

Stag Brewery, Mortlake

Further Transport Assessment Addendum

On behalf of **Reselton Properties**

Project Ref: 38262/5501 | Rev: B | Date: July 2020

Registered Office: Buckingham Court Kingsmead Business Park, London Road, High Wycombe, Buckinghamshire, HP11 1JU
Office Address: 33 Bowling Green Lane, London, EC1R 0BJ
T: +44 (0)203 824 6600 E: London@stantec.com

Document Control Sheet

Project Name: **Stag Brewery, Mortlake**
Project Ref: **38262**
Report Title: **Transport Assessment Addendum**
Doc Ref: **Addendum 003**
Date: **July 2020**

	Name	Position	Signature	Date
Prepared by:	Matt Bolshaw	Transport Planner	*M Bolshaw*	May 2020
Reviewed by:	Peter Wadey	Associate	*P Wadey*	May 2020
Approved by:	Greg Callaghan	Director	*G Callaghan*	May 2020
For and on behalf of Stantec UK Limited				

Revision	Date	Description	Prepared	Reviewed	Approved
A	May 2020	Updated following comments for Gerald Eve	MB	PW	GC
A - Final	May 2020	Updated following legal review comments	MB	PW	GC
B	July 2020	Updated following comments from TfL	MB	PW	GC

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

Contents

1 Introduction 1
1.1 Overview 1
1.2 Report Contents 3
2 Existing Site Context 4
2.1 Overview 4
2.2 Existing Transport Networks 4
2.3 Personal Injury Collision (PIC) Review 5
2.4 Summary 9
3 Policy Review 10
3.1 Overview 10
3.2 Cycle Parking 10
3.3 Healthy Streets 10
3.4 Compliance with Policy 11
4 Development Proposals 12
4.1 Overview 12
4.2 Summary of Amendments 12
4.3 Proposed Revised Scheme 13
4.4 Access Strategy 16
4.5 Cycle Parking 16
4.6 Car Parking 20
4.7 Delivery and Servicing 21
4.8 Waste Strategy 22
5 Methodology for the Assessment of Transport Impacts 23
5.1 Overview 23
5.2 Updated Person Trip Generation 23
5.3 Summary 24
6 Highway Network Assessment 25
6.1 General 25
6.2 Traffic Distribution 25
6.3 VISSIM Microsimulation Modelling 26
7 Operational Review of Proposed Highway Improvements 28
7.1 Introduction 28
7.2 Proposed Improvement Options 28
7.3 VISSIM Microsimulation Modelling Option Testing 32
8 Operation of the Public Transport, Walking and Cycling Networks 33
8.1 Impacts 33
9 Transport Strategy 37
9.1 Overview 37

9.2 Overall design principles 38
9.3 Walking and Cycling Strategy 38
9.4 Public Transport Strategy 42
9.5 River Use 45
9.6 Parking Strategy 45
9.7 Highway Strategy 47
9.8 Travel Planning 50
9.9 Delivery and Servicing 51
9.10 Construction and Logistics 53
9.11 Summary 53
10 Summary & Conclusions 55
10.1 Summary 55
10.2 Conclusions 56

Figures

Figure 2-1 Location of Collisions 6
Figure 4-1 Indicative Development Masterplan – Ground Floor 14
Figure 4.2 Basement Cycle Parking Stores 19
Figure 4.3 Ground Floor Level Cycle Parking Areas 19
Figure 6-1 AM Peak Development Traffic Distribution 26
Figure 6-2 PM Peak Development Traffic Distribution 26
Figure 7-1 Option 2 – Chalkers Corner 30
Figure 7-2 Option 3 – Bus Lane 31
Figure 9-1 Internal Pedestrian Routes 39
Figure 9-2 Internal Cycle Routes 40
Figure 9.3 Wider pedestrian and cycle links 41
Figure 9.4 Location of Bus Turnaround Safeguarded Land 45
Figure 9.7 Delivery and Servicing Routes 52

Tables

Table 2-1 Bus routes operating with Hammersmith Bridge Closure 5
Table 2-2 Summary of Collisions and Casualties 7
Table 3-1 Updated cycle parking standard 10
Table 4-1 Summary of Amendments 12
Table 4-2 Proposed Land Use Schedule 15
Table 4-3 Flexible Land Use Maximum / Minimum 16
Table 4-4 Flexible Land Use Schedule – Cycle Parking Calculation 17
Table 4-5 Cycle Parking Demand 18
Table 4-6 Proposed Cycle Parking provided per Block 20
Table 4-7 Car Parking Provision by Basement 21
Table 4-8 Delivery and Servicing Trip Generation differences 22
Table 5-1 Total Peak Hour Trip Generation (8% Vehicle Mode Share for School) 23
Table 8-1 Existing and Future Platform Width Requirement 34
Table 8-2 Notional and Required Width of the Staircase 35
Table 8-3 Notional and Required Width of the Footbridge 36

Appendices

Appendix A Personal Injury Collision (PIC) Data
Appendix B Masterplan Layout
Appendix C Cycle Parking Details
Appendix D Car Park & Swept Path Drawings
Appendix E Trip Generation Methodology Technical Note 35a
Appendix F TfL Trip Generation Approval
Appendix G Proposed Highway Plans
Appendix H TfL Modelling Expectations Report
Appendix I TN036 Stantec Response to TfL Modelling Report
Appendix J Further Correspondence with TfL

This page is intentionally blank

1 Introduction

1.1 Overview

1.1.1 This Transport Assessment Addendum has been prepared by Stantec as an addendum to the Transport Assessment submitted under Applications A, B and C (refs. 18/0547/FUL, 18/0548/FUL and 18/0549/FUL) ('the Applications'), in respect of the former Stag Brewery Site in Mortlake ('the Site') within the London Borough of Richmond Upon Thames ('LBRuT'). The Applications are for the comprehensive redevelopment of the Site. This document has been prepared on behalf of Reselton Properties Limited ('the Applicant'). A summary of the Applications is set out below:

a) Application A – hybrid planning application for comprehensive mixed-use redevelopment of the former Stag Brewery site consisting of:

i. Land to the east of Ship Lane applied for in detail (referred to as 'Development Area 1' throughout); and

ii. Land to the west of Ship Lane (excluding the school) applied for in outline (referred to as 'Development Area 2' throughout).

b) Application B – detailed planning application for the school (on land to the west of Ship Lane).

c) Application C – detailed planning application for highways and landscape works at Chalkers Corner.

1.1.2 This document should be read alongside the information and assessment contained within the Transport Assessment (February 2018) and Transport Assessment Addendum (May 2019).

1.1.3 In addition to this Transport Assessment Addendum, the planning application is accompanied by a Framework Delivery & Servicing Plan, Waste Management Plan, Car Park Management Plan and Travel Plans, which should be read in conjunction with this document.

1.1.4 The Applications were submitted in February 2018 to LBRuT. The Applications are related and were proposed to be linked via a Section 106 Agreement. In May 2019, a package of substitutions was submitted to LBRuT for consideration, which sought to address comments raised by consultees during determination. On 29 January 2020, the Applications were heard at LBRuT's Planning Committee with a recommendation for approval. This scheme is thereafter referred to as "the Original Scheme".

1.1.5 The Committee resolved to grant Applications A and B, and refuse Application C. The granting of Applications A and B was subject to the following:

d) Conditions and informatives as set out in the officer's report, published addendum and agreed verbally at the meeting;

e) Amendments to the Heads of Terms and completion of a Section 106 Legal Agreement which was delegated to the Assistant Director to conclude;

f) No adverse direction from the Greater London Authority ('GLA'); and

g) No call in by the Secretary of State for Housing, Communities and Local Government.

1.1.6 The Applications have been referred to the GLA and the Mayor has given a direction that he will take over the determination of the Applications and act as local planning authority in relation to all three applications.

1.1.7 The Applicant has engaged with the GLA in respect of the proposed amendments to the scheme, referred to throughout this document as the 'Revised Scheme'. As a result of these discussions, a number of changes have been made to the scheme proposals which are summarised as follows:

h) Increase in residential unit provision from up to 813 units (this includes the up to 150 flexible assisted living and / or residential units) to up to 1,250 units;

i) Increase in affordable housing provision from up to 17% to up to 30%;

j) Increase in height for some buildings, of up to three storeys compared to the Original Scheme;

k) Change to the layout of Buildings 18 and 19, conversion of Block 20 from a terrace row of housing to two four storey buildings;

l) Reduction in the size of the western basement, resulting in an overall reduction in car parking spaces of 186 spaces, and introduction of an additional basement storey beneath Building 1 (the cinema);

m) Other amendments to the masterplan including amendments to internal layouts, re-location and change to the quantum and mix of uses across the Site, including the removal of the nursing home and assisted living in Development Area 2;

n) Landscaping amendments, including canopy removal of four trees on the north west corner of the Site; and

o) Associated highways works may be carried out on adopted highways land..

1.1.8 The submission documents have tested an affordable housing provision of 30%. However, it should be noted that the final affordable housing level is subject to further viability testing and discussions with the GLA.

1.1.9 Minor amendments have also been made to the road and pedestrian layouts for the school (Application B). No other amendments are proposed to Application B. No amendments are proposed to the physical works proposed under Application C, although alternative options within the highway boundaries for mitigating the highway impact of the amended proposals have been assessed within the relevant substitution documents for Applications A and B and are the subject of ongoing discussions with the GLA and TfL.

1.1.10 A more detailed summary is included within the Planning Statement Addendum and Design and Access Statement Addendum submitted with the Revised Scheme documents.

1.1.11 These changes are being brought forward as substitutions to Applications A, B and C (refs. 18/0547/FUL, 18/0548/FUL and 18/0549/FUL), which are related applications (to be linked via a Section 106 Agreement).

1.1.12 It is important to note that no changes are proposed to the physical works proposed under Application C – the only change to this application is that the supporting documents (which include all documents submitted under Applications A and B) have been updated in the context of the proposed changes to the scheme as sought under Applications A and B. Application C was resolved to be refused by LBRuT at Committee on 29 January 2020. As a

result, whilst the works proposed in Application C are still an available option, the Applicant has progressed alternative approaches for addressing and mitigating the impacts on surrounding highways, and these have been tested within the relevant substitution documents for Applications A and B. All of these options are subject to ongoing discussions and testing with TfL. They are all within the existing highway boundaries and if agreed would not, in themselves, require planning consent.

1.1.13 Accordingly, Application C remains 'live' within this substitution package.

1.2 Report Contents

1.2.1 The remainder of this TAA is set out as per the original Transport Assessment, as follows:

- Chapter 2 sets out the baseline conditions, including details of access to the site by the different traffic modes. It also includes a review of accident records on the surrounding highway network over the last 3 years;
- Chapter 3 reviews the current relevant transport planning policy, including national, London and Borough policies;
- Chapter 4 details the proposed development, including proposed car parking and access proposals and sets out the access strategy for the development and considers how the proposed development accords with relevant transport policies;
- Chapter 5 sets out the overall assessment methodology that has been adopted and which has been agreed with TfL through the various scoping discussions. It includes a detailed review of the agreed trip generation rates;
- Chapter 6 provides a summary of the highway impacts of the scheme and sets out a proposed highway mitigation strategy. The assessment of this mitigation strategy is also detailed;
- Chapter 7 sets out the impacts of the development on the public transport and walking and cycling networks and the proposed mitigation strategy;
- Chapter 8 sets out the overall transport and access strategy for the Site including the various measures that are designed to mitigate the impacts arising from the proposed development. This includes a summary of the provides a summary of the various travel plans, of the Framework Delivery and Servicing Management Plan (FDSMP) for the development and of the outline Car Park Management Plan; and
- Chapter 9 provides a summary and conclusions for the TA.

2 Existing Site Context

2.1 Overview

2.1.1 The original Transport Assessment included a detailed chapter setting out the existing site context. This included the site location, adjacent land uses, access arrangements, car and cycle parking, a review of all transport networks and collision analysis on the surrounding roads.

2.1.2 The first addendum did not provide any update on this information as there was no change in the existing site context.

2.1.3 The information set out below is a summary of the changes to the existing site conditions. In addition, an updated collision analysis exercise has been undertaken, due to the previous assessment being from 2018. This information is also included within this chapter.

2.2 Existing Transport Networks

Pedestrian and Cycling Networks

2.2.1 The pedestrian and cycle networks remain unchanged from that detailed in the original TA. The pedestrian network around the site includes footways along all carriageways surrounding the sites and pedestrian routes through Mortlake Green and along the Thames Path.

2.2.2 The Hammersmith bridge closure has not had any impact on pedestrians or cyclists and still remains open for these two modes of travel. Once the bridge is fully operational it will remain a key route for pedestrians and cyclists crossing over the Thames.

Bus Network

2.2.3 The bus network also remains unchanged with the exception of a temporary closure of Hammersmith Bridge. The services available immediately outside the site, including Routes 209 and 419 are affected by this and terminate to the southside of the river. Therefore, where there were previously services available to Hammersmith, these now terminate in Castelnau. An updated table showing the bus routes with the Hammersmith Bridge Closure is included in the table below. All other bus routes remain the same.

Table 2-1 Bus routes operating with Hammersmith Bridge Closure

Bus No	Route	Closest Bus Stop to the Development	Weekday Bus Wait Times (mins) (07:00-19:00)	Saturday Bus Wait Times (mins) (07:00-19:00)	Sunday Bus Wait Times (mins) (07:00-19:00)
419	Castelnau - Richmond Bus Station	Sheen Lane/ Mortlake Station (A/B)	15-20	15-30	25-30
209	Castelnau – Mortlake Bus Station	Avondale Road (X) Mortlake Bus Station (P)	4-8	10-12	7-10
969	Whitton – Roehampton Vale	Sheen Lane/ Mortlake Station (A/B)	Tuesday and Friday only 1 service per day in each direction		
190	George Street – Empress State Bldg/ W Brompton Stn	Thames Bank (R/J)	15-20	15	20
R68	Kew Retail Park – Hampton Court Railway Station	Chalker's Corner (F)	15	12-15	12-15
33	Fulwell Station – Hammersmith Bus Station	East Sheen (C/D)	6-9	7-10	15

Rail Network

2.2.4 The rail network is unchanged since the original submission. New trains with two additional carriages are now running on the route, resulting in an increase in capacity. The routes and train frequency however remain unchanged. This increase in length has a very small impact on the level crossing down time and is considered to be negligible.

Highway Network

2.2.5 The only significant change to the highway network in the surrounding area is the temporary closure of Hammersmith Bridge to vehicles. This closure has increased traffic through Chalkers Corner at peak times, with TfL stating that the Chiswick Bridge is experiencing an increase in vehicular traffic due to the reduction of the number of crossing points for vehicles over the river Thames.

2.2.6 Transport for London and Hammersmith & Fulham Council have agreed the works needed to repair Hammersmith Bridge. The closure is therefore considered as temporary and that the bridge will be re-open by the time the development is fully operational.

2.2.7 There are no other observed changes to the local highway network since the application.

2.3 Personal Injury Collision (PIC) Review

2.3.1 Stantec has obtained three-year Personal Injury Collision (PIC) data for the local highway network surrounding the site from TfL. The records cover a period from 14th November 2016 – 30th October 2019 and the full PIC data report is presented within Appendix A.

2.3.2 The collision casualties are classified into three categories, based on severity: Slight, Serious and Fatal, definitions of which are provided below:

- Slight Injury: Injuries of a minor nature, such as sprains, bruises, or cuts not judged to be severe, or slight shock requiring only roadside attention (medical treatment is not a pre-requisite for an injury to be defined as slight);
- Serious Injury: Injuries for which a person is detained in hospital, as an in-patient, or any of the following injuries, whether or not a person is detained in hospital; fractures, concussion, internal injuries, severe cuts and lacerations, severe general shock requiring medical treatment and injuries which result in death 30 days after the accident. The serious category, therefore, covers a very broad range of injuries; and
- Fatal Injury: Injuries which cause death either immediately or any time up to 30 days after the accident.

2.3.3 The extent of data requested, and location of collisions is illustrated in Figure 2-1.

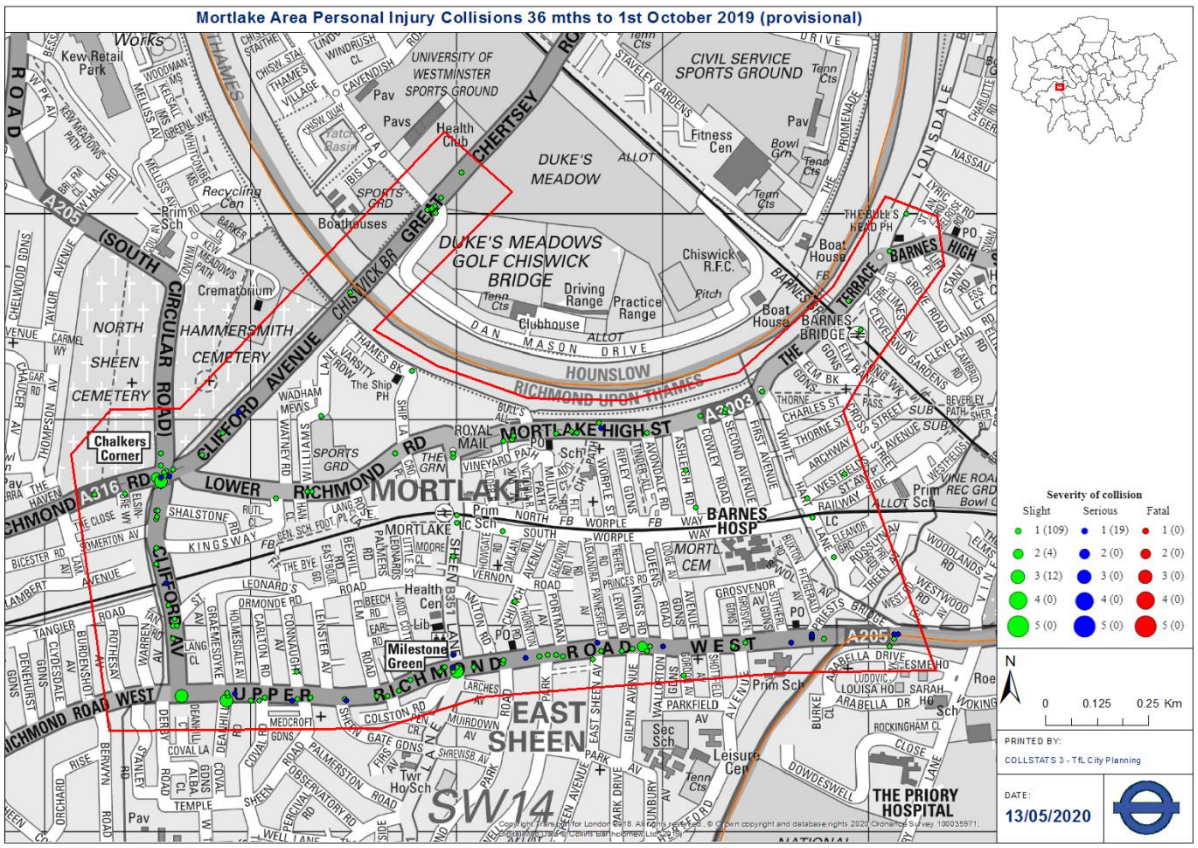


Figure 2-1 Location of Collisions

2.3.4 Figure 2-1 illustrates the clustering of collisions at key junctions within the vicinity of the site, which include Upper Richmond Road West/ Clifford Avenue and Chalkers Corner - Lower Richmond Road/ Clifford Avenue/ South Circular Road (A205). Collisions on the section of Lower Richmond Road adjacent to the Site, were all slight in nature.

2.3.5 A summary of the annual 12-month collision data (November to October) is provided in Table 2-2.

Table 2-2 Summary of Collisions and Casualties

	Severity	Year			Total
		1 (November 2016 – October 2017)	2 (November 2017 – October 2018)	3 (November 2018 – October 2019)	
Number of Collisions	Fatal	0	0	0	0
	Serious	7	6	7	20
	Slight	55	26	55	136
	Total	62	32	62	156
CASUALTIES					
Car Driver	Fatal	0	0	0	0
	Serious	0	1	1	2
	Slight	13	5	19	37
	Total	13	6	20	39
Car Passenger	Fatal	0	0	0	0
	Serious	0	0	0	0
	Slight	10	1	7	18
	Total	10	1	7	18
Pedestrian	Fatal	0	0	0	0
	Serious	1	2	3	6
	Slight	12	4	5	21
	Total	13	6	8	27
Cyclist	Fatal	0	0	0	0
	Serious	4	1	1	6
	Slight	7	10	10	27
	Total	11	11	11	33
Motorcycle	Fatal	0	0	0	0
	Serious	2	1	1	4
	Slight	15	6	11	32
	Total	17	7	12	36
Other	Fatal	0	0	0	0
	Serious	0	1	1	2
	Slight	6	1	7	14
	Total	6	2	8	16

2.3.6 The other category comprises of the following vehicle types:

- Bus or Coach Passenger;
- Good Vehicle Driver & Passenger; and

- Taxi Driver & Passenger

2.3.7 Table 2.2 shows that during the 36-momth period, there were a total of 156 collisions, resulting in no fatal injuries, 20 (13%) serious and 136 (87%) of a slight nature. As seen in Table 2.2 there were a total of 169 casualties, of which 149 (88% were of slight nature and 20 (12%) were of serious nature.

2.3.8 The results show that the highest proportion of casualties were car driver, with 2 serious (1%) and 37 slight (22%) casualties. The second highest casualties were to motorcyclists (4 serious (2%) and 32 slight (19%). The proportion of casualties by severity is outlined below:

- Serious Cyclist – 6 (4%);
- Slight Cyclist – 27 (16%);
- Serious Pedestrian – 6 (4%);
- Slight Pedestrian – 21 (12%);
- Serious Other – 2 (1%); and
- Slight Other – 14 (8%).

2.3.9 As part of TfL's Vision zero by 2041, all deaths and serious injuries should be eliminated from London's transport network. While it is not possible to mitigate for bad driver behavior or other bad practices as a cause, any collisions that could have been prevented, through improvements to the highway should be considered. The highway proposals for the development have therefore been designed with safety as a forefront to the design.

2.3.10 All of the data provided by TfL unfortunately does not provide a detailed description of how the collision occurred, as they are no longer receiving a suitable, anonymised summary of the collision from the Police since November 2016. The report also states a number of the collisions were self-reported and no cause of collision was provided.

2.3.11 The severity of the collisions that were noted as serious and also any clusters of collisions are discussed in more detail below.

2.3.12 The collision (01170055103) which occurred on Mortlake High Street (100m west of junction with Avondale Road) resulted in serious motorcycle injury, caused by reckless driving, exceeding speed limit and loss of control.

2.3.13 Two collisions (01170058120 and 01190207338) occurred at the junction of Lower Richmond Road and Clifford Avenue. The first collision resulted in serious cyclist injury, caused by a car failing to signal and the cyclist failed to look properly. The cause of the second collision (01190207338) is unknown.

2.3.14 Notably four of the serious cycle collisions occurred at different locations on Upper Richmond Road, with one occurring at Chalkers Corner at the Mortlake Road / Lower Richmond Road western side of the junction. Without further details of the reasons for the serious collision along here no issues can be identified., however as part of the highway proposals an Advanced cycle lane is proposed on this side of the junction which will raise driver awareness of cyclists at Chalkers Corner. Notably, mandatory cycle lanes also exist along both sides of Upper Richmond Road,

2.3.15 Closer analysis of the serious pedestrian accidents shows that three were located at or close to existing pelican pedestrian crossings. In addition, the remaining three were located at

priority junctions, where tactile paving and dropped kerbs exist. Further details of the contributing factors would be required to identify if there were any improvements required at these junctions to prevent any further collisions. However, while collisions were not identified at the crossings surrounding the development it is proposed to raise crossings to raise awareness of pedestrians, slow traffic and reduce collision severity in line with the vision zero policy.

2.3.16 In summary, the analysis of the collision records provided by TfL has not identified any specific concern with regards to the geometric design and/ or road layout of the local highway network and in the vicinity of the proposed site access points. The development proposals do however provide a number of improvements for pedestrians and cyclists in the surrounding roads, which will assist with the Mayors vision zero target. These are considered in more detail in Chapter 9 of this TAA.

2.4 Summary

2.4.1 The only significant change observed to the existing site context is the temporary closure of Hammersmith Bridge. This impacts primarily to vehicular traffic including buses, however, is still accessible for pedestrians and cyclists. The closure is temporary while repairs are made to the bridge and news reports have suggested that it will be reopened by the time the development is fully operational.

2.4.2 As part of the Vision Zero policy it is a shared responsibility to reduce serious and fatal collisions within London to zero. The developments highway proposals seek to improve safety by raising awareness of pedestrians and cyclists and introducing measures to reduce traffic speeds and making active travel modes more attractive in the surrounding area. Further details of the Transport Strategy proposed are included in Chapter 9.

3 Policy Review

3.1 Overview

3.1.1 The previous TA addendum submitted in May 2019 included an update in policy from the original TA.

3.1.2 The policies subject to change and reassessed in this addendum include changes to the Mayor's Transport Strategy (2018) and the Draft New London Plan Intend to Publish (2019) including comments from the secretary of state (SoS) (2020) from a regional perspective and the adoption of the London Borough of Richmond upon Thames Local Plan (2018). This included adoption of the site allocation, requiring a secondary school to be delivered at the site.

3.1.3 The Intend to Publish London Plan was published in 2019. The Revised Scheme will be determined in accordance with the development framework at the time of determination and therefore given the stage of the draft Plan, this addendum has considered the emerging London Plan policies. The updates are discussed below:

3.2 Cycle Parking

3.2.1 The residential cycle parking standard has changed as a result of the update. The standard is now as shown in Table 3.1.

Table 3-1 Updated cycle parking standard

Land Use Code	Land Use	Long Stay	Short Stay
C3 – C4	Dwelling (All)	1 Space per studio or 1 person 1 bedroom dwelling 1.5 spaces per 2 person 1 bedroom dwelling 1.5 spaces for units over 2 bedrooms	5 to 40 dwelling: 2 spaces Thereafter: 1 space per 40 dwellings

3.2.2 The main change is that any one bedroom one person flats now only require one space, where previously it was 1.5 spaces. With the proposed development schedule there are no one person one-bedroom units, therefore the long stay cycling space demand will not be impacted.

3.3 Healthy Streets

3.3.1 Transport for London's new guidance relates to the Healthy Streets Transport Assessment and Mayor's Vision Zero approach to design. As this is an addendum to the original TA, a new Healthy Streets Transport Assessment and accompanying Active Travel Zone Audit have not been carried out. However, a healthy streets assessment was undertaken as part of the Original Scheme at Chalkers Corner (Application C), which included an assessment of the existing layout of the junction. In addition, as part of the Original Scheme, an extensive pedestrian environment review system (PERS) audit was carried out and discussions were

held with both cycling officers from LBRuT and local cycle groups. Following this a number of proposals have been proposed to encourage active travel with a significant investment from the developer for measures which have been agreed with LBRuT and TfL. Further details of the Transport Strategy proposed are included in Chapter 9.

3.3.2 An updated Healthy Streets assessment will also be undertaken for the proposed option at Chalkers Corner which will be included in the final modelling recommendation report.

3.4 Compliance with Policy

3.4.1 The assessment provided in the TAA has found that the proposed scheme changes are compliant with the relevant planning policy updates, which include the revised cycle parking standards.

4 Development Proposals

4.1 Overview

4.1.1 Details of the Revised Scheme and the relevant transport changes are provided in this chapter. Proposals for the surrounding transport improvements remain as per the original application and are detailed in Chapter 9 of this Addendum report.

4.1.2 A copy of the revised masterplan, which includes the proposed transport improvements is included in Appendix B.

4.2 Summary of Amendments

4.2.1 The table below indicates the changes in the Revised Scheme relevant to transport and the assessments made in this addendum, such as the development quantum.

Table 4-1 Summary of Amendments

Original Scheme (i.e. February 2018 Submission, May 2019 Substitution and subsequent amendments), as taken to LBRuT Planning Committee 29 January 2020	**Revised Scheme (i.e. current substitution submission)**
Land Use	
Up to 813 residential units (this includes up to 150 flexible assisted living and / or residential units) (of which up to 525 private and up to 138 affordable)	Up to 1,250 residential units (of which up to 894 private and up to 356 affordable)
4,686 sqm flexible use floorspace for use as Class A1, A2, A3, A4, B1, D1, D2 and sui generis	5,023 sqm flexible use floorspace for use as Class A1, A2, A3, A4, B1, D1, D2 and sui generis Location of flexible use changed (remains within Development Area 1)
2,417 sqm office (Class B1) floorspace (in addition to space within flexible use floorspace) – 10% of all office space to be affordable workspace	5,532 sqm office (Class B1) floorspace (in addition to space within flexible use floorspace) – 10% of all office space to be affordable workspace
Hotel / public house with accommodation (1,673 sqm)	Hotel / public house with accommodation (1,765 sqm)
Cinema (2,120 sqm)	Cinema (1,606 sqm)
Gym (740 sqm)	Gym use removed from scheme
Up to 150 units of flexible use living accommodation for either assisted living or	Assisted living element removed from scheme

Original Scheme (i.e. February 2018 Submission, May 2019 Substitution and subsequent amendments), as taken to LBRuT Planning Committee 29 January 2020	Revised Scheme (i.e. current substitution submission)
residential use (flexible Class C2 and/or Class C3)	
Nursing and care home (up to 80 en-suite rooms) with associated communal and staff facilities	Nursing and care home removed from scheme
School (9,319 sqm) (1,200 students and 60 FTE staff)	School retained as part of revised scheme. No changes proposed.
Transport Changes, including Chalkers Corner	
Basement on east side of Ship Lane comprising 408 car parking spaces (331 residential, 77 commercial) plant and cycle parking	Since the original application the east basement has reduced very slightly as B10 no longer requires residential access to the basement. This does not change the number of car parking spaces, albeit there are now 330 residential and 78 commercial (total remains at 408)
Basement on west side of Ship Lane comprising 256 car parking spaces, plant and cycle parking	Basement extent reduced to provide 70 car parking spaces alongside plant, and cycle parking (reduction in 186 spaces overall)
Provision of 15 car parking spaces at grade for the school	No change
20% of car parking spaces to be provided with active electric charging provision, and 100% provided with passive electric charging provision	No change to this approach
Provision of 1,754 cycle parking spaces across the Site	Provision of 2,833 cycle parking spaces across the Site
Highways mitigation at Chalkers Corner comprising reconfiguration of junction and works to existing landscaped area at Chertsey Court	In addition to the submitted scheme alternative options being explored to Chalkers Corner and elsewhere in order to mitigate highways impacts.
School access roads and pedestrian routes	Minor amendments to school access roads and pedestrian routes

4.3 Proposed Revised Scheme

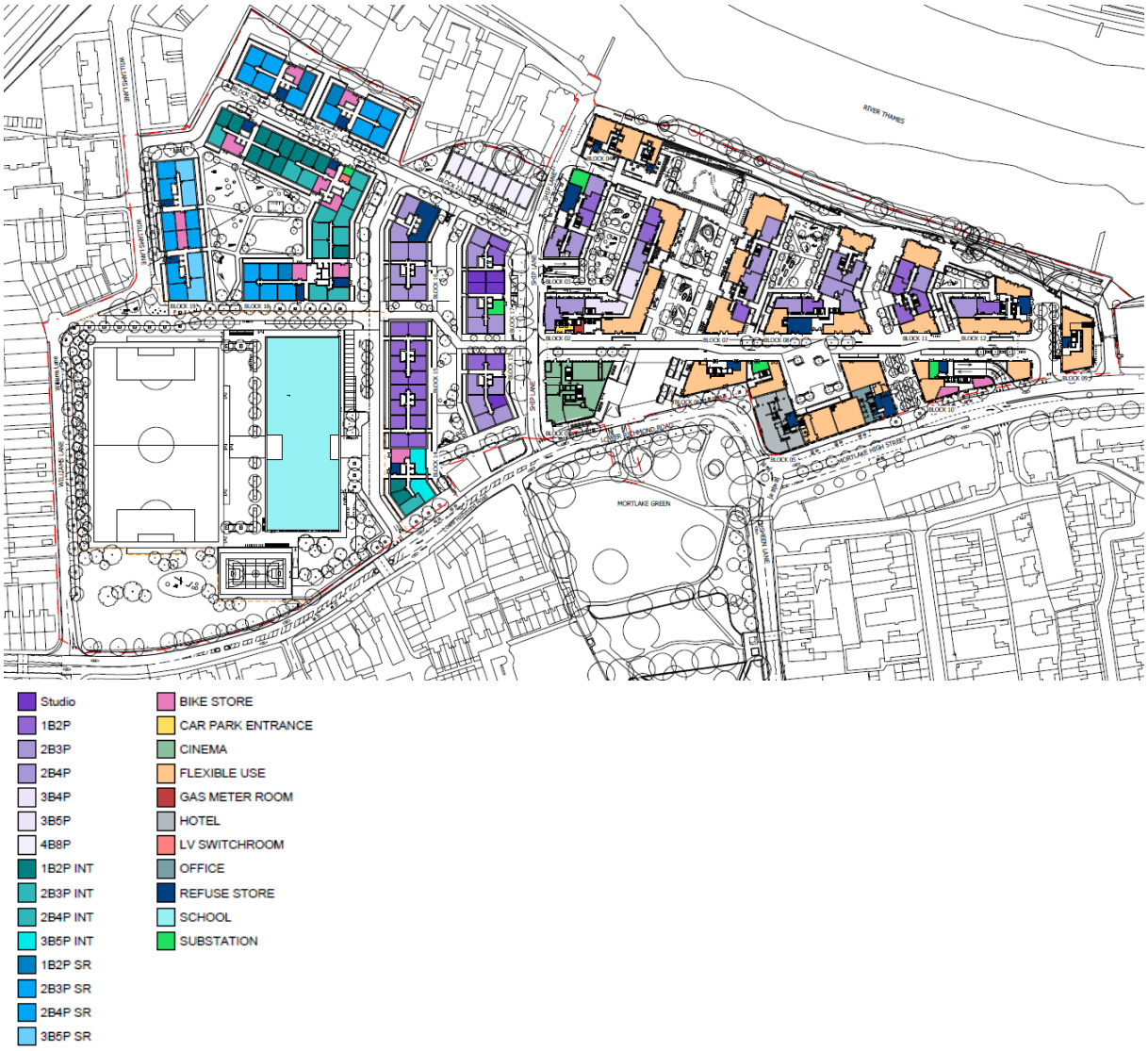
4.3.1 The Revised Scheme proposes an increase in residential units. To deliver this increase in residential units there have been significant changes to the western side of the development

with the flexible assisted living/residential units and care home facility proposed to become residential units and the originally proposed western basement car park being significantly reduced in size to align further with the Mayor's strategy to reduce reliance on cars. The eastern basement remains largely the same with minor amendments which have not impacted on parking numbers.

4.3.2 The non-residential element of the eastern side of the development has also been updated with the proposed flexible use land use area increasing in size, the hotel increasing slightly and cinema reducing in size. The gym has since been removed and the standalone office has also increased in size.

4.3.3 The revised proposed masterplan is illustrated in Figure 4.1 below. While the layout of the majority of the buildings remains the same as the original application, there have been amendments to building heights and some adjustments made to the layout of north west corner of the site.

Figure 4-1 Indicative Development Masterplan – Ground Floor



4.3.4 The following table demonstrates the total floor area of each land use across the site.

Table 4-2 Proposed Land Use Schedule

Land Use	Original Scheme (GFA / No.)	Proposed Revised Scheme (GFA / No.)
Total Residential, (inc. flexible assisted living and / or residential units for Original Application)	813 units	1,250 units
Detailed Application – Application A (Development Area 1)		
Residential	439 units	576 units
Unspecified Flexible Floor Areas inc, Retail/Restaurant/Office/ Community/Boathouse	4,686 m^2	5,023 m^2
Office	2,417 m^2	5,532 m^2
Cinema	2,120 m^2	1,606 m^2
Hotel	1,673 m^2	1,765 m^2
Gym	740 m^2	-
Outline Application - Application A (Development Area 2)		
Residential (inc. flexible assisted living and / or residential for Original Application)	374 units	674 units
Detailed School Application		
School	9,319 m^2 (approximately 1,200 pupils)	9,319 m^2 (approximately 1,200 pupils)
Total Basement Car Parking	679 Spaces	493 Spaces

4.3.5 The flexible use relates to a mixture of non-residential land uses that have been applied for as flexible, as the exact use is unknown until they are rented to the end user. This will include further office space, retail, cafes and restaurants. A number of maximum and minimum sizes have been applied to the flexible use land uses and these are shown in Table 4.3.

Table 4-3 Flexible Land Use Maximum / Minimum

Land Use	Maximum Cap (GFA sqm or units)	Minimum Cap (GFA sqm or units)
Shop Class A1	2,200	n/a
Financial and Professional Services Class A2	220	n/a
Café/Restaurant Class A3	2,400	n/a
Drinking Establishments Class A4	1,800	n/a
Office Class B1	2,200	2,000
Community Class D1	1,300	n/a
Boathouse Sui Generis	380	n/a

4.4 Access Strategy

4.4.1 The access strategy to the site remains as per the Original Scheme for the eastern side of the site with both car park accesses remaining. The principle of the controlled access route through the site also remains. Long stay cycle parking and vehicle parking both remain in the basement.

4.4.2 For the school, minor amendments have been made to the school pedestrian and cyclist access to remove the school access directly from Lower Richmond Road onto the new road adjacent to the school (eastern side). This was to prevent large numbers of students congregating on Lower Richmond Road close to the pedestrian crossing.

4.4.3 In the western section of the site, there is still access via Ship Lane and via the road adjacent to the school. There is however, a much smaller basement car park and the access leading into the car park now operates as an exit as well as an entrance to the car park.

4.4.4 The site can be accessed by pedestrians and cyclists from all sides of the development, with the main central spine providing a controlled access for delivery and servicing vehicles.

4.5 Cycle Parking

4.5.1 For the purpose of the Further TAA and to provide a robust analysis for the demand for cycle parking the worst-case split has been applied. This includes up to 750m^2 of retail, with the remaining being restaurant as anything over this has less short stay parking demand than restaurant use. In addition, a minimum of 2,000 m^2 of office space has applied. The splits used for the cycle parking calculation are provided in the table below.

