consequently the M4 Junction 4 or Stockley Road / Cherry Lane junctions, is likely to worsen as more traffic is released onto Stockley Road as a direct result of the capacity improvements at Junction 4. Forecast flows provided by the HA suggest that an additional 432 vehicles are likely to be approaching the Lavender Rise / Stockley Road junction northbound from the M4 during the morning peak hour on the completion of the improvement scheme. This will only result in more extensive queuing on the M4.

5.5 The signals at the Lavender Rise / Stockley Road junction were installed in response to a cluster of accidents which occurred at the junction. The new traffic signals allow all turning movements to be undertaken in a safe manner. The right turn from Lavender Rise is banned but this is accommodated by turning left and undertaking a U-turn at the Stockley Park junction. Signalised Pedestrian crossings are also included as a safety feature.

5.6 As a consequence of the number of turning movements which need to be accommodated and which require to run unopposed on safety grounds, a significant amount of green time is lost at the junction. The provision of a new signalised access roundabout for the development to the south of the Lavender Rise / Stockley Close junction on Stockley Road presents the opportunity to review the performance of the junction and thereby to improve the operation of the M4 Junction 4 and Stockley Road / Cherry Lane junctions. In particular, the provision of a new signalised roundabout facilitates the opportunity for U-Turns to be made to the south of the Lavender Rise / Stockley Close junction where previously no opportunities existed.

5.7 Figure 14 illustrates a proposed alternative layout for the Lavender Rise / Stockley Road junction which rationalises the number of opposed movements and thereby improves the performance of the junction as a whole. The proposed layout would result in Stockley Close operating as a left-in, left-out and right-in only junction. The southbound right turn into Lavender Rise would also be banned. Traffic wishing to travel west or north from the junction would be able to U-Turn at the new site access junction.

5.8 As a result of reducing the number of opposed turning movements at the junction additional green time is achieved for the remaining movements. All turning movements can still be safely achieved via the new Site access junction, which enables U-turns to be undertaken.

5.9 An operational assessment of the proposed alternative junction layout has been undertaken and the results of the analysis are presented in Table 5.1. Table 5.1 also presents the results of an operational assessment of the Site access junction and the existing Lavender Rise junction for comparison. Junction assessments have been undertaken using the JCT Consultancy's LINSIG modelling software.