

Job Name:	Stag Brewery, Mortlake
Job No:	38262
Note No:	TN048 – Rev A
Date:	July 2022
Prepared By:	O Akpengbe
Reviewed By:	P Wadey
Subject:	Traffic Data Comparison

### 1. Introduction

- 1.1. This Technical Note has been prepared following comments from TfL regarding the traffic network and junction modelling to assess the impact of the Stag Brewery proposed development (refs: 22/0900/OUT and 22/0902/FUL).
- 1.2. Comments were received from TfL on the 20<sup>th</sup> June 2022 and are as follows:

In order to test the impacts of the vehicle trips generated by the development, detailed traffic network and junction modelling was undertaken as part of the original application assessment. LINSIG modelling software was used to support the original planning application, and VISSIM microsimulation modelling software, with a cordon taken from TfL's strategic models for forecast years, was used for the revised and called-in schemes.

This modelling was undertaken using 2017 traffic flows, as the emerging COVID situation meant more recent traffic survey data were not able to be collected for the called-in scheme, and was assessed alongside bespoke analysis to understand the impact of issues such as the Hammersmith Bridge closure

However, since the restrictions associated with the collection of new data was lifted in May 2021, TfL strongly recommends the assessment of this development reverts to standard practises and established methodologies, using recent survey data and the latest forecast assumptions as required by TfL VISSIM Model Auditing Process (VMAP) standards. It should be noted that this may take several months to complete.

1.3. Additional surveys were commissioned and conducted in June 2022 to provide a comparison with traffic flows that were used in the original VMAP modelling which was based on data from 2017. This Technical Note provides details of the comparison and our recommended approach to address TfL comments.

### 2. Traffic Survey Locations

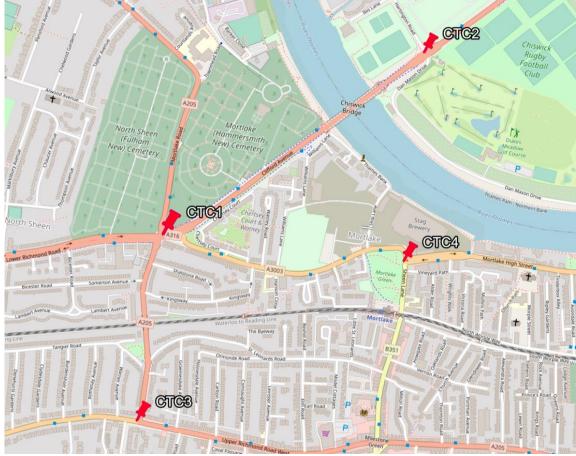
- 2.1. Classified Turning Count (CTC) surveys were undertaken in June 2022 to assess current traffic flows in the vicinity of the site. CTCs were carried out on 16<sup>th</sup> June 2022
- 2.2. The following traffic surveys were undertaken:
  - Classified Turning Counts (CTCs)
    - CTC1 Chalker's Corner
    - o CTC2 Great Chertsey Road / Dan Mason Drive / Hartington Road

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- o CTC3 Upper Richmond Road / Clifford Avenue
- o CTC4 Lower Richmond Road / Mortlake High Street

Figure 1: Traffic Survey Locations



Source: Open Streets Map

### 3. Traffic Data Comparison 2017 and 2022

- 3.1. A comparison of the key junctions modelled as part of the VMAP process has been undertaken for the AM Peak and PM Peak periods. The junctions assessed include the following:
  - CTC1 Chalker's Corner
  - CTC2 Great Chertsey Road / Dan Mason Drive / Hartington Road
  - CTC3 Upper Richmond Road / Clifford Avenue
  - CTC4 Lower Richmond Road / Mortlake High Street
- 3.2. The peak periods assessed are based on the VMAP modelling hours and also peak trip generation for the development and include the following times:
  - AM Peak 08:00 09:00
  - PM Peak 17:00 18:00

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- 3.3. The difference in traffic flows between 2017 and 2022 are provided in the following sections for each junction. The original data for each peak period is included in Appendix A and B for 2017 and 2022 respectively. Notably the 2017 data was taken from different survey days and 2022 the same day.
- 3.4. Negative figures represent a reduction in traffic between 2017 and 2022. In addition, entry values are vehicles entering each arm of the junction and exit values are vehicles exiting travelling away from the junction.

