across half the width of the intersection/shoulder. My understanding of the median strip is to act as deterrent to drivers using the intersection as a de-acceleration and turning lane for



Photo 3 shows the two access points to the BP from the GWH. It is proposed that the access on the left be blocked and traffic diverted by an appropriate sign and other road treatments into the Peninsula Road entrance.

access to the BP Garage from the GWH.

The driveway closest to the intersection (seen on the left on photo 3 below) should be closed and access should be via Peninsula Road only. The second driveway access to the BP should be regulated by BP as an exit only.

This safe systems approach is consistent with BP's obligations as

a person conducting a business or undertaking (PCBU) under the *Work Health and Safety Act 2011*.

Section 20 of the WHS Act provides that the person with management or control of a workplace must ensure, so far as is reasonably practicable, that the workplace, the means of entering and exiting the workplace and anything arising from the workplace are without risks to the health and safety of any person. It would seem that with the support of RMS and the installation of appropriate road treatments, the person who manages or controls the BP premises would be able to discharge their obligation under s.20 of the WHS Act and an integrated safe systems outcome could be achieved.

Road treatments will need to support this outcome of regulating the access and exits from the BP.

Supporting Road Treatments

Line-marking (i.e. a bicycle lane) across the intersection from the left hand turning lane into Peninsula Road should indicate bicycles have priority over traffic re-entering the GWH from the side street. This more or less means the existing position of the lines remains unchanged except that bicycle lane should be enhanced with PS-2 pavement symbols and green coloured pavement paint to increase lane visibility and also direct cyclists into the new protected shoulder area (see below). A sign should be installed to warn right and left turning vehicles cyclists

To further discourage vehicles from entering the intersection/bicycle lane, the shoulder, commencing from the BP side of Peninsula Road, should be turned into a dedicated bicycle lane for approximately 50 metres (eg enough to block the first driveway access but reform into a break down lane before the second driveway / exit. This could be achieved by narrowing the shoulder to 1.8 metres - 2 meters and placing rubber blocks on the lane edge (traffic side) to exclude other vehicles from the bicycle lane. Bollards may be used to signal the area is exclusively for bicycles and restrict other vehicle access (see photo 4 for an example). The bicycle lane should be painted with green pavement paint to enhance its status as a bicycle lane (eg not too thick as it can be slippery in wet conditions).



As noted above, the length of the corridor should be proximate to the start of the second drive way/ exit from BP (where it would taper back in alignment with the existing shoulder – at which point the blocks would terminate. This would permit vehicles to turn left from the BP back onto the GWH.

Photo 4 shows rubber blocks and bollards use to protect a bicycle only lane. We would emphasise that this is a critical control and without it the risk would significantly increase. Moreover, it is critical to overall

A variation of the bicycle lane continuing in alignment with the left hand turning lane and the position of the existing intersection markings may be to create a mid-block bicycle lane which passes on the traffic side of the intersection and re-joins the shoulder on the other side of Peninsula Road (eg similar to photo 5). For this variation, the mid-block path would continue into the bicycle only lane which would be protected by the rubber blocks as described above.



Photo 5 is an example of a mid-block bicycle path crossing an unregulated intersection

Signage Required

In addition to the bicycle lanes and rubber block treatments, the area should be properly sign-posted including as follows:

- A sign should be placed before the Peninsula Road intersection, warning motorists that there is no entrance to BP from the highway and that they must turn left (ie enter from Peninsula Road).
- A second sign, also placed on the GWH road side before Peninsula Road would indicate that cyclists only may proceed through the intersection and warn cyclists that the shoulder narrows up ahead.
- A third sign would be situated at the stop line at the intersection on Peninsula Road warning drivers to look out for cyclists crossing the intersection.
- An R8-1 (bicycle only) sign on the corner of Peninsula Road and GWH commencing at the start of rubber blocks

A treatment which eliminates a hazard is preferable to one which merely controls it

This proposed treatment would **eliminate** the root cause of the problem (ie traffic using the left hand turn lane and the intersection at Peninsula Road as a de-acceleration lane to enable entry into the BP from the GWH). As such this would be preferable to other measures which do not eliminate the risk of traffic entering the BP garage from the GWH.

The proposed option is consistent with RMS NSW Bicycle Guidelines Principles.

- Intersections should seek to provide a clear path for bicycle riders as well as for other modes.¹
- Intersections should be designed to explicitly include bicycles as well as other categories of road users. Special intersection designs that include a path for cyclists are an important element of integrated network design.²

¹ RMS, NSW Bicycle Guidelines, at p.10

² Ibid.

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- Intersection layouts should be simplified and marked on approaches to show each road user where they are to position themselves in order to safely negotiate the intersection.³
- On streets and roads and at intersections where bicycle network facilities are not present, it is current best practice to provide adequate road lane widths (particularly in the kerbside lane) to safely accommodate bicycle riders.⁴
- Where traffic volumes on all roads is significant it is recommended that green coloured pavement be used to increase overall road user awareness of the positioning of cyclists through the intersection.⁵

Final Comments

We appreciate that RMS are the experts and have the responsibility to find a safe solution which protects the safety of all road users. The current treatment of the median strip, for reasons given, is unsafe and is very likely to cause further harm to cyclists.

Mr [REDACTED] had a **go pro camera fitted to his bike** and the entire **crash is available on video** if you think it may assist your investigations. In addition, we also have **photographs of his injuries** and the ambulance taking him from the scene and would be happy to provide copies if it assists in any way.

Please do not hesitate to contact the writer for further information. The BMCSF will work RMS to help find a better outcome for cyclists and other road users at Peninsula Road, Valley Heights.

³ Ibid, at p.12

⁴ Ibid, at p.15. Austroads, Part 14 and the RTA Road Design guide provide detailed information and recommendations on lane widths and street profiles which include bicycle operating space.

⁵ Ibid, at p.42