Table 4-4 Flexible Land Use Schedule – Cycle Parking Calculation

Land Use	Quantum (GFA sqm or units)	Long Stay Parking Standard	Short Stay Parking Standard	Comment
Office	2,000 m^2	1 space per 75sqm	First 5,000sqm: 1 space per 500sqm	Based on minimum GFA requirement for Office
Retail	750 m^2	From a threshold of 100sqm: 1 space per 175sqm	1 space per 20sqm (up to 750msqm then 1 per 150	Based on over 750m^2 having less short stay parking demand than restaurant.
Café/Restaurant	2,273 m^2	From a threshold of 100sqm: 1 space per 175sqm	From a threshold of 100sqm: 1 space per 20sqm	Remaining GFA based on highest short stay cycle demand.
Total Flexible Use	**5,023 m^2**			

4.5.2 As stated in chapter 3 the update in the Draft London Plan - Intend to publish December 2019 version has changed the cycle parking standards for residential with one bedroom one person units now only requiring 1 long stay cycle parking space.

4.5.3 This change in policy together with the new unit mix and amendments to the non-residential land uses requires the following number of cycle parking spaces to be provided.

Table 4-5 Cycle Parking Demand

Land Use	Proposed Floor Area GIA (GEA) /No. of units (Revised Scheme)	Parking Numbers – Original Scheme		Parking Numbers – Revised Scheme	
		Long Stay	Short Stay	Long Stay	Short Stay
Residential	1250	1,280	17	2,279	33
Non-Residential					
Office	5532 (6,068)	35	5	81	13
Cinema	370 seats and 14 staff	2	12	2	13
Gym	N/A	2	9	0	0
Hotel	15 rooms	1	1	1	1
Sub - Total		**40**	**27**	**84**	**27**
Flexible Uses					
Retail	750 (883)	8	42	6	39
Office	2000 (2356)	21	3	32	5
Restaurant	2273 (2678)	9	77	16	134
Community Space	N/A	1	10	0	0
Sub - Total	5023 (5917)	**39**	**132**	**54**	**178**
School					
School	1260 pupils 60 staff	165	13	165	13
Overall Total		**1,754**	**197**	**2,582**	**251**

4.5.4 Both the residential and non- residential short stay cycle parking will be accommodated within the landscaped areas surrounding the development.

4.5.5 Long stay residential cycle parking will be via secured parking facilities within the Ground Floor and basement. except for building 18 which is to be provided in a mixture of locations including within building 18 and the courtyard. Notably the cycle parking facilities provided in Building 18 will use the new compact design two tier racks from Bike Dock Solutions, which are gas operated and require less space than conventional cycle parking racks.

4.5.6 The commercial long stay parking will be provided in the eastern basement located under block 6.

4.5.7 The locations of the cycle parking storage areas are shown on the figures 4.2 – 4.3 below for the eastern and western basement and ground floor respectively.

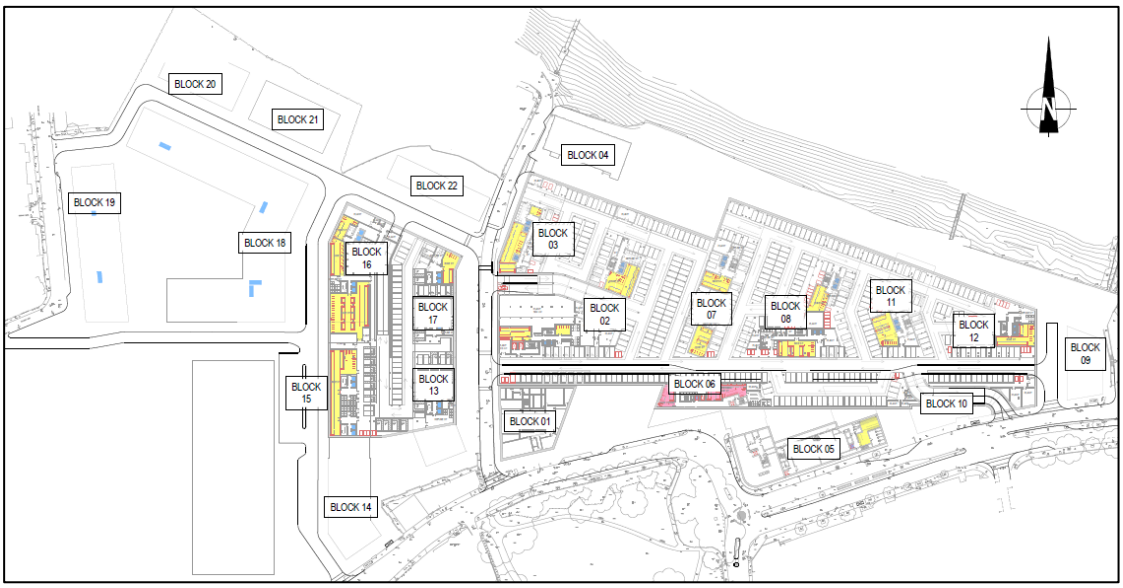


Figure 4.2 Basement Cycle Parking Stores

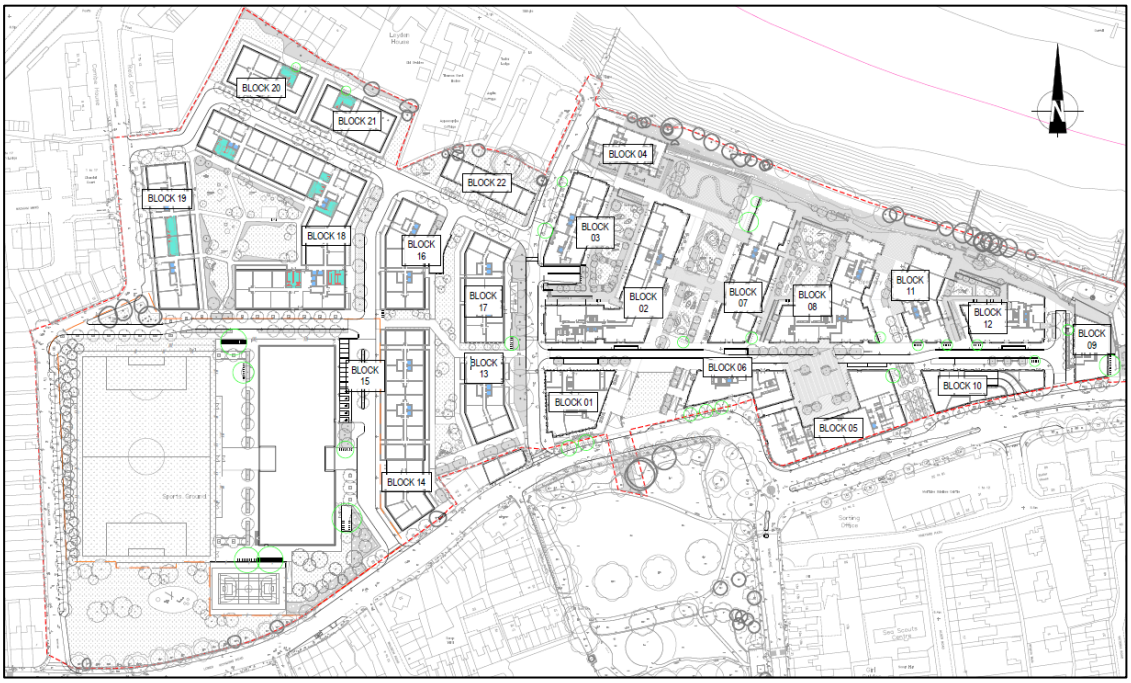


Figure 4.3 Ground Floor Level Cycle Parking Areas

4.5.8 Full details of the number of cycle parking spaces provided for each block and their locations are provided on the table below.

Table 4-6 Proposed Cycle Parking provided per Block

Building	No. of Long Stay Spaces	Location
Residential		
Blocks 1, 2, 3, 4, 7, 8, 9, 11, 12	982	Eastern Basement Car Park
Blocks 6, 10, 14	184	Ground Floor
Block 13, 15, 16 and 17	561	Western Basement Car Park
Blocks 18 and 19	446	Ground Floor and within courtyard
Blocks 20 and 21	93	Ground Floor
Block 22	14	Within each Townhouse
Sub-Total	**2,279**	
Non – Residential		
Commercial	138	Eastern Basement Car Park
School	165	Within School Premises
Sub-Total	**303**	
Total	**2,582**	

4.5.9 The Revised Scheme proposes to provide a minimum of 2,582 long stay cycle parking spaces, which is in line with the minimum required number of spaces specified in the Intend to Publish London Plan. Notably where there is additional space available in some of the cycle parking storage rooms, additional oversize bike racks will be provided to ensure all the space is utilised. Cycle parking areas can be accessed from each block either from the basement or Ground Floor.

4.5.10 It is also proposed to provide 302 short stay cycle parking spaces located around the development, including 14 for the school, which is greater than the minimum 251 spaces required.

4.5.11 A minimum of 10% of oversized spaces will be provided in each cycle store. Full details of each cycle store are included in the plans provided in Appendix C.

4.6 Car Parking

4.6.1 All residential car parking for the development remains in the basement. There will be no parking provision for at street level for any land use, with the exception of 7 spaces for the terrace of town houses (Block 22), 15 spaces for the school and delivery and servicing bays.

4.6.2 Full details showing the layouts of the basement car parks together with vehicle swept paths for a large car are provided in Appendix D.

4.6.3 The basement car parking spaces are allocated as follows:

Table 4-7 Car Parking Provision by Basement

	Original Scheme		Revised Scheme		
Parking Area	**Residential Spaces (disabled)**	**Non-Residential Spaces (disabled)**	**Residential Spaces (disabled)**	**Non-Residential Spaces (disabled)**	**Net Change**
Eastern Basement (Application A, Development Area 1)	331 (35)	77 (8)	330 (18)	78 (8)	0
Western Basement (Application A, Development Area 2)	148 (16)	108* (15)	70 (24)	-	-186
School (Application B)	N/A	15 (2)	N/A	15 (2)	
Sub - Total	479	200	400	93	
Total	**679**		**493**		**-186**

*Flexible assisted living/residential units within the eastern side of the development were considered non-residential

4.6.4 The 400 basement and 7 townhouse parking spaces compared to the 1,250 residential units represents a parking ratio of 0.33, which is well within the ITP London Plan standards for a development in Outer London, which has a maximum permitted parking ratio of 0.75 for a PTAL of 2-4.

4.6.5 A total of 3% of residential bays have been provided as disabled bays from the outset, with the provision for an increase of up to 10% of bays to be provided as disabled bays should they be required in the future. 10% of the non-residential parking bays will be provided for disabled parking from the outset.

4.6.6 In addition, 20% of car parking spaces will be provided with active electric charging provision, and 100% of the remaining spaces will be provided with passive electric charging provision.

4.6.7 In line with the Mayors strategy to reduce dependence on motorised vehicles, the reduction of the number of car parking spaces is a positive step to increase active travel and support the vision zero policy.

4.7 Delivery and Servicing

4.7.1 The strategy for delivering and servicing remains the same as the Original Scheme. An updated Framework Delivery and Servicing Plan has been prepared and will accompany this Further TAA as part of the Revised Scheme substitutions.

4.7.2 Due to the increase in the number of units and amendments to the non-residential land uses the number of delivery and servicing trips will increase, as shown in Table 4.8 below. Full details are included within the Delivery & Serving Plan Report.

Table 4-8 Delivery and Servicing Trip Generation differences

	Daily			AM Peak Trips (0800-0900			PM Peak Trips (1800-1900)		
Vehicle Type	LGV	HGV	Total	LGV	HGV	Total	LGV	HGV	Total
Original Scheme	354	61	415	40	10	50	18	3	21
Revised Scheme	525	81	606	55	11	67	28	5	33
Difference	**171**	**20**	**191**	**15**	**1**	**17**	**10**	**2**	**12**

4.7.3 This increase in the number of delivery and servicing vehicles is largely due to the increase in residential units and the deliveries associated with internet shopping, such as Amazon and supermarket deliveries.

4.8 Waste Strategy

4.8.1 The strategy for waste management remains the same as the Original Scheme. An updated Waste Management Plan has been prepared to accompany this Further TAA and will be included as part of the substituted planning submission.

5 Methodology for the Assessment of Transport Impacts

5.1 Overview

5.1.1 This methodology for the assessment of transport impacts chapter focuses on the change in trip numbers anticipated in the Revised Scheme and the impact on different modes of travel. As per the original TA, the number of person trips generated by the development has been calculated for all modes using the original person trip rates agreed with Transport for London (TfL).

5.1.2 A technical note (TN035a) has been produced to provide an update on the Trip Generation figures for the Revised Scheme. The note provided a response to TfL comments received on 10th and 22nd April 2020 regarding initial trip generation work undertaken. Full details of the Trip Generation analysis undertaken is included in the Technical note in Appendix E.

5.1.3 An email from TfL confirming approval of the Trip Generation figures for the Revised Scheme is included in Appendix F.

5.2 Updated Person Trip Generation

5.2.1 A summary of the Trip Generation figures for the Revised Scheme are provided in the Table below, together with details of the existing trip generation used previously.

Table 5-1 Total Peak Hour Trip Generation (8% Vehicle Mode Share for School)

Mode	Original Scheme Application						Revised Scheme Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	188	186	374	113	120	232	153	174	326	108	117	225
Walk	609	313	923	445	443	888	585	378	963	477	465	942
Cycle	38	21	59	26	27	52	39	29	69	28	32	59
Bus	573	114	687	106	154	261	539	150	689	118	164	282
Train	140	83	222	138	166	304	168	121	289	164	210	374
Underground	10	45	54	28	16	44	27	88	116	58	36	95
Other	37	35	71	36	43	79	54	53	107	48	57	105
Total	**1596**	**796**	**2391**	**893**	**969**	**1862**	**1564**	**994**	**2559**	**1001**	**1079**	**2081**

5.2.2 The Trip Generation assessment concludes that there will be an overall increase in the total number of trips generated by the Revised Scheme as a result of the proposed changes to the development. There will however, be a reduction in the number of vehicle trips due to the reduction in the size of the western car park.

5.2.3 Committee members, together with speakers from surrounding schools, considered the school trips used in the previous assessment were not realistic and showed a greater impact than

what would realistically be caused by a new school. This led to a review of the previous trip generation undertaken for the school. Following this it was agreed with TfL to remove one of the comparable school sites, which was considered to overestimate peak hour person trips. This resulted in a reduction in the overall school peak hour person trips by all modes. TfL requested that in order to be robust with the assessments that the mode share calculations used in the previous assessment were retained. Full details are provided in Technical note TN035a.

5.2.4 Notably following this reduction in person trips generated by the school there are less bus trips generated by the school in peak hours compared with what was shown in the original assessment. This reduction in school bus trips, together with the increase in bus trips as a result of the higher number of residential units has resulted in an overall similar number of peak hour bus trips for the development.

5.3 Summary

5.3.1 The trip generation assessment has been updated following comments from the Committee members and School representatives, resulting in a review of the predicted school trips generated by the development. In addition, a reduction in the size of the western car park has contributed to less vehicle peak hour trips being generated by the development, with other mode choices being utilised as an alternative. These trips have been agreed with TfL and are considered to be a worst case for the development as the targets for the school to reduce travel by car will be monitored and enforced through the School Travel Plan.

5.3.2 Overall, there is an increase in peak hour overall person trips added onto the transport network for the revised scheme in comparison with the Original Scheme application. This includes a decrease in vehicular trips and an increase in trips for all other modes, supporting active travel and the Mayor's vision zero policy.

6 Highway Network Assessment

6.1 General

6.1.1 The transport impacts have been updated to reflect revised trip generation figures. These figures have been amended following changes to quantum / development as proposed by the Revised Scheme.

6.1.2 This chapter provides a description of the modelling work currently being undertaken for the surrounding highway network. Following LBRuT Planning Committee meeting held on 29th January 2020, the proposed scheme at Chalkers Corner (Application C) had a resolution to refuse, however LBRuT recognised that work would be required at Chalkers Corner and instead sought for a S106 contribution from the developer for future work to the junction.

6.1.3 No amendments are proposed to the physical works proposed under Application C, although alternative options within the highway boundaries for mitigating the highway impact of the amended proposals have been assessed. This is following subsequent meetings held with TfL where they raised their concern for bus journey times along Lower Richmond Road and through Chalkers Corner. This has led Stantec to develop an option for a Chalkers Corner improvement scheme based on previous designs provided by TfL and a review of the potential for a bus lane to be implemented. Further details of the potential highway mitigation measures are provided in Chapter 7.

6.1.4 Notably any financial contribution for highway works will be considered against any works that the Applicant agrees to undertake under a s278 agreement.

6.1.5 This Chapter focuses on the development traffic distribution and work required for completion of the TfL VISSIM Model Auditing Process (VMAP) to understand the impact the development will have on Chalkers Corner.

6.2 Traffic Distribution

6.2.1 The traffic distribution, as part of the original scheme and used in the original TA, was taken from the TfL strategic Highway Assignment Model (HAM). This distribution has also been used for the updated assessment within this TAA. Figures 6.1 and 6.2 show the vehicle trip distribution from the proposed development.

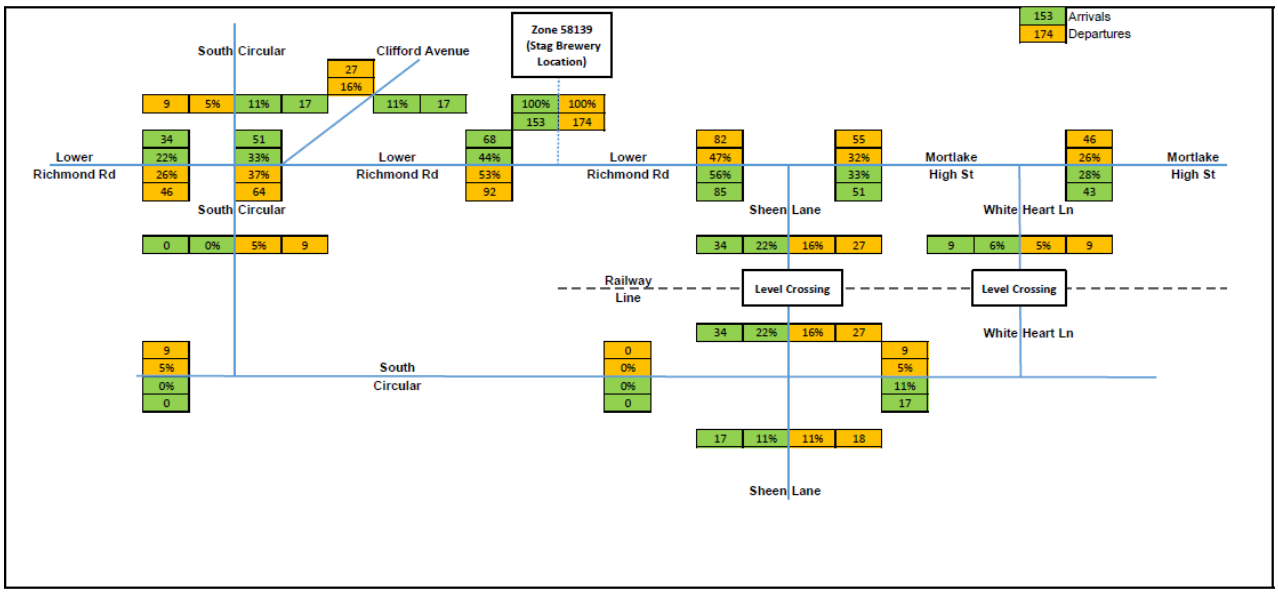


Figure 6-1 AM Peak Development Traffic Distribution

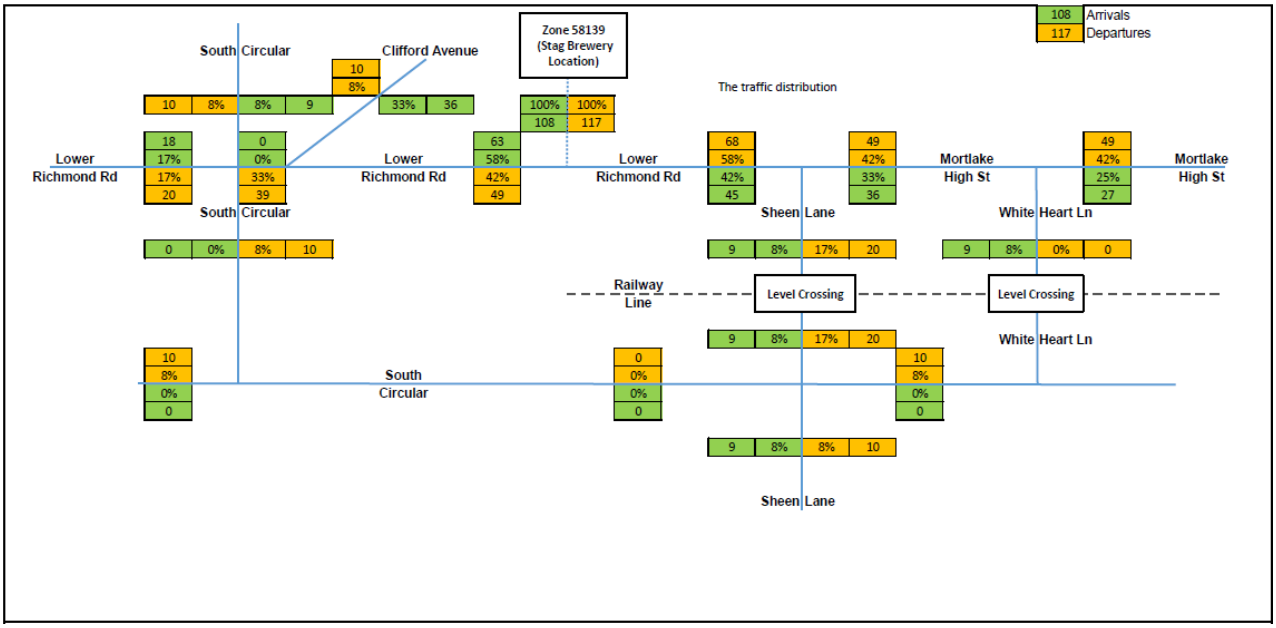


Figure 6-2 PM Peak Development Traffic Distribution

6.2.2 The traffic distribution indicates that approximately 50% of the traffic generated by the development travels through Chalkers Corner.

6.3 VISSIM Microsimulation Modelling

6.3.1 Initial modelling was undertaken using LINSIG modelling software, which includes the approved model at Chalkers Corner for the Original scheme, which was undertaken using 2017 data prior to the closure of Hammersmith Bridge. Due to limitations in the modelling software for modelling two junctions in close proximity to each other, a microsimulation model using VISSIM software has been requested by TfL.

6.3.2 VISSIM provides a real time analysis of the interaction between junctions and in this case would provide an accurate assessment of the benefits that would be obtained from any mitigations at Chalkers Corner or along Lower Richmond Road.

6.3.3 Notably, no further modelling was undertaken previously following the closure of Hammersmith Bridge as it was understood that the bridge would be re-opened prior to the development being fully operational. This is still the official understanding.

6.3.4 TfL issued a Modelling Expectations Report (MER) on 17th March 2020 and Stantec provided an initial response within a Technical Note (TN036) on 23/04/20. Later email discussions have taken place with TfL where the extent and methodology for modelling of Chalkers Corner following the VISSIM Modelling Approval Process (VMAP) has been agreed. Full details of all the above documents are included in Appendices H, I and J.

6.3.5 A full VMAP compliant microsimulation model for Chalkers Corner and surrounding junctions is therefore underway and running concurrently with the submission of the Transport Assessment.

6.3.6 As part of the assessment modelling will be undertaken for the existing layout for the following scenarios for each AM and PM peak period.

- 2017 Base – Existing Layout
- 2031 Future Base – Existing Layout
- 2031 Future Base + Development Flows – Existing Layout

6.3.7 The models will be calibrated and validated using data available from the 2017 surveys and video recording of the junction. Notably further validation will be undertaken using additional requested from TfL and third parties including IBus and Traffic Master data.

6.3.8 The results of the modelling will provide a base case for the impact of the development and for the proposed mitigation measures to be compared against.

7 Operational Review of Proposed Highway Improvements

7.1 Introduction

7.1.1 Early discussions with TfL have indicated a need for a mitigation at Chalkers Corner, centred around the need to preserve journey time for buses. In addition, LBRuT have identified the need for some improvements at Chalkers Corner. This chapter provides a review of the options that are being considered by TfL for Chalkers Corner and Lower Richmond Road to manage the development traffic. This includes details of the proposed options and the analysis to be undertaken to determine the recommended highway mitigation for the development using Microsimulation VISSIM modelling software.

7.1.2 Other highway options that were presented as part of the original TA still remain valid and the details of these proposed measures are included in Chapter 9.

7.2 Proposed Improvement Options

7.2.1 A number of indicative options have been considered as part of discussions with TfL, to mitigate the development traffic for both general traffic and buses through Chalkers Corner and along Lower Richmond Road. These include the following options:

- Option 1: No Change ('Do Nothing', LBRuT Proposal)
- Option 2: Chalkers Corner 'Light'
- Option 3: Lower Richmond Road Bus Lane
- Option 4: Chalkers Corner 'Light' & Bus Lane
- Option 5: Chalkers Corner Scheme (Application C)

7.2.2 Further details of each option are provided within this Chapter. In addition, it should be noted that the final details of the proposed option will be agreed with TfL / LBRuT in respect of any highways land via a section 278 agreement post the grant of any planning permission.

Option 1: No Change ('Do Nothing', LBRuT Proposal)

7.2.3 The outcome of the Committee meeting held on 29th January 2020 was a resolution to grant planning permission for the masterplan (Application A) and school (Application B) without the Chalkers Corner scheme (Application C). While the transport data that was put forward for the application was robust and agreed with LBRuT and TfL, during the Committee meeting Committee members, together with speakers from surrounding schools, considered the school trips used in the previous assessment were over estimating peak hour trips. In addition the encroachment of the public highway and footway towards and within Chertsey Court and the consequential loss of green nature and openness, was regarded as unacceptable and an unneighbourly form of development that would harm the green openness and character of both the grounds within Chertsey Court and the kerb side adjacent, to the detriment of the visual amenities of surrounding residents, streetscene and area in general.

7.2.4 Following the Committee meeting LBRuT requested that as an alternative to the Chalkers Corner scheme, a transport contribution was to be provided by the developer for a package of measures for the surrounding highway network. This contribution would include the previous

money allocated for the Chalkers Corner work and would be distributed for various Transport improvements. These include contributions for the following:

- Area Wide Traffic Management Contribution
- Highway Improvements Contribution
- Chalkers Corner Junction Contribution
- Main development Travel Plan and Travel Plan Bond.

7.2.5 The area wide traffic management contribution includes a wider more holistic review of the area considering factors such as (but not limited to) reduced trip numbers from the site, enhanced walking and cycling facilities, better understanding the wider trip generators and "feeders" of traffic to Chalkers Corner and reviewing more of the principles around ideas such as low traffic neighbourhoods, school streets, etc.

7.2.6 The highway improvements contribution is funding towards managing the impacts of the development on adjacent roads.

7.2.7 The Chalkers Corner Junction contribution is recommended by LBRuT to enable improvements to the junction within the existing highway boundary, which could include improvements to traffic signal phasing and improvements to the junction to encourage sustainable travel, such as improved facilities for pedestrians, cyclists and bus passengers.

7.2.8 Main development Travel Plan and Bond*[1] is provided for the LBRuT to monitor, enforce and provide measures to encourage sustainable travel.

7.2.9 As part of the LBRuT proposal option for the development these contributions would be provided as a mitigation for the development, with no additional Chalkers Corner or Lower Richmond Road highway proposals being progressed as part of the planning application. As an alternative TfL and LBRuT would be able to spend the money on the most appropriate highway works as the demand for these arises in the future.

Option 2: Chalkers Corner 'Light'

7.2.10 Further to the resolution to refuse at Committee for the larger Chalkers Corner scheme, TfL have requested that further options to mitigate the development traffic at Chalkers Corner are assessed. An indicative option for Chalkers Corner has therefore been developed, which incorporates a previous TfL proposed scheme for the junction. The design avoids any land take from Chertsey Court and the consequential loss of 'Other Open Land of Townscape Importance', which was one of the reasons for the resolution to refuse at the Committee Meeting.

7.2.11 The Option 2 design is shown on Figure 7.1 below and a more detailed drawing is included in Appendix G. The key features of the design include the following:

- Provision for a left turn flare lane from Lower Richmond Road.
- Relocation of stop lines on A205 closer to the junction.
- Introduction of advanced stop lanes on Mortlake Road and Clifford Avenue South.
- Widening of area between junctions by relocating stop line by 2m.
- Removal of one tree and replacing with two trees.

- All work within adopted Highway Land secured via a s278 agreement.

*1 - The Applicant does not accept that a Travel Bond is necessary under any option on the basis that the LBRuT will be able to use the Travel Plan for any necessary enforcement.

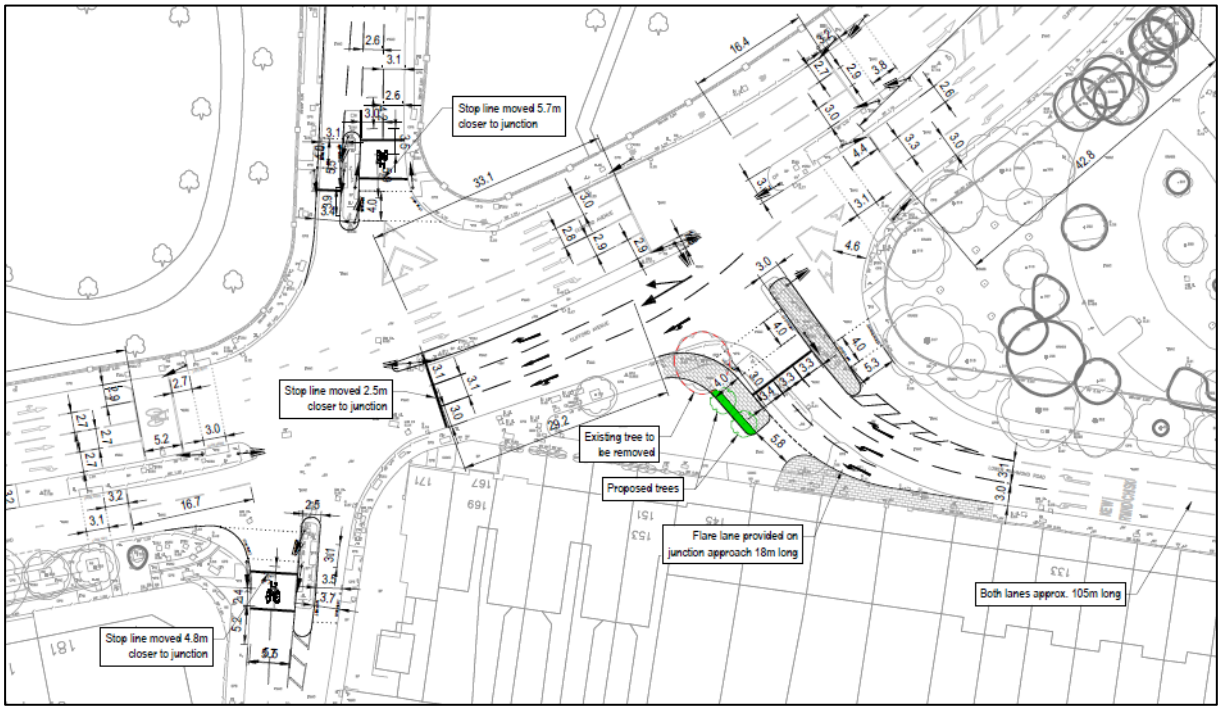


Figure 7-1 Option 2 – Chalkers Corner

7.2.12 The introduction of the left turn lane provides benefits to buses and general traffic travelling westbound along lower Richmond Road by allowing vehicles to pass queuing traffic travelling north towards the A205 through the junction. Currently vehicles queuing to turn onto A205 northbound block traffic along Lower Richmond Road travelling towards Richmond or A205 southbound. The addition of the left turn flare lane increases the number of vehicles than can pass through the junction before being blocked, which will be a positive for the junction.

Option 3: Lower Richmond Road Bus Lane

7.2.13 Option 3 proposes an indicative 350m westbound bus lane along Lower Richmond Road, with no other improvements at Chalkers Corner. The bus lane starts to the west of Rosemary Lane and extends up to a point approximately 60m from the stop line at Chalkers Corner.

7.2.14 The bus lane requires the loss of approximately 36 parking spaces along Lower Richmond Road. However, it is considered that vehicles would be able to park in the bus lane outside of operational hours, enforced through new waiting and loading restrictions.

7.2.15 All work would be located within adopted Highway Land secured via a s278 agreement.

7.2.16 The length of the bus lane is shown in Figure 7.2 and a detailed drawing of the proposal is included in Appendix G.

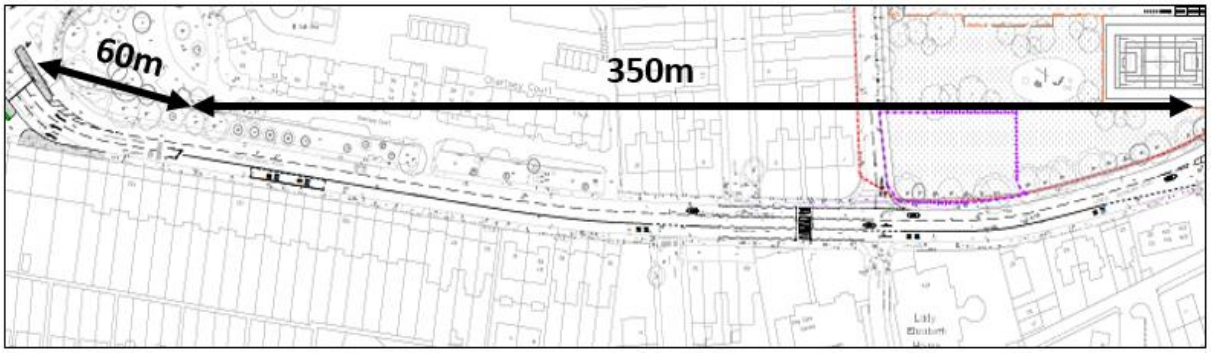


Figure 7-2 Option 3 – Bus Lane

Option 4: Chalkers Corner 'Light' & Bus Lane

7.2.17 Option 4 proposes a combination of the Chalkers Corner light' option and introduction of the bus lane.

7.2.18 All work would be located within adopted Highway Land secured via a s278 agreement.

7.2.19 A detailed drawing of the proposal is included in Appendix G.

Option 5: Chalkers Corner Scheme (Application C)

7.2.20 While the previous Chalkers Corner scheme (Application C) was resolved to be refused at LBRuT's Planning Committee, the Application is still live as a possible option to mitigate the impact of the development.

7.2.21 The proposed works involve the following:

- Realigning the Lower Richmond Road arm by moving it slightly closer to Chertsey Court. This is the most important feature from a traffic capacity perspective as it increases the storage area between Lower Richmond Road and the main crossroads allowing more vehicles to exit Lower Richmond Road each cycle of the signals. The increased reservoir length will also help to reduce the risk of traffic turning right into Lower Richmond Road queuing back into the main junction and blocking traffic movements at that junction;

- Localised widening of Lower Richmond Road to provide an additional left turn flare on the entry to the junction. This will allow the middle lane to feed the subsequent right turn into the South Circular (northbound) with the left lane feeding the subsequent straight-ahead movement towards Richmond and the lightly used left turn to South Circular (southbound);

- Improved pedestrian refuges and facilities for cyclists, including new "toucan" crossing facilities and provision of a feeder lane on the Lower Richmond Road approach arm to link with a future cycle scheme along the A316 corridor.

7.2.22 The scheme also incorporates a new wall and planting to address environmental impacts on Chertsey Court as well as the provision of a new "pocket park" on the south west corner of the secondary junction.

7.2.23 The LINSIG analysis undertaken previously for the Chalkers Corner proposed mitigation was based on higher development traffic figures as the western car park was considerably larger in the original scheme. The scheme was shown to fully mitigate the development traffic and as such can be considered as a worse case analysis for the junction and remains valid should this option be taken forward as the preferred scheme.

7.2.24 A detailed drawing of the proposed Chalkers Corner Application C scheme is included in Appendix G.

7.3 VISSIM Microsimulation Modelling Option Testing

7.3.1 The proposed options will be analysed using VISSIM microsimulation modelling software. Initial modelling has been undertaken using VISSIM which has suggested that more detailed modelling of these options are worth further consideration.

7.3.2 The detailed models are currently underway and will be subject to a full TfL VISSIM Model Auditing Process (VMAP) to determine the proposed option to mitigate the impact of the development on Chalkers Corner.

8 Operation of the Public Transport, Walking and Cycling Networks

8.1 Impacts

8.1.1 The trip generation results show that there is a reduction in vehicular trips whilst all other modes increase marginally. The following section outlines the anticipated impacts by other modes, including walking and cycling and public transport.

Walking and Cycling

8.1.2 The Revised Scheme, as a result of providing more car free units, is anticipated to increase the numbers of residents and visitors walking and cycling to and from the site. The changes result in an increase of 40 two-way trips in the AM peak by pedestrians and 54 in the PM peak. The number of cyclists is anticipated to increase by 10 two-way trips in the AM peak and 7 in the PM peak.

8.1.3 Notably there is a higher number of pedestrian trips in the PM Peak as compared to the original scheme. This difference is related to the increase in residential units together with the assumption used for the flexible use assessment with the increased GIA assumed to be restaurants / bars.

8.1.4 The number of trips by active modes is anticipated to increase, which will have a positive impact on the health of residents and staff. The more people travel actively and exercise the better their mental and physical health is likely to be. Good public realm with people travelling actively can also act as a multiplier and cause others to do the same, therefore an increase in active travel is positive for the surrounding area. It is anticipated that the facilities for pedestrians and cyclists proposed in the surrounding area and throughout the development are more than adequate to meet the increased demand.

8.1.5 There are also a number of improvements at the Level Crossing on Sheen Lane, which have since the original application been agreed with Network Rail. This include the following measures:

- Additional bridge signage;
- General improvements to the pedestrian bridge;
- Moving bollards back on both North and South Worple Way;
- Setting back vehicle stop lines.

Bus

8.1.6 The largest impact for the Revised Scheme is on the bus and rail / underground networks. In total it is anticipated that approximately 50% of the increased trips will be undertaken by Public Transport.

8.1.7 In discussion with TfL it has been agreed that a payment towards bus enhancements is appropriate for the increase in bus trips predicted from the development. This will be secured through the s106 agreement. These trips are mostly associated with the school, with over 70% of the bus trips at school peak times generated by the school.

Rail

8.1.8 The increase in Rail and Underground trips is considered to be accommodated by the increase in capacity with the new trains that have been introduced on the network for trains leaving Mortlake Train Station. The new trains have provided an increase in capacity from 8 carriages to 10 carriages on the network, while retaining journey times into London and other key destinations.

