

Project	South Caldecotte		
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Checked	Matthew Addison	Revision	P1
Approved	Matthew Addison	Date	05/02/2020

1 Introduction

- 1.1 BWB Consulting Ltd (BWB) has been appointed by Hampton Brook (UK) Ltd (the Client) to prepare this response to Technical Note 06 (received 29th January 2020) produced by AECOM on behalf of Highways England in relation to the traffic impact of the proposals at South Caldecotte on the strategic road network (SRN).

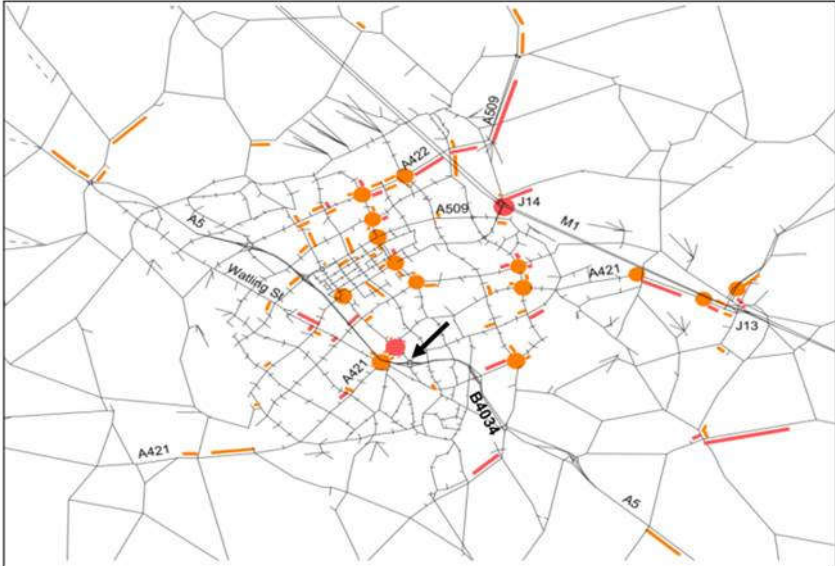
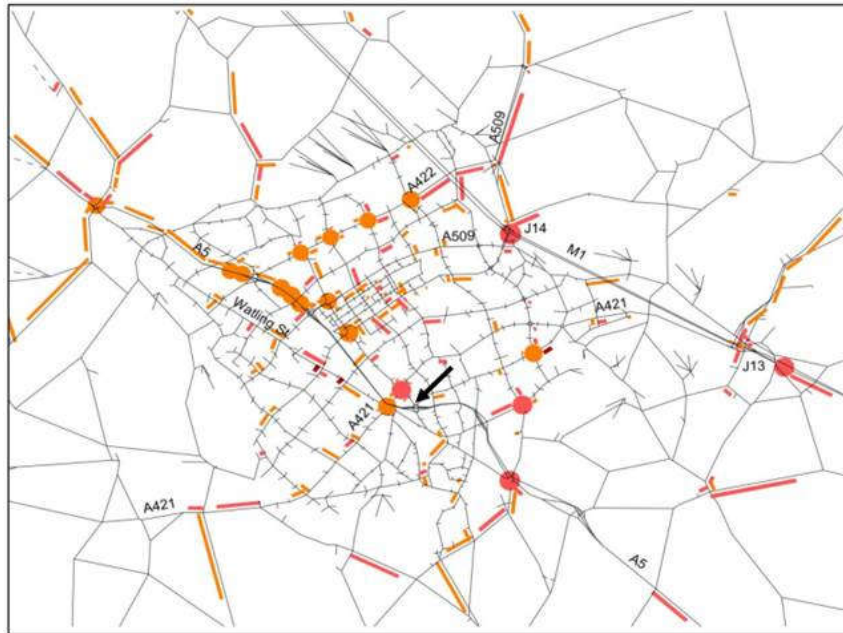
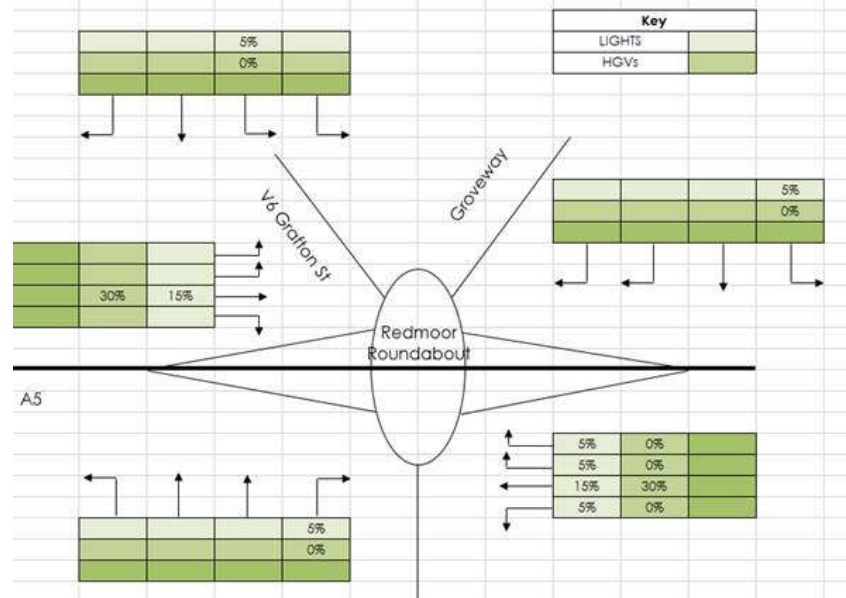
Rating	AECOM Recommendation	BWB Response
Critical	A capacity assessment should be undertaken at the A5 Redmoor junction.	<p>To provide context, the A5 Redmoor roundabout was included in the study area of the MK Multi Modal Model, the results of which are presented in Chapter 5 of Mobility Strategy for Milton Keynes 2018-36 (LTP4) Detailed Context and Evidence Base. Figure 24 (below) of the document highlights congestion hot spots in Milton Keynes in the 2016 AM base scenario and indicates that the A5 Redmoor roundabout operates with reserve capacity.</p> <p style="text-align: center;">Figure 24 Congestion hot spots – 2016 Base AM Peak link and junction w/c over 85%</p>  <p>Figure 33 of the Evidence Base shows the same network in 2031 and again indicates that the junction in question would operate with reserve capacity.</p>

