M5 East improvements between King Georges Road and the tunnels.

The following plan addresses the design faults with the M5 East. It addresses the shortness of the entrance and exit ramps at King Georges Road. It allows for improvements there without the major work and expense of rebuilding the Coolangatta Road bridge. It also tackles the other major design flaw, the right exits, which cause traffic to bunch in the right lane causing overtaking on the left. It also allows for better traffic flow as it has three lanes west-bound throughout and over one kilometre of extra lane eastbound after King Georges Road before the traffic has to merge before the tunnel entrance.

Rough details are given below.

West bound carriageway.

The westbound carriageway is widened to three lanes by adding an extra lane, starting immediately on the right after the tunnel exit. The slip road from Bexley Road is shortened as much as possible and this adds a fourth lane on the left. This would become a merging/exit lane which leaves at Kingsgrove Road. This requires the construction of a new exit ramp to Kingsgrove Road on the left and the filling in of the current right exit. This a similar design to that which exists between the Moorebank Avenue and Hume Highway exits further west. The carriageway continues as three lanes until a long exit lane starts on the left before King Georges Road. There is sufficient space below the Coolangatta Road bridge for the four lanes but there would be no shoulder at this point and therefore no provision for cyclists. After the exit lane has separated the three running lanes continue under the junction by utilising the shoulder and part of the westbound carriageway by moving the central barrier and narrowing the westbound shoulder. There is insufficient space for six full size running lanes under the bridge but five could be accommodated.

East bound carriageway.

After the left lane has exited to King Georges Road the two remaining lanes continue under the junction with a narrow shoulder as explained above. The

on-ramp from King Georges Road remains as constructed presently until it joins the main carriageway where it becomes an added lane on the left. There is sufficient room under Coolangatta Road bridge to accommodate this. This extra lane continues until just before the Kingsgrove Road bridge where it ends and traffic merges into two lanes. The on-ramp from Kingsgrove Road is shortened so that it joins as an added lane as soon as practicable. This added lane continues until it exits onto a new exit to Bexley Road on the left. The current right exit is removed.

Junction provisions

As all the slip roads to and from Kingsgrove Road and Bexley Road, according to my plan, are relatively short the traffic flows would have to be managed. Both exits from the motorway should be controlled by traffic lights so that priority can be given to exiting traffic to prevent queuing back towards the main carriageway. The entrances to the motorway from Kingsgrove Road and Bexley Road should be roundabouts so that the entering traffic is at a more even flow than traffic-lights would allow.

I would appreciate an opportunity to discuss this further with the relevant authorities.

Graeme Harris. 9/27 Toomevara Street Kogarah NSW 2217.