8.1.9 Previously there were assessments undertaken to assess the impact on the platforms, staircases and footbridge of the station. These assessments have been undertaken again as part of the addendum to confirm there is still sufficient capacity.

Platform

8.1.10 The platform width assessment calculations are calculated by splitting the platform into sections and working out the minimum width required based on the number of people waiting on the platform. Using the same measurements as the original TA the measurements are as follows:

Zone A – Yellow Line Zone Requirement – this is still assumed to be 1.0m

Zone B – Boarding/Alighting Zone Requirement – The same assumptions for this calculation have been retained where block length is equal to the average car length (20m) and block load is the maximum number of passengers that board a carriage on an individual train. This has been based on four trains per hour travelling towards Central London.

$$Width\ (m) = \frac{block\ load\ \times 0.93}{block\ length}$$

Zone C – Circulation Zone Requirement – this still assumed to not be relevant as Mortlake remains a station where interchange is not possible

Zone D – Activity Zone Requirement – this is assumed to be the required minimum of 0.3m

8.1.11 The table below shows the existing and future requirements for platform width based on existing and future flows.

Table 8-1 Existing and Future Platform Width Requirement

Requirement	Existing Requirement (m)	Future Requirement (m)
Zone A	1	1
Zone B	2.91	3.17
Zone C	0.00	0.00
Zone D	0.30	0.30
Total	**4.21**	**4.47**

8.1.12 The critical width on the platform is 4.67m, which indicates that there is sufficient width available as the requirement would be 4.57m.

Staircase

8.1.13 The staircase comfort level analysis also retains the same methodology based on the National Rail (NR) guidance. This uses the formula below based on a Fruin Level of Service (LoS) level C. The scale for LoS ranges from A (free flow circulation) to F (complete breakdown in traffic flow). Noting that where the width does not exceed 1.6m in width NR recommend that this measurement should be applied as a minimum, the formula used within the calculation is as follows:

$$Notional\ Two-way\ width\ (m) = \frac{Average\ Peak\ Minute\ Flow}{40} + 0.6$$

8.1.14 Using this formula, the following widths required have been calculated and are shown in the table below.

Table 8-2 Notional and Required Width of the Staircase

Scenario	Average Peak Minute Flow	Notional Two-Way Width (m)	Required Width (m)
Existing	15.40	1.288	1.6*
Future – With Development	17.89	1.399	1.6*

*1.6m is the minimum recommended by Network Rail

8.1.15 The staircases are currently 2.00m wide and therefore greater than the minimum 1.6m width required for the existing and both future scenarios.

Footbridge

8.1.16 The footbridge comfort level analysis also uses a formula provided in NR's guidance on comfort levels and is again based on a Fruin LoS C.

8.1.17 NR's guidance recommends a minimum passageway width for passageways with a central handrail of 1.6m plus 0.3m (to account for edge effects) either side of the handrail plus the width of the central handrail. This minimum width applies in circumstances where the notional two-way width required is less than this otherwise a wider passageway is required. The notational width for the existing and future scenarios is calculated below.

8.1.18 The average peak minute flow is the average flow per minute in the peak hour which is then increased by 25% to account for possible delays to trains services leading to fluctuations in passenger flows through the station. This factor is the same as that used to increase train loading at the station in the event of delays.

Table 8-3 Notional and Required Width of the Footbridge

Scenario	Average Peak Minute Flow	Notional Two-Way Width (m)	Required Width (m)
Existing	19.32	1.204	3.85*
Future – With Development	21.81	1.281	3.85*

*3.85m is the minimum recommended by Network Rail

8.1.19 At present the footbridge is 4.00m wide with a central railing at waist height that is approximately 0.05m wide. Whilst the demand for the footbridge increases as a result of the new scheme, it does not go beyond the minimum required width set by NR, which is already provided for by the existing footbridge. Thus, the footbridge is within NR's requirements for both the present and future peak hour loadings.

8.1.20 At all peak times both sides of the footbridge are open to members of the public as the station is manned and there are a number of improvements that have been agreed with NR to make improvements to the bridge, which are detailed in Chapter 9: Transport Strategy.

9 Transport Strategy

9.1 Overview

9.1.1 This transport strategy chapter provides an update of the latest strategy that is proposed for the Revised Scheme. The aim is to promote active and sustainable modes of travel in accordance with the Mayors vision zero policy and highlight how this is possible for residents, employees and visitors of the development.

9.1.2 Whilst the strategy largely remains as per the original transport assessment and addendum, there have been a number of alterations made following feedback and discussions with key stakeholders. This includes discussions that have taken place with officers of LBRuT and TfL, with members of the public through CLG meetings and through the two extensive formal public consultation events and with third party stakeholders, including NR.

9.1.3 The overall strategy for the Site is in line with the Planning Brief, the emerging Site Allocation and with the Mayor's Transport Strategy and the recently issued updated draft Strategy which places considerable emphasis on the creation of "Healthy Streets" and as such has given a high priority to the provision of a high quality public realm which will help to promote walking and cycling.

9.1.4 The Planning Brief for the Site and the emerging Site Allocation also places a high priority on the need to create a high quality public realm as part of a permeable development and in particular highlights the need to provide a high quality pedestrian link through the Site to connect Mortlake Green and the station with the riverside. It also recognised that there were a number of difficult transport issues that needed to be addressed within the TA including existing congestion and the need to consider improvements to public transport, including the possible provision of a bus turning facility to replace the excising one at Avondale Road.

9.1.5 The quantum and design of parking is also a key element of the Transport Strategy. Not only will excessive parking encourage car use and potentially increase existing levels of congestion in the area, but it will also challenge the provision of a high-quality public realm. Too little parking may cause overspill onto surrounding residential roads.

9.1.6 The remaining part of this chapter sets out the various elements of the Transport Strategy that seek to ensure good access by all modes but with priority to walking and cycling and to minimise adverse impacts on the existing community.

9.1.7 The Transport Strategy is very comprehensive and identifies improvements for all modes of transport, based on the planning brief and extensive discussions with key stakeholders, and proposes improvements in the area for all users. In summary it comprises the following elements:

- Overall design principles;
- Walking and cycling strategy;
- Public transport strategy;
- Parking strategy and delivery and servicing strategy;
- Highway access strategy; and
- Travel planning/demand management strategy.

9.1.8 Each of these components is set out below. In addition, impacts during construction will be dealt with through a Framework Construction Management Statement. This is a separate document that has been prepared by AECOM.

9.1.9 As part of the overall strategy, the proposed parking for the development has been reduced and is below LBRuT's maximum standards for the location, but in accordance with GLA standards. It has been pitched at a level that is considered to achieve an appropriate balance between facilitating and encouraging the use of more sustainable modes of transport and ensuring that there is adequate parking to meet the needs of the various land uses proposed.

9.2 Overall design principles

9.2.1 The design principles for the site remain as per the previous reports. The overall principles are to promote active and sustainable travel by creating a development where walking and cycling has priority over all other modes.

9.2.2 The masterplan has been designed to provide sufficient space dedicated to active modes, including various public realm works. By placing the majority of vehicle parking in the basement of the site, this allows those walking and cycling to travel through the development with less risk of conflict with motor vehicles.

9.2.3 The scheme has two distinct elements:

- To the east of Ship Lane (Application A – Development Area 1), and in accordance with the Planning Brief and the emerging Site Allocation, the scheme seeks to create a vibrant new centre for Mortlake with new restaurants and bars, cafes, local retail and employment opportunities and community uses. This is reflected in the creation of a new "high street" running east to west parallel to Mortlake High Street as well as a series of new links to the riverside with a number of new public squares being created. The area will essentially be traffic free since all parking is underground with access points on the periphery. Whilst servicing will occur on street level, access to the area will be controlled physically and by time restriction to minimise conflicts with pedestrians and cycles;

- To the west of Ship Lane (Application A – Development Area 2), the development is more residential in nature. The school (Application B) is also coming forward to the west of Ship Lane. With the exception of pedestrian and cycle flows related to the school at the start and end of the school day this part of the site will be subject to much less intense movement. In addition, it has no direct access to the river. Therefore, the design involves a more traditional streetscape with footways. The key challenge for this part of the Site is to manage the flow of people, cycles and traffic associated with the school.

9.2.4 Full details of the proposed public realm are provided within Gillespies' submitted Landscape Design and Access Statement. This gives high priority to establishing a network of pedestrian and cycle routes which will be largely traffic free providing very high-quality access through the site, including excellent access routes to the river and towards Mortlake Green.

9.2.5 The proposed layout through the site and links to the surrounding roads, together with the proposed highway improvements are shown on drawing number 38262-5514-026, included in Appendix G.

9.3 Walking and Cycling Strategy

9.3.1 As per the previous TA and TAA walking and cycling are still the principal modes considered within the Transport Strategy. Street design is crucial in providing an appropriate environment for walking and cycling through the development and therefore streets have been designed to slow vehicle speeds, where they are permitted, and to provide areas where vehicles are either

not allowed or the access is controlled, such as along the riverfront, with no vehicle access with the exception of delivery and servicing vehicles, whose access will be strictly controlled both through design and management arrangements.

9.3.2 The walking and cycling strategy for the site is encompassed within the wider design and landscape of the site. It is envisaged that the site will have a high level of on street activity with walking and cycling providing the best way to travel through, to and from the development.

9.3.3 As part of the second addendum and as detailed in the development proposals chapter, cycle parking has been provided in line with the latest ITP London Plan standards. Long stay cycle parking is still provided in secure and sheltered areas within the basement and at ground floor and short stay spaces are provided amongst the public realm. In total the number of cycle parking spaces proposed for the development will be in excess of the minimum standards set out in the latest Draft London Plan.

9.3.4 Figures 9.1 and 9.2 show the proposed network of pedestrian and cycle routes through the Site and how this link into the wider networks. The key change is how cyclists travel through the eastern section of the development. Following meetings with key cycling stakeholders, which took place between the submission of this Addendum and the previous Addendum in May 2019 it is considered beneficial to keep cyclists off road for longer within the site. As such, the cycle route heading eastbound now exits the site in the very eastern corner rather than in line with the proposed crossing.

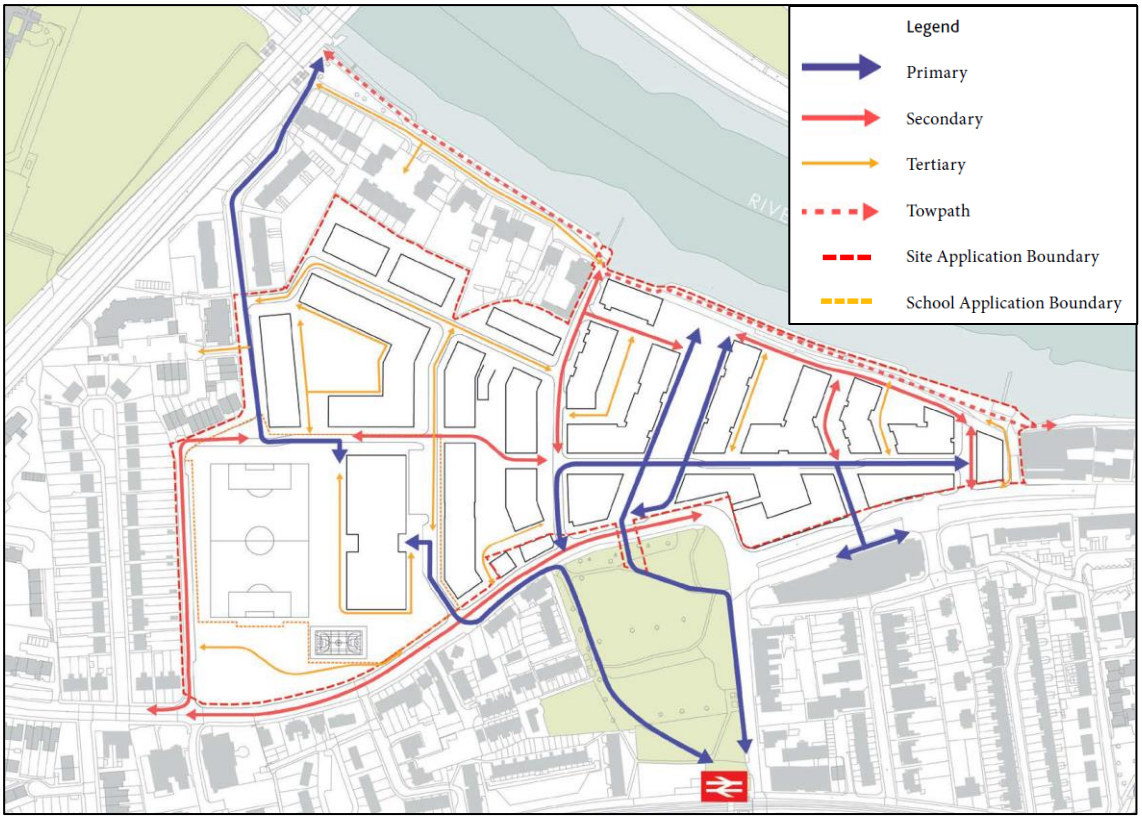


Figure 9-1 Internal Pedestrian Routes

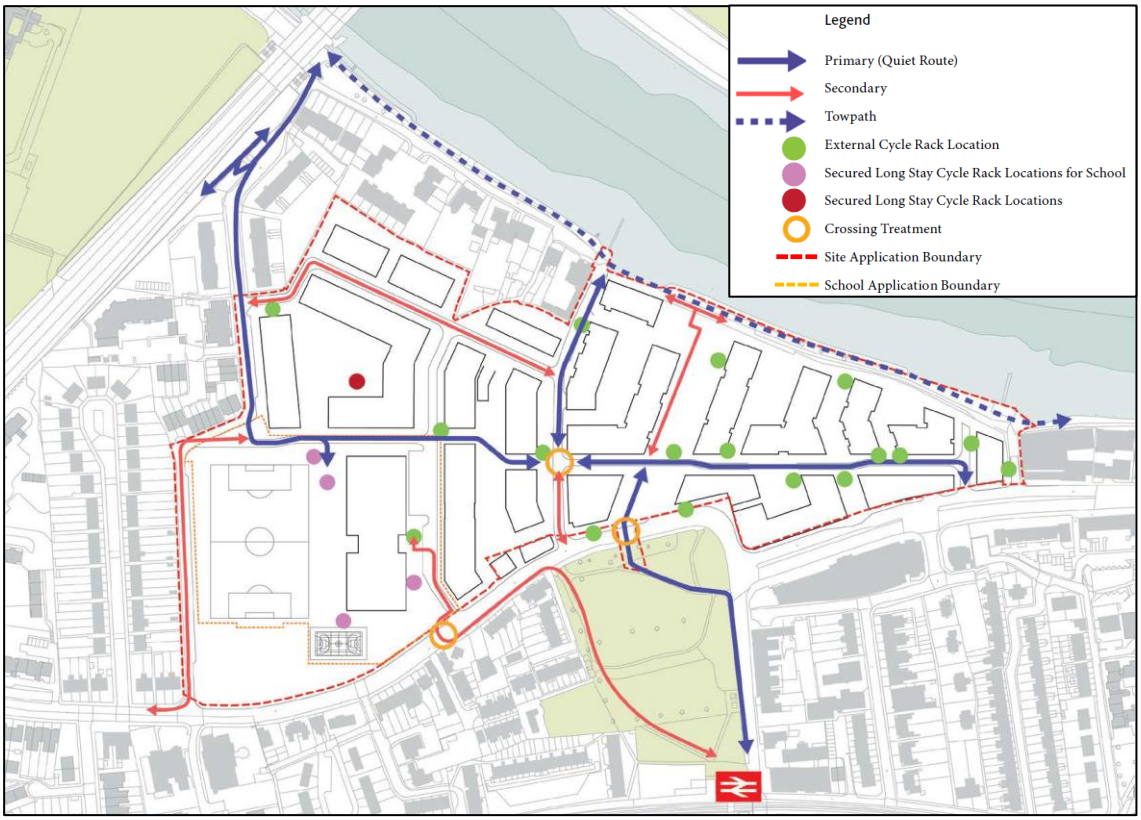


Figure 9-2 Internal Cycle Routes

9.3.5 Key features of the pedestrian network are as follows:

- The provision of the new "Green Link which will run north-south through the Site providing a link between Mortlake Green and the River. This will have an overall width of between 30 and 38 metres and provide an important route for cycles as well as pedestrians.

- A new "high street" running east- west parallel to Mortlake High Street and linking Ship Lane in the west with Mortlake High Street at the eastern end of the Site. This will again be a wide street (14 metres between buildings). It will have a defined vehicular path of 4.1 metres together with a number of defined loading bays. Actual traffic flows will be low and limited to servicing vehicles. Traffic access will be from the eastern end only and will be controlled though barriers which will allow time limited access to be effectively managed. The design will allow cycles to use this as a through route in either direction.

- The existing towpath east of Ship Lane will be largely unaffected by the proposals. However, a new pedestrian promenade, (with a width of between 4 and 4.6 metres) will be provided parallel to the towpath but at a higher level above the flood level. This will be primarily a pedestrian route but will provide an informal route for cycles. Limited servicing activity will also take place along this route since there will be a series of bars, restaurants and other 'flexible uses' along the river frontage.

- Ship Lane, which bisects the Site, will continue as a public highway but will be considerably enhanced as a pedestrian route through the provision of a wider footway on the west side and a generous (3 metre) new footway on the east side. On street parking will be limited mainly to car club spaces (total 3 spaces);

- To the west of Ship Lane, a new east-west pedestrian cycle route will be constructed across the Site immediately to the north of the school. This will be essentially traffic free but there may be limited access for school service vehicles and buses. This will link with Williams Lane to the west and Ship Lane to the east and then in turn with the new east-west "high street" creating a new east-west route across the full site. A crossing treatment is proposed where this route crosses Ship Lane.

9.3.6 Figure 9.3 shows how the proposed local pedestrian and cycle network will interface with the wider networks.

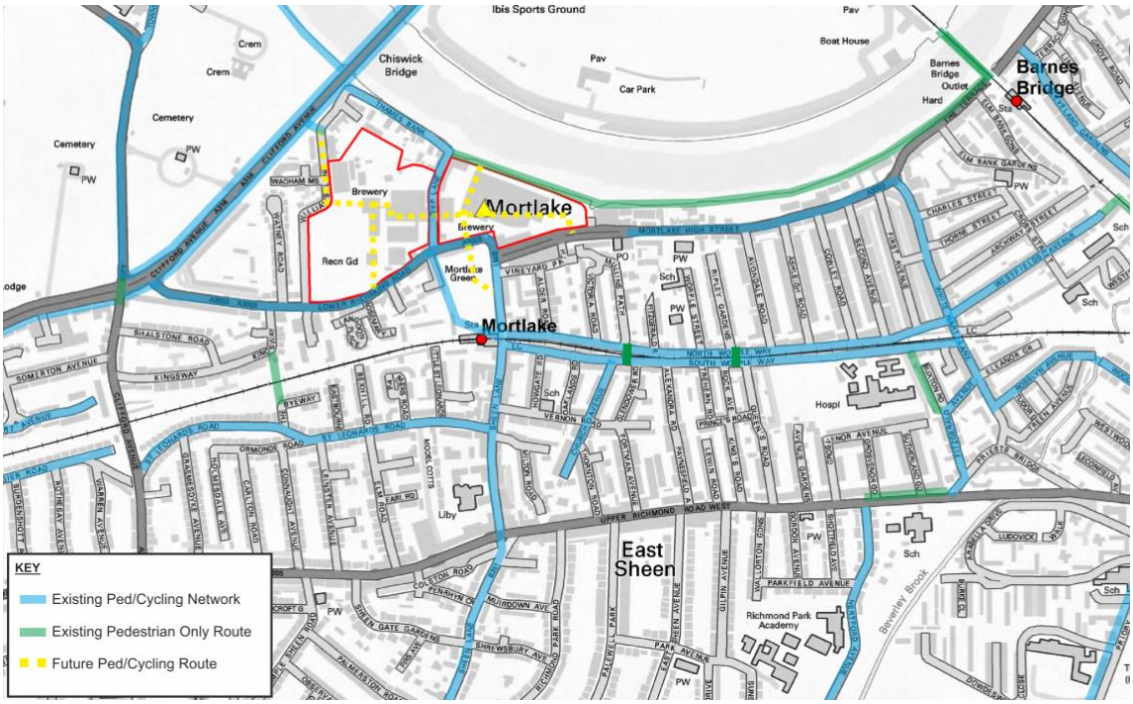


Figure 9.3 Wider pedestrian and cycle links

9.3.7 For pedestrians the main desire lines are considered as follows:

- To the station and south along Sheen Lane – this will be facilitated by providing a new toucan crossing at the southern end of the Green Link. The signalised toucan crossing was initially included although this has been widened as part of the Revised Scheme. It was considered that the updated route provided a more natural link through the site and enabled a safer option for entering and exiting the carriageway.

- To various bus stops located along Mortlake High Street and Lower Richmond Road – two new pedestrian crossings are proposed: one on Mortlake High Street which will connect to the new "high street" and one on Lower Richmond Road to the west of the new access road to the school. This will provide the main pedestrian access to the school and link in turn to Kingsway footbridge for pupils living to the south of the railway;

- To the river towpath, including Thames Path. There are various connections to this route, including via Williams Lane, Ship Lane and the "Green Link". The towpath in turn provides a route to Barnes Bridge Station to the east and to Kew Riverside to the west as well as access onto Chiswick Bridge.

9.3.8 In terms of cycle access, the proposed east-west route connects with both the riverside route towards Kew and the TfL Quiet Way along the A316. This in turn provides access to Chiswick to the north across Chiswick Bridge and to Richmond to the South west. For north-south

movement the new “Green Link” would provide the main signposted route linking the riverside route with Mortlake Green and onward to the station and the signposted routes along South and North Worpole Way which run either side of the railway line.

9.3.9 Further detail on the highway changes such as the realigned crossings and modifications to the highway layout to benefit pedestrians and cyclists is included within the Highway Strategy section later in this chapter.

9.3.10 The developer has also agreed to a contribution towards the TfL pedestrian improvement scheme at the junction of Upper Richmond Road / Sheen Lane.

9.3.11 The proposed layout through the site and links to the surrounding roads, together with the proposed highway improvements are shown on drawing number 38262-5514-026, included in Appendix G.

Off-site Cycle Design

9.3.12 Offsite the strategy for cyclists remains as per the Original Scheme. The crossing on Lower Richmond Road is to be relocated to align with the Green Link through the site, with a new pathway through Mortlake Green to the station also provided. Notably as discussed earlier the toucan crossing located between the development and Mortlake Green is proposed to be widened to provide additional space for cyclists. This has been proposed as a result of the revised scheme and subsequent discussions with local cyclist groups.

9.3.13 The Thames Path has been identified as a key recreational route. While enhancement works are proposed, the strategy to not re-surface this route have been maintained, as feedback from users suggested better surfaces would lead to faster moving cyclists which would deter pedestrians.

9.3.14 As part of the transport strategy, further improvements to the cycle network have been considered but ruled out due to feedback from local residents, LBRuT and TfL. Other options included replacing parking on the southern side of Lower Richmond Road with a two-way segregated cycle track, cycle lanes in both directions on Lower Richmond Road and several iterations of the Chalkers Corner Junction Design. These designs were not carried further into the strategy due to issues relating to parking and the balance between cycling and motor vehicles. Whilst some local residents expressed a desire for greater cycle facilities in the area, there was also a high value placed on existing parking and accessibility to the highway network. Therefore, it is felt that the cycling strategy put forward enables the best balance between these two modes.

9.4 Public Transport Strategy

9.4.1 The public transport strategy for the development is based around the bus services operating on Lower Richmond Road and the rail network available from Mortlake Station. While the bus services and rail network remain the same as the original application the impact has changed based on the amendments to the proposed development.

9.4.2 The Site has an existing PTAL score of 2 indicating a poor level of accessibility by public transport. However, this is considered to underplay the accessibility of the location by public transport since the nearby Mortlake Station provides good access to central London and to the wider strategic network via interchange at Clapham Common, Vauxhall, Waterloo or Richmond.

9.4.3 The key issues identified in discussions with the transport authorities and the public have been:

- The poor quality of the pedestrian access to the Station;

- Crowding of existing peak services from Mortlake towards London in the AM peak. This was raised by the public rather than the authorities;
- The relatively poor bus service that is accessible from the Site;
- The potential need for a bus turnaround facility with driver facilities within the Site with TfL considering their potential options.

Rail

9.4.4 The rail strategy is also retained as per the original TA. As concluded in chapter 8 there are no anticipated capacity issues in relation to either the peak hour trains or station infrastructure at Mortlake as a result of the development.

9.4.5 The access route between the Site and the station will be improved through the provision of a more direct route achieved by relocating the existing pedestrian crossing close to Ship Lane further west to align with the "Green Link".

9.4.6 The possibility for improving the quality of the environ around the northern access to the station has also been investigated with Network Rail (NR). It has been shown from land ownership plans that NR are the owners of the land surrounding the north of the station but that the Timber Yard company have a leasehold on the land here. Whilst the current arrangements are considered to be unattractive there is no evidence that the Stag Brewery development has a significant impact on the area in terms of pedestrian capacity. In any case, options to improve the area around the station for those accessing trains have been explored.

9.4.7 The level crossing and footbridge were identified as the best ways of improving access to the station for those wanting to travel by train. The measures agreed by Network Rail and LBRuT were as follows:

- Additional bridge signage
- General improvements to the pedestrian bridge
- Moving bollards back on both North and South Worple Way
- Setting back vehicle stop lines
- Improvements to Sheen Lane (as per the original development proposals).

9.4.8 It should be noted that these measures were not previously considered necessary to mitigate the additional development trips, however the developer has agreed to fund these, noting the benefits that these measures will bring.

Buses

9.4.9 From discussions with both TfL and LBRuT, and with the exception of the school requirements, the main issue regarding buses for this Site is not one of capacity but of the relatively unattractive nature of the 419 service due to its relatively low frequency, up to 4 buses an hour. The service does however provide an important link to both Hammersmith (in the east) and to Richmond (in the west) which are considered to be the most important local destinations. In addition, there are a variety of other bus services that can be accessed from the different parts of the Site, albeit requiring a walk in excess of the preferred walking distance to a stop. Taken together these bus services provide direct access to a wide range of destinations.

9.4.10 As part of the original TA we have looked at a range of options for improving the local bus offer and these options can be summarised as follows:

- Diversion of the 209 bus service which provides a frequent service to Hammersmith but which currently terminates at the bus turn facility at Avondale Road to the south west of the Site. This was originally the Council's preferred option and would require the provision of a replacement bus turn facility within the Site;

- Upgrading the frequency of the 419 bus service. This would be the most straightforward option;

- Diverting or extending one of a number of other services to the Site that currently terminate in the Richmond area. Again, these options are likely to require the provision of a bus turnaround facility on the Site but would be provided to benefit the wider area and not directly as a result of the development, hence why the turnaround facility is not included within this application.

9.4.11 TfL's current position is that, given the uncertainties relating to the repair works at Hammersmith Bridge, they are not yet in a position to advise on their preferred strategy to meet the future requirements of the masterplan. They anticipate that, prior to the reopening of Hammersmith Bridge to double deck buses, they will undertake an extensive review of bus services throughout the Hammersmith and Richmond area.

9.4.12 As things stand, the diversion of the 209 bus service is unlikely to be TfL's preferred option since this would be costly and would remove the service from residents living in the Avondale Road area, including to the south of the rail line.

9.4.13 TfL agree that increasing the frequency of the 419 bus service, together with the provision of special school bus services as required once the school's catchment has been determined, would meet the needs of the Stag development proposals.

9.4.14 However, as TfL have not committed to any improvements for bus services they have instead sought a contribution from the development through a s106 contribution.

9.4.15 Whilst the need for a bus turn facility has not been established and will not be a direct requirement for this development and therefore part of a separate application, land has been reserved at the south west corner of the site at the junction of Williams Lane with Lower Richmond Road. Here a bus turn facility to accommodate up to 4 bus spaces together with driver facilities, could be provided. This is TfL's preferred location for such a facility since it provides them with the greatest flexibility in terms of the management of bus services in the area and would involve least redundant bus mileage. Figure 9.4 shows the location of the safeguarded land.

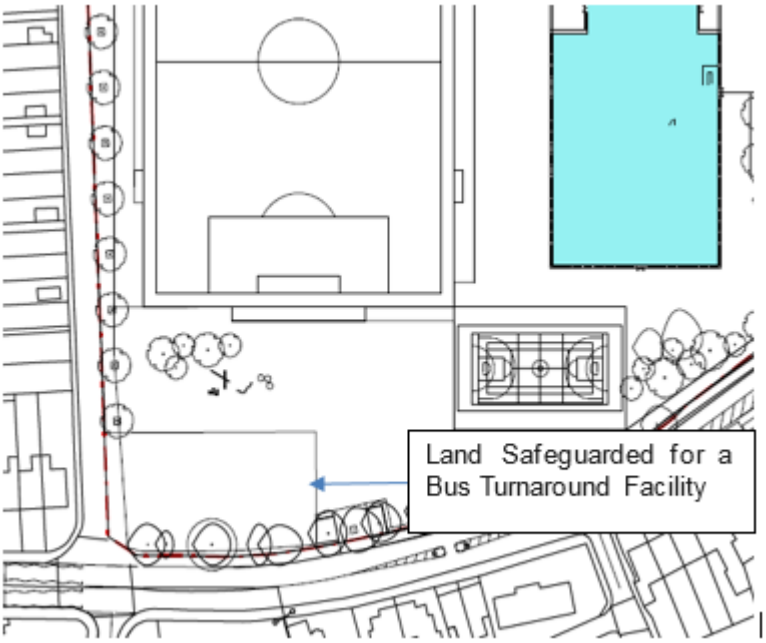


Figure 9.4 Location of Bus Turnaround Safeguarded Land

9.5 River Use

9.5.1 Notwithstanding the constraints regarding the commercial use of this part of the river, the potential for the possible extension of river boat services from Putney to the stag was discussed with officers of TfL and the Chief Operating Officer of Thames Clipper (TC). These discussions confirmed that the provision of a service from the Stag was unlikely to be viable. A number of factors were highlighted:

- Bridge height is a key issue. TC vessels (approx. 150 capacity) currently have some difficulty clearing both Wandsworth and Putney bridges at certain times of day due to a combination of low bridge height and high tide. Heading further west with existing TC vessels is not considered feasible as the channel depth worsens and navigating bridges at high tide is difficult and subsequently restricts the service timings. Hammersmith (south) bridge has a main navigational arch clearance of 3.6m, which is not sufficient for existing TC vessels. The use of smaller vessels was not considered to be viable;
- Unattractive Journey time due to the combination of the speed restriction and the river alignment. These would combine to give an unattractive journey time of circa 30 minutes between the Stag and Putney; and
- Difficulty of providing access to the Site from the navigable channel.

9.5.2 For these reasons the potential use of the river to provide a commercial river bus service was discounted.

9.5.3 It is considered however that as part of the Contractors Construction Logistic Plan (CLP) use of the River to bring and remove materials to / from the site will be investigated further.

9.6 Parking Strategy

9.6.1 The parking strategy for the site was originally derived to create a balance between providing appropriate parking and helping to reduce the number of vehicle trips generated by the development. As such a parking ratio of 0.74 spaces was applied. Since the uplift in units and

reduction of the western car park the parking ratio has significantly reduced. This reduces the impact of the development on the surrounding highway network and also further encourages residents and visitors to travel either actively or via public transport.

9.6.2 Overall, a total of 493 parking spaces is proposed for the development providing parking for residents at a ratio of approximately 0.33 spaces per dwelling. As per the original application 78 spaces are provided within the eastern car park (Development Area 1) to meet the needs of the non-residential development. The school has 15 spaces provided at surface level.

9.6.3 For the non-residential development a parking accumulation assessment has been undertaken based upon the agreed trip generation rates and this suggests that the quantum of non-residential parking should be sufficient to meet the needs of the proposed commercial and leisure uses.

9.6.4 The importance of ensuring that parking from the proposed development does not overspill onto the surrounding road network has been recognised. Baseline parking surveys have established that, whilst there are spaces available at all times of day on the surrounding road network relatively high stress levels do exist.

9.6.5 The car parking management plan submitted as part of the Original Scheme has been updated and forms part of the parking strategy. Within this parking management plan there are a number of objectives, including the following:

- To provide clear and effective management of all residential and non-residential parking across the development (but excluding the school which will be responsible for managing its own parking);
- To actively discourage residents and visitors from parking on residential streets on the periphery of the Site;
- To monitor the utilisation of both on and off-site parking in conjunction with the Framework Travel Plan and from first occupation of the commercial and 50% occupation of the residential units provide an annual report to the Local Planning Authority. This will provide a basis for determining if changes should be made to the management regime or potentially whether it might be appropriate to consider a Controlled Parking Zone (CPZ), which the developer has agreed to pay through a S106 contribution.

9.6.6 It is envisaged that the full CPMP will need to be agreed with the Planning Authority prior to first occupation of the development. It is recognised that the demand for non-residential parking spaces could exceed demand at busy times and therefore it is envisaged that the Management Plan will have some form of pre booking facility and measures to discourage visitors to turn up on a speculative basis to use the parking. Notwithstanding this, we expect the commercial and community uses to be quite local in nature so expect that a number of visitors will walk/cycle rather than drive to the Site.

9.6.7 It is anticipated that this will include the following detailed measures.:

- Residential parking spaces will be allocated to specific users through a leasing arrangement;
- Detailed arrangements for the management of non-residential spaces within the main car park. This will include proposed charges and the method of charging;
- Information regarding the availability of non-residential parking and any pre booking arrangements;
- An agreed monitoring and reporting regime relating to both on-site and off-site parking.

9.6.8 It is also anticipated that the school, as part of its Travel Plan, will need to agree its own management arrangements for its parking and to discourage indiscriminate short term parking by parents seeking to drop off / pick up children at the start and end of the school day. This is reflected within the updated School Travel Plan.

9.6.9 It is also recognised that, should overspill parking occur and cannot be effectively managed then there may be a need to implement a controlled parking zone (CPZ) in the streets around the Site, which are currently uncontrolled and potentially modify the hours of existing CPZ's in the area. It is therefore anticipated that the potential costs associated with such measures would be addressed through the Section 106 agreement. This will also need to cover potential on-street parking related to the school. Whilst this CPZ is desirable for the area, it is not essential to the development.

9.7 Highway Strategy

9.7.1 As part of the previous highway proposals the improvements proposed were accepted by TfL and LBRuT officers. This included a number of improvements proposed along Mortlake High Street, Sheen Lane, Lower Richmond Road, Ship Lane, Williams Lane and other side roads connecting with the development.

9.7.2 The Chalkers Corner scheme (Application C) was however challenged by LBRuT members and subsequently resolved to be refused at Committee. However, following the Committee meeting LBRuT officers sought for s106 highway contributions for work to be undertaken at Chalkers Corner, recognising the need to mitigate the development traffic. This was also confirmed by TfL in relation to their concern on bus journey times along Lower Richmond Road and through Chalkers Corner, suggesting that Chalkers Corner works are required.

9.7.3 A number of options have been investigated for Chalkers Corner and Lower Richmond Road which are discussed in detail in Chapter 7.

9.7.4 Details of the proposed strategy for the highway network is summarised below and is focused on the following aspects:

- Strategic access to the area, recognising the need to ensure that the Stag development does not significantly add further to existing levels of congestion. This reflects the concerns expressed by the Council, including within the Planning Brief and emerging Site Allocation, and members of public through the various consultation exercises;
- The operation of the local network, in particular, the site frontage of Lower Richmond Road and Mortlake High Street to ensure that it does not act as a barrier to pedestrian / cycle access to the Site and aligns with the Mayor's Policy for Health Streets; and
- Ensuring safe and efficient access to the Site including to the two underground car parks and for servicing vehicles that does not prejudice through traffic movement or the movement of pedestrians and cycles through the Site.

9.7.5 For any offsite works that fall outside of the application red line boundary, they will be secured through a S278 agreement in the usual way.

Strategic Access – Chalkers Corner

9.7.6 Whilst the Transport Strategy gives priority to non-car modes it is recognised that the area is subject to existing high levels of congestion at busy times. This relates to the limited points of access to Mortlake due to the combined barriers created by the River Thames and the railway lines and the congested nature of the main access to the area via Chalkers Corner. Also, two of the main access points are across level crossings which are characterised by extended and unpredictable barrier down times (which average at around 45 minutes per hour).

9.7.7 The Planning Brief recognised the importance of addressing congestion as part of the TA. Whilst options for improving vehicular access over the level crossings has been examined, it is clear that improvements are not practical, certainly in the context of the proposed development. NR has confirmed that it has no plans to alter the level crossings or introduce any measures that would reduce or better regulate barrier down time. It has also been confirmed with LBRuT that there are no realistic options for replacing either of the crossings with an underpass or road bridge due to constraints of land availability, cost and environmental issues.

9.7.8 Therefore, the highway assessment has focussed on the option of improving the design of the Chalkers Corner junction as the main and most suitable way of ensuring that the proposed development does not further increase congestion levels in the area.

9.7.9 A number of indicative options have been considered to mitigate the development traffic for both general traffic and buses through Chalkers Corner and along Lower Richmond Road. These include the following options:

- Option 1: No Change ('Do Nothing', LBRuT Proposal)
- Option 2: Chalkers Corner 'Light'
- Option 3: Lower Richmond Road Bus Lane
- Option 4: Chalkers Corner 'Light' & Bus Lane
- Option 5: Chalkers Corner Scheme (Application C)

9.7.10 The key features of the proposed Chalkers Corner 'light' scheme include the following:

- Provision for a left turn flare lane from Lower Richmond Road.
- Relocation of stop lines on A205 closer to the junction.
- Introduction of advanced stop lanes on Mortlake Road and Clifford Avenue South to raise awareness of cyclists.
- Improved crossing facilities.
- Widening of area between junctions by relocating stop line by 2m.
- Removal of one tree and replacing with two trees.
- All work within adopted Highway Land secured via a s278 agreement.

9.7.11 The bus lane option would provide a westbound bus lane along Lower Richmond Road, requiring the loss of peak hour parking on the southern side of the carriageway.

9.7.12 Initial modelling by the application has identified that the proposed Chalkers Corner scheme is capable of mitigating the impacts of the revised scheme, however, all options are being investigated further as part of TfL VMAP process, which is running concurrently with the submitted application.

Lower Richmond Road / Mortlake High Street

9.7.13 In addition to the works at Chalkers Corner, a package of works is proposed along the Lower Richmond Road corridor including Mortlake High Street and extending down Sheen Lane towards the level crossing. These works focus on enhancing the pedestrian and cycle

environment and by slowing speeds and improving pedestrian and cycle crossing facilities, further enhancing the safety as part of vision zero and in particular creating a suitable environment for a new secondary school.

