Bramley – Modelling Summary Note

1.1 This summary outlines the key findings from the junction modelling undertaken to support the proposed residential development north of Sherfield Road, Bramley.

Modelling Scope

1.2 Traffic data was collected between the 10th and 16th of July 2025 prior to the school holidays using ATCs and MCCs to inform the Baseline Scenario. Using the baseline data, nine junctions were modelled, including key locations such as the A33/Bramley Road roundabout, Sherfield Road rail crossing, and proposed site access points.

Scenarios assessed:

- 2025 Baseline
- 2029 Future Year + Committed Development
- 2029 Future Year + Committed + Proposed Development

1.3 Based on 650 dwellings, forecast off-site peak hour trips generated by the proposed development are:

- **AM peak**: 421 total trips (197 by car)
- **PM peak**: 332 total trips (185 by car)

1.4 The distribution of development traffic was derived from the 2011 Census data for Basingstoke & Deane MSOA 005 (which includes all of Bramley), with Basingstoke, Newbury, and Reading/London identified as key destinations.

1.5 **Modelling Results**

1.6 The traffic modelling results reveal the A33/Bramley Road junction to be constrained during the AM peak, and work is ongoing to identify and assess potential mitigation measures at this junction. All other modelled junctions operate within capacity across all scenarios (RFC < 0.85). The two proposed site accesses at Sherfield Road roundabout and Bramley Lane show minimal delays and queuing.

1.7 The level crossing shows an increase in the amount of queuing at either side of the level crossing of around 3 to 4 vehicles in the AM and PM peaks based on existing barrier operation; however, queues are expected to clear once the barriers are raised. This does not account for any potential reduction in through-traffic due to the proposed site access road.

1.8 Targeted mitigation is being explored for the A33 roundabout, and these will be communicated once complete.

1.9 The Transport Assessment which will accompany the Planning Application will detail the full, industry standard methodology used to assess the impact of the proposed development. This will include all traffic data collected and full modelling results.