#### **Chalker's Corner**

3.5. Figures 2 and 3 below shows the difference in turning movements at Chalker's Corner.

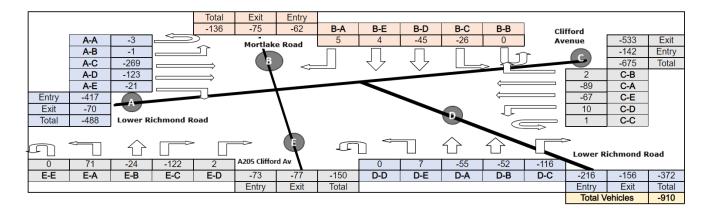
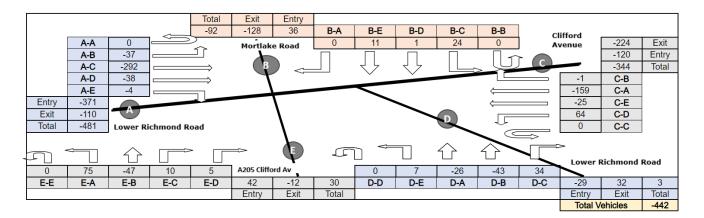


Figure 2: 2017 vs. 2022 – Chalker's Corner – AM Peak

Figure 3: 2017 vs. 2022 - Chalker's Corner - PM Peak



- 3.6. The results show a general decrease along all links in both peak periods, with the exception of a small increase along A205 Clifford Avenue and A205 Mortlake Road in the PM Peak period on the approach to Chalkers Corner. Notably this increase is within 5% of the total volume of traffic on this link, which would fall within daily variations in traffic through the junction.
- 3.7. Interestingly the traffic shown along Clifford Avenue has decreased in both peak periods, even with the closure of Hammersmith Bridge from 2017 to 2022. This suggests that the reduction in traffic across London, with more people working from home, and travel outside of peak hours has made a positive impact on Chalkers Corner.
- 3.8. Overall, the results show a significant decrease in traffic with 910 vehicles less in the AM peak and 442 less in the PM peak.

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### Great Chertsey Road / Dan Mason Drive / Hartington Road

3.9. Figures 4 and 5 show the difference in turning movements at the junction of Great Chertsey Road, Dan Mason Drive and Hartington Road.

Figure 4: 2017 vs. 2022 – Great Chertsey Road AM Peak

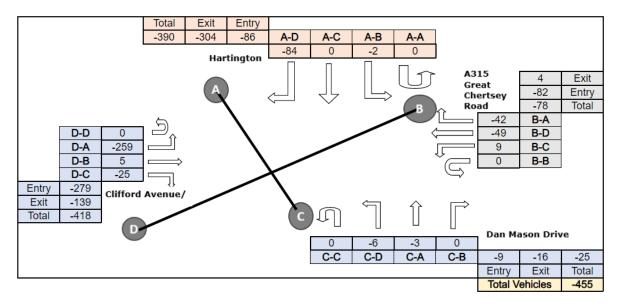
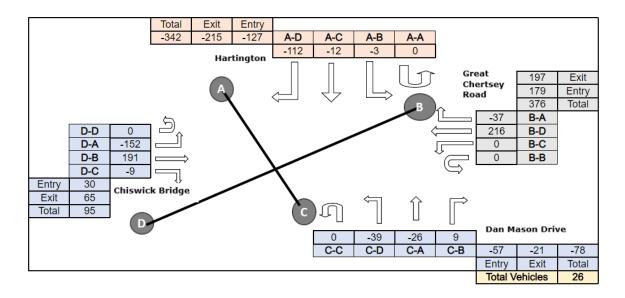


Figure 5: 2017 vs. 2022 - Great Chertsey Road PM Peak



- 3.10. The results show a general decrease in traffic across the junction on all arms in the AM Peak period. In the PM Peak There is a decrease in traffic along Hartington and Dan Mason Drive, however an increase in traffic along Great Chertsey Road and Chiswick Bridge.
- 3.11. Overall, the results show a decrease in traffic with 455 vehicles less in the AM peak and a small increase of 26 vehicles in the PM Peak. In comparison these 26 vehicles is approximately 1% additional traffic through the junction which would fall within daily variations of traffic through the junction.