9.7.14 The specific proposals are shown on the drawings which are included in Appendix G and include the following:

- A New 20mph speed limit enforced between Williams Lane and Bulls Alley including Sheen Lane, between the Mortlake High Street / Lower Richmond Road junction and the Sheen Lane level crossing. A number of physical measures are proposed to help manage speeds including junction entry treatments, carriageway narrowing and provision of a textured tarmac resin to differentiate the area of speed restraint. Potentially, tabletops to comply with TfL requirements for buses could be installed at pedestrian crossing points by the school and on the "Green Link".

- A new crossing provided just to the west of the new access road to the school to improve access for pupils needing to cross Lower Richmond Road. This is currently shown as a zebra crossing but could potentially be upgraded to a pelican crossing;

- Moving of Bus Stop P further to the east to align with the new crossing point and encourage them to cross at the crossing rather than informally;

- The existing signalised crossing point adjacent to Ship Lane is relocated to align better with the Green Link. This also requires the removal of one of the Bus Stops;

- Extension of the two lanes on the Lower Richmond Road arm of the Sheen Lane mini-roundabout so as to provide more capacity for those heading from west to east across the roundabout. This will reduce the tendency for the eastbound traffic movement through the junction to become blocked when the level crossing barriers are down;

- Provision of 'KEEP CLEAR' markings on the Sheen Lane mini-roundabout to free up the roundabout when the level crossing is down;

- Provision of an informal crossing point on the east side of the roundabout enabled by providing a kerb buildout on the corner to slow traffic and improve pedestrian/vehicle inter visibility at this location;

- Provision of a new zebra crossing to serve a desire line to the eastern portion of the development and help to reduce speeds on Mortlake High Street

- Possible enlargement of the central reserve and narrowing of traffic lanes, again to improve the pedestrian environment by slowing vehicle speeds.

- Provision of a new right turn lane on Mortlake High Street to provide for right turners into the development car park at the current junction with Vineyard Path.

- Tightening of radii and footway build-out at Vineyard Path Junction.

- Relocation of bus stops and bus stands on Mortlake High Street to allow for the new access points and the new crossing.

- Improve safety of surrounding roads to ensure the development targets TfL's vision zero policy to reduce collisions on roads.

9.7.15 All these modifications whilst part of the highway strategy also widely benefit the walking and cycling strategy with many of the changes aimed at reducing vehicle speeds, increasing the

permeability across Lower Richmond Road and improving the public realm and safety within the surrounding area.

Upper Richmond Road / Sheen Lane

9.7.16 TfL have a pedestrian improvement scheme at the junction of Upper Richmond Road / Sheen Lane. The applicant has agreed to a contribution of £222,787 towards the scheme, which will further improve the pedestrian environment around the development and improve safety for pedestrians in line with the Mayors vision zero targets.

Site Access

9.7.17 The majority of car parking will be provided within two underground car parks. The main car park which will serve the mix of uses to the east of Ship Lane (Development Area 1) can be accessed at two locations, from Ship Lane and from Mortlake High Street. The second access onto Mortlake High Street was added following feedback from public consolation with a view to reducing the impacts of the development upon the Sheen Lane mini roundabout. The addition of this second access will mean that only traffic specifically wishing to use Sheen Lane will need to travel thought the mini roundabout form this part of the development.

9.7.18 Since the original application the size of the western basement has reduced and the entry and exit has been consolidated into a single access point.

9.7.19 Access to the School (Application B) is from the new road connected to Lower Richmond Road. Vehicles will be able to use this road and then loop through the site exiting via either Ship Lane or Williams Lane.

9.7.20 Access for servicing vehicles is described within the section on servicing below.

9.7.21 The proposed Site access arrangements together with the proposed enhancements to the Site's highway frontage along Lower Richmond Road and Mortlake High Street, have been subject to an independent Stage One Safety Audit. undertaken by Alpha Consultants in December 2017. This remains valid as there have been no changes to the layout of the highway.

9.8 Travel Planning

9.8.1 Three travel plans are being submitted as part of the application, with the aim of promoting more sustainable patterns of travel and outlining the different travel options available to residents, employees, pupils etc. who will be using the site.

9.8.2 The three travel plans are as follows:

- Framework Travel Plan (FTP) setting out the overarching principles for travel planning across the full development with the exception of the school;
- Residential Travel Plan (RTP) similar to the FTP but with a more detailed and focused approach on the residential aspect of the site; and
- School Travel Plan (STP) focusing on the travel patterns of pupils, staff and visitors of the school.

9.8.3 The FTP is a site encompassing travel plan covering the overarching objectives of the development and how sustainable travel will be promoted.

9.8.4 All three travel plans will set out targets and measures of how best to promote sustainable travel and reduce the amount of private vehicle trips made. This is an integral part of the transport

strategy for the site as it is the principal way of communicating with residents and users of the site about their method of travel and the best way to promote walking and cycling as principal modes of travel.

9.8.5 The objective of the FTP is:

To encourage the use of sustainable transport and realise the benefits of walking and cycling to and from the proposed development.

9.8.6 To support the realisation of this overarching objective, the following sub-objectives have been set out:

- Increase awareness of the FTP and its constituent measures;
- Encourage greater use of sustainable transport modes, particularly cycling and walking;
- Promote smarter sustainable travel behaviour and reduce the need to travel overall / and / or in peak times;
- Improve the health of residents and minimise the development impacts on the surrounding environment.
- Promote sustainable modes of travel to all visitors of the site

9.8.7 The FTP also sets targets which will seek to achieve a shift in mode away from car, and in particular single occupancy car, towards the more sustainable modes of travel.

9.8.8 The school travel plan will also be aiming at delivering a car free school to encourage students to walk and cycle. While this is stated to be car free it is understood that this is not likely to be a realistic target therefore the STP is targeting 5% of students arriving by car, which is less than neighbouring schools and will reduce the impact of peak hour school traffic on the surrounding roads.

9.8.9 The targets will be reviewed once the initial TRICS travel survey of each individual land use is completed. The baseline data from the surveys will provide a better understanding about what is achievable and what measures will best suit each land use and their respective users.

9.9 Delivery and Servicing

9.9.1 A Framework Delivery and Servicing Management Plan (FDSMP) has also been produced as part of the developments Transport Strategy. The FDSMP outlines the management of delivery and servicing trips and how they will operate within the Site. Figure 9.7 shows the access routes for servicing vehicles.

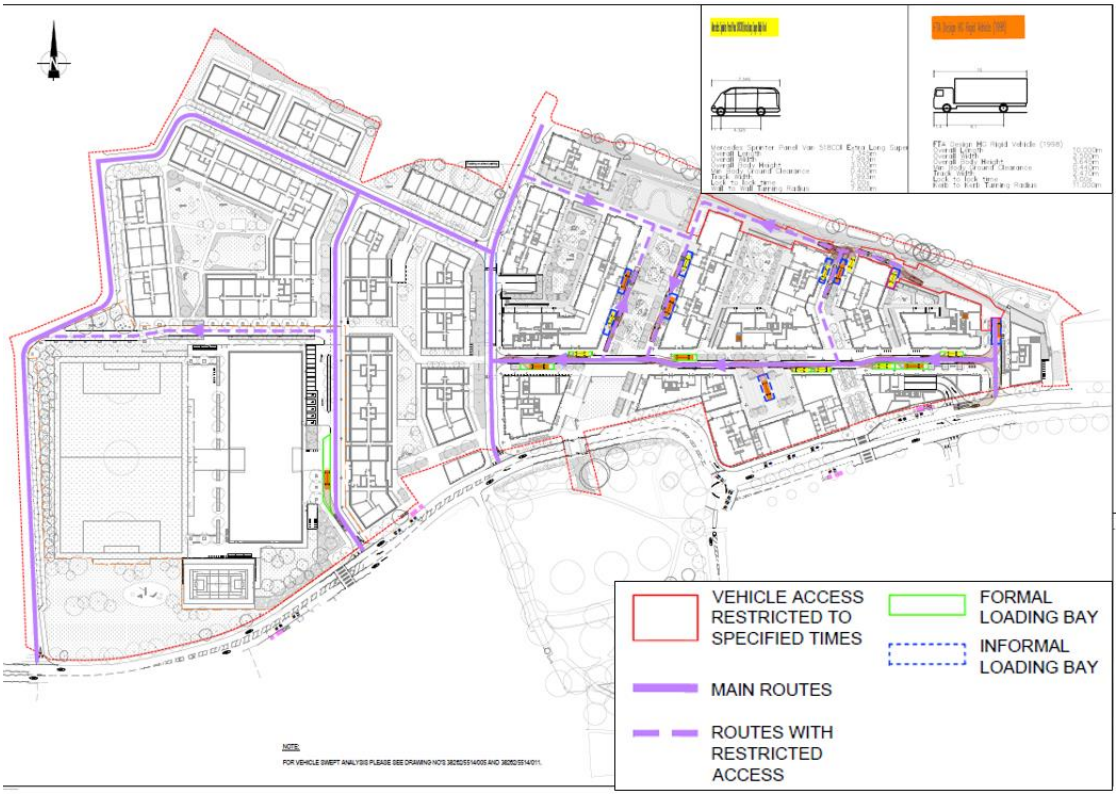


Figure 9.7 Delivery and Servicing Routes

9.9.2 The FDSMP factors in trips made to the residential aspect of the development as well as the school, retail units and all other land uses within the Site. A mix of formal and informal loading bays have been identified within the Site. These will accommodate service vehicles to both the residential and non-residential elements of the Site as well as refuse vehicles.

9.9.3 The main delivery and servicing area will be the 'new High Street' as this is where the main retail area will be. This will also provide access to the main restaurant/bar area on the river front. As part of the Delivery and Servicing strategy this area will be controlled by the estate management company through the use of rising bollards close to the entrance to the 'new High Street'.

9.9.4 The servicing and waste strategy for the detailed application (Application A – Development Area 1) involves the following elements:

- Entry to the area will be from the eastern end of the 'new High Street' and controlled by bollards close to the entry but allow for "u" turns for which arrive out of hours;
- The management control room is located close to the bollards to improve the effective management of the entrance;
- Loading bays of appropriate size identified throughout the Site. The capacity of these to accommodate the demand has been estimated based on industry data as set out in the FDSMP;
- Bin stores have all been located appropriately within the site so as to make refuse collections more efficient, with all refuse then collected on the 'new High Street' for the eastern part of the site and from appropriate locations within the western side of the development in line with LBRuT's requirements;

- Access for servicing will be time controlled to minimise conflicts with pedestrians and cycles and to ensure servicing does not occur at unsociable hours; and

- All residential buildings will have a concierge service during agreed servicing times. The control room will offer a collection service out of hours.

9.9.5 Vehicle tracking for refuse vehicles and for appropriate service vehicles has been undertaken to ensure the highway layout is navigable by large refuse trucks and delivery vehicles.

9.9.6 An Operational Waste Management Strategy has been prepared by Stantec. Waste is a key consideration in the creation of sustainable community as it has environmental, social and economic impacts on the development, in terms of physical infrastructure provision and site operation. This Strategy discusses the relevant waste management policies and targets that the development needs to consider, identifies the expected waste arisings and servicing from the operational phase, and describes the on-site requirements for the storage and collection of waste from the development during its operation. The Strategy has been produced through consultation with LBRuT and will continue to be development in coordination with LBRuT going forward.

9.10 Construction and Logistics

9.10.1 A Framework Construction Management Statement (FCMS) which will include a draft Construction Logistics Plan (CLP), has been submitted in support of the planning applications. The CLP aims to reduce the impact of construction vehicle trips travelling to and from the Site. It sets out the following measures to reduce adverse effects generated by construction activities:

- Construction vehicle routes to site will be agreed with LBRuT and TfL and will seek to minimise impact on the local road network and community. Wherever possible routes will avoid local schools and where this is not possible time restrictions will be put in place to avoid school start and finish times.

- Commitment to use a Delivery Management System (DMS) to ensure contractors and suppliers forward plan and pre-book deliveries. This will enable site managers to control deliveries and vehicle flow to site including avoiding peak network times where possible.

- Investigate the use of construction consolidation centre to help maximise vehicle load efficiency and reduce vehicle trips.

- Investigate the use of the River for construction deliveries and waste.

- Commitment to use contractors and suppliers that are members of best practice schemes such as Considerate Constructors Scheme (CCS), Fleet Operators Recognition Scheme (FORS) and Construction Logistics and Community Safety (CLOCS).

- Ensure a sufficiently robust CLP management, monitoring and compliance regime is in place so that the CLP is implemented correctly, and remedial actions are taken when necessary.

9.11 Summary

9.11.1 The Strategy has been shaped by the detailed discussions that have taken place with officers of LBRuT and TfL, with members of the public through CLG meetings and through the two extensive formal public consultation events and with third party stakeholders, including NR.

9.11.2 The walking and cycling strategy for the site is encompassed within the wider design and landscape of the site. It is envisaged that the site will have a high level of on street activity with walking and cycling providing the best way to travel through, to and from the development.

9.11.3 Rail improvements have been explored with the possibility for improving the quality of the environ around the northern access to the station investigated with NR.

9.11.4 We have looked at a range of options for improving the local bus offer including delivering additional bus capacity as required. TfL have agreed to a financial contribution for buses secured via a s106 agreement.

9.11.5 Overall, a total of 493 parking spaces is proposed for the development providing parking for residents at a ratio of approximately 0.33 spaces per dwelling. 78 spaces are provided within the eastern car park (Development Area 1) to meet the needs of the non-residential development. The school has 15 spaces provided at surface level.

9.11.6 The highway access strategy has focussed on the following aspects:

- Strategic access to the area, recognising the need to ensure that the Stag development does not significantly add further to existing levels of congestion. This reflects the concerns expressed by the Council, including within the Planning Brief, and members of public through the various consultation exercises;

- The operation of the local network, in particular, the site frontage of Lower Richmond Road and Mortlake High Street to ensure that it does not act as a barrier to pedestrian / cycle access to the Site and aligns with the Mayor's Policy for Health Streets; and

- Ensuring safe and efficient access to the Site including to the two underground car parks and for servicing vehicles that does not prejudice through traffic movement or the movement of pedestrians and cycles through the Site.

9.11.7 Three travel plans have been produced to support the application. They include a Framework Travel Plan, Residential Travel Plan and School Travel Plan.

9.11.8 Both a FDSMP and CLP have also been produced as part of the Transport work and are included as part of the application.

10 Summary & Conclusions

10.1 Summary

10.1.1 In summary this Transport Assessment Addendum has been produced in order to reflect the amendments that have been made to the development proposals following the call in from GLA.

10.1.2 The original Transport Assessment for the Stag Brewery was submitted in February 2018 and a subsequent addendum was submitted in May 2019. The first addendum covered slight changes to the scheme as submitted in February 2018. This second addendum is to address further scheme amendments proposed in the Revised Scheme.

10.1.3 This addendum covers a review of the existing site context and the transport networks surrounding the site. The addendum also updates on any changes in policy. Most of these policy updates were covered in the May 2019 addendum, although the second addendum includes the updates to the London Plan (ITP December 2019).

10.1.4 The development proposals set out the changes to the scheme. These include an uplift in the number of residential units, changes to non-residential uses and a reduction in the number of car parking spaces.

10.1.5 While there are an increased number of trips made on foot, bicycle, by bus and by train, the increased number of trips are not considered to generate any capacity issues. TfL have requested a contribution for buses, will be adequate for the development. In addition, the train services and Mortlake Station have the required capacity to accommodate the increased demand. Furthermore, the increased numbers of pedestrian and cyclists can be accommodated within the surrounding area.

10.1.6 The Revised Scheme is anticipated to generate less traffic than the Original Scheme as a result of the reduced size of the western basement car park and reduction in school trips through lower car share targets in the school travel plan, therefore all conclusions relating to the local highway network in the Original scheme offer a robust and worst-case assessment for the development.

10.1.7 The Chalkers Corner scheme (Original Scheme - Application C), had a resolution to refuse at LBRuT Planning Committee meeting held on 29th January 2020, however LBRuT recognised that work would be required at Chalkers Corner and instead sought for a S106 contribution from the developer for future work to the junction. Subsequent meetings held with TfL raised their concern for bus journey times along Lower Richmond Road and through Chalkers Corner. This led to a review of options for Chalkers Corner improvements based on previous designs provided by TfL and a review of the potential for a bus lane to be implemented along Lower Richmond Road. This also includes the original Application C scheme as one of the proposed mitigations at Chalkers Corner.

10.1.8 The options being considered for Chalkers Corner and Lower Richmond Road, include the following options:

- Option 1: No Change (‘Do Nothing’, LBRuT Proposal)
- Option 2: Chalkers Corner ‘Light’
- Option 3: Lower Richmond Road Bus Lane
- Option 4: Chalkers Corner ‘Light’ & Bus Lane

- Option 5: Chalkers Corner Original Scheme (Application C).

10.1.9 Initial modelling has identified that the proposed options at Chalkers Corner will mitigate the development traffic and provide improvements for buses along Lower Richmond Road. These options are however being investigated further as part of TfL VMAP process, which is running concurrently with the submitted application.

10.1.10 The transport strategy for other modes remains similar to the strategy proposed under the Original Scheme. The focus remains on promoting walking and cycling, encouraging the use of public transport over motor vehicles and promoting TfL's vision zero to eliminate serious and fatal collisions on all roads. This is helped further by the reduction in the number of car parking spaces provided with the revised scheme.

10.2 Conclusions

10.2.1 To conclude, the transport measures proposed will mitigate the trips generated by the development, while also providing additional capacity and benefits for local residents. It is therefore considered that the proposals are adequate for the development.

Appendix A Personal Injury Collision (PIC) Data

AREFNO	YearNum	BOROUGH_NAME	GEOCODE_OSGR_E	GEOCODE_OSGR_N	ALOCGEAR	ADATES_FULL	ASERVICE_DECODED	AFACTORS	HWY_DECODED	AUGHTB_DECODED	ARDSUR_DECODED	AWEATHD	AJUNCT_DECODED	AJUNDET_DECODED	ARDTYPE_DECODED	APEDCRS_DECODED	CREPNO	CAGE	CAGEB2_DECODED	CSEVCAS_DECODED	CSEX_DECODED	CUSER_DECODED	CLASS_DECODED	CETHNIC2_DECODED	CSEATB_DECODED	PROCESSED_DESCRIPTION
116000015	2016	014 RICHMOND-UPON-THAMES	519770	175960	LOWER RICHMOND ROAD/JW CLIFFORD AVENUE	14/11/2016 17:48	3 SLIGHT	405,B,V001,406,B,V001,408,B,V002	1 TURN	1 DARK	2 ROAD WET	1 RAINING	2 AUTO SIG	06 CROSSROADS	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	26	25-59	3 SLIGHT	1 MALE	7 GOODS VEHICLE	1 DRIVER/RIDER	W9 OTHER WHITE	4 UNKNOWN	NOT KNOWN HOW COLLISION OCCURRED
116000035	2016	014 RICHMOND-UPON-THAMES	519780	175920	MORTLAKE ROAD 60M N OF J/W LOWER RICHMOND ROAD	04/11/2016 12:41	3 SLIGHT	602,A,V002	1 TURN	2 DAYLIGHT	2 ROAD WET	2 RAINING	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	26	25-59	3 SLIGHT	1 MALE	7 GOODS VEHICLE	1 DRIVER/RIDER	W9 OTHER WHITE	4 UNKNOWN	NOT KNOWN HOW COLLISION OCCURRED
116000696	2016	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/12/2016 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	1 DARK	1 ROAD DRY	1 FINE	2 AUTO SIG	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	58	25-59	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH	2 NOT APPLICABLE
116000781	2016	014 RICHMOND-UPON-THAMES	520240	176310	CHISWICK BRIDGE 50M N OF J/W CLIFFORD ROAD	25/12/2016 22:53	3 SLIGHT	408,B,V002,601,B,V001	1 TURN	1 DARK	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	0 NO KING FACILITY IN SGM	1	19	16-24	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH	2 NOT APPLICABLE
116000781	2016	014 RICHMOND-UPON-THAMES	520240	176310	CHISWICK BRIDGE 50M N OF J/W CLIFFORD ROAD	25/12/2016 22:53	3 SLIGHT	408,B,V002,601,B,V001	1 TURN	1 DARK	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	0 NO KING FACILITY IN SGM	1	25	25-59	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH	4 UNKNOWN
116000781	2016	014 RICHMOND-UPON-THAMES	520240	176310	CHISWICK BRIDGE 50M N OF J/W CLIFFORD ROAD	25/12/2016 22:53	3 SLIGHT	408,B,V002,601,B,V001	1 TURN	1 DARK	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	0 NO KING FACILITY IN SGM	3	35	25-59	3 SLIGHT	2 FEMALE	4 CAR	1 DRIVER/RIDER	W9 OTHER WHITE	2 WORN BUT NOT INDEPENDENTLY CONFIRMED	NOT KNOWN HOW COLLISION OCCURRED
116000915	2016	014 RICHMOND-UPON-THAMES	520458	175380	UPPER RICHMOND ROAD WEST 80M W OF J/W SHEEN LANE	15/12/2016 18:58	3 SLIGHT	406,A,V002,601,B,V001	1 TURN	1 DARK	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	57	16-24	3 SLIGHT	1 MALE	1 PEDESTRIAN	3 PEDESTRIAN		2 NOT APPLICABLE	NOT KNOWN HOW COLLISION OCCURRED
116000612	2016	014 RICHMOND-UPON-THAMES	520628	175410	UPPER RICHMOND ROAD J/W RICHMOND PARK ROAD	06/11/2016 18:10	3 SLIGHT	406,A,V002,603,B,V002,602,A,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	29	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	A9 OTHER ASIAN	0 NOT APPLICABLE	NOT KNOWN HOW COLLISION OCCURRED
116000677	2016	014 RICHMOND-UPON-THAMES	520850	175440	UPPER RICHMOND ROAD WEST J/W PARKSFIELD AVENUE	07/11/2016 16:22	3 SLIGHT	406,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	09 OTHER JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	61	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	A9 OTHER ASIAN	0 NOT APPLICABLE	NOT KNOWN HOW COLLISION OCCURRED
117002900	2017	010 WANDSWORTH	521530	175450	LUDDOCK WALK J/W AMARILLA DRIVE SW15	30/03/2017 08:00	3 SLIGHT	801,A,C001	3 BOR	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	3 DUAL CWY	0 NO KING FACILITY IN SGM	1	66	25-59	3 SLIGHT	2 FEMALE	1 PEDESTRIAN	3 PEDESTRIAN	A2 PAKISTAN	0 NOT APPLICABLE	
116000781	2016	014 RICHMOND-UPON-THAMES	520240	176310	CHISWICK BRIDGE 50M N OF J/W CLIFFORD ROAD	25/12/2016 22:53	3 SLIGHT	408,B,V002,601,B,V001,605,B,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	0 NO KING FACILITY IN SGM	1	25	25-59	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH	4 UNKNOWN
116000915	2016	014 RICHMOND-UPON-THAMES	520458	175380	UPPER RICHMOND ROAD WEST 80M W OF J/W SHEEN LANE	15/12/2016 18:58	3 SLIGHT	406,A,V002,601,B,V001,605,B,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	57	16-24	3 SLIGHT	1 MALE	1 PEDESTRIAN	3 PEDESTRIAN		2 NOT APPLICABLE	
116000612	2016	014 RICHMOND-UPON-THAMES	520628	175410	UPPER RICHMOND ROAD J/W RICHMOND PARK ROAD	06/11/2016 18:10	3 SLIGHT	406,A,V002,603,B,V002,602,A,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	29	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	A9 OTHER ASIAN	0 NOT APPLICABLE	
116000677	2016	014 RICHMOND-UPON-THAMES	520850	175440	UPPER RICHMOND ROAD WEST J/W PARKSFIELD AVENUE	07/11/2016 16:22	3 SLIGHT	406,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	09 OTHER JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	61	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	A9 OTHER ASIAN	0 NOT APPLICABLE	
117002900	2017	010 WANDSWORTH	521530	175450	LUDDOCK WALK J/W AMARILLA DRIVE SW15	30/03/2017 08:00	3 SLIGHT	801,A,C001	3 BOR	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	3 DUAL CWY	0 NO KING FACILITY IN SGM	1	66	25-59	3 SLIGHT	2 FEMALE	1 PEDESTRIAN	3 PEDESTRIAN	A2 PAKISTAN	0 NOT APPLICABLE	
116000781	2016	014 RICHMOND-UPON-THAMES	520240	176310	CHISWICK BRIDGE 50M N OF J/W CLIFFORD ROAD	25/12/2016 22:53	3 SLIGHT	408,B,V002,601,B,V001,605,B,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	0 NO KING FACILITY IN SGM	1	25	25-59	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH	4 UNKNOWN
117001676	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	58	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W9 OTHER WHITE	2 WORN BUT NOT INDEPENDENTLY CONFIRMED	
117001676	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	26	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W9 OTHER WHITE	2 WORN BUT NOT INDEPENDENTLY CONFIRMED	
117001676	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	61	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W9 OTHER WHITE	2 WORN BUT NOT INDEPENDENTLY CONFIRMED	
117001676	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	25	25-59	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH	4 UNKNOWN
117001676	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	26	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W9 OTHER WHITE	2 WORN BUT NOT INDEPENDENTLY CONFIRMED	
117001676	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	61	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W9 OTHER WHITE	2 WORN BUT NOT INDEPENDENTLY CONFIRMED	
117001676	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	25	25-59	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH	4 UNKNOWN
117001676	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	58	25-59	3 SLIGHT	1 MALE	5 TAXI	1 DRIVER/RIDER		4 UNKNOWN
117002110	2017	014 RICHMOND-UPON-THAMES	519780	175960	LOWER RICHMOND ROAD J/W MORTLAKE ROAD	09/01/2017 17:30	3 SLIGHT	405,A,V002,406,B,V001	1 TURN	1 DARK	2 ROAD WET	8 OTHER	03 T/JTSNG JUN	3 DUAL CWY	4 PELICAN OR SIMILAR	1 NO	1	24	16-24	3 SLIGHT	2 FEMALE	1 PEDAL CYCLE	1 DRIVER/RIDER	B9 OTHER BLACK	0 NOT APPLICABLE	
117003086	2017	014 RICHMOND-UPON-THAMES	519780	175890	MORTLAKE ROAD 50M E/J CLIFFORD AVENUE	07/02/2017 17:18	3 SLIGHT	405,A,V001	1 TURN	2 DAYLIGHT	5 ROAD FLOOD	1 FINE	2 AUTO SIG	06 CROSSROADS	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	66	60+	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W1 BRITISH	0 NOT APPLICABLE	
117003016	2017	014 RICHMOND-UPON-THAMES	519780	175870	MORTLAKE ROAD J/W CLIFFORD AVENUE	01/02/2017 13:47	3 SLIGHT		1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	2 AUTO SIG	07 MULTI JUN	6 SINGLE CWY	5 PEDS PHASE AT ATS	1	29	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER		0 NOT APPLICABLE	
117003683	2017	014 RICHMOND-UPON-THAMES	519830	175910	SOUTH CIRCULAR ROAD 30M N OF J/W ST LEONARDS ROAD	21/05/2017 17:15	3 SLIGHT	406,A,V002	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	21	16-24	3 SLIGHT	2 FEMALE	4 CAR	1 DRIVER/RIDER	W1 BRITISH	4 UNKNOWN
117006866	2017	014 RICHMOND-UPON-THAMES	519810	175920	CLIFFORD AVENUE J/W ST LEONARDS ROAD	01/11/2017 15:30	3 SLIGHT	813,A,C001	1 TURN	1 DARK	1 ROAD DRY	1 FINE	2 AUTO SIG	03 T/JTSNG JUN	6 SINGLE CWY	5 PEDS PHASE AT ATS	1	1	0-15	3 SLIGHT	1 MALE	1 PEDESTRIAN	3 PEDESTRIAN	W9 OTHER WHITE	0 NOT APPLICABLE	
117006870	2017	014 RICHMOND-UPON-THAMES	519810	175880	LOWER RICHMOND ROAD J/W LOWER RICHMOND ROAD	12/11/2017 19:24	3 SLIGHT	601,B,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	2 AUTO SIG	07 MULTI JUN	3 DUAL CWY	5 PEDS PHASE AT ATS	1	30	25-59	3 SLIGHT	2 FEMALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W9 OTHER WHITE	0 NOT APPLICABLE	
117006870	2017	014 RICHMOND-UPON-THAMES	519810	175880	LOWER RICHMOND ROAD J/W LOWER RICHMOND ROAD	12/11/2017 19:24	3 SLIGHT	601,B,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	2 AUTO SIG	07 MULTI JUN	3 DUAL CWY	5 PEDS PHASE AT ATS	1	25	25-59	3 SLIGHT	2 FEMALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W9 OTHER WHITE	0 NOT APPLICABLE	
117006976	2017	014 RICHMOND-UPON-THAMES	519830	175930	SOUTH CIRCULAR ROAD 10M N OF J/W UPPER RICHMOND ROAD	24/01/2017 17:40	3 SLIGHT	403,A,V002,405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	66	25-59	3 SLIGHT	2 FEMALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W1 BRITISH	0 NOT APPLICABLE	
117007690	2017	014 RICHMOND-UPON-THAMES	519880	175910	CLIFFORD AVENUE 40M NE OF J/W LOWER RICHMOND ROAD	06/08/2017 08:40	3 SLIGHT	403,A,V002,405,A,V002,602,A,V001,713,A,V002	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	5 PEDS PHASE AT ATS	1	65	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W1 BRITISH	0 NOT APPLICABLE	
117006633	2017	014 RICHMOND-UPON-THAMES	519930	175920	UPPER RICHMOND ROAD J/W SEAGRAVE ROAD SW15	17/12/2017 19:00	3 SLIGHT	405,A,V001,703,B,V003,306,A,V002	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	09 OTHER JUN	3 DUAL CWY	4 PELICAN OR SIMILAR	1	38	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER		0 NOT APPLICABLE	
117006829	2017	014 RICHMOND-UPON-THAMES	519930	175920	UPPER RICHMOND ROAD J/W DRAWELL ROAD	21/12/2017 12:20	3 SLIGHT	405,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	5 PEDS PHASE AT ATS	1	28	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	A2 PAKISTAN	0 NOT APPLICABLE	
117006246	2017	014 RICHMOND-UPON-THAMES	519930	175920	UPPER RICHMOND ROAD WEST J/W DRAWELL ROAD	24/10/2017 16:32	3 SLIGHT	307,B,V002,602,B,V002	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	4 PELICAN OR SIMILAR	2	58	25-59	3 SLIGHT	1 MALE	7 GOODS VEHICLE	1 DRIVER/RIDER	W1 BRITISH	4 UNKNOWN	
117006246	2017	014 RICHMOND-UPON-THAMES	519930	175920	UPPER RICHMOND ROAD WEST J/W DRAWELL ROAD	24/10/2017 16:32	3 SLIGHT	307,B,V002,602,B,V002	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	4 PELICAN OR SIMILAR	2	58	25-59	3 SLIGHT	1 MALE	7 GOODS VEHICLE	1 DRIVER/RIDER	W1 BRITISH	4 UNKNOWN	
117006687	2017	014 RICHMOND-UPON-THAMES	520320	175320	UPPER RICHMOND ROAD WEST J/W COVAL ROAD	26/10/2017 18:50	3 SLIGHT	405,A,V002	1 TURN	1 DARK	2 ROAD WET	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	21	16-24	3 SLIGHT	2 FEMALE	4 CAR	2 PASSENGER	W1 BRITISH	4 UNKNOWN	
117006687	2017	014 RICHMOND-UPON-THAMES	520320	175320	UPPER RICHMOND ROAD WEST J/W COVAL ROAD	26/10/2017 18:50	3 SLIGHT	405,A,V002	1 TURN	1 DARK	2 ROAD WET	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	25	25-59	3 SLIGHT	2 FEMALE	4 CAR	1 DRIVER/RIDER	W1 BRITISH	4 UNKNOWN	
117006194	2017	014 RICHMOND-UPON-THAMES	520320	175327	UPPER RICHMOND ROAD WEST J/W COVAL ROAD	08/11/2017 15:40	3 SLIGHT	306,B,V001,307,A,V001	1 TURN	1 DARK	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	25	25-59	3 SLIGHT	2 FEMALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	A9 OTHER ASIAN	0 NOT APPLICABLE	
117006784	2017	014 RICHMOND-UPON-THAMES	520260	175450	KINGSWAY 20M S/J J/W LOWER RICHMOND ROAD	19/10/2017 19:00	3 SLIGHT	403,A,V002,405,A,V002,406,A,V002	3 BOR	1 DARK	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	66	25-59	3 SLIGHT	1 MALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER	W1 BRITISH	0 NOT APPLICABLE	
117006839	2017	014 RICHMOND-UPON-THAMES	520175	176020	WILLIAMS LANE 40M S OF J/W WILLOW CLOSE	07/11/2017 08:40	3 SLIGHT		1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	24	16-24	3 SLIGHT	1 MALE	1 PEDAL CYCLE	1 DRIVER/RIDER		0 NOT APPLICABLE	
117006795	2017	014 RICHMOND-UPON-THAMES	520230	175320	UPPER RICHMOND ROAD J/W SHEEN GATE GARDENS	01/07/2017 19:30	3 SLIGHT	808,A,C001,701,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	45	25-59	3 SLIGHT	1 MALE	1 PEDESTRIAN	3 PEDESTRIAN	W1 BRITISH	0 NOT APPLICABLE	
117006795	2017	014 RICHMOND-UPON-THAMES	520230	175320	UPPER RICHMOND ROAD J/W SHEEN GATE GARDENS	01/07/2017 19:30	3 SLIGHT	808,A,C001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	03 T/JTSNG JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	58	25-59	3 SLIGHT	1 MALE	1 PEDESTRIAN	3 PEDESTRIAN	W1 BRITISH	0 NOT APPLICABLE	
117005899	2017	014 RICHMOND-UPON-THAMES	519830	175930	LOWER RICHMOND ROAD 80M S/J J/W SOUTH CIRCULAR ROAD	17/07/2017 13:00	3 SLIGHT		3 BOR	2 DAYLIGHT	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	0 UNKNOWN (S/R)	1	26	25-59	3 SLIGHT	1 MALE	1 PEDAL CYCLE	1 DRIVER/RIDER		0 NOT APPLICABLE	
117006297	2017	014 RICHMOND-UPON-THAMES	520190	176120	THAMES BANK J/W SHIP LANE	09/08/2017 09:30	3 SLIGHT	103,B,V002	3 BOR	2 DAYLIGHT	2 ROAD WET	1 FINE	6 GIVE WAY/UNCONTROLLED	09 OTHER JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	34	25-59	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER		0 NOT APPLICABLE	
117005007	2017	014 RICHMOND-UPON-THAMES	520490	175400	SHEEN LANE J/W UPPER RICHMOND ROAD	14/09/2017 09:30	3 SLIGHT	406,A,V001,406,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	-2 NOT APPLICABLE	00 NO JUN IN 20M	3 DUAL CWY	5 PEDS PHASE AT ATS	1	22	16-24	3 SLIGHT	2 FEMALE	3 POWERED 2 WHEELER	1 DRIVER/RIDER		0 NOT APPLICABLE	
117006759	2017	014 RICHMOND-UPON-THAMES	520490	175950	SHEEN LANE J/W MORTLAKE ROAD	20/09/2017 08:50	3 SLIGHT		1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	9 UNKNOWN (S/R)	03 T/JTSNG JUN	1 ROUNDABOUT	9 UNKNOWN (S/R)	1	66	25-59	3 SLIGHT	1 MALE	2 PEDAL CYCLE	1 DRIVER/RIDER		0 NOT APPLICABLE	
117005561	2017	014 RICHMOND-UPON-THAMES	520520	175850	SHEEN LANE J/W UPPER RICHMOND ROAD	04/05/2017 22:30	3 SLIGHT	405,A,V001,406,A,V002,602,B,V002,603,A,V001,808,B,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	2 AUTO SIG	06 CROSSROADS	6 SINGLE CWY	5 PEDS PHASE AT ATS	1	19	16-24	3 SLIGHT	1 MALE	4 CAR	1 DRIVER/RIDER	W1 BRITISH	0 NOT APPLICABLE	
117005561	2017	014 RICHMOND-UPON-THAMES	520520	175850	SHEEN LANE J/W UPPER RICHMOND ROAD	04/05/2017 22:30	3 SLIGHT	405,A,V001,406,A,V002,602,B,V002,603,A,V001,808,B,V002	1 TURN	1 DARK	1 ROAD DRY	1 FINE	2 AUTO SIG	06 CROSSROADS	6 SINGLE CWY	5 PEDS PHASE AT ATS	1	27	25-59	3 SLIGHT	1 MALE	4 CAR	1 DRIVER/RIDER	A1 INDIAN	0 UNKNOWN	
117006788	2017	014 RICHMOND-UPON-THAMES	520520	175850	SHEEN LANE J/W UPPER RICHMOND ROAD WEST	05/03/2017 17:30	3 SLIGHT	406,A,V003	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	6 GIVE WAY/UNCONTROLLED	09 OTHER JUN	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	66	60+	3 SLIGHT	1 MALE	1 PEDAL CYCLE	1 DRIVER/RIDER	W1 BRITISH	0 NOT APPLICABLE	
117006163	2017	014 RICHMOND-UPON-THAMES	520520	175850	SHEEN LANE J/W UPPER RICHMOND ROAD WEST	05/06/2017 07:38	3 SLIGHT	405,A,V001,801,B,C001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	2 AUTO SIG	07 MULTI JUN	6 SINGLE CWY	5 PEDS PHASE AT ATS	1	61	60+	3 SLIGHT	2 FEMALE	1 PEDESTRIAN	3 PEDESTRIAN	W9 OTHER WHITE	0 NOT APPLICABLE	
117006353	2017	014 RICHMOND-UPON-THAMES	520520	175760	SHEEN LANE J/W UPPER RICHMOND WAY	30/08/2017 12:45	3 SLIGHT	801,A,C001	3 BOR	1 DARK	1 ROAD DRY	1 FINE	2 AUTO SIG	06 CROSSROADS	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	19	16-24	3 SLIGHT	1 MALE	1 PEDESTRIAN	3 PEDESTRIAN	W9 OTHER WHITE	0 NOT APPLICABLE	
117006597	2017	014 RICHMOND-UPON-THAMES	520520	175450	UPPER RICHMOND ROAD WEST J/W SHEEN LANE	30/08/2017 12:45	3 SLIGHT	808,A,V001	1 TURN	2 DAYLIGHT	1 ROAD DRY	1 FINE	2 AUTO SIG	06 CROSSROADS	6 SINGLE CWY	0 NO KING FACILITY IN SGM	1	55	25-59	3 SLIGHT	2 FEMALE	6 BUS OR COACH

