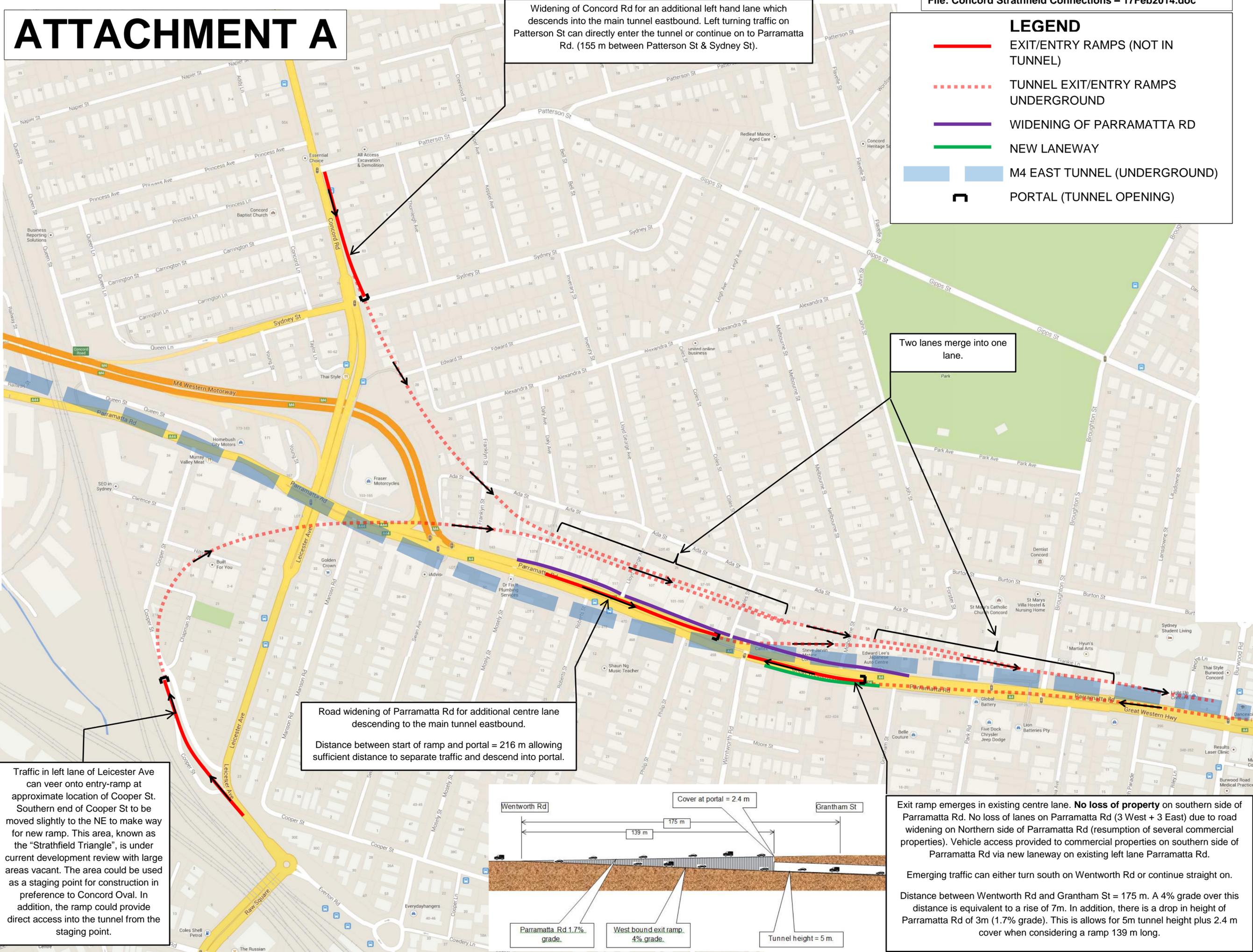


# ATTACHMENT A

Widening of Concord Rd for an additional left hand lane which descends into the main tunnel eastbound. Left turning traffic on Patterson St can directly enter the tunnel or continue on to Parramatta Rd. (155 m between Patterson St & Sydney St).

### LEGEND

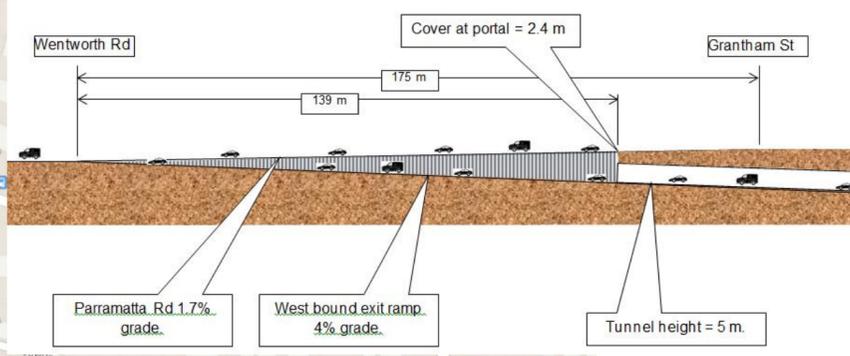
- EXIT/ENTRY RAMPS (NOT IN TUNNEL)
- - - TUNNEL EXIT/ENTRY RAMPS UNDERGROUND
- WIDENING OF PARRAMATTA RD
- NEW LANEWAY
- ▭ M4 EAST TUNNEL (UNDERGROUND)
- PORTAL (TUNNEL OPENING)



Two lanes merge into one lane.

Road widening of Parramatta Rd for additional centre lane descending to the main tunnel eastbound.  
Distance between start of ramp and portal = 216 m allowing sufficient distance to separate traffic and descend into portal.

Traffic in left lane of Leicester Ave can veer onto entry-ramp at approximate location of Cooper St. Southern end of Cooper St to be moved slightly to the NE to make way for new ramp. This area, known as the "Strathfield Triangle", is under current development review with large areas vacant. The area could be used as a staging point for construction in preference to Concord Oval. In addition, the ramp could provide direct access into the tunnel from the staging point.



Exit ramp emerges in existing centre lane. **No loss of property** on southern side of Parramatta Rd. No loss of lanes on Parramatta Rd (3 West + 3 East) due to road widening on Northern side of Parramatta Rd (resumption of several commercial properties). Vehicle access provided to commercial properties on southern side of Parramatta Rd via new laneway on existing left lane Parramatta Rd.

Emerging traffic can either turn south on Wentworth Rd or continue straight on.

Distance between Wentworth Rd and Grantham St = 175 m. A 4% grade over this distance is equivalent to a rise of 7m. In addition, there is a drop in height of Parramatta Rd of 3m (1.7% grade). This allows for 5m tunnel height plus 2.4 m cover when considering a ramp 139 m long.