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### **Upper Richmond Road / Clifford Avenue**

3.12. Figures 6 and 7 show the difference in turning movements at the junction of Upper Richmond and Clifford Avenue. Figure 6: 2017 vs. 2022 – Upper Richmond / Clifford Avenue

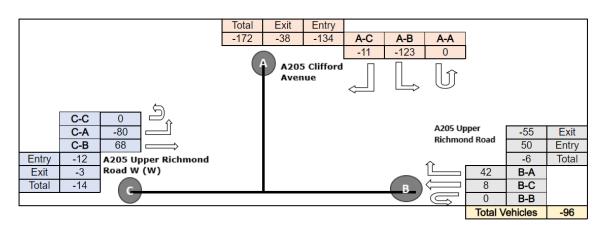
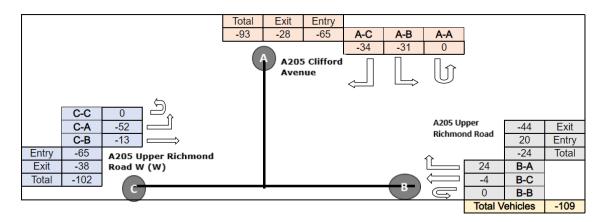


Figure 7: 2017 vs. 2022 – Lower Richmond Road / Mortlake High Street



- 3.13. The results show a general decrease in traffic through the junction in both peak periods, except along the eastern arm of A205 Upper Richmond Road.
- 3.14. Overall, the results show a decrease in traffic with 96 vehicles less in the AM peak and 109 less in the PM peak.

#### Lower Richmond Road / Mortlake High Street

3.15. Figures 8 and 9 shows the difference in turning movements at the roundabout connecting Lower Richmond Road, Mortlake High Street and Sheen Lane.

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Figure 8: 2017 vs. 2022 – Lower Richmond Road / Mortlake High Street

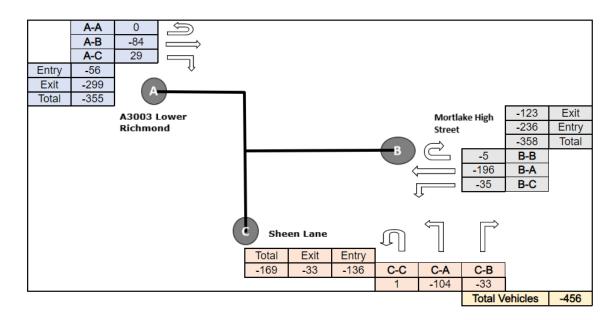
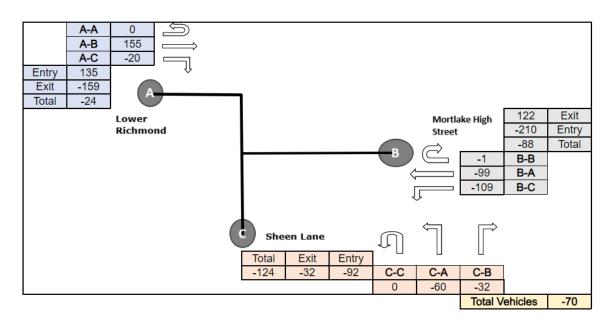


Figure 9: 2017 vs. 2022 - Lower Richmond Road / Mortlake High Street



- 3.16. The results show a general decrease in traffic across the junction on all arms in the AM Peak period. In the PM Peak there is a decrease in traffic approaching the junction along Sheen Lane and Mortlake High Street, however an increase in traffic along Lower Richmond Road.
- 3.17. Overall, the results show a decrease in traffic with 456 vehicles less in the AM peak and 70 less in the PM peak.

### 4. Summary

4.1. This Technical Note has been prepared following comments received from TfL regarding the traffic network and junction modelling as part of the original application assessment.