Mortlake Area Personal Injury Collisions 36 mths to 1st October 2019 (provisional)

SUMMARY OF COLLISIONS SELECTED

SITE REFERENCE AND DESCRIPTION	DATE PERIOD	ACCIDENT COUNT
TOPIC BASED QUERY		144

THE DESCRIPTION OF HOW THE COLLISION OCCURRED AND THE CONTRIBUTORY FACTORS ARE THE REPORTING OFFICER'S OPINION AT THE TIME OF REPORTING AND MAY NOT BE THE RESULT OF EXTENSIVE INVESTIGATION

TOPIC BASED QUERY

1

01160000357	FRI 04/11/2016 12:41		LIGHT	MORTLAKE RD 60M N OF J/W LOWER RICHMOND RD			LINK 198-218	519780/175920
POLICE - AT SCENE		ROAD-WET	RAINING	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(26 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(47 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO NW) FRONT HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(26 YRS - M - REDACT)		U-TURN	(S TO NW) O/S HIT FIRST	JOURNEY P/O WORK
V002	A	602 (CARELESS, RECKLESS OR IN A HURRY)						

2

01160000652	SUN 06/11/2016 18:10		DARK	UPPER RICHMOND RD J/W RICHMOND PARK RD			LINK 184-706	520608/175416
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(29 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(39 YRS - M - REDACT)		TURNING RIGHT	(W TO E) N/S HIT FIRST	J/P - UNKN JCT MID
VEHICLE	002 (000)	M/C <= 50CC BT - NOT PROVD		(29 YRS - M - REDACT)		O/TAKING - MOVING VEH	(W TO E) FRONT HIT FIRST	COMMUTING JCT APP
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)				V002 B	605 (LEARNER OR INEXPERIENCED DRIVER)	
V002	A	602 (CARELESS, RECKLESS OR IN A HURRY)						

3

01160000677	MON 07/11/2016 16:22		LIGHT	UPPER RICHMOND RD WEST J/W PAYNESFIELD AVENUE			LINK 184-706	520850/175440
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (002)	(41 YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NOT REQ	(30 YRS - F - REDACT)	TURNING RIGHT	(E TO W) O/S HIT FIRST	COMMUTING JCT APP
VEHICLE	002 (000)	M/C 51-125CC BT - NOT PROVD	(41 YRS - M - REDACT)	O/TAKING - NON MOVING VEH	(E TO W) BACK HIT FIRST	J/P - UNKN JCT APP

V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)	V001	B	405 (FAILED TO LOOK PROPERLY)

4

01160001567	MON 14/11/2016 17:49		DARK	LOWER RICHMOND RD J/W CLIFFORD AVENUE			NODE 198	519770/175860
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (002)	(28 YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NEG	(39 YRS - M - REDACT)	G/AHEAD - OTHER	(NE TO NW) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - NEG	(28 YRS - M - REDACT)	G/AHEAD - OTHER	(NE TO NW) BACK HIT FIRST	J/P - UNKN JCT APP

V001	B	405 (FAILED TO LOOK PROPERLY)	V001	B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)
V002	B	408 (SUDDEN BRAKING)			

5

01160008696	SAT 24/12/2016 17:40		DARK	SOUTH CIRCULAR RD J/W UPPER RICHMOND RD			NODE 182	519830/175330
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(28 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - NEG		(43 YRS - M - REDACT)		WAITING - TURN RIGHT	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
VEHICLE	002 (000)	CAR BT - NEG		(32 YRS - M - REDACT)		SLOWING/STOPPING	(N TO S) O/S HIT FIRST	J/P - UNKN JCT CLEARED
V002	A	403 (POOR TURN OR MANOEUVRE)				V001 A	403 (POOR TURN OR MANOEUVRE)	

6

01160008781	SUN 25/12/2016 22:53		DARK	CHISWICK BRDG 50M N OF J/W CLIFORD RD			LINK 199-729	520240/176310
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(19 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
CASUALTY	002 (001)	(25 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	REAR SEAT PASSENGER		
CASUALTY	003 (002)	(35 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(19 YRS - M - REDACT)		CHNG LANE - RIGHT	(SW TO NE) FRONT HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	CAR BT - NEG		(35 YRS - F - REDACT)		CHNG LANE - LEFT	(SW TO NE) BACK HIT FIRST	J/P - UNKN
V002	B	408 (SUDDEN BRAKING)				V001 B	601 (AGGRESSIVE DRIVING)	

7

01160010965	THU 15/12/2016 18:59		DARK	UPPER RICHMOND RD WEST 30M W OF J/W SHEEN LANE				LINK 182-184	520458/175389
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(17 YRS - M - REDA)		SLIGHT	PEDESTRIAN		N BOUND	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(77 YRS - M - REDACT)		UNKNOWN S/R		(N TO N) O/S HIT FIRST	J/P - UNKN

8

01170009664	WED 04/01/2017 06:15		DARK	SOUTH CIRCULAR RD J/W EAST SHEEN AVENUE				LINK 184-706	520840/175460
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(33 YRS - M - REDA)		SERIOUS	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NEG		(49 YRS - M - REDACT)		TURNING RIGHT		(W TO E) FRONT HIT FIRST	COMMUTING L/MAIN RD
VEHICLE	002 (000)	M/C 126-500CC BT - NOT PROVD		(33 YRS - M - REDACT)		G/AHEAD - OTHER		(E TO W) FRONT HIT FIRST	COMMUTING JCT APP
V001	A	405 (FAILED TO LOOK PROPERLY)							

9

01170012853	THU 19/01/2017 19:25		DARK	SHEEN LANE J/W SOUTH WORPLE WAY				LINK 184-202	520500/175750
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG		NO XING FACIL IN 50M	CTRL - AUTH PERSON
CASUALTY	001 (001)	(19 YRS - F - REDA)		SLIGHT	PEDESTRIAN		W BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	M/C >500CC BT - NOT REQ		(45 YRS - M - REDACT)		MOVING OFF		(N TO E) FRONT HIT FIRST	COMMUTING JCT APP
C001	A	802 (FAILED TO LOOK PROPERLY)							

10

01170013417	FRI 20/01/2017 20:20		DARK	BARNES HIGH ST J/W LONSDALE RD				NODE 214	521550/176410
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	ROUNDABOUT	M ROUNDABOUT	GIVEWAY /UNCONT		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(32 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NEG		(79 YRS - M - REDACT)		MOVING OFF		(NE TO SE) FRONT HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	M/C 126-500CC BT - NEG		(32 YRS - M - REDACT)		TURNING RIGHT		(NE TO SE) FRONT HIT FIRST	J/P - UNKN L/ROUNDABOUT
V001	A	405 (FAILED TO LOOK PROPERLY)							

11

01170013979	TUE 24/01/2017 09:08		LIGHT	UPPER RICHMOND RD WEST J/W PRIESTS BRDG			NODE 706	521390/175470
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	PELICAN OR SIML	CTRL - AUTH PERSON
CASUALTY	001 (001)	(7 YRS - M - REDA)		SLIGHT	PEDESTRIAN	S BOUND	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	M/C 126-500CC BT - NEG		(34 YRS - M - REDACT)		O/TAKING - NEARSIDE	(E TO W) FRONT HIT FIRST	J/P - UNKN JCT APP
V001	B	405 (FAILED TO LOOK PROPERLY)				V001 B	701 (STATIONARY OR PARKED VEHICLE(S))	

12

01170014076	TUE 24/01/2017 17:40		DARK	UPPER RICHMOND RD WEST J/W CLIFFORD AVENUE			NODE 182	519830/175330
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(77 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A		(77 YRS - M - REDACT)		WAITING - TURN RIGHT	(E TO N) BACK HIT FIRST	COMMUTING JCT MID
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		TURNING RIGHT	(E TO N) FRONT HIT FIRST	J/P - UNKN JCT MID
V002 V001	A B	302 (DISOBEYED 'GIVE WAY' OR 'STOP' SIGN OR MARKINGS) 405 (FAILED TO LOOK PROPERLY)				V002 A	405 (FAILED TO LOOK PROPERLY)	

13

01170016064	FRI 03/02/2017 18:05		DARK	UPPER RICHMOND RD WEST J/W RICHMOND PARK RD			LINK 184-706	520610/175410
POLICE - AT SCENE		ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
CASUALTY	001 (001)	(49 YRS - M - REDA)		SLIGHT	PEDESTRIAN	S BOUND	FROM DRIVERS N/SIDE - MASKED	
VEHICLE	001 (000)	M/C 51-125CC BT - NOT REQ		(23 YRS - M - REDACT)		O/TAKING - MOVING VEH	(W TO E) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP
C001	B	802 (FAILED TO LOOK PROPERLY)				V001 B	405 (FAILED TO LOOK PROPERLY)	

14

01170018661	MON 13/02/2017 10:50		LIGHT	UPPER RICHMOND RD WEST J/W HERTFORD AVENUE SHEEN			LINK 184-706	521200/175460
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(37 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C 51-125CC BT - NEG		(37 YRS - F - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - NEG		(70 YRS - F - REDACT)		TURNING RIGHT	(W TO E) N/S HIT FIRST	J/P - UNKN JCT APP
V002	B	405 (FAILED TO LOOK PROPERLY)						

15

01170019034	WED 01/02/2017 13:47	LIGHT	MORTLAKE RD J/W CLIFFORD AVENUE			NODE 198		519790/175870
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	MULTI JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(29 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C 51-125CC BT - REFUSED		(29 YRS - M - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(19 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) O/S HIT FIRST	J/P - UNKN JCT APP

16

01170019812	TUE 21/02/2017 07:10	LIGHT	LOWER RICHMOND RD J/W CLIFFORD AVENUE			NODE 198		519780/175850
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	MULTI JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(58 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	TAXI/PHV BT - NEG		(58 YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	JOURNEY P/O WORK JCT MID
VEHICLE	002 (000)	CAR BT - NEG		(33 YRS - M - REDACT)		TURNING RIGHT	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT MID
V001	B	405 (FAILED TO LOOK PROPERLY)				V002	B	405 (FAILED TO LOOK PROPERLY)

17

01170020468	THU 23/02/2017 10:29	LIGHT	CLIFFORD AVENUE J/W LOWER RICHMOND RD			NODE 198		519780/175840
POLICE - AT SCENE		ROAD-DRY	FINE - H WIND	SINGLE CWY	MULTI JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (002)	(35 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NEG		(27 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	CAR BT - NEG		(35 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) BACK HIT FIRST	COMMUTING JCT APP
V001	B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)				V002	B	408 (SUDDEN BRAKING)

18

01170023784	WED 08/03/2017 11:20	LIGHT	UPPER RICHMOND RD WEST J/W KINGS RD			LINK 184-706		520950/175450
POLICE - AT SCENE		ROAD-WET	RAINING	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
CASUALTY	001 (002)	(45 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
CASUALTY	002 (003)	(65 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - NEG		(32 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	CAR BT - NEG		(45 YRS - F - REDACT)		G/AHEAD - OTHER	(E TO W) BACK HIT FIRST	J/P - UNKN JCT APP
VEHICLE	003 (000)	CAR BT - NOT PROVD		(67 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) BACK HIT FIRST	J/P - UNKN JCT APP
V001	A	405 (FAILED TO LOOK PROPERLY)				V001	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)

19

01170024873	MON 13/03/2017 18:15		DARK	UPPER RICHMOND RD WEST J/W SHEEN GATE GARDENS			LINK 182-184	520230/175320
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	CTRL - AUTH PERSON
CASUALTY	001 (001)	(79 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	STANDING PASSENGER		
VEHICLE	001 (000)	BUS/COACH >=17 PAX BT - NOT REQ		(58 YRS - M - REDACT)		SLOWING/STOPPING	(NE TO SE) DID NOT IMPACT	JOURNEY P/O WORK JCT APP
V001	B	999 (OTHER - PLEASE SPECIFY BELOW)						

20

01170025340	WED 15/03/2017 08:10		LIGHT	UPPER RICHMOND RD WEST J/W SUTHERLAND GARDENS				LINK 184-706	521310/175460
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT		PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (001)	(12 YRS - F - REDA)		SLIGHT	PEDESTRIAN		S BOUND	FROM DRIVERS N/SIDE	
CASUALTY	002 (001)	(25 YRS - F - REDA)		SERIOUS	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - NOT PROVD		(25 YRS - F - REDACT)		G/AHEAD - OTHER		(W TO E) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
C001	A	802 (FAILED TO LOOK PROPERLY)				C001	B	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)	

21

01170029005	TUE 21/03/2017 09:10		LIGHT	MORTLAKE HIGH ST J/W AVONDALE RD				LINK 202-204	520960/175970
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	UNKNOWN S/R		UNKNOWN S/R	NONE IN 50M
CASUALTY	001 (001)	(72 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - NOT REQ		(72 YRS - M - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER		(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - NOT REQ		(? YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R		(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R

22

01170029082	THU 30/03/2017 08:00		LIGHT	LUDOVICK WALK J/W ARABELLA DRIVE SW15				CELL 521500/175000	521550/175450
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	GIVEWAY /UNCONT		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(44 YRS - F - REDA)		SLIGHT	PEDESTRIAN		N BOUND	FROM DRIVERS O/SIDE - MASKED	
VEHICLE	001 (000)	CAR BT - NOT REQ		(59 YRS - M - REDACT)		G/AHEAD - OTHER		(W TO E) O/S HIT FIRST	J/P - UNKN JCT CLEARED
C001	A	801 (CROSSING ROAD MASKED BY STATIONARY OR PARKED VEHICLE)							

23

01170032047	THU 13/04/2017 12:20		LIGHT	UPPER RICHMOND RD WEST J/W PRIESTS BRDG			NODE 707	521570/175480
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(28 YRS - M - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A		(28 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	COMMUTING JCT CLEARED
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(18 YRS - M - REDACT)		SLOWING/STOPPING	(E TO W) O/S HIT FIRST	J/P - UNKN JCT CLEARED
V002	A	405 (FAILED TO LOOK PROPERLY)						

24

01170034055	SUN 16/04/2017 16:30		LIGHT	TERRACE 35M SW OF J/W CLEVELAND GARDENS			LINK 204-214	521450/176290
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(13 YRS - M - REDA)		SLIGHT	PEDESTRIAN	W BOUND	FROM DRIVERS O/SIDE - MASKED	
VEHICLE	001 (000)	CAR BT - NEG		(85 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST	J/P - UNKN
C001	A	801 (CROSSING ROAD MASKED BY STATIONARY OR PARKED VEHICLE)						

25

01170034907	SUN 30/04/2017 12:45		LIGHT	UPPER RICHMOND RD WEST J/W SHEEN LANE			NODE 184		520540/175400
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG	PEDN PHASE ATS		NONE IN 50M
CASUALTY	001 (001)	(55 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	SEATED PASSENGER			
VEHICLE	001 (000)	BUS/COACH >=17 PAX BT - NOT REQ		(58 YRS - M - REDACT)		SLOWING/STOPPING	(E TO W) DID NOT IMPACT	JOURNEY P/O WORK JCT APP	
V001	A	408 (SUDDEN BRAKING)							

26

01170035561	THU 04/05/2017 22:30		DARK	SHEEN LANE J/W UPPER RICHMOND RD			NODE 184		520500/175390
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG	PEDN PHASE ATS		NONE IN 50M
CASUALTY	001 (001)	(37 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
CASUALTY	002 (002)	(23 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NEG		(37 YRS - M - REDACT)		TURNING RIGHT	(E TO W) O/S HIT FIRST	J/P - UNKN E/MAIN RD	
VEHICLE	002 (000)	M/C 126-500CC BT - NEG		(23 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	J/P - UNKN L/MAIN RD	

V001	A	405 (FAILED TO LOOK PROPERLY)	V002	A	405 (FAILED TO LOOK PROPERLY)
V002	B	602 (CARELESS, RECKLESS OR IN A HURRY)	V001	B	403 (POOR TURN OR MANOEUVRE)
V002	B	308 (FOLLOWING TOO CLOSE)			

27

01170038683	SUN 21/05/2017 17:15		LIGHT	SOUTH CIRCULAR RD 30M N OF J/W ST LEONARDS RD				LINK 182-198	519800/175550
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(21 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ		(21 YRS - F - REDACT)		G/AHEAD - OTHER		(N TO S) BACK HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	CAR BT - NOT REQ		(27 YRS - M - REDACT)		G/AHEAD - OTHER		(N TO S) FRONT HIT FIRST	J/P - UNKN
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)							

28

01170041143	MON 05/06/2017 07:38		LIGHT	UPPER RICHMOND RD WEST J/W SHEEN LANE				NODE 184	520500/175390
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	MULTI JUN	AUTO SIG		PEDN PHASE ATS	CTRL - AUTH PERSON
CASUALTY	001 (001)	(61 YRS - F - REDA)		SLIGHT	PEDESTRIAN		S BOUND	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		G/AHEAD - OTHER		(W TO E) O/S HIT FIRST	J/P - UNKN E/MAIN RD
V001	A	405 (FAILED TO LOOK PROPERLY)				C001	B	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)	

29

01170046788	WED 05/07/2017 17:50		LIGHT	SHEEN LANE J/W UPPER RICHMOND RD WEST				NODE 184	520500/175390
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG		PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (004)	(61 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NEG		(60 YRS - F - REDACT)		WAITING - HELD UP		(S TO N) BACK HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - NEG		(43 YRS - F - REDACT)		WAITING - HELD UP		(S TO N) BACK HIT FIRST	J/P - UNKN JCT APP
VEHICLE	003 (000)	CAR BT - NEG		(39 YRS - F - REDACT)		G/AHEAD - OTHER		(S TO N) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	004 (000)	PED CYCLE BT - N/A		(61 YRS - M - REDACT)		WAITING - HELD UP		(S TO N) BACK HIT FIRST	J/P - UNKN JCT APP
V003	A	509 (DISTRACTION IN VEHICLE)							

30

01170046795	WED 05/07/2017 19:10		LIGHT	UPPER RICHMOND RD J/W SHEEN GATE GARDENS				LINK 182-184	520230/175320
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(45 YRS - M - REDA)		SERIOUS	PEDESTRIAN		W BOUND	STATIONARY NOT CROSSING - MASKED	
VEHICLE	001 (000)	CAR BT - NOT REQ		(51 YRS - F - REDACT)		WAITING - TURN RIGHT		(W TO E) FRONT HIT FIRST	J/P - UNKN L/MAIN RD
C001	A	808 (CARELESS, RECKLESS OR IN A HURRY)				V001	A	701 (STATIONARY OR PARKED VEHICLE(S))	

31

01170047397	SUN 09/07/2017 16:05	LIGHT	SOUTH CIRCULAR RD 100M S OF J/W LOWER RICHMOND RD			LINK 182-198		519770/175760
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(27 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(27 YRS - F - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	CAR BT - NOT REQ		(78 YRS - M - REDACT)		CHNG LANE - LEFT	(S TO N) FRONT HIT FIRST	J/P - UNKN
VEHICLE	003 (000)	CAR BT - NOT REQ		(48 YRS - F - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN

V002	A	409 (SWERVED)	V002	A	510 (DISTRACTION OUTSIDE VEHICLE)
V002	B	602 (CARELESS, RECKLESS OR IN A HURRY)			

32

01170049829	SAT 22/07/2017 13:39	LIGHT	UPPER RICHMOND RD J/W PRIESTS BRDG			NODE 706		521360/175480
POLICE - AT SCENE		ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(34 YRS - F - REDA)		SLIGHT	PEDESTRIAN	E BOUND	UNKNOWN/OTHER	
VEHICLE	001 (000)	CAR BT - NEG		(49 YRS - M - REDACT)		TURNING RIGHT	(W TO E) FRONT HIT FIRST	J/P - UNKN L/MAIN RD

V001	B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)	V001	B	405 (FAILED TO LOOK PROPERLY)

33

01170050644	WED 26/07/2017 17:52		LIGHT	GORDON AVENUE J/W UPPER RICHMOND RD WEST				CELL 521000/175000	521050/175380
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SLIP ROAD	T/STAG JUN	GIVEWAY /UNCONT		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(6 YRS - M - REDA)		SLIGHT	PEDESTRIAN		E BOUND	FROM DRIVERS N/SIDE - MASKED	
VEHICLE	001 (000)	CAR BT - NEG		(68 YRS - M - REDACT)		G/AHEAD - OTHER		(N TO S) DID NOT IMPACT	J/P - UNKN JCT CLEARED
C001	A	801 (CROSSING ROAD MASKED BY STATIONARY OR PARKED VEHICLE)							

34

01170052600	TUE 01/08/2017 17:55		LIGHT	LONSDALE RD 30M S OF J/W LYRIC RD				LINK 214-235	521590/176500
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(40 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - DRV NOT CONTACTED		(? YRS - F - REDACT)		G/AHEAD - OTHER		(MOVE UNKN) UNKNOWN S/R	J/P - UNKN
VEHICLE	002 (000)	PED CYCLE BT - DRV NOT CONTACTED		(40 YRS - F - REDACT)		G/AHEAD - OTHER		(MOVE UNKN) DID NOT IMPACT	COMMUTING

35

01170053456	SAT 12/08/2017 17:05		LIGHT	GREAT CHERTSEY RD J/W HARTINGTON RD			NODE 157		520430/176510
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	CROSSROADS	AUTO SIG	NO XING FACIL IN 50M		NONE IN 50M
CASUALTY	001 (002)	(83 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER			
VEHICLE	001 (000)	CAR BT - NEG		(43 YRS - F - REDACT)		WAITING - TURN RIGHT	(N TO W) N/S HIT FIRST	J/P - UNKN JCT APP	
VEHICLE	002 (000)	CAR BT - NEG		(87 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT APP	
V002	A	405 (FAILED TO LOOK PROPERLY)							

36

01170053999	THU 27/07/2017 00:30		DARK	LOWER RICHMOND RD 30M S OF J/W CROMWELL RD			LINK 199-202		520350/175920
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	UNKNOWN S/R		UNKNOWN S/R
CASUALTY	001 (001)	(39 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - DRV NOT CONTACTED		(39 YRS - M - REDACT)		O/TAKING - NEARSIDE	(E TO E) FRONT HIT FIRST	J/P - UNKN	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		PARKED	(E TO W) UNKNOWN S/R	J/P - UNKN	

37

01170055103	SAT 19/08/2017 17:35		LIGHT	MORTLAKE HIGH ST 100M W OF J/W AVONDALE RD			LINK 202-204	520850/175980
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	ZEBRA XING	NONE IN 50M
CASUALTY	001 (001)	(31 YRS - M - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	M/C >500CC BT - NOT PROVD		(31 YRS - M - REDACT)		O/TAKING - MOVING VEH	(E TO W) FRONT HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		PARKED	(P TO P) BACK HIT FIRST	J/P - UNKN

V001	A	601 (AGGRESSIVE DRIVING)	V001	A	304 (DISOBEYED PEDESTRIAN CROSSING FACILITY)
V001	A	306 (EXCEEDING SPEED LIMIT)	V001	A	307 (TRAVELLING TOO FAST FOR CONDITIONS)
V001	A	410 (LOSS OF CONTROL)	V001	A	602 (CARELESS, RECKLESS OR IN A HURRY)

38

01170055659	WED 23/08/2017 21:00		DARK	UPPER RICHMOND RD WEST J/W GILPIN AVENUE SW14			LINK 184-706	520900/175440
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(50 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - NOT REQ		(57 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	COMMUTING JCT CLEARED
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		PARKED	(P TO P) O/S HIT FIRST	J/P - UNKN JCT CLEARED
VEHICLE	003 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		PARKED	(P TO P) BACK HIT FIRST	J/P - UNKN JCT CLEARED
V001	A	201 (TYRES ILLEGAL, DEFECTIVE OR UNDER-INFLATED)						

39

01170057590	WED 06/09/2017 08:40	LIGHT	CLIFFORD AVENUE 40M NE OF J/W LOWER RICHMOND RD			LINK 199-729		519880/175915
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	NO JUN IN 20M	N/A	PEDN PHASE ATS	CTRL - AUTH PERSON
CASUALTY	001 (001)	(45 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C >500CC BT - NEG		(45 YRS - M - REDACT)		O/TAKING - MOVING VEH	(W TO E) N/S HIT FIRST	COMMUTING
VEHICLE	002 (000)	TAXI/PHV BT - NEG		(66 YRS - M - REDACT)		U-TURN	(W TO W) O/S HIT FIRST	JOURNEY P/O WORK

V002	A	403 (POOR TURN OR MANOEUVRE)	V002	A	405 (FAILED TO LOOK PROPERLY)
V001	B	403 (POOR TURN OR MANOEUVRE)	V002	B	710 (VEHICLE BLIND SPOT)

40

01170058120	SAT 09/09/2017 19:50	DARK	LOWER RICHMOND RD J/W MORTLAKE RD			NODE 198		519780/175860
POLICE - AT SCENE		ROAD-WET	WEATHER-OTHER	DUAL CWY	T/STAG JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (002)	(24 YRS - M - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(52 YRS - F - REDACT)		WAITING - TURN RIGHT	(N TO E) FRONT HIT FIRST	J/P - UNKN JCT MID
VEHICLE	002 (000)	PED CYCLE BT - N/A		(24 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	J/P - UNKN JCT MID

V002	A	405 (FAILED TO LOOK PROPERLY)	V001	B	404 (FAILED TO SIGNAL OR MISLEADING SIGNAL)

41

01170058157	SUN 10/09/2017 12:20		LIGHT	DAN MASON DRIVE 0M N OF J/W CLIFFORD AVENUE			NODE 157	520440/176512
SELF-REPORTED		ROAD-DRY	WEATHER-UNKNOWN	SLIP ROAD	CROSSROADS	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(51 YRS - M - REDA)		SLIGHT	PEDESTRIAN	STILL	WALKING - FACING TRAFFIC	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(69 YRS - M - REDACT)	UNKNOWN S/R	WAITING - HELD UP	(N TO S) N/S HIT FIRST	J/P - UNKN UNKNOWN S/R

42

01170058324	MON 11/09/2017 09:34		LIGHT	CLIFFORD AVENUE J/W SOMERTON AVENUE			LINK 182-198	519770/175650
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(23 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(52 YRS - F - REDACT)		G/AHEAD - OTHER	(N TO S) O/S HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	M/C >500CC BT - NOT REQ		(23 YRS - M - REDACT)		O/TAKING - NEARSIDE	(N TO S) N/S HIT FIRST	J/P - UNKN JCT APP
V001	B	405 (FAILED TO LOOK PROPERLY)				V001 B	601 (AGGRESSIVE DRIVING)	
V002	B	601 (AGGRESSIVE DRIVING)						

43

01170059007	THU 14/09/2017 09:15		LIGHT	SHEEN LANE J/W UPPER RICHMOND RD			NODE 184		520490/175400
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	CROSSROADS	AUTO SIG	PEDN PHASE ATS		NONE IN 50M
CASUALTY	001 (002)	(31 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ		(26 YRS - M - REDACT)		TURNING RIGHT	(E TO N) N/S HIT FIRST	COMMUTING JCT MID	
VEHICLE	002 (000)	M/C <= 50CC BT - NOT REQ		(31 YRS - F - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	COMMUTING JCT MID	
V001	A	405 (FAILED TO LOOK PROPERLY)				V001 A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)		

44

01170060759	WED 20/09/2017 08:50		LIGHT	SHEEN LANE J/W MORTLAKE RD			NODE 202		520490/175910
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	ROUNDABOUT	T/STAG JUN	UNKNOWN S/R	UNKNOWN S/R		UNKNOWN S/R
CASUALTY	001 (001)	(44 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A		(44 YRS - M - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER	(SW TO W) UNKNOWN S/R	J/P - UNKN	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - F - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER	(W TO W) UNKNOWN S/R	J/P - UNKN	

45

01170061215	WED 27/09/2017 11:30		LIGHT	MORTLAKE HIGH ST J/W SECOND AVENUE			LINK 202-204	521150/176020
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(41 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(41 YRS - M - REDACT)		WAITING - HELD UP	(W TO E) BACK HIT FIRST	J/P - UNKN JCT MID
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(62 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT MID
V002	A	405 (FAILED TO LOOK PROPERLY)						

46

01170063086	SAT 07/10/2017 11:18		LIGHT	MORTLAKE RD SW14 J/W LOWER RICHMOND RD			NODE 198	519780/175890
POLICE - AT SCENE		FLOOD	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(66 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(39 YRS - F - REDACT)		U-TURN	(S TO N) N/S HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	M/C >500CC BT - NEG		(66 YRS - M - REDACT)		G/AHEAD - R-HAND BEND	(E TO N) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
V001	A	405 (FAILED TO LOOK PROPERLY)						

47

01170063194	SUN 08/10/2017 14:55		LIGHT	UPPER RICHMOND RD WEST LONDON SW14 J/W COVAL RD			LINK 182-184	520032/175327
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(33 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C 51-125CC BT - NOT PROVD		(33 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) O/S HIT FIRST	JOURNEY P/O WORK JCT MID
VEHICLE	002 (000)	CAR BT - NOT REQ		(35 YRS - M - REDACT)		TURNING RIGHT	(W TO S) O/S HIT FIRST	J/P - UNKN JCT MID
V001	B	306 (EXCEEDING SPEED LIMIT)				V001 A	307 (TRAVELLING TOO FAST FOR CONDITIONS)	

48

01170063297	MON 09/10/2017 09:39		LIGHT	THAMES BANK J/W SHIP LANE			CELL 520000/176000	520390/176120
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(34 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		PARKED	(P TO P) DID NOT IMPACT	J/P - UNKN JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A		(34 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) DID NOT IMPACT	J/P - UNKN JCT CLEARED
V002	B	103 (SLIPPERY ROAD (DUE TO WEATHER))						

49

01170065929	SUN 22/10/2017 12:20		LIGHT	UPPER RICHMOND RD J/W DEANHILL RD			LINK 182-184		519940/175320
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	PEDN PHASE ATS		CTRL - AUTH PERSON
CASUALTY	001 (002)	(28 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ		(58 YRS - M - REDACT)		TURNING RIGHT	(E TO S) FRONT HIT FIRST	J/P - UNKN L/MAIN RD	
VEHICLE	002 (000)	M/C 51-125CC BT - NOT REQ		(28 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT MID	
V001	A	405 (FAILED TO LOOK PROPERLY)							

50

01170066266	TUE 24/10/2017 16:51		LIGHT	UPPER RICHMOND RD WEST J/W DEANHILL RD			LINK 182-184		519940/175320
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	PELICAN OR SIML		NONE IN 50M
CASUALTY	001 (001)	(42 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
CASUALTY	002 (002)	(58 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NEG		(42 YRS - F - REDACT)		TURNING RIGHT	(W TO S) FRONT HIT FIRST	COMMUTING L/MAIN RD	
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NEG		(58 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	COMMUTING JCT MID	
VEHICLE	003 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(49 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) BACK HIT FIRST	COMMUTING JCT CLEARED	
V002	B	307 (TRAVELLING TOO FAST FOR CONDITIONS)				V002	B	602 (CARELESS, RECKLESS OR IN A HURRY)	

51

01170066403	WED 25/10/2017 10:00		LIGHT	UPPER RICHMOND RD J/W DEANHILL RD SW14				LINK 182-184	519940/175320
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	OTHER JUN	GIVEWAY /UNCONT		PELICAN OR SIML	NONE IN 50M
CASUALTY	001 (002)	(38 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ		(59 YRS - F - REDACT)		TURNING RIGHT		(W TO E) N/S HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	M/C >500CC BT - NOT REQ		(38 YRS - M - REDACT)		G/AHEAD - OTHER		(E TO W) FRONT HIT FIRST	J/P - UNKN JCT MID
V001	A	405 (FAILED TO LOOK PROPERLY)				V001	B	703 (ROAD LAYOUT (EG. BEND, WINDING ROAD, HILL CREST)	
V002	B	306 (EXCEEDING SPEED LIMIT)							

52

01170066451	TUE 24/10/2017 20:40		DARK	MORTLAKE HIGH ST 100M E OF J/W VINEYARD PATH				LINK 202-204	520790/175970
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A		ZEBRA XING	NONE IN 50M
CASUALTY	001 (001)	(14 YRS - M - REDA)		SLIGHT	PEDESTRIAN		N BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	CAR BT - NEG		(59 YRS - M - REDACT)		G/AHEAD - OTHER		(W TO E) FRONT HIT FIRST	J/P - UNKN
C001	A	805 (DANGEROUS ACTION IN CARRIAGEWAY (EG PLAYING))							

53

01170066687	THU 26/10/2017 18:50		DARK	UPPER RICHMOND RD WEST J/W COVAL RD			LINK 182-184	520020/175320
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(25 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
CASUALTY	002 (002)	(21 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - NOT REQ		(41 YRS - F - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - NOT REQ		(25 YRS - F - REDACT)		TURNING RIGHT	(E TO S) N/S HIT FIRST	J/P - UNKN JCT APP
V002	A	405 (FAILED TO LOOK PROPERLY)						

54

01170067001	SUN 29/10/2017 03:00		DARK	UPPER RICHMOND RD J/W CLIFFORD AVENUE			NODE 182	519830/175330
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(33 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(33 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) O/S HIT FIRST	J/P - UNKN JCT MID
V001	A	503 (FATIGUE)						

55

01170067094	WED 18/10/2017 19:00		DARK	KINGSWAY 20M S OF J/W LOWER RICHMOND RD				LINK 199-202	520060/175810
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT		NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (001)	(44 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	M/C 126-500CC BT - DRV NOT CONTACTED		(44 YRS - M - REDACT)		G/AHEAD - OTHER		(E TO W) DID NOT IMPACT	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - M - REDACT)		TURNING RIGHT		(S TO W) O/S HIT FIRST	J/P - UNKN JCT CLEARED

56

01170068066	FRI 03/11/2017 18:20		DARK	CLIFFORD AVENUE J/W ST LEONARDS RD				LINK 182-198	519810/175500
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	AUTO SIG		PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (001)	(12 YRS - M - REDA)		SLIGHT	PEDESTRIAN		E BOUND	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	CAR BT - NEG		(33 YRS - M - REDACT)		G/AHEAD - OTHER		(N TO S) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
C001	A	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)							

57

01170068539	TUE 07/11/2017 08:49		LIGHT	WILLIAMS LANE 45M S OF J/W WILLIAMS CLOSE			CELL 520000/176000	520170/176010
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
CASUALTY	001 (002)	(24 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(27 YRS - F - REDACT)		G/AHEAD - R-HAND BEND	(N TO S) FRONT HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	PED CYCLE BT - N/A		(24 YRS - M - REDACT)		G/AHEAD - L-HAND BEND	(S TO N) FRONT HIT FIRST	J/P - UNKN
V002	A	401 (JUNCTION OVERSHOOT)				V002 A	405 (FAILED TO LOOK PROPERLY)	
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)						

58

01170069570	SUN 12/11/2017 19:24		DARK	LOWER RICHMOND RD J/W LOWER RICHMOND RD			NODE 199	519810/175880
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	MULTI JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
CASUALTY	001 (002)	(30 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(59 YRS - F - REDACT)		TURNING - LEFT	(W TO E) O/S HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	M/C >500CC BT - NOT REQ		(30 YRS - F - REDACT)		TURNING RIGHT	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT MID
V002	B	403 (POOR TURN OR MANOEUVRE)						

59

01170071868	TUE 21/11/2017 20:05		DARK	SOUTH CIRCULAR RD 20M N OF J/W SHALSTONE RD			LINK 182-198		519770/175780
SELF-REPORTED		ROAD-DRY	WEATHER-OTHER	SINGLE CWY	T/STAG JUN	UNKNOWN S/R	NO XING FACIL IN 50M		NONE IN 50M
CASUALTY	001 (001)	(63 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A		(63 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(37 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) N/S HIT FIRST	J/P - UNKN UNKNOWN S/R	

60

01180081818	WED 03/01/2018 20:24		DARK	SHEEN LANE 20M N OF J/W SOUTH CIRCULAR UPPER RICHMOND RD			NODE 184		520490/175430
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG	NO XING FACIL IN 50M		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (002)	(31 YRS - F - REDA)		SERIOUS	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NOT REQ		(68 YRS - M - REDACT)		SLOWING/STOPPING	(N TO S) FRONT HIT FIRST	J/P - UNKN JCT CLEARED	
VEHICLE	002 (000)	CAR BT - NOT REQ		(31 YRS - F - REDACT)		SLOWING/STOPPING	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT CLEARED	
V001	B	401 (JUNCTION OVERSHOOT)				V002 B	405 (FAILED TO LOOK PROPERLY)		

61

01180082957	WED 10/01/2018 19:58	DARK	THORNTON RD J/W CHURCH AVENUE				CELL 520500/175500	520640/175560
POLICE - AT SCENE	ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT		NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(29 YRS - M - REDA)	SLIGHT	PEDESTRIAN		UNKNOWN	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ	(32 YRS - M - REDACT)		MOVING OFF		(N TO S) O/S HIT FIRST	JOURNEY P/O WORK JCT CLEARED

V001	A	506 (NOT DISPLAYING LIGHTS AT NIGHT OR IN POOR VISIBILITY)	C001	A	802 (FAILED TO LOOK PROPERLY)
C001	B	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)	C001	A	806 (IMPAIRED BY ALCOHOL)
C001	A	809 (PEDESTRIAN WEARING DARK CLOTHING AT NIGHT)			

62

01180085805	SUN 21/01/2018 19:00	LIGHT	NFL SHEEN LANE J/W NORTH WORPLE WAY				LINK 184-202	520500/175770
SELF-REPORTED	ROAD-DRY	WEATHER-UNKNOWN	UNKNOWN	T/STAG JUN	UNKNOWN S/R		UNKNOWN S/R	UNKNOWN S/R

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(71 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A	(71 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R		(MOVE UNKN) BACK HIT FIRST	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - F - REDACT)	UNKNOWN S/R	UNKNOWN S/R		(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R

63

01180085985	FRI 26/01/2018 12:00		LIGHT	TERRACE J/W MORTLAKE HIGH ST			NODE 204	521240/176070
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	ROUNDABOUT	ROUNDABOUT	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(24 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(78 YRS - M - REDACT)		WAITING - TURN RIGHT	(E TO W) N/S HIT FIRST	J/P - UNKN L/ROUNDABOUT
VEHICLE	002 (000)	M/C 51-125CC BT - NOT REQ		(24 YRS - M - REDACT)		TURNING RIGHT	(E TO W) BACK HIT FIRST	JOURNEY P/O WORK L/ROUNDABOUT
V001	B	405 (FAILED TO LOOK PROPERLY)				V002 B	405 (FAILED TO LOOK PROPERLY)	