Figure 33 Congestion hot spots – 2031 AM Peak link and junction v/c over 85%



Only 15% of all our development traffic has an impact at the A5 Redmoor roundabout, the traffic distribution is expected to be as follows.

Trip distribution through A5 Redmoor roundabout

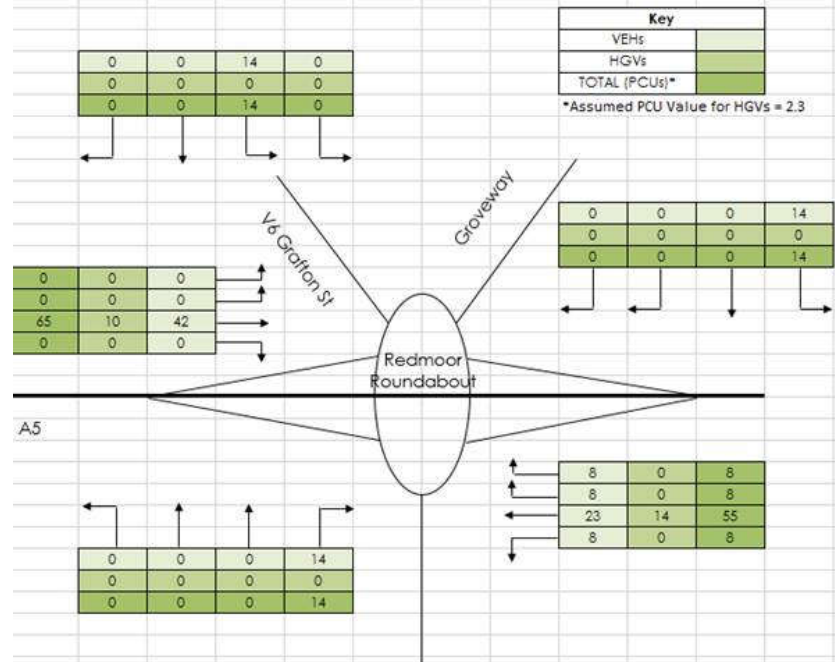


AM Peak Impact

Based on the trip rates agreed with Highways England and AECOM, the total proposed development would generate 428 total vehicle trips (277 arrivals and 151 departures) during the AM Peak hour of which 64 trips would have an impact at this junction.

Based on the above agreed distribution assumptions, the AM Peak hour development traffic movements at the A5 Redmoor roundabout are as follows:

AM Peak assignment through A5 Redmoor roundabout



Of the 64 total vehicle movements having an impact at the A5 Redmoor junction, 24 vehicles will use the northbound off-slip with 14 vehicles approaching from V6 Grafton Street South, V6 Grafton Street North and Groveway.

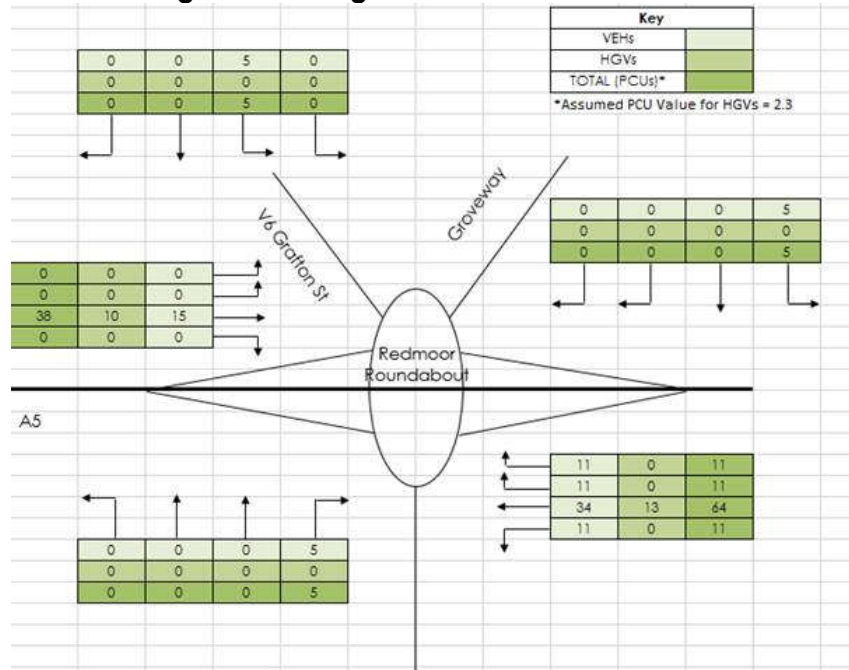
It is considered that the maximum impact at this junction would be at the northbound off-slip and this would be less than one vehicle every two minutes.