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- 4.2. A number of traffic surveys were undertaken on a neutral weekday in June 2022, avoiding rail strikes and roadworks. They were then compared to the original surveys undertaken in 2017, which indicates that there is a general decrease in vehicle movements through all junctions studied as part of the approved VMAP work undertaken in 2021 in both the AM and PM peak periods.
- 4.3. As part of the GLA refused scheme the VMAP modelling of the surrounding highway network concluded that the Chalkers Corner 'light' scheme would be adequate to mitigate the impacts of the development. As the modelling assessment was based on higher base traffic flows, it can be concluded that a worst-case modelling assessment has already been undertaken to assess the impacts of the Stag Development.
- 4.4. It is therefore considered that the previous modelling work, submitted in support of the pending applications (refs: 22/0900/OUT and 22/0902/FUL) should still be considered satisfactory and robust, therefore, no further junction modelling is proposed at this time. It is noted, that prior to implementation of the Chalkers Corner scheme as part of the Traffic Management Act 2004 Notification (TMAN) application, the study area will be re-modelled with VISSIM and follow TfL's VMAP process using updated traffic surveys at the time the application is raised. Any amendments to the design and / or signal timings would then be picked up at that time if necessary.

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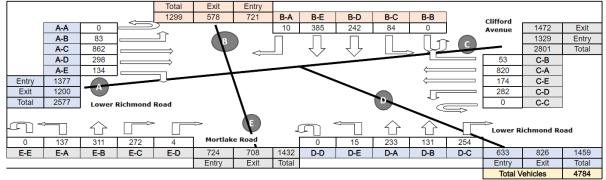
# Appendix A

### 2017

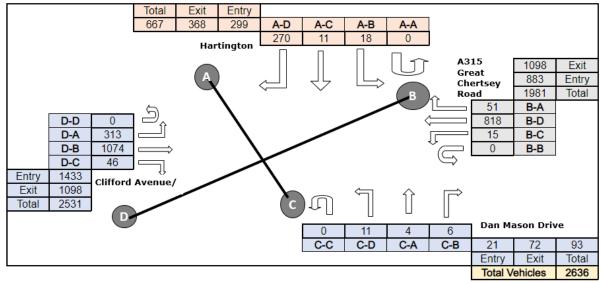
Chalker's Corner - AM Peak (08:00 - 09:00)

			Total 1165	Exit 571	Entry 594	B-A	B-E	B-D	B-C	B-B	Cliff Ave							
A-A	4		2	Mortlake	Road	6	281	221	86	0			1705	Exit				
A-B	62		1			Π				Πſ			1114	Entry				
A-C	980		$\implies$	В			$\overline{\mathbf{v}}$	$\checkmark$			) ( c		2819	Total				
A-D	316		$\implies$	T			Ŷ	Ŷ				47	C-B					
A-E	149									$\leftarrow$		606	C-A					
Entry 1511					1					$\leftarrow$		188	C-E					
Exit 978	A				1							273	C-D					
Total 2489	Lower	Richmond	Road							Č		0	C-C					
	$\hat{\mathbf{U}}$			>	E	ſ	n) <		分			>						
0 132	324	345	10	A205 C	A205 Clifford Av		A205 Clifford Av		A205 Clifford Av		0	32	230	138	294	Lower Ri	chmond Ro	ad
E-E E-A	E-B	E-C	E-D	811	650	1461	D-D	D-E	D-A	D-B	D-C	694	820	1514				
				Entry	Exit	Total						Entry	Exit	Total				
											Total Vehicles		4724					

### Chalker's Corner – PM Peak (17:00 - 18:00)



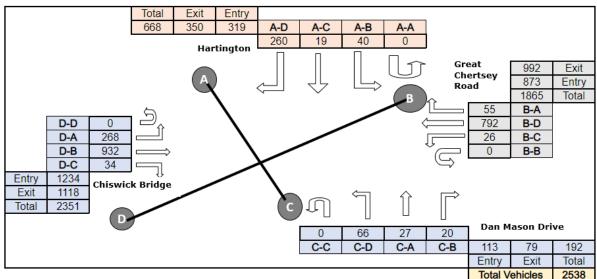
Great Chertsey Road / Dan Mason Drive / Hartington Road – AM Peak (08:00 - 09:00)