64

01180087160	THU 01/02/2018 12:24		LIGHT	UPPER RICHMOND RD WEST J/W QUEENS RD			LINK 184-706	521000/175450
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(83 YRS - F - REDA)		SERIOUS	VEH/PILLION PAX	STANDING PASSENGER		
VEHICLE	001 (000)	BUS/COACH >=17 PAX BT - NOT REQ		(34 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) DID NOT IMPACT	JOURNEY P/O WORK JCT CLEARED
V001	A	408 (SUDDEN BRAKING)						

65

01180090446	THU 15/02/2018 15:32		LIGHT	CLIFFORD AVENUE 100M E OF J/W LOWER RICHMOND RD NREST CLAS			LINK 199-729	519970/176020
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(68 YRS - F - REDA)		SERIOUS	PEDESTRIAN	SW BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	CAR BT - NOT REQ		(48 YRS - F - REDACT)	G/AHEAD - OTHER		(SW TO NE) FRONT HIT FIRST	J/P - UNKN
V001	B	405 (FAILED TO LOOK PROPERLY)			C001	B	802 (FAILED TO LOOK PROPERLY)	

66

01180095477	THU 08/03/2018 17:00		LIGHT	SHEEN LANE J/W VERNON RD			LINK 184-202	520490/175670
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(35 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		G/AHEAD - OTHER	(N TO S) N/S HIT FIRST	J/P - UNKN JCT MID
VEHICLE	002 (000)	PED CYCLE BT - N/A		(35 YRS - M - REDACT)		MOVING OFF	(N TO S) O/S HIT FIRST	JOURNEY P/O WORK JCT APP
V001	A	407 (TOO CLOSE TO CYCLIST, HORSE RIDER OR PEDESTRIAN)						

67

01180096479	TUE 06/03/2018 16:20		LIGHT	NFL GREAT CHERTSEY RD 110M NE OF J/W HARTINGTON RD			LINK 157-159	520510/176600
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(61 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(61 YRS - M - REDACT)		WAITING - HELD UP	(MOVE UNKN) BACK HIT FIRST	COMMUTING
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN

68

01180105441	WED 02/05/2018 16:41		LIGHT	MORTLAKE HIGH ST J/W COWLEY RD			LINK 202-204	521090/176010
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(30 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(59 YRS - M - REDACT)		TURNING RIGHT	(S TO E) FRONT HIT FIRST	COMMUTING E/MAIN RD
VEHICLE	002 (000)	M/C 51-125CC BT - NOT REQ		(30 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) O/S HIT FIRST	J/P - UNKN JCT MID

V001	B	701 (STATIONARY OR PARKED VEHICLE(S))	V001	B	403 (POOR TURN OR MANOEUVRE)
V002	B	602 (CARELESS, RECKLESS OR IN A HURRY)	V001	B	405 (FAILED TO LOOK PROPERLY)
V001	B	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)	V002	B	601 (AGGRESSIVE DRIVING)

69

01180108976	SAT 19/05/2018 08:25		LIGHT	DAN MASON DRIVE J/W CHISWICK BRDG			NODE 157		520447/176502
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	DUAL CWY	CROSSROADS	AUTO SIG	CNTL REFUGE N/O CTRLS		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (002)	(? YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(37 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R	
VEHICLE	002 (000)	PED CYCLE BT - N/A		(? YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R	

70

01180109131	SAT 19/05/2018 10:50		LIGHT	UPPER RICHMOND RD WEST J/W COVAL RD			LINK 182-184		520000/175320
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(71 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
CASUALTY	002 (002)	(32 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - NEG		(71 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) BACK HIT FIRST	J/P - UNKN JCT CLEARED	
VEHICLE	002 (000)	CAR BT - NEG		(32 YRS - F - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	J/P - UNKN JCT CLEARED	
V002	A	405 (FAILED TO LOOK PROPERLY)							

71

01180109901	MON 21/05/2018 08:30		LIGHT	PRIESTS BRDG J/W UPPER RICHMOND RD WEST				NODE 706	521360/175480
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	ONE-WAY ST	T/STAG JUN	UNKNOWN S/R		UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(48 YRS - F - REDA)		SERIOUS	PEDESTRIAN		UNKNOWN	UNKNOWN/OTHER	
VEHICLE	001 (000)	PED CYCLE BT - N/A		(? YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R		(MOVE UNKN) BACK HIT FIRST	J/P - UNKN UNKNOWN S/R

72

01180110989	THU 17/05/2018 18:15		LIGHT	CLIFFORD AVENUE J/W ST LEONARDS RD				LINK 182-198	519820/175500
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT		PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(47 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A		(47 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R		(N TO S) UNKNOWN S/R	COMMUTING JCT APP
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - M - REDACT)		UNKNOWN S/R		(N TO S) BACK HIT FIRST	J/P - UNKN JCT APP
VEHICLE	003 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R		(NE TO N) DID NOT IMPACT	J/P - UNKN JCT MID

73

01180113760	MON 14/05/2018 08:45		LIGHT	UPPER RICHMOND RD WEST J/W SHEEN LANE			NODE 184	520490/175400
SELF-REPORTED		UNKNOWN S/R	WEATHER-UNKNOWN	DUAL CWY	T/STAG JUN	AUTO SIG	UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(59 YRS - F - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A		(59 YRS - F - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER	(W TO E) DID NOT IMPACT	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	TURNING RIGHT	(S TO SE) DID NOT IMPACT	J/P - UNKN E/MAIN RD

74

01180116471	SUN 24/06/2018 20:29		LIGHT	UPPER RICHMOND RD WEST J/W KINGS RD			LINK 184-706	520950/175450
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(57 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	GOODS > 7.5T BT - NOT REQ		(52 YRS - M - REDACT)	SNGL TRAILER	G/AHEAD - OTHER	(E TO W) BACK HIT FIRST	JOURNEY P/O WORK JCT CLEARED
VEHICLE	002 (000)	CAR BT - NOT REQ		(57 YRS - F - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
V002	A	408 (SUDDEN BRAKING)						

75

01180118606	TUE 03/07/2018 22:10		DARK	CLIFFORD AVENUE J/W LANGDALE PLACE			LINK 182-198	519810/175470
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (002)	(19 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	TAXI/PHV BT - NEG	(32 YRS - M - REDACT)		U-TURN	(N TO S) FRONT HIT FIRST	J/P - UNKN JCT MID
VEHICLE	002 (000)	PED CYCLE BT - N/A	(19 YRS - M - REDACT)		O/TAKING - MOVING VEH	(N TO S) FRONT HIT FIRST	J/P - UNKN JCT MID
V001	B	403 (POOR TURN OR MANOEUVRE)					

76

01180123783	SAT 28/07/2018 15:00		LIGHT	CLIFFORD AVENUE 100M N OF J/W MORTLAKE RD NREST CLASSIFIED			LINK 199-729	519930/175970
POLICE - AT SCENE		ROAD-DRY	FINE - H WIND	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (002)	(29 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	TAXI/PHV BT - NOT REQ	(48 YRS - M - REDACT)		SLOWING/STOPPING	(N TO S) BACK HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	M/C 51-125CC BT - NOT PROVD	(29 YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN
V001	A	999 (OTHER - PLEASE SPECIFY BELOW)			V002 B	706 (DAZZLING SUN)	

77

01180125894	WED 08/08/2018 07:10		LIGHT	SOUTH CIRCULAR RD 10M SW OF J/W PENRHYN CRESENT				LINK 182-184	520330/175330
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	UNKNOWN S/R		UNKNOWN S/R	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(24 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A		(24 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R		(MOVE UNKN) FRONT HIT FIRST	COMMUTING UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(54 YRS - UNKNOWN - REDACT)		UNKNOWN S/R		(MOVE UNKN) N/S HIT FIRST	J/P - UNKN UNKNOWN S/R

78

01180128304	TUE 21/08/2018 20:50		DARK	SOUTH WORPLE WAY 23M W OF J/W OAKLANDS RD				CELL 520500/175500	520610/175730
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(31 YRS - M - REDA)		SLIGHT	PEDESTRIAN		W BOUND	WALKING - BACK TO TRAFFIC	
VEHICLE	001 (000)	CAR BT - NEG		(42 YRS - M - REDACT)		MOVING OFF		(E TO W) FRONT HIT FIRST	J/P - UNKN
C001	B	809 (PEDESTRIAN WEARING DARK CLOTHING AT NIGHT)							

79

01180128834	FRI 24/08/2018 07:20		LIGHT	UPPER RICHMOND RD WEST LONDON SW14 J/W SHEEN LANE			NODE 184		520490/175390
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG	PEDN PHASE ATS		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(28 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A		(28 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	COMMUTING UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(34 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R	

80

01180130377	WED 29/08/2018 09:30		LIGHT	LOWER RICHMOND RD J/W SOUTH CIRCULAR			NODE 198		519770/175860
SELF-REPORTED		ROAD-WET	RAINING	DUAL CWY	CROSSROADS	UNKNOWN S/R	PEDN PHASE ATS		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(33 YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(33 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	J/P - UNKN UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(56 YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R	

81

01180133348	TUE 18/09/2018 18:50		DARK	UPPER RICHMOND RD J/W PRIESTS BRDG			NODE 706	521360/175470
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(22 YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	M/C 126-500CC BT - NOT REQ	(22 YRS - M - REDACT)	SLOWING/STOPPING	(W TO E) FRONT HIT FIRST	COMMUTING JCT MID
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ	(27 YRS - M - REDACT)	TURNING RIGHT	(N TO W) O/S HIT FIRST	J/P - UNKN E/MAIN RD

V002	A	405 (FAILED TO LOOK PROPERLY)	V001	A	408 (SUDDEN BRAKING)

82

01180137730	WED 03/10/2018 08:50		LIGHT	UPPER RICHMOND RD WEST J/W UPPER RICHMOND RD			NODE 184	520470/175400
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	UNKNOWN S/R	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (002)	(? YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED	(35 YRS - M - REDACT)	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	PED CYCLE BT - N/A	(? YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R J/P - UNKN UNKNOWN S/R

83

01180139230	MON 15/10/2018 18:14		DARK	UPPER RICHMOND RD WEST LONDON SW14 J/W HERTFORD RD			LINK 184-706	521170/175450
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(35 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(42 YRS - M - REDACT)		TURNING RIGHT	(S TO E) FRONT HIT FIRST	JOURNEY P/O WORK E/MAIN RD
VEHICLE	002 (000)	M/C 126-500CC BT - NOT REQ		(35 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) N/S HIT FIRST	COMMUTING JCT MID
V002	A	103 (SLIPPERY ROAD (DUE TO WEATHER))				V001 A	405 (FAILED TO LOOK PROPERLY)	
V002	B	307 (TRAVELLING TOO FAST FOR CONDITIONS)						

84

01180140568	MON 22/10/2018 07:45		LIGHT	UPPER RICHMOND RD J/W PRIESTS BRDG SW15			NODE 707	521560/175480
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(57 YRS - M - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(68 YRS - M - REDACT)		MOVING OFF	(N TO SE) O/S HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	M/C 126-500CC BT - NOT REQ		(57 YRS - M - REDACT)		MOVING OFF	(N TO SE) FRONT HIT FIRST	J/P - UNKN JCT APP
V002	B	405 (FAILED TO LOOK PROPERLY)				V002 B	602 (CARELESS, RECKLESS OR IN A HURRY)	

85

01180141510	FRI 26/10/2018 18:47		DARK	CLIFFORD AVENUE J/W KINGSWAY				LINK 182-198	519770/175690
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	ONE-WAY ST	T/STAG JUN	GIVEWAY /UNCONT		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(22 YRS - M - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(43 YRS - M - REDACT)		SLOWING/STOPPING		(S TO N) BACK HIT FIRST	COMMUTING JCT APP
VEHICLE	002 (000)	CAR BT - NOT REQ		(43 YRS - M - REDACT)		G/AHEAD - OTHER		(S TO N) FRONT HIT FIRST	J/P - UNKN JCT APP
V002	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)				V001	B	408 (SUDDEN BRAKING)	

86

01180142122	SAT 27/10/2018 18:36		DARK	UPPER RICHMOND RD WEST 21M W OF J/W KINGS RD				LINK 184-706	520960/175440
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A		ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(15 YRS - M - REDA)		SLIGHT	PEDESTRIAN		N BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	CAR BT - NOT REQ		(33 YRS - F - REDACT)		G/AHEAD - OTHER		(E TO W) N/S HIT FIRST	J/P - UNKN
C001	A	802 (FAILED TO LOOK PROPERLY)							

87

01180143119	SAT 03/11/2018 07:55		LIGHT	UPPER RICHMOND RD WEST J/W PORTMAN AVENUE			LINK 184-706	520740/175430
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	SLIP RD	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(20 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
CASUALTY	002 (002)	(43 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - POS		(20 YRS - F - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	COMMUTING JCT CLEARED
VEHICLE	002 (000)	TAXI/PHV BT - NOT REQ		(43 YRS - M - REDACT)		WAITING - HELD UP	(P TO P) BACK HIT FIRST	JOURNEY P/O WORK JCT APP
V001	B	409 (SWERVED)				V001 A	501 (IMPAIRED BY ALCOHOL)	

88

01180143452	MON 05/11/2018 07:40		LIGHT	WHITE HART LANE J/W SOUTH WORPLE WAY			LINK 189-204	521363/175764
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	MULTI JUN	GIVEWAY /UNCONT	PELICAN OR SIML	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(44 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - NOT REQ		(46 YRS - M - REDACT)		SLOWING/STOPPING	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - NOT REQ		(44 YRS - M - REDACT)		SLOWING/STOPPING	(S TO N) BACK HIT FIRST	J/P - UNKN JCT APP
V001	B	103 (SLIPPERY ROAD (DUE TO WEATHER))						

89

01180144708	SAT 10/11/2018 17:40		DARK	LOWER RICHMOND RD J/W CLIFFORD AVENUE				NODE 198	519780/175850
POLICE - AT SCENE		ROAD-WET	RAINING	DUAL CWY	CROSSROADS	AUTO SIG		PELICAN OR SIML	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(7 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	REAR SEAT PASSENGER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(43 YRS - M - REDACT)		TURNING RIGHT		(W TO S) N/S HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	CAR BT - NOT REQ		(26 YRS - M - REDACT)		G/AHEAD - OTHER		(E TO W) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
V001	A	405 (FAILED TO LOOK PROPERLY)				V001	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)	

90

01180144817	SUN 11/11/2018 09:05		LIGHT	EAST SHEEN AVENUE 28M S OF J/W UPPER RICHMOND RD WEST				CELL 520500/175000	520830/175420
SELF-REPORTED		ROAD-WET	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(67 YRS - M - REDA)		SLIGHT	PEDESTRIAN		W BOUND	FROM DRIVERS O/SIDE	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(71 YRS - F - REDACT)		UNKNOWN S/R		(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN

91

01180145670	WED 14/11/2018 17:20		DARK	UPPER RICHMOND RD WEST J/W SHEEN LANE			NODE 184	520488/175399
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	MULTI JUN	UNKNOWN S/R	ZEBRA XING	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(52 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(52 YRS - M - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) BACK HIT FIRST	J/P - UNKN JCT MID
VEHICLE	002 (000)	M/C 51-125CC BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) BACK HIT FIRST	J/P - UNKN JCT MID

92

01180145811	THU 15/11/2018 11:00		LIGHT	HARTINGTON RD J/W GREAT CHERSTEY RD			NODE 157	520428/176510
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	AUTO SIG	PELICAN OR SIML	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(52 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(52 YRS - M - REDACT)		TURNING - LEFT	(N TO E) FRONT HIT FIRST	J/P - UNKN JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A		(? YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN JCT APP
V002	A	310 (CYCLIST ENTERING ROAD FROM PAVEMENT)						

93

01180146474	SUN 18/11/2018 13:40		LIGHT	GREAT CHERTSEY RD J/W HARTINGTON RD			NODE 157	520460/176540
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	UNKNOWN S/R	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(35 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(35 YRS - F - REDACT)		WAITING - HELD UP	(MOVE UNKN) BACK HIT FIRST	COMMUTING JCT MID
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

94

01180146832	MON 05/11/2018 09:20		LIGHT	UPPER RICHMOND RD J/W PRIESTS BRDG RD			NODE 707	521560/175470
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	CNTL REFUGE N/O CTRLS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(29 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C <= 50CC BT - DRV NOT CONTACTED		(29 YRS - M - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN JCT APP

95

01180149907	TUE 04/12/2018 17:37		DARK	LOWER RICHMOND RD 311M E OF J/W BICESTER RD			LINK 196-198		519620/175820
SELF-REPORTED		ROAD-DRY	WEATHER-OTHER	SLIP ROAD	NO JUN IN 20M	N/A	PEDN PHASE ATS		UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(28 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A		(28 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	COMMUTING	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN	

96

01180150742	FRI 07/12/2018 18:30		DARK	WHITE HART LANE J/W WESTFIELDS AVENUE			LINK 189-204		521350/175810
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	UNKNOWN S/R	NO XING FACIL IN 50M		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(40 YRS - F - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	M/C <= 50CC BT - DRV NOT CONTACTED		(40 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R	
VEHICLE	002 (000)	M/C 51-125CC BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) DID NOT IMPACT	J/P - UNKN UNKNOWN S/R	

97

01180150854	SAT 08/12/2018 18:55		DARK	MORTLAKE HIGH ST J/W SHEEN LANE			NODE 202	520490/175920
POLICE - AT SCENE		ROAD-WET	RAINING	ROUNDABOUT	M ROUNDABOUT	GIVEWAY /UNCONT	CNTL REFUGE N/O CTRLS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(21 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(49 YRS - M - REDACT)		SLOWING/STOPPING	(E TO W) FRONT HIT FIRST	J/P - UNKN L/ROUNDABOUT
VEHICLE	002 (000)	M/C 51-125CC BT - NOT REQ		(21 YRS - M - REDACT)		SLOWING/STOPPING	(P TO N) BACK HIT FIRST	J/P - UNKN L/ROUNDABOUT
V001	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)						

98

01180151742	WED 12/12/2018 22:50		DARK	CLIFFORD AVENUE LONDON SW14 J/W MORTLAKE RD			NODE 198	519780/175850
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	MULTI JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(50 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
CASUALTY	002 (002)	(65 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - NOT REQ		(50 YRS - M - REDACT)		WAITING - TURN RIGHT	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT MID
VEHICLE	002 (000)	CAR BT - NOT REQ		(30 YRS - F - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN JCT MID
V001	A	401 (JUNCTION OVERSHOOT)				V001 A	403 (POOR TURN OR MANOEUVRE)	
V001	A	405 (FAILED TO LOOK PROPERLY)				V002 A	405 (FAILED TO LOOK PROPERLY)	

99

01180152269	SAT 15/12/2018 09:02		LIGHT	PALEWELL PARK J/W UPPER RICHMOND RD WEST			LINK 184-706	520720/175430
POLICE - AT SCENE		ROAD-DRY	FINE - H WIND	SINGLE CWY	T/STAG JUN	AUTO SIG	PELICAN OR SIML	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(26 YRS - F - REDA)	SLIGHT	PEDESTRIAN		NE BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	PED CYCLE BT - N/A	(54 YRS - M - REDACT)		G/AHEAD - OTHER		(N TO S) FRONT HIT FIRST	J/P - UNKN JCT APP
C001	B	803 (FAILED TO JUDGE VEHICLE'S PATH OR SPEED)						

100

01180154123	THU 13/12/2018 11:00		LIGHT	WESTFIELDS AVENUE 30M W OF J/W WHITE HART			CELL 521000/175500	521440/175870
SELF-REPORTED		UNKNOWN S/R	WEATHER-UNKNOWN	UNKNOWN	NO JUN IN 20M	N/A	UNKNOWN S/R	UNKNOWN S/R

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(39 YRS - M - REDA)	SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED	(39 YRS - M - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER		(MOVE UNKN) UNKNOWN S/R	J/P - UNKN
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	UNKNOWN S/R		(MOVE UNKN) UNKNOWN S/R	J/P - UNKN

101

01180154792	SAT 29/12/2018 01:05		DARK	UPPER RICHMOND RD WEST J/W CONNAUGHT AVENUE			LINK 182-184	520100/175320
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(26 YRS - M - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	M/C 51-125CC BT - POS		(26 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
V001	B	501 (IMPAIRED BY ALCOHOL)						

102

01180155734	THU 13/12/2018 13:30		LIGHT	CONNAUGHT AVENUE 70M N OF J/W UPPER RICHMOND RD			CELL 520000/175000	520110/175390
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M	N/A	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(30 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(30 YRS - F - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(? YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN

103

01190156991	THU 10/01/2019 08:30		LIGHT	UPPER RICHMOND RD WEST, LONDON SW14, NR JUNCT WTH SHEEN LANE.			NODE 184	520500/175400
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	AUTO SIG	UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(27 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A		(27 YRS - F - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	COMMUTING UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(35 YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

104

01190158789	MON 21/01/2019 16:53		DARK	CLIFFORD AVENUE, LONDON SW14, 26 METRES SOUTH OF JUNCT WTH SHALSTONE RD.			LINK 182-198	519772/175765
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(31 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C 51-125CC BT - DRV NOT CONTACTED		(31 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(54 YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN

105

01190159324	THU 24/01/2019 12:20		LIGHT	UPPER RICHMOND RD WEST, 10 METRES WEST OF JUNCT WTH KINGS RD.			LINK 184-706	520968/175450
POLICE - AT SCENE		ROAD-WET	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(17 YRS - F - REDA)		SLIGHT	PEDESTRIAN	N BOUND	FROM DRIVERS N/SIDE	
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NEG		(65 YRS - M - REDACT)	G/AHEAD - OTHER		(W TO E) FRONT HIT FIRST	JOURNEY P/O WORK JCT CLEARED
C001	B	802 (FAILED TO LOOK PROPERLY)			C001	B	802 (FAILED TO LOOK PROPERLY)	
V001	B	405 (FAILED TO LOOK PROPERLY)						

106

01190160486	WED 30/01/2019 14:52		LIGHT	MALTHOUSE PASSAGE, LONDON SW13, 65 METRES EAST OF JUNCT WTH TERRACE.			CELL 521000/176000	521480/176219
SELF-REPORTED		ROAD-WET	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(43 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C 51-125CC BT - DRV NOT CONTACTED		(43 YRS - M - REDACT)	UNKNOWN S/R		(MOVE UNKN) UNKNOWN S/R	COMMUTING

107

01190160866	THU 31/01/2019 17:00		DARK	CLIFFORD AVENUE, NR JUNCT WTH SHALSTONE RD.			LINK 182-198	519774/175780
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(44 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(44 YRS - M - REDACT)		WAITING - TURN RIGHT	(S TO E) BACK HIT FIRST	COMMUTING JCT APP
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(24 YRS - F - REDACT)		G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT APP

108

01190164834	THU 21/02/2019 15:56		LIGHT	UPPER RICHMOND RD WEST, NR JUNCT WTH PRIESTS BRDGS.			NODE 706	521361/175472
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	GIVEWAY /UNCONT	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(39 YRS - M - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT PROVD		(39 YRS - M - REDACT)		O/TAKING - NON MOVING VEH	(E TO W) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(47 YRS - M - REDACT)		WAITING - TURN RIGHT	(E TO NE) O/S HIT FIRST	COMMUTING JCT MID
V001	A	710 (VEHICLE BLIND SPOT)						

109

01190166037	THU 28/02/2019 13:00		DARK	A316 GREAT CHERTSEY RD , NR JUNCT WTH HARTINGTON RD.			NODE 157	520446/176519
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	CROSSROADS	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(52 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(42 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	COMMUTING JCT APP
VEHICLE	002 (000)	M/C >500CC BT - NOT REQ		(52 YRS - M - REDACT)		SLOWING/STOPPING	(E TO W) BACK HIT FIRST	COMMUTING JCT APP
V001	A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)						

110

01190166170	SUN 24/02/2019 11:50		LIGHT	LOCATION UNCERTAIN. ON WHITE HART LANE, 35 METRES EAST OF JUNCT WTH ROSSLYN AVE.			LINK 189-204	521414/175668
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(29 YRS - M - REDA)		SLIGHT	PEDESTRIAN	STILL	UNKNOWN/OTHER	
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

111

01190167129	TUE 05/03/2019 13:40		LIGHT	GREAT CHERTSEY RD, NR JUNCT WTH HARTINGTON RD.			NODE 157	520438/176513
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(34 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(34 YRS - F - REDACT)		TURNING RIGHT	(NE TO NW) FRONT HIT FIRST	JCT MID
VEHICLE	002 (000)	CAR BT - NOT REQ		(37 YRS - M - REDACT)		G/AHEAD - OTHER	(SW TO NE) FRONT HIT FIRST	JCT MID
V001	A	403 (POOR TURN OR MANOEUVRE)						

112

01190171025	MON 11/03/2019 08:00		LIGHT	LOWER RICHMOND RD, NR JUNCT WTH HANSON CLOSE.			LINK 199-202	520148/175826
SELF-REPORTED		UNKNOWN S/R	WEATHER-UNKNOWN	UNKNOWN	UNKNOWN S/R	UNKNOWN S/R	UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(22 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(22 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	J/P - UNKN UNKNOWN S/R
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER	(MOVE UNKN) FRONT HIT FIRST	UNKNOWN S/R

113

01190174824	FRI 12/04/2019 15:05		LIGHT	MORTLAKE HIGH ST, 30 METRES EAST OF JUNCT WTH TINDERBOX ALLEY.. NREST CLASSIFIED RD WAS A3003. NREST CLASSIFIED RD WAS A3003			LINK 202-204	520740/175967
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(50 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(25 YRS - M - REDACT)		U-TURN	(P TO E) FRONT HIT FIRST	JOURNEY P/O WORK
VEHICLE	002 (000)	M/C <= 50CC BT - NEG		(50 YRS - M - REDACT)		G/AHEAD - OTHER	(E TO W) FRONT HIT FIRST	
V001	B	602 (CARELESS, RECKLESS OR IN A HURRY)						

114

01190175881	THU 18/04/2019 11:05		LIGHT	UPPER RICHMOND RD WEST, NR JUNCT WTH RICHMOND PARK RD.			LINK 184-706	520613/175417
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(57 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(44 YRS - F - REDACT)		TURNING RIGHT	(S TO E) O/S HIT FIRST	J/P - UNKN E/MAIN RD
VEHICLE	002 (000)	PED CYCLE BT - N/A		(57 YRS - M - REDACT)		WAITING - HELD UP	(E TO W) O/S HIT FIRST	JCT APP

115

01190176016	FRI 19/04/2019 19:50		DARK	UPPER RICHMOND RD WEST, NR JUNCT WTH TEMPLE SHEEN RD.			LINK 182-184	520112/175323
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(35 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(34 YRS - M - REDACT)		TURNING RIGHT	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
VEHICLE	002 (000)	M/C 51-125CC BT - NEG		(35 YRS - M - REDACT)		O/TAKING - MOVING VEH	(W TO E) FRONT HIT FIRST	JCT CLEARED

V001	A	403 (POOR TURN OR MANOEUVRE)	V002	A
V001	A	404 (FAILED TO SIGNAL OR MISLEADING SIGNAL)		

406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)

116

01190176833	WED 24/04/2019 16:22		LIGHT	UPPER RICHMOND RD WEST, 10 METRES WEST OF JUNCT WTH THORNTON RD.			LINK 184-706	520667/175422
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	AUTO SIG	PELICAN OR SIML	CTRL - AUTH PERSON
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(79 YRS - M - REDA)		SERIOUS	PEDESTRIAN	UNKNOWN	UNKNOWN/OTHER	
VEHICLE	001 (000)	M/C >500CC BT - NEG		(50 YRS - M - REDACT)		O/TAKING - NON MOVING VEH	(E TO W) FRONT HIT FIRST	COMMUTING JCT APP
VEHICLE	002 (000)	M/C >500CC BT - NEG		(58 YRS - M - REDACT)		WAITING - HELD UP	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT APP

C001	A	804 (WRONG USE OF PEDESTRIAN CROSSING FACILITY)

117

01190176942	THU 25/04/2019 10:35		LIGHT	MORTLAKE HIGH ST, NR JUNCT WTH VINEYARD PATH.			LINK 202-204	520632/175953
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	SLIP RD	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(40 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(40 YRS - M - REDACT)		WAITING - HELD UP	(MOVE UNKN) BACK HIT FIRST	COMMUTING JCT MID
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		G/AHEAD - OTHER	(MOVE UNKN) FRONT HIT FIRST	JCT MID

118

01190178119	TUE 30/04/2019 16:45		LIGHT	LOWER RICHMOND RD, 100 METRES WEST OF JUNCT WTH CLIFFORD AVENUE.. NREST CLASSIFIED RD WAS A205. NREST CLASSIFIED RD WAS A205			LINK 196-198	519693/175821
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	DUAL CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(65 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(65 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN

119

01190180430	SUN 12/05/2019 16:10		DARK	MORTLAKE HIGH ST, NR JUNCT WTH VINEYARD PATH.			LINK 202-204	520613/175948
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	CROSSROADS	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (002)	(15 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	PHV - LICENCED BT - NOT REQ	(54 YRS - M - REDACT)		TURNING - LEFT	(S TO W) N/S HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A	(15 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	JCT APP

V001	A	701 (STATIONARY OR PARKED VEHICLE(S))	V002	A	701 (STATIONARY OR PARKED VEHICLE(S))
V001	B	706 (DAZZLING SUN)			

120

01190180710	SUN 28/04/2019 13:00		LIGHT	LOWER RICHMOND RD, NR JUNCT WTH HANSON COURT RD.			LINK 199-202	520136/175827
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	OTHER JUN	UNKNOWN S/R	ZEBRA XING	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(43 YRS - M - REDA)	SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A	(43 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) N/S HIT FIRST	UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

121

01190180807	SUN 31/03/2019 06:15		LIGHT	MORTLAKE HIGH ST, NR JUNCT WTH SECOND AVENUE.			LINK 202-204		521152/176026
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	DUAL CWY	UNKNOWN S/R	UNKNOWN S/R	UNKNOWN S/R		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (001)	(? YRS - M - REDA)		SLIGHT	DRIVER/RIDER				
VEHICLE	001 (000)	PED CYCLE BT - N/A		(? YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	UNKNOWN S/R	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R	

122

01190183326	SUN 26/05/2019 16:15		LIGHT	MORTLAKE HIGH ST, 100 METRES WEST OF JUNCT WTH TINDERBOX ALLEY.			LINK 202-204		520844/175993
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		NO XING FACIL IN 50M		NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED									
CASUALTY	001 (002)	(54 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(54 YRS - M - REDACT)		U-TURN	(W TO E) FRONT HIT FIRST	JOURNEY P/O WORK	
VEHICLE	002 (000)	CAR BT - NOT REQ		(33 YRS - F - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST		
VEHICLE	003 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		PARKED	(P TO P) O/S HIT FIRST	J/P - UNKN	
V001	B	405 (FAILED TO LOOK PROPERLY)							

123

01190183371	SUN 26/05/2019 19:55		LIGHT	ASHLEIGH RD, 50 METRES SOUTH OF JUNCT WTH MORTLAKE HIGH SREET .. NREST CLASSIFIED RD WAS A3003. NREST CLASSIFIED RD WAS A3003			CELL 521000/175500	521055/175878
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(79 YRS - F - REDA)		SLIGHT	PEDESTRIAN	STILL	STATIONARY NOT CROSSING	
VEHICLE	001 (000)	PED CYCLE BT - N/A		(39 YRS - F - REDACT)	G/AHEAD - OTHER		(E TO W) FRONT HIT FIRST	J/P - UNKN
V001	A	405 (FAILED TO LOOK PROPERLY)						

124

01190183417	SUN 26/05/2019 23:12		DARK	CLIFFORD AVENUE, NR JUNCT WTH ST LEONARDS RD.			LINK 182-198	519815/175517
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(50 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NEG		(50 YRS - M - REDACT)	G/AHEAD - OTHER		(S TO N) FRONT HIT FIRST	J/P - UNKN JCT CLEARED
V001	A	410 (LOSS OF CONTROL)						

125

01190184300	FRI 31/05/2019 13:40		LIGHT	LOWER RICHMOND RD, NR JUNCT WTH CHALKERS CORNER.			NODE 198	519791/175866
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	MULTI JUN	AUTO SIG	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(45 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
CASUALTY	002 (002)	(32 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(45 YRS - M - REDACT)		G/AHEAD - OTHER	(S TO N) FRONT HIT FIRST	J/P - UNKN JCT MID
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(32 YRS - M - REDACT)		TURNING RIGHT	(N TO W) N/S HIT FIRST	SCHOOL - TAKING JCT MID
V002	A	305 (ILLEGAL TURN OR DIRECTION OF TRAVEL)				V001 A	405 (FAILED TO LOOK PROPERLY)	

126

01190186185	SUN 09/06/2019 16:23		LIGHT	CLIFFORD AVENUE , NR JUNCT WTH LOWER RICHMOND RD .			NODE 198	519793/175877
POLICE - AT SCENE		ROAD-WET	RAINING	DUAL CWY	T/STAG JUN	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(51 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C 51-125CC BT - NEG		(51 YRS - M - REDACT)		TURNING RIGHT	(E TO N) O/S HIT FIRST	JCT MID
VEHICLE	002 (000)	TAXI/PHV BT - DRV NOT CONTACTED		(? YRS - M - REDACT)		TURNING RIGHT	(E TO N) N/S HIT FIRST	J/P - UNKN JCT MID
V002	B	403 (POOR TURN OR MANOEUVRE)						

127

01190188056	MON 17/06/2019 12:46		LIGHT	UPPER RICHMOND RD WEST, 10 METRES EAST OF JUNCT WTH DEANHILL RD.			LINK 182-184	519960/175335
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	PELICAN OR SIML	CTRL - AUTH PERSON
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(83 YRS - F - REDA)		SERIOUS	PEDESTRIAN	UNKNOWN	UNKNOWN/OTHER	
VEHICLE	001 (000)	M/C >500CC BT - NEG		(? YRS - M - REDACT)		SLOWING/STOPPING	(E TO W) N/S HIT FIRST	JOURNEY P/O WORK JCT APP
V001	B	999 (OTHER - PLEASE SPECIFY BELOW)						

128

01190188695	FRI 21/06/2019 09:15		LIGHT	LOWER RICHMOND RD, NR JUNCT WTH MORTLAKE RD.			NODE 198	519789/175873
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	DUAL CWY	CROSSROADS	AUTO SIG	PEDN PHASE ATS	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(30 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(44 YRS - M - REDACT)		TURNING RIGHT	(E TO N) N/S HIT FIRST	JOURNEY P/O WORK JCT MID
VEHICLE	002 (000)	PED CYCLE BT - N/A		(30 YRS - M - REDACT)		O/TAKING - NON MOVING VEH	(W TO E) FRONT HIT FIRST	J/P - UNKN JCT APP
V002	B	999 (OTHER - PLEASE SPECIFY BELOW)						

129

01190188751	FRI 21/06/2019 17:40		LIGHT	UPPER RICHMOND RD, NR JUNCT WTH SHEEN GATE GARDENS.			LINK 182-184	520228/175323
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	ONE-WAY ST	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (002)	(34 YRS - M - REDA)	SLIGHT	DRIVER/RIDER		
VEHICLE	001 (000)	CAR BT - NOT REQ	(42 YRS - F - REDACT)	TURNING RIGHT	(W TO S) FRONT HIT FIRST	JCT APP
VEHICLE	002 (000)	PED CYCLE BT - N/A	(34 YRS - M - REDACT)	O/TAKING - NEARSIDE	(E TO W) FRONT HIT FIRST	JCT APP

V001	A	701 (STATIONARY OR PARKED VEHICLE(S))	V002	A	701 (STATIONARY OR PARKED VEHICLE(S))

130

01190190324	SAT 29/06/2019 07:21		LIGHT	UPPER RICHMOND RD, 10 METRES EAST OF JUNCT WTH THORNTON RD.			LINK 184-706	520699/175426
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	PELICAN OR SIML	NONE IN 50M

NOT KNOWN HOW COLLISION OCCURRED

CASUALTY	001 (001)	(25 YRS - M - REDA)	SLIGHT	VEH/PILLION PAX		
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - NEG	(38 YRS - M - REDACT)	O/TAKING - NEARSIDE	(E TO W) FRONT HIT FIRST	JOURNEY P/O WORK JCT CLEARED
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED	(? YRS - UNKNOWN - REDACT)	PARKED	(P TO P) BACK HIT FIRST	J/P - UNKN JCT CLEARED

V001	A	701 (STATIONARY OR PARKED VEHICLE(S))	V001	B	403 (POOR TURN OR MANOEUVRE)
V001	B	602 (CARELESS, RECKLESS OR IN A HURRY)			

131

01190191766	FRI 05/07/2019 17:01		LIGHT	MORTLAKE HIGH ST, LONDON SW14, 120 METRES WEST OF JUNCT WTH AVONDALE RD.			LINK 202-204	520778/175973
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	NO JUN IN 20M		NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(77 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(77 YRS - F - REDACT)		MOVING OFF	(W TO E) FRONT HIT FIRST	
VEHICLE	002 (000)	CAR BT - NOT REQ		(29 YRS - F - REDACT)		WAITING - HELD UP	(W TO E) BACK HIT FIRST	
V001	A	405 (FAILED TO LOOK PROPERLY)				V001 A	406 (FAILED TO JUDGE OTHER PERSON'S PATH OR SPEED)	

132

01190193445	SAT 13/07/2019 21:58		DARK	UPPER RICHMOND RD WEST, NR JUNCT WTH DEANHILL RD.			LINK 182-184	519944/175331
SELF-REPORTED		UNKNOWN S/R	WEATHER-OTHER	UNKNOWN	UNKNOWN S/R	AUTO SIG	UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(45 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(45 YRS - F - REDACT)		UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	J/P - UNKN UNKNOWN S/R

133

01190200125	SAT 17/08/2019 20:14		LIGHT	UPPER RICHMOND RD WEST, NR JUNCT WTH ELM RD.			LINK 182-184	520305/175330
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	PELICAN OR SIML	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(35 YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	SEATED PASSENGER		
VEHICLE	001 (000)	LONDON BUS BT - NOT REQ		(57 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	JCT APP
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - NOT REQ		(60 YRS - M - REDACT)		WAITING - TURN RIGHT	(N TO W) FRONT HIT FIRST	JCT APP
V002	A	405 (FAILED TO LOOK PROPERLY)				V001 A	405 (FAILED TO LOOK PROPERLY)	