PM Peak Impact

In the PM Peak, the total proposed development would generate 327 vehicle trips (99 arrivals and 228 departures) during the PM Peak hour of which 49 vehicles would have an impact at this junction.

Based on the above agreed distribution assumptions, the PM Peak hour development traffic movements at the A5 Redmoor roundabout are as follows:

PM Peak assignment through A5 Redmoor roundabout



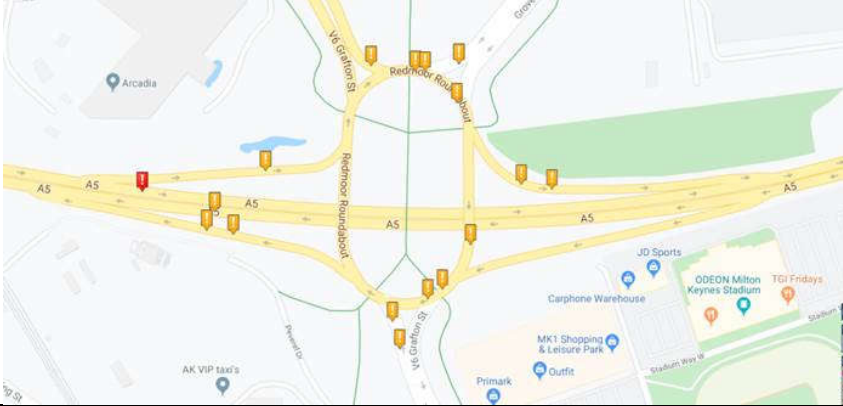
Of the 49 total vehicle movements having an impact at the A5 Redmoor junction, 33 vehicles will use the northbound off-slip with 5 vehicles approaching from V6 Grafton Street South, V6 Grafton Street North and Groveway.

It is considered that the maximum impact at this junction would be at the northbound off-slip and again this would be less than one vehicle every two minutes.

Based on the above evidence and taking into account the results of the MK Multi Modal Model, the proposed development is unlikely to have a significant impact on this junction. Therefore, it is realistic to assume that a full junction capacity assessment is not appropriate on this occasion.

Once VISSIM modelling issues are resolved (see TN07), revised model outputs should be provided within the TA for review by AECOM.

As above, we responded to the issued raised in TN06 yesterday and await the outcome of your review.

<p>Important but not critical</p>	<p>As there is predicted to be a material increase in trip numbers as a result of the proposed development at the Redmoor roundabout, PIC analysis should be undertaken at the junction.</p>	<p>BWB has reviewed PIC records for the junction covering the 5-year period 2014 to 2018 inclusive (most recently available) using Crashmap and this is illustrated below. There have been 17 PICs recorded of which two (including one serious PIC) occurred on the mainline. There have been no fatalities recorded at the junction. The remaining 15 PICs are all of slight severity and located as follows:</p> <ul style="list-style-type: none"> • 2 PICs on the V6 Grafton Street NB approach; • 1 PIC on the V6 Grafton Street SB approach; • 2 PICs on the northern circulatory; • 1 PIC on the Groveway NB exit; • 1 PIC on Groveway SB approach; • 1 PIC on eastern circulatory; • 2 PICs on circulatory b/t northbound off-slip and V6 Grafton Street SB exit; • 2 PICs on NB on-slip; • 1 PIC on SB off-slip; • 2 PICs on SB on-slip; and • No PICs on NB off-slip. <p>The spread and severity of PICs across the junction indicates that there are no existing concerns relating to the operation of the junction in terms of highway safety.</p> <p>Due to the low level increase in vehicle trips during the peak periods at the junction, it is considered unlikely that the proposals at South Caldecotte would have a material impact on road safety at the A5 Redmoor junction.</p> 
	<p>Further details on the bus provision proposals are provided to enable AECOM to determine whether they are likely to</p>	<p>BWB is in discussions with MKC to develop the initial public transport strategy further to maximise usage and accessibility by this mode.</p> <p>It should be noted that our assessment of the SRN is a worst case and does not allow for any modal shift away from the private car and therefore this has no direct bearing on SRN impact modelled to date.</p>

RESPONSE TO TN06 TECHNICAL NOTE
South Caldecotte



	result in a shift away from private car use.	
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