

National Highways Position Statement July 2023

On the modelling evidence for the Local Plan provided by LB Barnet to National Highways (additional flows supplied on 17 March 2023 at M1 Junction 2 and elsewhere supplementing the evidence in the Strategic transport Assessment), the M1 Junction 2 southbound diverge will be sub-optimal by the end of the Local Plan period (2036). This is because the modelling has shown that in the morning peak hour there will be more traffic wishing to leave the M1 southbound at Junction 2 than the junction layout is designed to safely accommodate. LB Barnet have provided flows both with and without “demand management” measures designed to reduce car use but this does not have any impact upon the required design standard and is not part of any Local Plan mitigation.

Using DMRB CD122 Figure 3.26b (to determine the appropriate design standard) shows that the off-slip diverge should be a Layout D ghost island diverge lane drop or auxiliary lane lane drop to meet the required design standard. Given that the current Layout is a basic Type A taper diverge, before 2036 the volume of traffic wishing to leave via the southbound diverge will have exceeded the design standard. With the forecast morning peak hour flows, the southbound carriageway could very likely experience stop-start traffic as vehicles attempt to get into the left lane of the main carriageway prior to or at the merge. The left lane will also contain traffic heading along the main carriageway to Junction 1 as will the centre lane, so there will potentially be insufficient capacity in the left lane and slow moving or stationary traffic in the centre lane leading to flow breakdown.

From the traffic forecast flows provided, the diverge is expected to be substandard either with or without the additional Local Plan growth in traffic. However, the addition of the non-consented Local Plan development will add over 100 vehicles per hour at the southbound diverge in the morning peak hour, increasing the safety risk by increasing the frequency risk of flow breakdown, manifesting as slow or stop-start traffic on the high speed network. With additional traffic and incidence of flow breakdown there is a greater risk of accidents as high speed traffic fails to stop in time when there is standing traffic on the carriageway ahead.

NPPF Paragraph 111 states that “Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe”. As can be seen the increase in traffic due to the additional demand from the Local Plan is, in our judgement, sufficient to have an unacceptable impact on highway safety.

For this reason, it is considered that mitigation is required through the Local Plan to ensure that the traffic impacts at the diverge following development leave the network no worse off at this location. Note that what is required is an improvement to the existing layout of the southbound M1 Junction 2 diverge sufficient to provide a “nil-detriment” solution to accommodate the additional traffic apparent from the transport modelling with the non-consented element of the Local Plan built out. In this instance it may, for example, be achievable by altering the existing M1

southbound road layout to provide a lower mitigation than the design standard would dictate such as a Type B ghost island diverge or a Type C lane drop. It may be possible that these layouts could be provided within the existing carriageway by redesignating the existing lane use but would likely require signing upstream either roadside or using gantries.

We would therefore welcome proposals to mitigate the safety concerns apparent from the evidence provided. From the flows provided we would not envisage the need to implement mitigation at this location in the early years of the Local Plan. Modelling undertaken as part of the strategic transport assessment undertaken by LB Barnet looked only at the end year of the Plan. It is not possible from the evidence provided to link the increase in traffic volumes on the M1 southbound to any particular development or developments in the Local Plan. Assuming that the cumulative traffic growth through the Local Plan is due to a range of developments and that there will be a steady build out trajectory for the Plan as a whole, we would expect the requirement to mitigate the impacts at Junction 2 towards the end of the Plan period.

We therefore request that the Infrastructure Delivery Plan includes provision for a suitable mitigation at M1 Junction 2 based upon the interpretation of the evidence above. National Highways recommends an expected delivery date of 2031, five years prior to the end of the Plan to ensure that any mitigation is implemented in a timely manner.

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