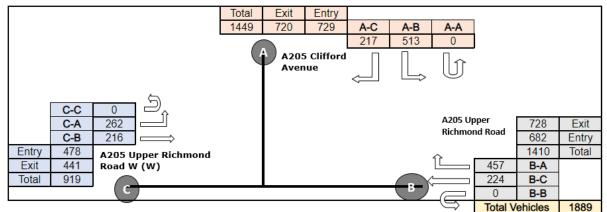
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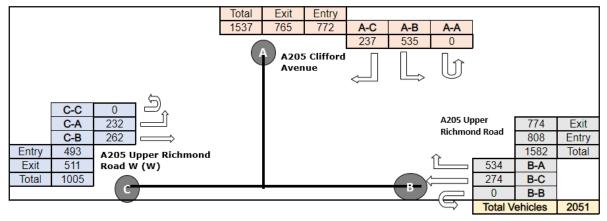
#### Great Chertsey Road / Dan Mason Drive / Hartington Road – PM Peak (17:00 - 18:00)



Upper Richmond Road / Clifford Avenue – AM Peak (08:00 - 09:00)



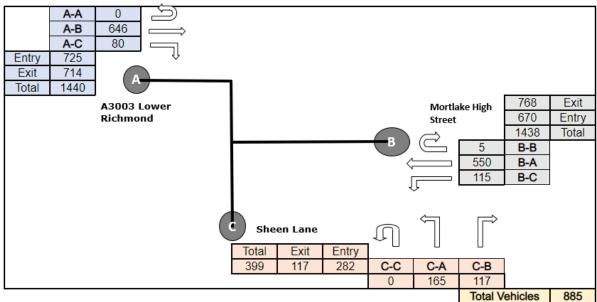
Upper Richmond Road / Clifford Avenue - PM Peak (17:00 - 18:00)



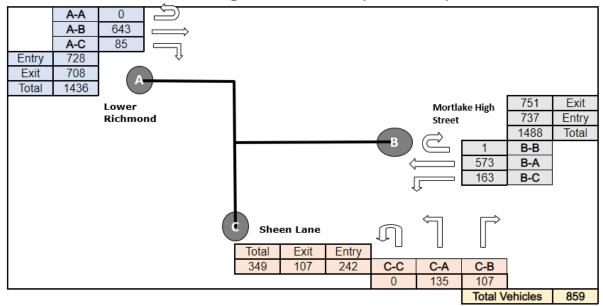
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#### Lower Richmond Road / Mortlake High Street - AM Peak (08:00 - 09:00)



Lower Richmond Road / Mortlake High Street - PM Peak (17:00 - 18:00)



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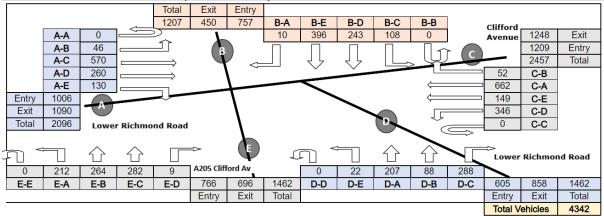
# **Appendix B**

### 2022

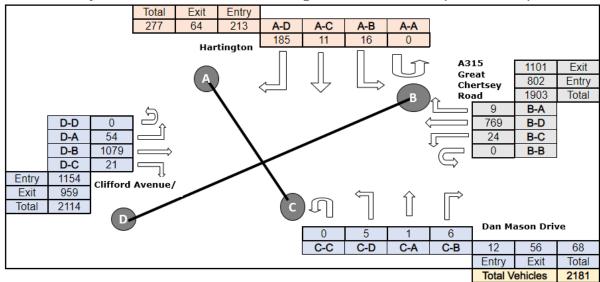
Chalker's Corner – AM Peak (08:00 - 09:00)