134

01190200368	MON 19/08/2019 08:40		LIGHT	UPPER RICHMOND RD WEST, NR JUNCT WTH PRIESTS BRDG.			LINK 706-707	521361/175476
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(37 YRS - M - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	OTHER VEH BT - NEG		(50 YRS - M - REDACT)		TURNING - LEFT	(E TO S) N/S HIT FIRST	JOURNEY P/O WORK L/MAIN RD
VEHICLE	002 (000)	PED CYCLE BT - N/A		(37 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) O/S HIT FIRST	JCT APP
V001	B	403 (POOR TURN OR MANOEUVRE)				V002 A	405 (FAILED TO LOOK PROPERLY)	

135

01190206674	FRI 20/09/2019 19:14		DARK	UPPER RICHMOND RD WEST, LONDON, SW14, NR JUNCT WTH UPPER RICHMOND RD.			LINK 182-184	520358/175343
POLICE - AT SCENE		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(23 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C 51-125CC BT - NOT REQ		(23 YRS - M - REDACT)		G/AHEAD - OTHER	(W TO E) FRONT HIT FIRST	JOURNEY P/O WORK JCT APP
VEHICLE	002 (000)	CAR BT - NOT REQ		(47 YRS - F - REDACT)		WAITING - TURN RIGHT	(E TO NW) FRONT HIT FIRST	JCT APP
V002	B	405 (FAILED TO LOOK PROPERLY)						

136

01190207338	THU 04/07/2019 17:30		LIGHT	LOWER RICHMOND RD, NR JUNCT WTH MORTLAKE RD.			NODE 198	519802/175863
SELF-REPORTED		UNKNOWN S/R	WEATHER-FINE	UNKNOWN	CROSSROADS	AUTO SIG	PEDN PHASE ATS	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(52 YRS - F - REDA)		SERIOUS	PEDESTRIAN	UNKNOWN	UNKNOWN/OTHER	
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)	UNKNOWN S/R	G/AHEAD - OTHER	(E TO W) UNKNOWN S/R	UNKNOWN S/R

137

01190207610	FRI 20/09/2019 17:30		LIGHT	UPPER RICHMOND RD WEST, LONDON SW14, NR JUNCT WTH GILPIN AVENUE.			LINK 184-706	520926/175446
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	UNKNOWN S/R	UNKNOWN S/R	ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(45 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A		(45 YRS - M - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	COMMUTING UNKNOWN S/R
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(27 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

138

01190208718	TUE 24/09/2019 17:20		LIGHT	ASHLEIGH RD, NR JUNCT WTH NORTH WORPLE WAY.			CELL 521000/175500	521079/175788
POLICE - AT SCENE		ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	NO XING FACIL IN 50M	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (002)	(30 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - NOT REQ		(34 YRS - F - REDACT)		REVERSING	(W TO E) BACK HIT FIRST	E/MAIN RD
VEHICLE	002 (000)	CAR BT - NOT REQ		(30 YRS - M - REDACT)		G/AHEAD - OTHER	(N TO S) FRONT HIT FIRST	J/P - UNKN E/MAIN RD
V001	B	405 (FAILED TO LOOK PROPERLY)				V002 B	509 (DISTRACTION IN VEHICLE)	

139

01190209120	WED 02/10/2019 15:20		LIGHT	UPPER RICHMOND RD, 21 METRES WEST OF JUNCT WTH MODEL COTTAGES. NREST CLASSIFIED RD WAS A205.			LINK 182-184	520387/175369
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(34 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
CASUALTY	002 (001)	(? YRS - F - REDA)		SLIGHT	VEH/PILLION PAX	FRONT SEAT PASSENGER		
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(34 YRS - M - REDACT)		O/TAKING - NON MOVING VEH	(W TO E) FRONT HIT FIRST	JCT APP
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - M - REDACT)		TURNING RIGHT	(N TO W) FRONT HIT FIRST	J/P - UNKN JCT MID

140

01190210593	MON 07/10/2019 17:25		LIGHT	LOCATION UNCERTAIN. ON UPPER RICHMOND RD WEST, 30 METRES SOUTH OF JUNCT WTH TEMPLE SHEEN RD.			LINK 182-184	520144/175326
SELF-REPORTED		ROAD-WET	RAINING	ONE-WAY ST	NO JUN IN 20M		ZEBRA XING	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(20 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(20 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

141

01190211199	FRI 04/10/2019 17:10		LIGHT	CLIFFORD AVENUE, 71 METRES SOUTH OF JUNCT WTH KINGSWAY.			LINK 182-198	519794/175605
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	DUAL CWY	NO JUN IN 20M		NO XING FACIL IN 50M	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(41 YRS - M - REDA)		SERIOUS	DRIVER/RIDER			
VEHICLE	001 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(41 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	COMMUTING
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(28 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

142

01190212068	FRI 11/10/2019 09:15		LIGHT	UPPER RICHMOND RD WEST, NR JUNCT WTH PORTMAN AVENUE .			LINK 184-706	520756/175427
SELF-REPORTED		ROAD-WET	RAINING	SINGLE CWY	T/STAG JUN	UNKNOWN S/R	UNKNOWN S/R	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(49 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	M/C >500CC BT - DRV NOT CONTACTED		(49 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	COMMUTING UNKNOWN S/R
VEHICLE	002 (000)	VAN/GOODS => 3.5T BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R

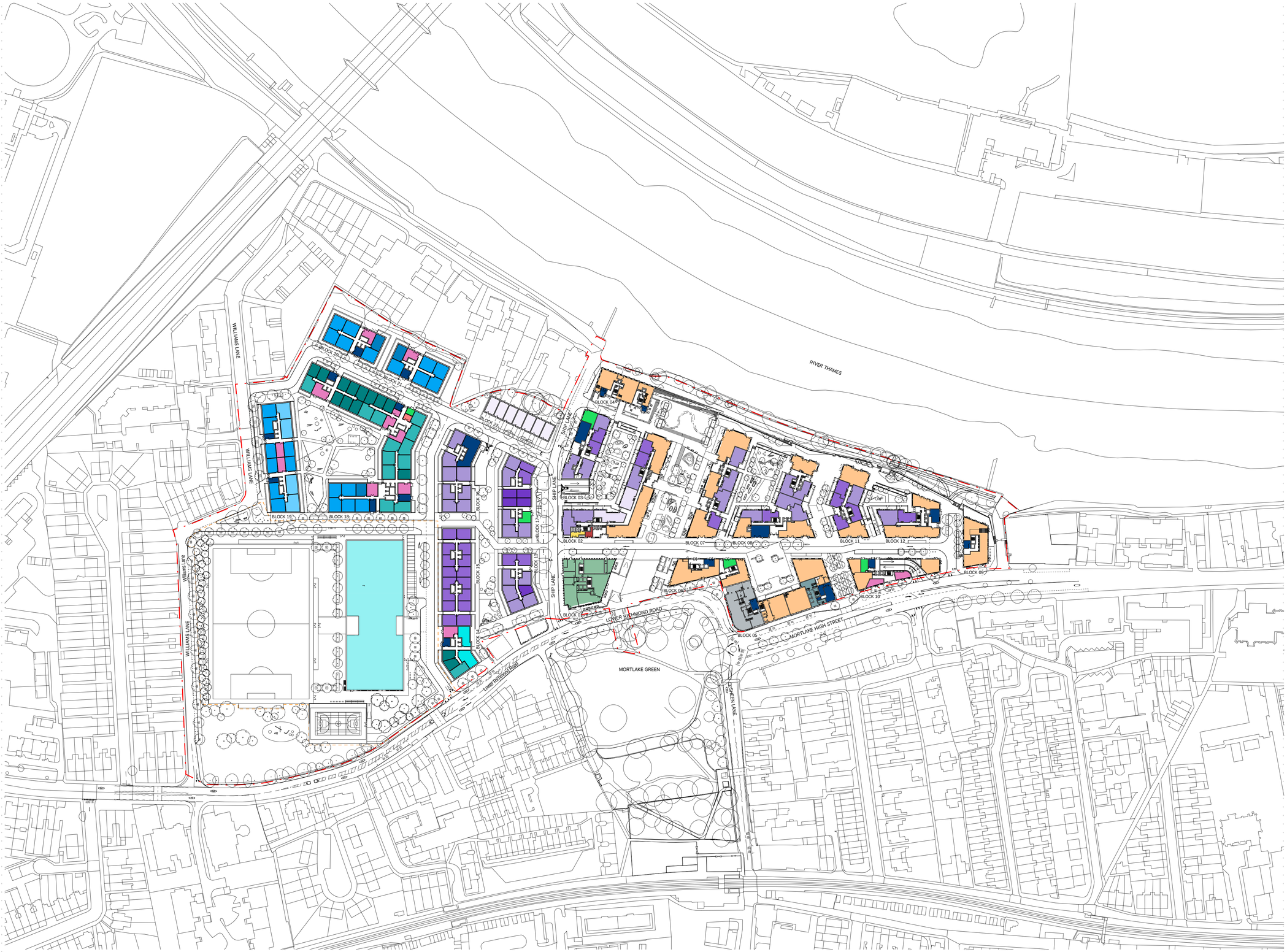
143

01190214336	FRI 25/10/2019 18:25		DARK	MORTLAKE HIGH ST, NR JUNCT WTH VINEYARD PATH.			LINK 202-204	520637/175962
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	ZEBRA XING	UNKNOWN S/R
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(37 YRS - M - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	CAR BT - DRV NOT CONTACTED		(37 YRS - M - REDACT)		UNKNOWN S/R	(MOVE UNKN) BACK HIT FIRST	JCT MID
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) FRONT HIT FIRST	J/P - UNKN UNKNOWN S/R

144

01190214936	WED 30/10/2019 08:35		LIGHT	UPPER RICHMOND RD WEST, NR JUNCT WTH GRAEMESDYKE RD .			LINK 182-184	519941/175337
SELF-REPORTED		ROAD-DRY	WEATHER-FINE	SINGLE CWY	T/STAG JUN	GIVEWAY /UNCONT	UNKNOWN S/R	NONE IN 50M
NOT KNOWN HOW COLLISION OCCURRED								
CASUALTY	001 (001)	(41 YRS - F - REDA)		SLIGHT	DRIVER/RIDER			
VEHICLE	001 (000)	PED CYCLE BT - N/A		(41 YRS - F - REDACT)	UNKNOWN S/R	UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	COMMUTING UNKNOWN S/R
VEHICLE	002 (000)	CAR BT - DRV NOT CONTACTED		(? YRS - UNKNOWN - REDACT)		UNKNOWN S/R	(MOVE UNKN) UNKNOWN S/R	J/P - UNKN UNKNOWN S/R

Appendix B Masterplan Layout



NOTES:

DO NOT SCALE FROM THIS DRAWING. ALL DIMENSIONS TO BE CHECKED ON SITE. ALL OMISSIONS AND DISCREPANCIES TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.

ALL RIGHTS RESERVED. THIS WORK IS COPYRIGHT AND CANNOT BE REPRODUCED OR COPIED OR MODIFIED IN ANY FORM OR BY ANY MEANS, GRAPHIC ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING WITHOUT THE WRITTEN PERMISSION OF SQUIRE AND PARTNERS ARCHITECTS.

NOTE: UNIT MIX AND LAYOUT FOR DEVELOPMENT AREA 2 IS INDICATIVE AT THIS STAGE

- Studio
- 1B2P
- 2B3P
- 2B4P
- 3B4P
- 3B5P
- 4B8P
- 1B2P INT
- 2B3P INT
- 2B4P INT
- 3B5P INT
- 1B2P SR
- 2B3P SR
- 2B4P SR
- 3B5P SR
- BIKE STORE
- CAR PARK ENTRANCE
- CINEMA
- FLEXIBLE USE
- GAS METER ROOM
- HOTEL
- LV SWITCHROOM
- OFFICE
- REFUSE STORE
- SCHOOL
- SUBSTATION

Revision description	Date	Check	Rev
GLA SUBMISSION	06/04/20	BJ	C
DRAFT GLA SUBMISSION	24/01/20	KH	B
FINAL DRAFT PLANNING APPLICATION	21/10/19	KH	A
LEGAL REVIEW	13/09/19	KH	-

SQUIRE & PARTNERS

The Department Store
248 Ferndale Road London SW9 8FR
T: 020 7278 5555 F: 020 7239 0495

info@squireandpartners.com
www.squireandpartners.com

Project

Stag Brewery
Richmond

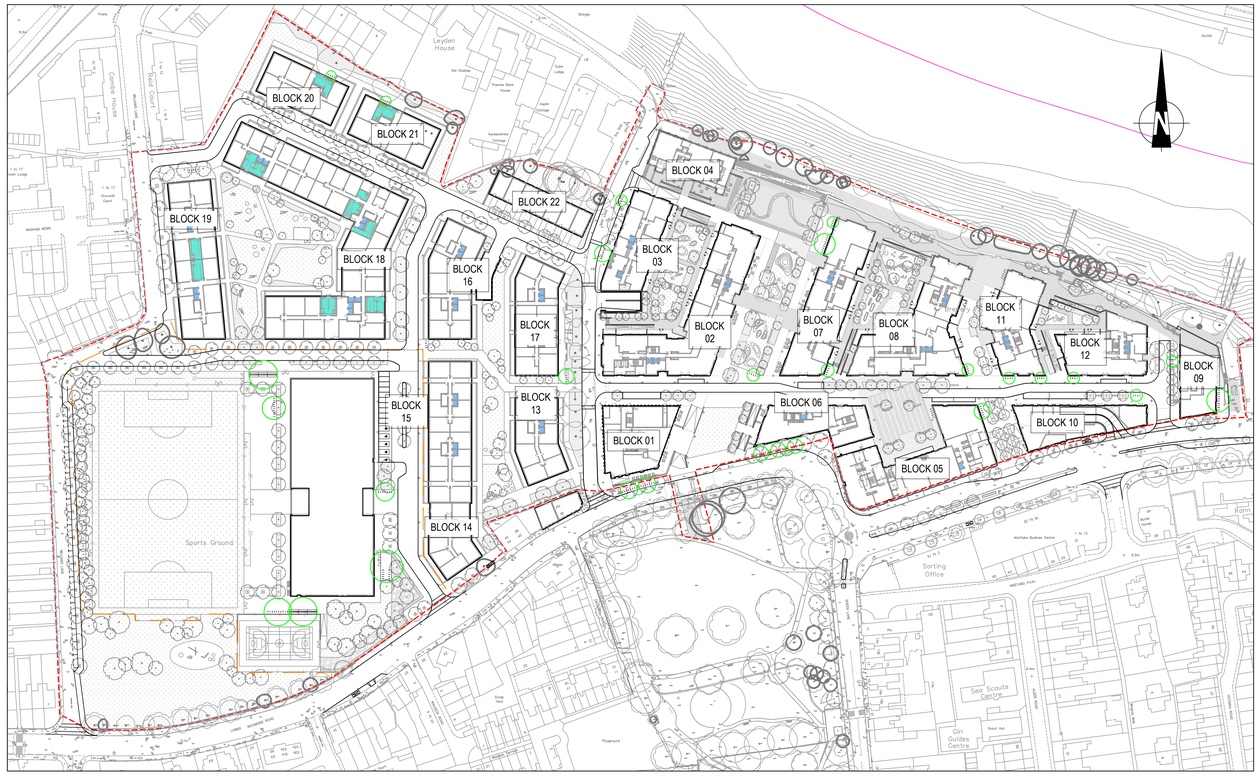
Drawing

PROPOSED MASTERPLAN
GROUND FLOOR LEVEL

Drawn	Date	Scale
TC	18/01/18	1 : 1250 @ A1 1 : 2500 @ A3

Job Number	Drawing number	Revision
18125	C645_MP_P_00_001	C

Appendix C Cycle Parking Details



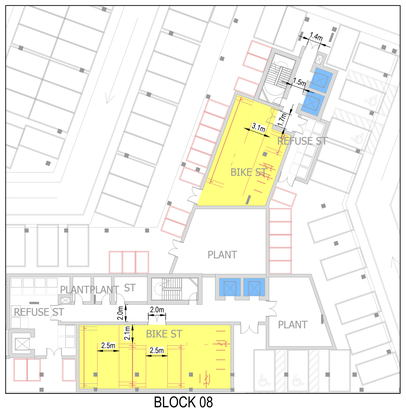
CYCLE PARKING LOCATIONS AT GROUND LEVEL



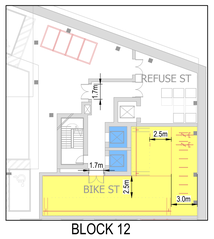
CYCLE PARKING LOCATIONS AT BASEMENT LEVEL



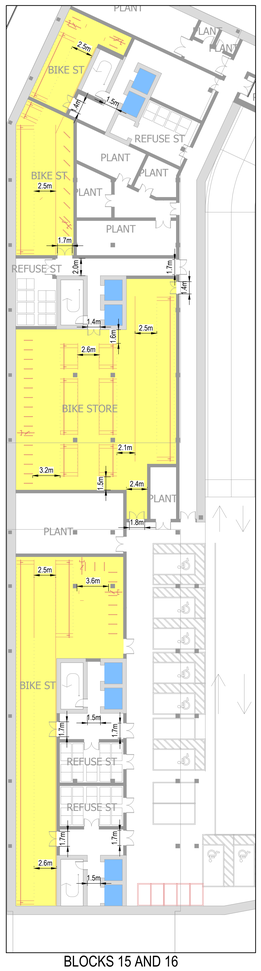
BLOCKS 02 AND 03



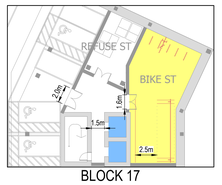
BLOCK 08



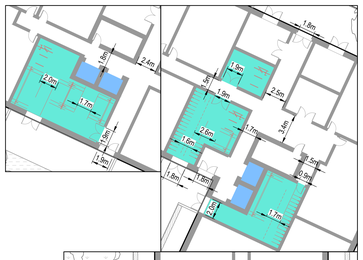
BLOCK 12



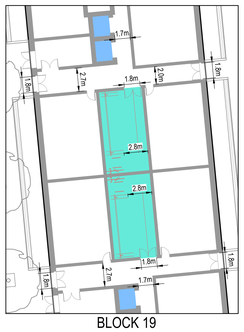
BLOCKS 15 AND 16



BLOCK 17



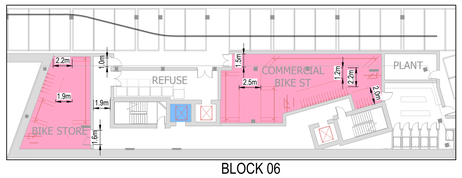
BLOCK 18



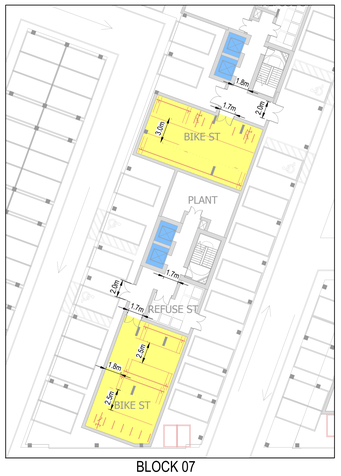
BLOCK 19



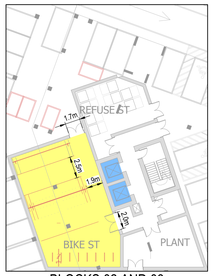
BLOCK 05



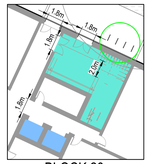
BLOCK 06



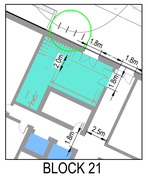
BLOCK 07



BLOCKS 02 AND 03



BLOCK 20



BLOCK 21

KEY

- GROUND LEVEL CYCLE PARKING (EXTERNAL)
- GROUND FLOOR CYCLE PARKING (INTERNAL)
- BASEMENT CYCLE PARKING (RESIDENTIAL)
- BASEMENT CYCLE PARKING (NON- RESIDENTIAL)
- LIFTS FOR ACCESS TO CYCLE STORES
- SHEFFIELD STANDS
- CYCLE STORAGE - STACKING SYSTEM
- CYCLE STORAGE - VERTICAL RACK

CYCLE PARKING BY BLOCK

BLOCK NUMBER	RESIDENTIAL				
	TOTAL UNITS	STUDIO	1 BED	2 BED +	CYCLE PARKING SPACES
01	-	-	-	-	-
02	130	-	26	104	247
03	57	-	9	48	110
04	20	-	-	20	40
05	-	-	-	-	-
06	25	-	4	21	48
07	93	-	19	74	177
08	101	-	21	80	192
09	13	-	-	13	26
10	38	4	8	30	72
11	55	-	11	44	105
12	44	0	3	41	87
13	43	25	15	24	75
14	34	29	8	26	64
15	122	-	92	30	198
16	91	-	24	42	145
17	93	-	27	37	144
18	192	-	53	139	358
19	44	-	-	44	88
20	24	-	3	21	47
21	31	-	3	28	47
22	-	-	-	-	14
TOTAL	1250	58	326	866	2279

CYCLE PARKING BY LAND USE

LAND USE	LONG STAY CYCLE SPACES	SHORT STAY CYCLE SPACES
RESIDENTIAL		
Residential	2279	33
Sub-total	2279	33
NON-RESIDENTIAL		
Office	81	13
Cinema	2	13
Hotel	1	1
Sub-total	84	27
FLEXIBLE USES		
Retail	6	39
Office (B1)	32	5
A3 and A4	16	134
Sub-total	54	178
TOTAL	2417	238
EDUCATION		
School	165	13
TOTAL	2582	251

Mark	Revision	Date	Drawn	Chkd	Appd

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

FOR PLANNING

STAG BREWERY, MORTLAKE
CYCLE PARKING PROVISION

Client

RESELTON PROPERTIES LTD

Stantec

stantec.com/uk

Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600

Date of 1st Issue	Designed	Drawn
18.05.2020	REM	REM
AO Scale	**Checked**	**Approved**
1:1000 / 1:250 @A0	MB	PW

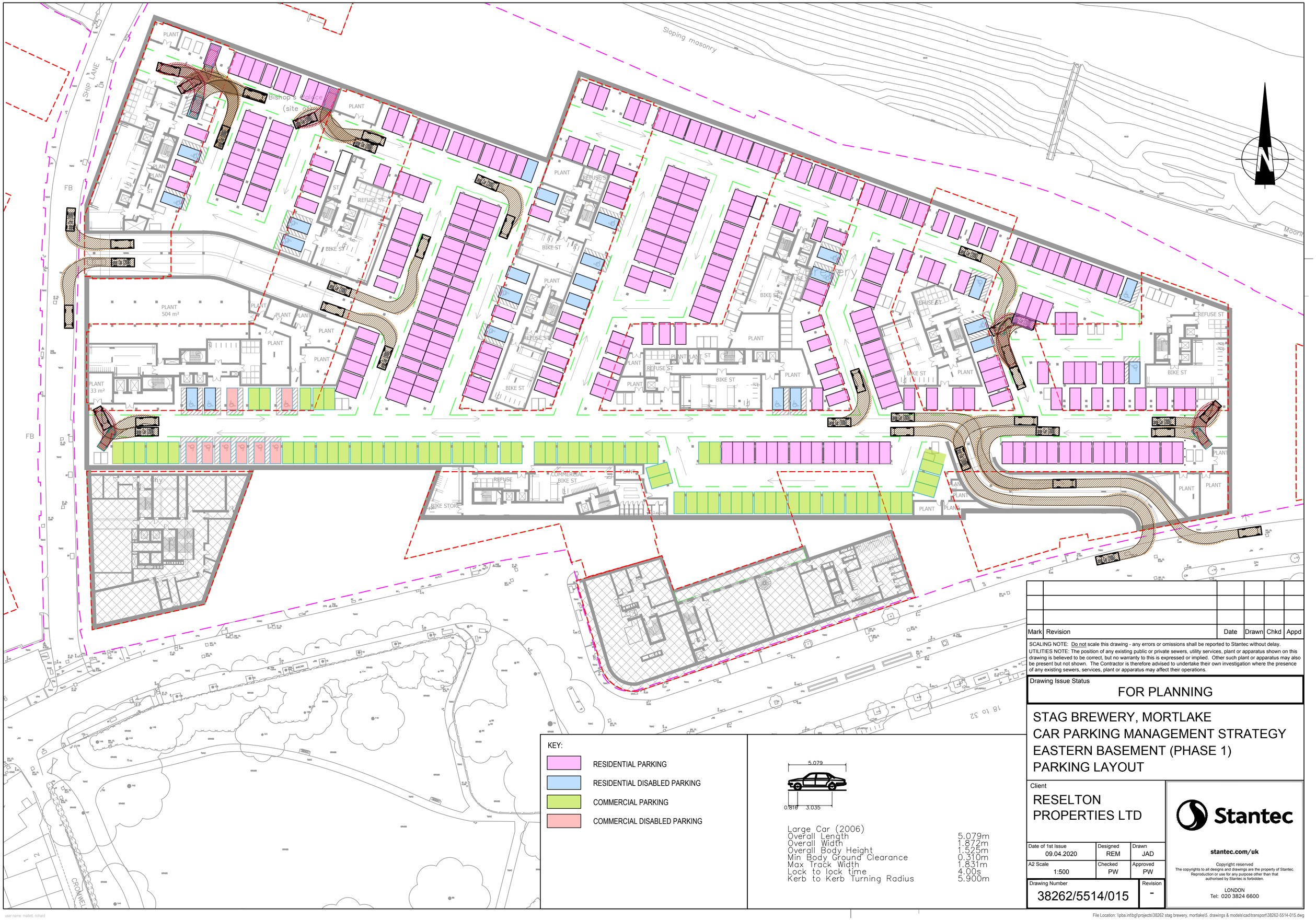
Drawing Number: 38262/5514/025

Revision: -

© Crown copyright and database rights Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Ordnance Survey Stantec

File Location: j:\38262 stag brewery, mortlake\5. drawings & models\cad\transport\38262-5514-025.dwg

Appendix D Car Park & Swept Path Drawings



KEY:

- RESIDENTIAL PARKING
- RESIDENTIAL DISABLED PARKING
- COMMERCIAL PARKING
- COMMERCIAL DISABLED PARKING

Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m

Mark	Revision	Date	Drawn	Chkd	Appd

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status
FOR PLANNING

STAG BREWERY, MORTLAKE
CAR PARKING MANAGEMENT STRATEGY
EASTERN BASEMENT (PHASE 1)
PARKING LAYOUT

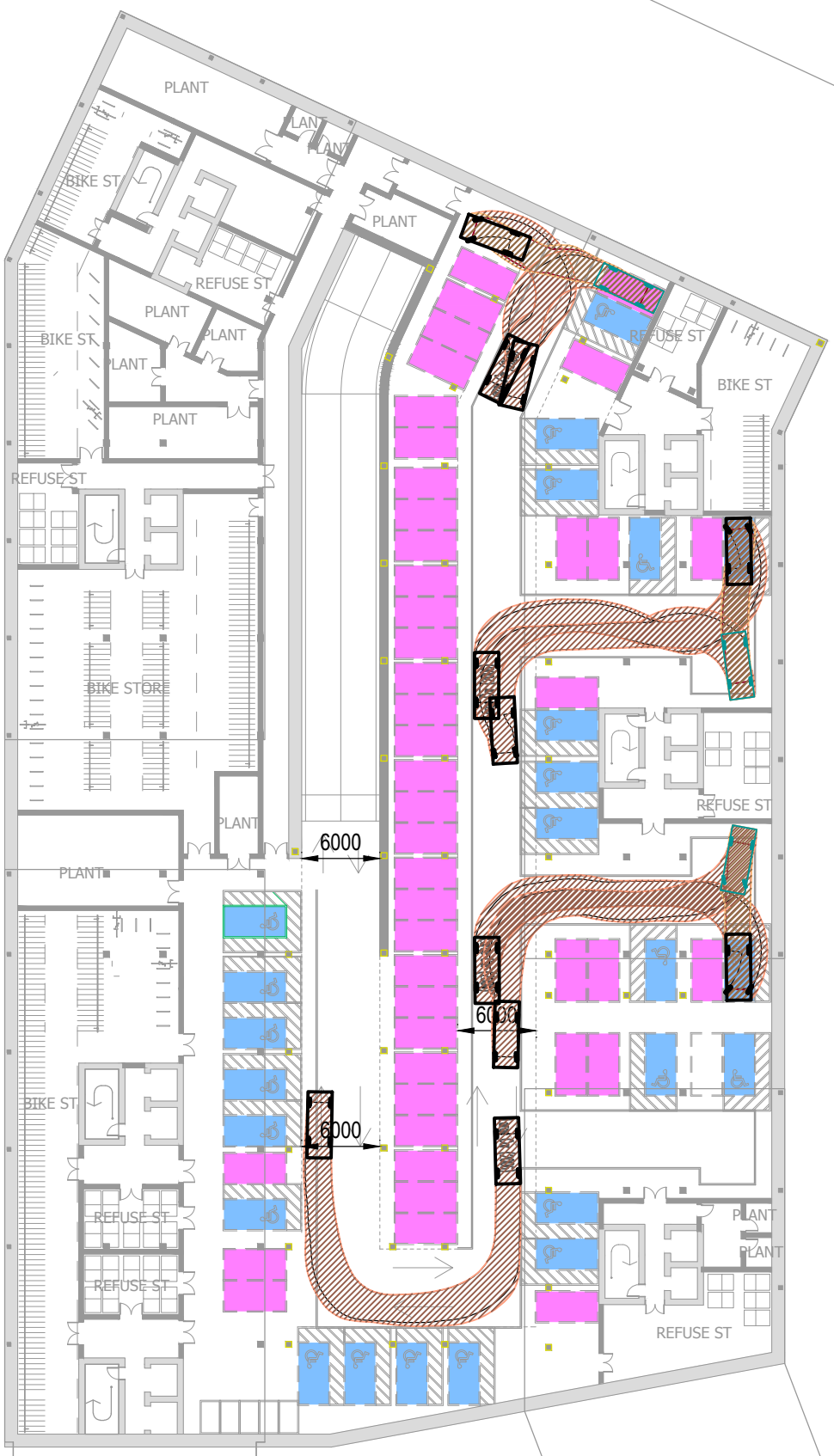
Client
RESELTON PROPERTIES LTD

Date of 1st Issue	Designed	Drawn
09.04.2020	REM	JAD
A2 Scale	Checked	Approved
1:500	PW	PW
Drawing Number		Revision
38262/5514/015		-

Stantec
stantec.com/uk

Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600



KEY:

RESIDENTIAL PARKING

RESIDENTIAL DISABLED PARKING



Large Car (2006)	
Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.900m

Mark	Revision	Date	Drawn	Chkd	Appd

SCALING NOTE: Do not scale this drawing - any errors or omissions shall be reported to Stantec without delay.

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

FOR PLANNING

STAG BREWERY, MORTLAKE
CAR PARKING MANAGEMENT STRATEGY
WESTERN BASEMENT (PHASE 2)
PARKING LAYOUT

Client

RESELTON PROPERTIES

Date of 1st Issue	Designed	Drawn
09.04.2020	REM	REM
A3 Scale	Checked	Approved
1:500	PW	PW
Drawing Number		Revision
38262/5514/016		-

Stantec

stantec.com/uk

Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600

Appendix E Trip Generation Methodology Technical Note 35a

TECHNICAL NOTE

Job Name: Stag Brewery, Mortlake

Job No: 38262

Note No: TN035

Date: April 2020

Prepared By: Matt Bolshaw / Peter Wadey

Subject: **Trip Generation Enlarged Scheme**

1. Introduction

1.1. This technical note has been produced by Stantec on behalf of Resleton Properties to provide an update on the Trip Generation figures for the updated Stag Development project. This note also provides a response to TfL comments received on 10th and 22nd April 2020 regarding initial trip generation work undertaken.

1.2. Following the LBRuT Planning Committee meeting held on 29th January 2020 and resolution to grant planning permission for the original masterplan (Application A) and school (Application B) without the Chalkers Corner scheme (Application C), the Applicant is discussing amendments to the scheme with the GLA, with a view to shortly submitting substitutions to the current scheme, likely to be determined by the GLA following the call in of the Applications. This will include a greater level of affordable housing and reduced car parking. The amended scheme will reduce school vehicle trips following comments from the LBRuT Planning Committee meeting and a review of the operation of the school.

1.3. The LBRuT Planning Committee members resolved to refuse the Chalkers Corner proposals on the basis that the mitigation measures secured under Applications A and B adequately mitigated the adverse impacts to the highway network. Therefore, the Committee considered the Chalkers Corner scheme unnecessary, and that any benefits the scheme may have delivered is outweighed by the negative impacts. In coming to this conclusion, the Committee members, together with speakers from surrounding schools, considered the school trips used in the previous assessment were not realistic and showed a greater impact than what would realistically be caused by a new school.

1.4. This technical note details the proposed changes to the scheme post planning Committee and discusses how the transport strategy has changed in relation to the revised scheme. This includes the proposed trip generation for the development which is discussed in this technical note and includes the following information:

- Existing Site Operation
- Proposed Development
- Development Trip Generation
- Total Trip Generation
- Next Steps

2. Response to TfL Comments

2.1. Stantec received a number of comments on the Trip Generation included in TN034. These include the following together with our response to each.

Table 1: TfL Comments and Stantec Response

Date	TfL Comment	Stantec Response
09/04/20	**1. Existing Site Operation** The TN states that in order to better understand the peak hour flows for the development and to ensure that the daily trips generated by the existing brewery site are robust, additional trip rates have been derived from the TRICS database which have a similar size to Stag. Comparing these peak hour trips with the data provided for the existing Stag Brewery site in terms of total number of vehicles per day, these trips correspond well with 255 vehicles (one-way trips) compared with 277 arriving and 286 departing from the TRICS sites However, the TA clearly states that the figures provided in Table 1 of the TN are from a typical day when the brewery was in full operation. Furthermore, the TRICS survey sites used are between 16-19 years old and are well beyond what is considered to be robust. Please use TRICS to determine the arrival and departure profile and use the Stag Brewery vehicle trips detailed in Table 1. This will result in 28 two-way trips in the Am peak hour and 28 two way trips in the peak hour.	Comment noted. The arrival and departure profiles from the TRICS sites have been used together with the existing Stag Brewery daily vehicle survey data to determine the numbers of peak hour trips on the network. The results are discussed in detail in Chapter 3 of this technical note. Notably the peak hour two-way trips are greater than 28 based on 23% of vehicles arriving and 7% leaving in the AM peak hour. The results have also been compared against the trip rates from the TRICS sites and provide a close comparison indicating that the data represents a good representation of the operation for the Stag Brewery.
09/04/20	**2. Proposed Development** The reduction in residential / non-residential vehicle trips (excluding the school) are logical and are a result in a reduction in car parking spaces. However, it would be useful to have this broken down by use along with the trip rate by use for ease of reference. I would like to see the total person trip generation also.	Noted, trip rates and total person trip generation provided for each land use in section 5 below.
09/04/20	**3. School Trip Generation** In terms of the secondary school trips I've re-read the original methodology and in my mind this was robust. Total person trips based on TRICS then modes share determined by 3 secondary school sites within Richmond as identified by the borough as being compatible.	Noted, we have used the existing methodology with our updated assessment. One of the TRICS sites however has been discounted due to the reasons detailed in Section 5 – School Trip Generation chapter. In addition, two additional schools found on TRICS have been included in the assessment.

	Mode share based on averaged travel plan targets, which have been supplemented with actual travel to school data for two of three schools. For the revised secondary school trips only one of the three previously used schools has been used. A discount has then been applied as it is stated that travel by car will be discouraged. The school already has a travel plan so presumably car travel is already discouraged. The TN states that the future school operator has confirmed that they have experience operating a zero-car travel plan at schools in their current portfolio. There is no information as to where these schools are based or how successful they are, but I don't believe that a school can operate with zero pupil vehicle trips especially at this location. They are likely to transferred to an alternative location. The TN provides two scenarios for the secondary school vehicle trips. The first is the discounted secondary school trips, the second is the zero pupil vehicle trips. Neither scenario is considered to be acceptable and the resultant net development vehicle trips have been underestimated	The zero school trips were shown as a reference however this is not proposed to be used for any detailed analysis. We also agree that zero car trips are unlikely even with measures in place. We have undertaken research into 'car free' schools in other boroughs and have not found data which we can use for comparison. We have however reviewed the information provided for Grey Court School and Christ's School and consider that the Grey Court School car trips is achievable at the proposed Stag Brewery school. Also considering the lack of parking provided on site at the Stag Brewery school and in the surrounding roads following the introduction of the proposed CPZ by LBRuT, this will encourage both staff and students to use alternative means of travel. The school Travel Plan will also be monitored closely with the developer contributing towards the monitoring process to be fully paid. In addition, a Travel Plan bond will be provided as part of the S106, to ensure if the school and development does not meet their targets further investment is made to encourage sustainable travel.
22/04/20	**4. General** The TN includes the trip rates for each use which is helpful however it is noted that the PM trip rate for the residential house does not correspond with the rates detailed in Technical Note 8b. This will need to be updated.	Noted, this has been updated.
22/04/20	**5. Residential Trip Generation** The TN states that residential trips by mode for the proposed enlarged scheme also includes an adjustment for the reduced number of car parking spaces, which includes a 16% reduction in residential car parking spaces within the development. This has resulted in a similar reduction of 16% trips by car from the approved trips, with any additional trips all distributed to other modes based on the existing mode share proportions. However, whilst there is a 16% reduction in residential car parking spaces there will also be a 35% uplift in residential units.	The residential vehicle trip generation has been updated to reflect comments from TfL. This has been based on the arrival and departure profile for residential developments with a low car parking ratio and PTAL of 2 or below. Notably there is higher vehicle movements associated with lower car parking ratios, which has been captured in the analysis. In addition, a 7.5% uplift has also been applied to these figures in line with further recommendations from TfL.