				Total	Exit	Entry									
				1029	496	533	B-A	B-E	B-D	B-C	B-B	Cliffo	ord		
	A-A	1			Mortlake	Road	11	285	177	60	0	Aven	ue 1	1172	Exit
	A-B	61	c				Π	Π		Π				972	Entry
	A-C	711	<b></b>	$\implies$	Ŀ			47	Ϋ́		, Y	( C	2	2144	Total
	A-D	193		$\implies$				$\sim$	$\sim$	L		4	9 (	C-B	
	A-E	128						$\leq$			<──	51	17 (	C-A	
Entry	1094					1					<===	12	22 (	C-E	
Exit	908	<u>A</u>				1						28	33 (	C-D	
Total	2001	Low	er Richm	ond Roa	d							1	1 (	C-C	
		$\land$		>			C	~ ~		$\bigtriangleup$					
		Ţ			_	Т	11						wer Ri	ichmon	nd Road
0	203	300	223	12	A205 Clif	ford Av		0	39	175	86	178			
E-E	E-A	E-B	E-C	E-D	738	573	1311	D-D	D-E	D-A	D-B	<b>D-C</b> 47	78 0	664	1142
					Entry	Exit	Total					En	itry I	Exit	Total
												Tot	tal Vehi	icles	3814

### Chalker's Corner – PM Peak (17:00 - 18:00)



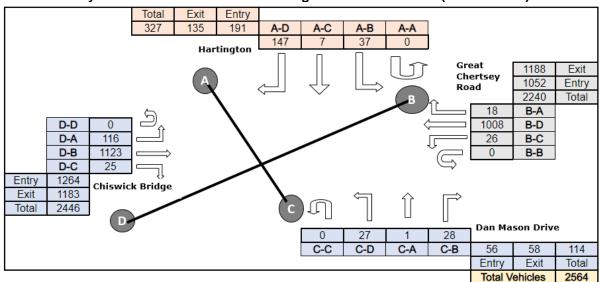
Great Chertsey Road / Dan Mason Drive / Hartington Road – AM Peak (08:00 - 09:00)



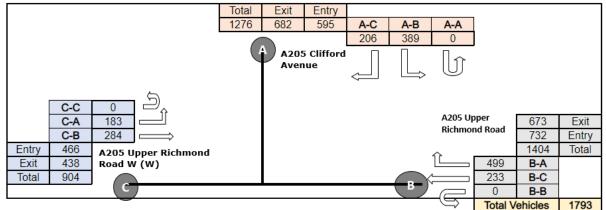
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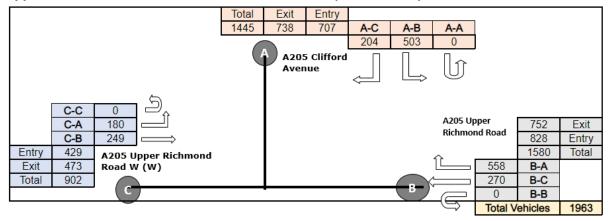
#### Great Chertsey Road / Dan Mason Drive / Hartington Road – PM Peak (17:00 - 18:00)



#### Upper Richmond Road / Clifford Avenue – AM Peak (08:00 - 09:00)



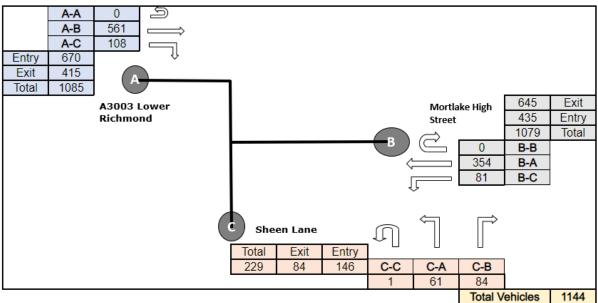
#### Upper Richmond Road / Clifford Avenue - PM Peak (17:00 - 18:00)



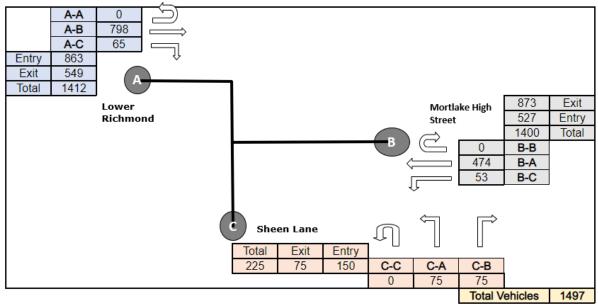
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#### Lower Richmond Road / Mortlake High Street - AM Peak (08:00 - 09:00)



Lower Richmond Road / Mortlake High Street - PM Peak (17:00 - 18:00)



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