	The reduction in trips by cars referred to above, appears to have been applied to the current application car trips rather than the proposed enlarged application. The reduction between the proposed enlarged application (no adjustment) car trips and the proposed enlarged scheme (with adjustment) (see Table 9) equates to a 54% reduction in car trips in both the AM and PM peak hours. Therefore, the assessment only appears to take account of the reduction in car parking and doesn't make any allowance for car trips associated with the increase in units.	Further details of the calculations used have been provided to TfL by email on 28-04-20.
22/04/20	**6. School Trip Generation** For the secondary school total person trip assessment, the same TRICS/TRAVL survey sites have been used from the original assessment but with the removal of the Southgate school TRAVL site and the inclusion of two additional TRICS sites (HM-04-B-01 and BN-04-B-01). The resultant total person trips are acceptable. For the secondary school mode share only one (Grey Court School) of the three previously used schools has been used. The TN states that there was also data for one other school provided by LBRuT, Christ's School, however this school is approximately 50% of the size and showed that 10.1% of students arrive by car. Due to the proposed school at the Stag Brewery site proposing to introduce measures to encourage less people to drive as part of their Travel Plan and this to be enforced through a S106 contribution. It is considered that the new proposed school will be able to target a much lower car driver %. As highlighted in TfL's previous response the Christ's School already has a Travel Plan which actively seek to discourage car use and is STARS accredited, furthermore the size of the school shouldn't influence mode share. Therefore, TfL would like to see a comparison using the revised total person trips using and previously agreed mode share compared to the 6.2% detailed in the TN.	Noted a comparison has been provided using the previously agreed mode share of 8%.
22/04/20	**7. Other Trip Generation** Based on Table 7 of the TN, it is difficult to establish if the other uses' trips are robust. It is unclear what retail and restaurant floor areas have been used to determine the resultant trips. Where flexible uses are	Further details for the flexible use split are provided on Table 8.

	proposed, TfL expect the worst-case scenario trip rates to be provided for the flexible use classes. The TN states the Gym, Community, Extra Care & Care Home are no longer proposed as part of the updated enlarged scheme; and that for the purposes of the study they have been omitted from the trip generation calculation. As above it is difficult to establish if these are robust given we are unclear what floor areas have been applied to the current scheme. Furthermore, TfL never accepted the car parking associated with the extra care and car home uses so the peak hour vehicle trips are likely to have been over estimated.	Floor areas applied to the current scheme together with person trip rates are provided in Table 7 and 8 respectively. The Gym, Community, Extra Care & Care Home are shown for completeness as the numbers that were used in the current application. Noted that the numbers may have been overestimated previously.

2.1. The following sections include the revised trip generations based on the revised scheme, comments from the LBRuT planning committee and in response to the further comments received from TfL.

3. Existing Site Operation

3.1. As highlighted at the LBRuT Planning Committee it is feasible that the existing site could reopen as a brewery, without the need for planning permission. It was noted by LBRuT Committee members that these trips should be factored into the assessment. These trips were not previously discounted as both TfL and LBRuT wanted to test the most robust assessment. This note however, considers these trips in more detail. This approach was discussed with TfL and the comments received have also been taken into account in regard to the methodology for calculating these trips.

3.2. A snapshot of the daily trips generated by the site, whilst it was operational, were provided by the previous operator to Reselton Properties, based on the operation in 2015, and are shown below.

Table 2: Existing Site Operation – Total No. of Daily One-Way Vehicles

Trip Generator	HGV	Vans	Cars	Total
Brewing	33	3	55	91
Packaging	8	32	0	40
Staff and Other	4	9	111	124
Total	45	44	166	255

3.3. In order to better understand the peak arrival / departure flows for the development and to ensure that the above data is robust, trip rates have been derived from the TRICS database and have included the following comparable Brewery sites (Table 2). Notably these include all Brewery sites that exist on the database that are a similar size to the Stag Brewery. TRICS output data is included as an Appendix to this note.

Table 3: TRICS – Brewery Sites

TRICS Code	Land Use	Location	GFA
DC-02-C-04	Brewery (B2)	Dorchester	19,857
GM-02-C-02	Brewery (B2)	Manchester	33,470
LC-02-C-01	Brewery (B2)	Blackburn	34,581
Stag Brewery	Brewery (B2)	London	36,541

3.4. The arrival / departure pattern for the TRICS Brewery sites are shown in the table below:

Table 4: TRICS Brewery Sites – Arrival / Departure Profile

Time Period	Arrival	Departure
07:00-08:00	10%	2%
08:00-09:00	23%	7%
09:00-10:00	12%	6%
10:00-11:00	7%	7%
11:00-12:00	7%	7%
12:00-13:00	6%	7%
13:00-14:00	11%	10%
14:00-15:00	6%	10%
15:00-16:00	6%	7%
16:00-17:00	4%	14%
17:00-18:00	5%	18%
18:00-19:00	2%	4%
Daily	100%	100%

3.5. Applying the arrival / departure patterns from TRICS have therefore been applied to the Stag Brewery Development trips and provides the following existing vehicular peak hour trips for the development:

Table 5: Existing Development Peak Hour Trips

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily Trips		
	Arrival	Depart	Two-way	Arrival	Depart	Two-way	Arrival	Depart	Two-way
Brewing	21	1	22	5	16	21	91	91	182
Packaging	9	1	10	2	7	9	40	40	80
Staff and Other	29	2	31	6	22	29	124	124	248
Total	59	4	63	13	46	59	255	255	510

3.6. To confirm the accuracy of the trips shown in Table 4 a comparison has been made with the TRICS trip rates for the peak hours. This is included in Table 5 below.

Table 6: Comparison with TRICS Trip Rates

	AM Peak (08:00 – 09:00)			PM Peak (17:00 – 18:00)			Daily Trips		
	Arrival	Depart	Two-way	Arrival	Depart	Two-way	Arrival	Depart	Two-way
TRICS sites - Average Trip Rate	0.173	0.052	0.225	0.036	0.14	0.176	0.758	0.783	1.541
Stag Brewery (36,541 sqm) – Trip Generation	63	19	82	13	51	64	277	286	563
Calculated Existing Development Trips (Table 4)	59	4	63	13	46	59	255	255	510
Difference	-4	-15	-19	0	-5	-5	-22	-31	-53

3.7. The comparison of the Stag Brewery calculated peak hour trips, compares well with the trips extracted from TRICS Brewery sites. The results show that the trips calculated from the daily surveyed flows are slightly less than the trips calculated using the TRICS trip rates and development GFA. Therefore, for the purposes of any analysis the calculated trips shown in Table 4 provide a comparable case for analysis.

4. Proposed Development

4.1. The proposed development includes an increase in residential units in order to provide 30% affordable housing units. There have been changes to the western side of the development with the flexible assisted living/residential units and care home facility becoming residential units and the existing western basement car park being reduced in size, which aligns further with the Mayor's strategy to reduce reliance on cars. The eastern basement remains the same as previously submitted.

4.2. The non-residential element of the eastern side of the development has also been updated with the flexible use land use increasing in size and the cinema reducing in size. The standalone office has also increased in size.

4.3. The following table demonstrates the total floor area of each land use across the site for the revised scheme.

Table 7: Development Land Use Schedule

Land Use	Current Application (GFA / No.)	Proposed Enlarged Scheme (GFA / No.)
Total Residential, (inc. care home / assisted living for current App)	813 units	1,250 units
Detailed Application – Application A (Development Area 1)		
Residential	439 units	576 units
Unspecified Flexible Floor Areas inc, Retail/Restaurant/Office/ Community/Boathouse	4,664 m2	5,023 m2
Office	2,417 m2	5,532 m2
Cinema	2,120 m2	1,606 m2
Hotel	1,668 m2	1,765 m2
Gym	740 m2	-
Outline Application - Application A (Development Area 2)		
Residential (inc. care home / assisted living for current App)	374 units	674 units
Detailed School Application		
School	9,319 m2 (approximately 1,200 pupils)	9,319 m2 (approximately 1,200 pupils)
Total Car Parking	679 Spaces	493 Spaces

4.4. The flexible use relates to a mixture of non-residential land uses that have been applied for as flexible, as the exact use is unknown until they are rented to the end user. This will include further office space, community use, retail, cafes and restaurants. For the purposes of the trip generation exercise a combination of the land uses generating the higher trips, while creating a realistic balance have been assumed. The split used for the purpose of the trip generation is provided in the table below.

Table 8: Flexible Use Land Use Schedule

Flexible Use	GFA	Comment
Office	2,000 m^2	Based on minimum GFA requirement for Office
Retail - Supermarket	568 m^2	Based on known supermarket size
Retail Other	943 m^2	50/50 split with total retail and restaurants with remaining GFA
Restaurant	1,512 m^2	50/50 split with total retail and restaurants with remaining GFA
Total	5,023 m^2	

4.5. Notably as per the previous used methodology only the Convenience Store was considered as part of the Retail land use trip generation. This is based on other Retail units being more local shops and will be mainly for residents and linked trips with the supermarket and restaurants.

4.6. The new development proposals for car parking at the site are as follows:

- 15 school car parking spaces provided for disabled and staff parking (as per the current scheme).
- Residential car parking spaces to be reduced from 479 to 400.
- Non-residential car parking spaces to be reduced from 200 to 78.
- Total car parking reduced from 679 to 493.

4.7. The revised development layout reduces the number of vehicle trips and the impact on Chalkers Corner and the surrounding highway network, while focusing on improvements to the public realm, cycle infrastructure and public transport provision.

5. Development Trip generation

General

5.1. A trip generation assessment has been undertaken to estimate the number of trips to be generated from the development.

5.2. The trips generated for the residential, school, retail, hotel and office land uses have been updated, while the care home and assisted living have been removed. The proposed site generated trip generation is discussed below for each land use.

5.3. Trip rates for the development were approved by TfL as part of the original scheme. These have been retained except for the school trip rates which have been updated and are discussed in the School section of this note. The total person trip rates are provided in the table below for each land use.

Table 9: Approved Development Person Trip Rates

Land Use		Calculation Factor	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
			Arr	Dep	Two Way	Arr	Dep	Two Way
Residential	Private Flat	Per Unit	0.080	0.417	0.497	0.267	0.146	0.413
	Affordable Flat		0.180	0.850	1.030	0.533	0.278	0.811
	Houses		0.239	0.914	1.153	0.239	0.914	1.153
Education		Per Pupil	0.922	0.189	1.111	0.040	0.119	0.158
Retail - Convenience Store		Per 100sqm	41.959	41.443	83.402	57.113	56.289	113.40
Restaurant		Per 100sqm	0.000	0.000	0.000	9.205	8.057	17.262
Hotel		Per Bedroom	0.166	0.438	0.604	0.300	0.252	0.552
Office		Per 100sqm	2.072	0.183	2.255	0.311	2.572	2.883
Cinema		Per Seat	0.000	0.000	0.000	0.204	0.276	0.481
Gym		Per 100sqm	1.535	2.112	3.647	3.996	1.793	5.789
Community Space		Per 100sqm	0.865	0.079	0.944	0.786	0.76	1.546
Health Care		Per 100sqm	1.218	0.295	1.513	0.701	1.366	2.067

5.4. The approved mode shares for each land use have also been retained from the original study.

Residential Trip Generation

5.5. The trip generation for the residential has been calculated using the approved person trip rates from the original application and an exercise has been undertaken to calculate the vehicle trips based on the reduction in the size of the car park. Any additional trips as a result of the increased number of units were re-distributed to other modes of travel.

5.6. The calculation for the vehicle trips for the residential land use has been calculated using the arrival and departure profiles for comparative sites within London. In addition, in order to be robust with the numbers a 7.5% uplift has been applied in accordance with the recommendation provided by TfL.

5.7. The residential trips by mode are shown on the table below for the current and proposed enlarged scheme.

Table 10: Residential Peak Hour Trip Generation

Mode	Current Application						Proposed Enlarged Application (No Adjustment)					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	51	82	133	69	44	112	30	93	123	72	35	107
Walk	17	83	100	52	28	80	50	164	214	109	65	174
Cycle	2	12	14	7	4	11	7	23	30	15	9	24
Bus	9	42	51	27	15	42	25	82	107	55	33	87
Train	10	45	55	29	16	44	27	88	114	58	35	93
Underground	10	45	54	28	16	44	27	87	114	58	35	93
Other	5	24	29	15	8	24	14	47	61	31	19	50
Total	**105**	**332**	**437**	**227**	**131**	**358**	**180**	**584**	**764**	**399**	**230**	**629**

5.8. The results show that there will be a large increase in the total number of residential trips for all modes of travel with the exception of vehicles where trips will be reduced.

School Trip Generation

5.9. During the Planning Committee meeting, members raised a number of concerns over the high number of predicted vehicles to be generated by the school. It was considered that the trips used were overestimating the number to be generated by a secondary school in Mortlake. The committee members were very clear that they would like to see the school drop off trips reduced and have this monitored through the school travel plan.

5.10. Further analysis of other secondary schools in London, show a number of initiatives being introduced to reduce traffic generated by schools. This includes “school streets” in Hackney and a public space protection order (PSPO) scheme in Havering where vehicle trips to schools are discouraged through differing measures.

5.11. The nominated operator for the new secondary school is the Aspiration Academies Trust. They have confirmed that they have experience operating a zero-car travel plan at schools in their current portfolio and advocated that at the Richmond Council planning committee meeting held on 29th January 2020. The applicant has agreed to incorporate a travel plan in the Section 106 Agreement which binds the land for the new school proposed at the subject site.

5.12. The distribution of trips over the day have been calculated using comparable schools on TRICS for secondary schools. Details of the schools together with the peak hour person trip generation is provided on the table below.

Table 11: Person Trips Rates TRICS data for Schools

Ref. Code	School	No. of Students	No. of Staff	Car Parking Spaces	Date of Survey	AM Peak - 08:00 - 09:00			PM Peak - 17:00 - 18:00		
						Arr	Dep	2-way	Arr	Dep	2-way
TRAVL - 850	Crest	1461	152	75	2009	0.986	0.105	1.092	0.038	0.170	0.207
TRAVL - 375	Southgate	1600	141	133	2002	1.383	0.474	1.856	0.080	0.084	0.164
IS-04-B-01	Finsbury Park	850	120	22	2009	0.770	0.028	0.798	0.012	0.091	0.103
LB-04-B-01	Vauxhall	624	34	25	2009	0.750	0.141	0.891	0.029	0.130	0.159
HM-04-B-01	Fulham	610	62	Not known	2002	0.770	0.028	0.798	0.008	0.051	0.059
BN-04-B-01	Barnet	1200	76	Not known	2005	0.821	0.062	0.883	0.013	0.026	0.039
Average (exc. Southgate)						**0.819**	**0.073**	**0.892**	**0.020**	**0.094**	**0.113**

5.13. Notably Southgate school, which was used in the assessment previously has a significantly higher peak hour person trip rate and is not comparable with the other schools. This school was taken from TRAVL data and there is limited information for how the trip rate was derived. Closer analysis of the data shows that with 1,600 students and 141 teachers, it would not be possible to have a person trip rate arrival rate greater than 1.088 even if every teacher and student arrived between 8-9am. It is therefore clear that there must have been another contributing factor to the trip rate. For this reason, Southgate has been discounted and the average of the other 5 schools has been used for the assessment.

5.14. Data has also been obtained from LBRuT for Grey Court School, which is situated in Ham, in the London Borough of Richmond upon Thames. Grey Court School is a similar size to the new school being proposed with 1,246 pupils, although there are 65 parking spaces available for staff, whereas the new school in the Stag development only provides 15 spaces. The results of a travel survey undertaken at the school suggested that 77 pupils (representing 6.2%) travel as a passenger in a car being dropped off. All car parking spaces are used by staff.

5.15. There was also data for one other school provided by LBRuT, Christ's School, which showed that 10.1% of students arrive by car. Due to the proposed school at the Stag Brewery site proposing to introduce measures to encourage less people to drive as part of their Travel Plan and this to be enforced through a S106 contribution. It is considered that the new proposed school will be able to target a much lower car driver %.

5.16. In addition, while LBRuT committee members and school representatives believe that the car driver trips should be significantly less, it is noted that TfL do not support this approach. In order to provide a more balanced approach it is proposed to use Grey Court School for the trip generation calculation, with the knowledge that this school already has an active Travel Plan in place and the new proposed school will have a Travel Plan target for 5% of pupils to travel by car. However, following further discussion with TfL as a comparison the trip generation using the previous car driver mode split of 8% has also been analysed.

5.17. The proposed school trip generation for the school calculated using the average person trips and applying the 6.2% and 8% vehicle mode share is provided on the two tables below. Notably the overall trips during the peak hours has reduced slightly, which is as a result of removing the Southgate school from the analysis.

Table 12: School Peak Hour Trip Generation – 6.2% Vehicle Mode Share

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	105	85	191	12	27	39	65	55	119	7	12	19
Walk	372	30	402	16	48	64	339	30	370	8	39	47
Cycle	23	2	25	1	3	4	21	2	23	1	2	3
Bus	523	43	566	22	67	90	477	42	520	12	54	66
Train	70	6	75	3	9	12	64	6	69	2	7	9
Underground	0	0	0	0	0	0	0	1	2	0	1	2
Other	15	1	16	1	2	3	21	2	23	1	2	3
Total	**1108**	**167**	**1275**	**55**	**156**	**211**	**987**	**138**	**1126**	**29**	**118**	**149**

Table 13: School Peak Hour Trip Generation – 8.0% Vehicle Mode Share

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	105	85	191	12	27	39	81	71	152	9	14	23
Walk	372	30	402	16	48	64	333	30	362	8	38	46
Cycle	23	2	25	1	3	4	21	2	23	1	2	3
Bus	523	43	566	22	67	90	468	42	510	11	53	65
Train	70	6	75	3	9	12	62	6	68	2	7	9
Underground	0	0	0	0	0	0	0	1	2	0	1	2
Other	15	1	16	1	2	3	21	2	23	1	2	3
Total	**1108**	**167**	**1275**	**55**	**156**	**211**	**985**	**152**	**1139**	**31**	**118**	**150**

5.18. Notably the total trips increase with the higher % car mode share, which is related to the car passenger trips being assigned to both the arrival and departure routes, as parents pick up and drop off their children and arrive and depart in the same peak hour.

Retail Trip Generation

5.19. The table below shows the retail trips calculated for the current application and the proposed enlarged scheme.

5.20. The results indicate that there is no change in the number of trips as the retail element forms part of the flexible use and has been based on convenience store, with the same GFA as previous.

Table 14: Retail Peak Hour Trip Generation

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	7	6	13	8	10	18	7	6	13	8	10	18
Walk	185	183	368	252	248	500	185	183	368	252	248	500
Cycle	3	3	7	5	4	9	3	3	7	5	4	9
Bus	23	23	45	31	31	62	23	23	45	31	31	62
Train	21	20	41	28	28	56	21	20	41	28	28	56
Underground	0	0	0	0	0	0	0	0	0	0	0	0
Other	1	1	3	2	2	4	1	1	3	2	2	4
Total	**241**	**237**	**477**	**326**	**323**	**649**	**241**	**237**	**477**	**326**	**323**	**649**

Restaurant Trip Generation

5.21. The table below shows the restaurant trips calculated for the current application and the proposed enlarged scheme.

5.22. Notably the restaurant GFA as part of the flexible use is considered to increase. This has resulted in an increase in development trips for restaurant land use.

Table 15: Restaurant Peak Hour Trip Generation

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	0	0	0	3	2	5	0	0	0	7	6	14
Walk	0	0	0	51	45	96	0	0	0	70	62	132
Cycle	0	0	0	2	1	3	0	0	0	2	2	4
Bus	0	0	0	6	5	12	0	0	0	8	7	16
Train	0	0	0	33	29	62	0	0	0	46	40	86
Underground	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	4	3	7	0	0	0	5	5	10
Total	**0**	**0**	**0**	**99**	**86**	**185**	**0**	**0**	**0**	**139**	**122**	**261**

Hotel Trip Generation

5.23. The table below shows the hotel trips calculated for the current application and the proposed enlarged scheme.

5.24. Due to the proposed number of rooms remaining the same there is no change to the hotel trips.

Table 16: Hotel Peak Hour Trip Generation

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	0	1	1	1	0	1	0	1	1	1	0	1
Walk	0	1	1	0	0	1	0	1	1	0	0	1
Cycle	0	0	0	0	0	0	0	0	0	0	0	0
Bus	0	1	1	1	1	1	0	1	1	1	1	1
Train	1	2	3	2	1	3	1	2	3	2	1	3
Underground	0	0	0	0	0	0	0	0	0	0	0	0
Other	1	2	2	1	1	2	1	2	2	1	1	2
Total	**3**	**7**	**9**	**5**	**4**	**8**	**3**	**7**	**9**	**5**	**4**	**8**

Office Trip Generation

5.25. The table below shows the office trips calculated for the current application and the proposed enlarged scheme.

Table 17: Office Peak Hour Trip Generation

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	17	3	20	5	18	23	34	3	37	5	43	48
Walk	13	1	14	1	13	15	17	1	18	2	20	23
Cycle	6	0	7	1	7	7	8	1	9	1	10	11
Bus	14	1	15	2	17	19	23	2	25	3	29	32
Train	34	3	37	5	42	47	57	5	63	9	71	80
Underground	0	0	0	0	0	0	0	0	0	0	0	0
Other	8	1	9	1	10	11	16	1	18	2	20	23
Total	**92**	**10**	**101**	**16**	**107**	**122**	**156**	**14**	**170**	**23**	**194**	**217**

5.26. The office land use has increased in size resulting in an increase in the number of trips for all land uses. While there is a limited number of car parking spaces available for non-residential use, to be robust the vehicle trip rate has not been adjusted.

Cinema Trip Generation

5.27. The table below shows the cinema trips calculated for the current application and the proposed enlarged scheme.

5.28. The cinema trips will reduce as a result of less area being provided for the cinema.

Table 18: Cinema Peak Hour Trip Generation

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	0	0	0	8	11	20	0	0	0	6	9	15
Walk	0	0	0	46	40	86	0	0	0	35	31	65
Cycle	0	0	0	5	4	9	0	0	0	4	3	7
Bus	0	0	0	11	14	25	0	0	0	8	11	19
Train	0	0	0	26	36	62	0	0	0	20	27	47
Underground	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	8	10	18	0	0	0	6	8	13
Total	**0**	**0**	**0**	**104**	**116**	**220**	**0**	**0**	**0**	**79**	**88**	**167**

Gym, Community, Extra Care & Care Home Trip Generation

5.29. The Gym, Community, Extra Care & Care Home are no longer proposed as part of the updated enlarged scheme, unless they form part of the flexible use in the future. For the purposes of the study they have been omitted from the trip generation calculation.

5.30. The table below shows the trips calculated for the current application and the proposed enlarged scheme.

Table 19: Gym, Community, Extra Care & Care Home Peak Hour Trip Generation

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	8	9	17	7	7	14	0	0	0	0	0	0
Walk	22	15	37	26	20	46	0	0	0	0	0	0
Cycle	3	3	6	5	3	8	0	0	0	0	0	0
Bus	4	4	8	6	5	11	0	0	0	0	0	0
Train	5	6	11	12	6	18	0	0	0	0	0	0
Underground	0	0	0	0	0	0	0	0	0	0	0	0
Other	6	6	12	5	6	11	0	0	0	0	0	0
Total	**48**	**43**	**91**	**62**	**46**	**107**	**0**	**0**	**0**	**0**	**0**	**0**

6. Total Trip Generation

6.1. The total trip generation for the site has been calculated by adding all of the development land uses together. This includes a comparison of the current application and the proposed enlarged scheme development trips with either 6.8% or 8.0% of school children arriving by car. This is provided on the tables below:

Table 20: Total Peak Hour Trip Generation – 6.8% Vehicle Mode Share for School

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	188	186	374	113	120	232	136	157	294	106	115	221
Walk	609	313	923	445	443	888	591	379	970	477	465	943
Cycle	38	21	59	26	27	52	40	29	69	28	32	59
Bus	573	114	687	106	154	261	549	150	699	118	166	284
Train	140	83	222	138	166	304	169	121	291	164	210	374
Underground	10	45	54	28	16	44	27	88	116	58	36	95
Other	37	35	71	36	43	79	54	53	107	48	57	105
Total	**1596**	**796**	**2391**	**893**	**969**	**1862**	**1566**	**979**	**2546**	**999**	**1079**	**2080**

Table 21: Total Peak Hour Trip Generation – 8.0% Vehicle Mode Share for School

Mode	Current Application						Proposed Enlarged Application					
	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00			AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way	Arr	Dep	2-way
Vehicle	188	186	374	113	120	232	153	174	326	108	117	225
Walk	609	313	923	445	443	888	585	378	963	477	465	942
Cycle	38	21	59	26	27	52	39	29	69	28	32	59
Bus	573	114	687	106	154	261	539	150	689	118	164	282
Train	140	83	222	138	166	304	168	121	289	164	210	374
Underground	10	45	54	28	16	44	27	88	116	58	36	95
Other	37	35	71	36	43	79	54	53	107	48	57	105
Total	**1596**	**796**	**2391**	**893**	**969**	**1862**	**1564**	**994**	**2559**	**1001**	**1079**	**2081**

6.2. The existing development trips calculated earlier are proposed to be used for the purposes of modelling the baseline condition in the future year. No existing development trips by any other modes, except vehicles are proposed to be used in any other assessments.

7. Summary

7.1. This technical note has been produced by Stantec on behalf of Resleton Properties to provide an update on the Trip Generation figures for the updated Stag Development project. This note also provides a response to TfL comments received on 10th and 22nd April 2020 regarding initial trip generation work undertaken.

7.2. Following the LBRuT Planning Committee meeting held on 29th January 2020 and resolution to grant planning permission for the masterplan (Application A) and the school (Application B) without the Chalkers Corner scheme (Application C), the Applicant is discussing amendments to the scheme with the GLA, with a view to shortly submitting substitutions to the current scheme, likely to be determined by the GLA following call in of the Applications. This will include a greater level of affordable housing and a reduction in the number of car parking spaces.

7.3. The trip generation assessment has been updated including comments from the Committee members and School representatives, resulting in a review of the predicted school trips generated by the development. In addition, a reduction in the size of the western car park has contributed to less vehicle peak hour trips being generated by the development, with other mode choices being utilised as an alternative.

7.4. Overall, there is an increase in peak hour trips added onto the network for the enlarged scheme in comparison with the current application. This includes a decrease in vehicular trips and an increase in trips for all other modes.

Appendix F TfL Trip Generation Approval

RE: Stag Brewery - Revised Trip Generation

SL

Simpson Lucy <LucySimpson@tfl.gov.uk>
To Wadey, Peter
Cc Callaghan, Greg; Bradshaw Alison; Miklasz Michal

Reply | Reply All | Forward | ...

Tue 05/05/2020 17:32

You replied to this message on 05/05/2020 19:21.

Hi Peter,
Thank you for this and sorry for the delay in coming back to you. I can now confirm that the trip generation assessment is acceptable subject to using the higher vehicle mode share for the school. We would also like a sensitivity which uses the original school trips given these were not disputed as part of the original application.

Kind regards

Lucy

Appendix G Proposed Highway Plans

Traffic lane 106m long

Existing bus stop retained

New bus stop

Approximate extent of existing uncontrolled on-street parking - 122m

Area reserved for potential future bus terminus

Existing Zebra crossing to have surface raised

Existing on-street parking

FOR CONTINUATION SEE BOTTOM PANEL

Relocated signal controlled crossing with raised surface

Proposed raised crossing point

Nearside & offside lanes 73m long

Relocated bus stands (for 3 buses)

Proposed Zebra crossing with raised surface

Relocated bus stop with new shelter

New right turn lane

Location of access to underground car park

Existing parking bays retained

Car Club bays

Proposed raised crossing point and bellmouth narrowing

Existing bus stop and shelter to be removed

Relocated bus stop with new shelter

Existing bus stop and shelter to be removed

New footpath link to crossing

Existing signal controlled crossing to be removed

Proposed raised crossing point

Existing refuge enlarged

New 'KEEP CLEAR' markings on roundabout

Proposed bus stop to accommodate 2 buses Existing shelter to be replaced with new shelter in new position

Proposed raised crossing point

Area reserved for potential future bus terminus

Existing bus stop and shelter to be relocated

Existing Zebra crossing to have surface raised

Existing on-street parking

FOR CONTINUATION SEE TOP PANEL

Existing Zebra crossing to have surface raised

© Crown copyright and database rights Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Ordnance Survey

Mark	Revision	Date	Drawn	Chkd	Appd

ns shall be reported to Stantec without delay.

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

DRAFT FOR DISCUSSION

STAG BREWERY, MORTLAKE LOWER RICHMOND ROAD AND MORTLAKE HIGH STREET SCENARIO 1 - DO MINIMUM

Client

RESELTON PROPERTIES LTD

Date of 1st Issue	Designed	Drawn
22.04.2020	REM	REM
Scale	Checked	Approved
1:500 @A0	PW	PW

Drawing Number: 38262/5514/020

Revision: -

Stantec

stantec.com/uk

Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600

File Location: j:\38262 stag brewery, mortlake\5. drawings & models\cad\transport\38262-5514-020.dwg

Stop line moved 5.7m closer to junction

Stop line moved 2.5m closer to junction

Stop line moved 4.8m closer to junction

Existing tree to be removed

Proposed trees

Flare lane provided on junction approach 18m long

Both lanes approx. 105m long

Existing bus stop retained

New bus stop

Approximate extent of existing uncontrolled on-street parking - 122m

Existing Zebra crossing to have surface raised

Area reserved for potential future bus terminus

Existing on-street parking

FOR CONTINUATION SEE BOTTOM PANEL

Relocated signal controlled crossing with raised surface

Proposed raised crossing point

Nearside & offside lanes 73m long

Relocated bus stands (for 3 buses)

Proposed Zebra crossing with raised surface

Relocated bus stop with new shelter

New right turn lane

Location of access to underground car park

Existing parking bays retained

Car Club bays

Proposed raised crossing point and bellmouth narrowing

Existing bus stop and shelter to be removed

Relocated bus stop with new shelter

Existing bus stop and shelter to be removed

New footpath link to crossing

Existing signal controlled crossing to be removed

Proposed raised crossing point

Existing refuge enlarged

New 'KEEP CLEAR' markings on roundabout

Proposed bus stop to accommodate 2 buses Existing shelter to be replaced with new shelter in new position

Proposed raised crossing point

Existing bus stop and shelter to be relocated

Existing Zebra crossing to have surface raised

Existing on-street parking

FOR CONTINUATION SEE TOP PANEL

Area reserved for potential future bus terminus

Existing Zebra crossing to have surface raised

Existing on-street parking

FOR CONTINUATION SEE BOTTOM PANEL

© Crown copyright and database rights Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Ordnance Survey

Mark	Revision	Date	Drawn	Chkd	Appd
A	TREES AND LANDSCAPING ADDED	20.05.20	REM	PW	PW

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

DRAFT FOR DISCUSSION

STAG BREWERY, MORTLAKE LOWER RICHMOND ROAD AND MORTLAKE HIGH STREET

SCENARIO 2 - CHALKERS CORNER IMPROVEMENT

Client

RESELTON PROPERTIES LTD

Stantec

stantec.com/uk

Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600

Date of 1st Issue	Designed	Drawn
22.04.2020	REM	REM
Scale	Checked	Approved
1:500 @A0	PW	PW

Drawing Number: 38262/5514/021 Revision: A

Existing bus stop improved with new clearway marking (N.B. 3 parking spaces will be lost)

Existing bus stop retained

Traffic lanes 60m long

New nearside bus lane

Approximate extent of existing uncontrolled on-street parking - 122m

Existing on-street parking to be retained. Time restrictions will be required to coincide with bus lane operation times.

New nearside bus lane

Proposed flat top hump to facilitate pedestrian access to parking bays

Existing Zebra crossing to have surface raised and islands removed to create space for traffic lane

Existing on-street parking to be retained. Time restrictions will be required to coincide with bus lane operation times.

Area reserved for potential future bus terminus

FOR CONTINUATION SEE BOTTOM PANEL

Relocated signal controlled crossing with raised surface

Proposed raised crossing point

Nearside & offside lanes 73m long

Relocated bus stands (for 3 buses)

Proposed Zebra crossing with raised surface

Relocated bus stop with new shelter

Location of access to underground car park

New right turn lane

Existing parking bays retained

Car Club bays

Proposed raised crossing point and bellmouth narrowing

Existing bus stop and shelter to be removed

Relocated bus stop with new shelter

Existing bus stop and shelter to be removed

New footpath link to crossing

Existing signal controlled crossing to be removed

Proposed raised crossing point

Existing refuge enlarged

New 'KEEP CLEAR' markings on roundabout

Proposed bus stop to accommodate 2 buses Existing shelter to be replaced with new shelter in new position

Proposed raised crossing point

Existing bus stop and shelter to be relocated

Existing Zebra crossing to have surface raised

FOR CONTINUATION SEE TOP PANEL

Area reserved for potential future bus terminus

Existing Zebra crossing to have surface raised and islands removed to create space for traffic lane

Existing on-street parking to be retained. Time restrictions will be required to coincide with bus lane operation times.

© Crown copyright and database rights Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Ordnance Survey

Mark	Revision	Date	Drawn	Chkd	Appd
B	BUS LANE WESTERN EXTENT REVISED	20.05.20	REM	PW	PW
A	WILLIAMS LANE & LRR PARKING REVISED, NOTES UPDATED	28.04.20	REM	PW	PW

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

DRAFT FOR DISCUSSION

STAG BREWERY, MORTLAKE
LOWER RICHMOND ROAD AND MORTLAKE HIGH STREET
SCENARIO 3 - POSSIBLE BUS LANE LAYOUT

Client

RESELTON PROPERTIES LTD

Stantec

stantec.com/uk

Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600

Date of 1st Issue	Designed	Drawn
22.04.2020	REM	REM
Scale	Checked	Approved
1:500 @A0	PW	PW

Drawing Number: 38262/5514/022

Revision: B

Stop line moved 5.7m closer to junction

Stop line moved 2.5m closer to junction

Stop line moved 4.8m closer to junction

Existing tree to be removed

Proposed trees

Flare lane provided on junction approach 18m long

Traffic lanes 60m long

New nearside bus lane

Existing bus stop improved with new clearway marking (N.B. 3 parking spaces will be lost)

Existing bus stop retained

New nearside bus lane

Approximate extent of existing uncontrolled on-street parking - 122m

Existing on-street parking to be retained. Time restrictions will be required to coincide with bus lane operation times.

Proposed flat top hump to facilitate pedestrian access to parking bays

Area reserved for potential future bus terminus

FOR CONTINUATION SEE BOTTOM PANEL

Existing Zebra crossing to have surface raised and islands removed to create space for traffic lane

Existing bus stop and shelter to be removed

Existing on-street parking to be retained. Time restrictions will be required to coincide with bus lane operation times.

Sports Ground

1 to 12 Southside Apartments

Chertsey Court

Lady Elizabeth House

Day Care Centre

Employment Development Centre

Relocated signal controlled crossing with raised surface

Proposed raised crossing point

New nearside bus lane

Nearside & offside lanes 73m long

Relocated bus stands (for 3 buses)

Proposed Zebra crossing with raised surface

Relocated bus stop with new shelter

Location of access to underground car park

New right turn lane

Existing parking bays retained

Car Club bays

Proposed raised crossing point and bellmouth narrowing

Existing bus stop and shelter to be removed

Relocated bus stop with new shelter

Mortlake Busines Centre

Sorting Office

Proposed bus stop to accommodate 2 buses Existing shelter to be replaced with new shelter in new position

Existing signal controlled crossing to be removed

New footpath link to crossing

Existing refuge enlarged

New 'KEEP CLEAR' markings on roundabout

Proposed raised crossing point

Existing Zebra crossing to have surface raised

Scrap Yard

Playground

Kendal Court

Woodbine Cottage

Sea Scouts Centre

Girl Guides Centre

Scout Hut

Information Bureau

Nursery

Butler House

Rann

FOR CONTINUATION SEE TOP PANEL

Mark	Revision	Date	Drawn	Chkd	Appd
B	BUS LANE WESTERN EXTENT REVISED. TREES ADDED	20.05.20	REM	PW	PW
A	WILLIAMS LANE & LRR PARKING REVISED, NOTES UPDATED	28.04.20	REM	PW	PW

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

DRAFT FOR DISCUSSION

STAG BREWERY, MORTLAKE LOWER RICHMOND ROAD AND MORTLAKE HIGH STREET SCENARIO 4 - COMBINED IMPROVEMENTS

Client

RESELTON PROPERTIES LTD

Stantec

stantec.com/uk

Date of 1st Issue	Designed	Drawn
22.04.2020	REM	REM
Scale	Checked	Approved
1:500 @A0	PW	PW

Drawing Number: 38262/5514/023

Revision: B

© Crown copyright and database rights Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Ordnance Survey.

Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600

File Location: j:\38262 stag brewery, mortlake\5. drawings & models\cad\transport\38262-5514-023-b.dwg

Verge / utility strip / potential footway
Town houses to have private driveways
Informal on-street parking retained
Carriageway widening to ensure space for two-way movements
Shared footpath / cycleway
Proposed raised crossing point
On-street parking spaces
Visitor car park
Sports Ground
Existing kerb line and wall retained
Location of access to underground car park
Proposed raised crossing point
Shared footpath / cycleway
Proposed bus stop to accommodate 2 buses. Existing shelter to be replaced with new shelter in new position
Proposed right turn lane
Proposed raised crossing point
Proposed Zebra crossing with raised surface
Existing parking bay to be retained
New dropped kerb access to no. 43 Oliver House
Relocated bus stop with realigned kerb and new shelter
Existing Zebra crossing to have surface raised
Existing on-street parking retained
Relocated signal controlled crossing with raised surface
Proposed raised crossing point
Existing bus stop and shelter to be removed
New footpath link to crossing
Existing footpath to be removed and landscaped
Existing signal controlled crossing to be removed
Footpath / cycle path widening to be agreed with LBRuT Parks Team
Existing refuge enlarged
New 'KEEP CLEAR' markings on roundabout
Existing Zebra crossing to have surface raised
Additional bridge signage to indicate alternative route for pedestrians to use footbridge rather than wait for barriers
Improve lighting and general refurbishment of existing footbridge
Set back stop lines to create advance areas for cyclists
Move bollards back to provide an increased area with enhanced paving for pedestrians to wait whilst the barriers are down.
On-street parking spaces
Proposed enhancement works along Thames Path
Location of access to underground car park
Nearside & offside lanes 73m long
Relocated bus stands (for 3 buses)
Proposed Zebra crossing with raised surface
Relocated bus stop with new shelter
Proposed raised crossing points
New right turn lane
Proposed raised crossing point
Existing parking bays retained
Car Club bays
Proposed raised crossing point and bellmouth narrowing
Existing bus stop and shelter to be removed
Relocated bus stop with new shelter

KEY:

- BUILDINGS
- CARRIAGEWAY
- SHARED SURFACE AREAS
- PEDESTRIAN AREAS
- SHARED FOOTWAY
- BUS STOPS AND BUS STANDS
- BUS SHELTERS
- GRASSED AREAS
- PLANTING (HEDGES & SHRUBS)
- CYCLE PARKING LOCATIONS

Mark	Revision	Date	Drawn	Chkd	Appd

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

FOR PLANNING

STAG BREWERY, MORTLAKE
ILLUSTRATIVE HIGHWAY LAYOUT
LOWER RICHMOND RD/MORTLAKE HIGH ST

Client
RESELTON PROPERTIES LTD

Date of 1st Issue	Designed	Drawn
07.07.2020	REM	REM
A0 Scale	Checked	Approved
1:500 @A0	PW	PW

Drawing Number: 38262/5514/026
Revision: -

Stantec
stantec.com/uk

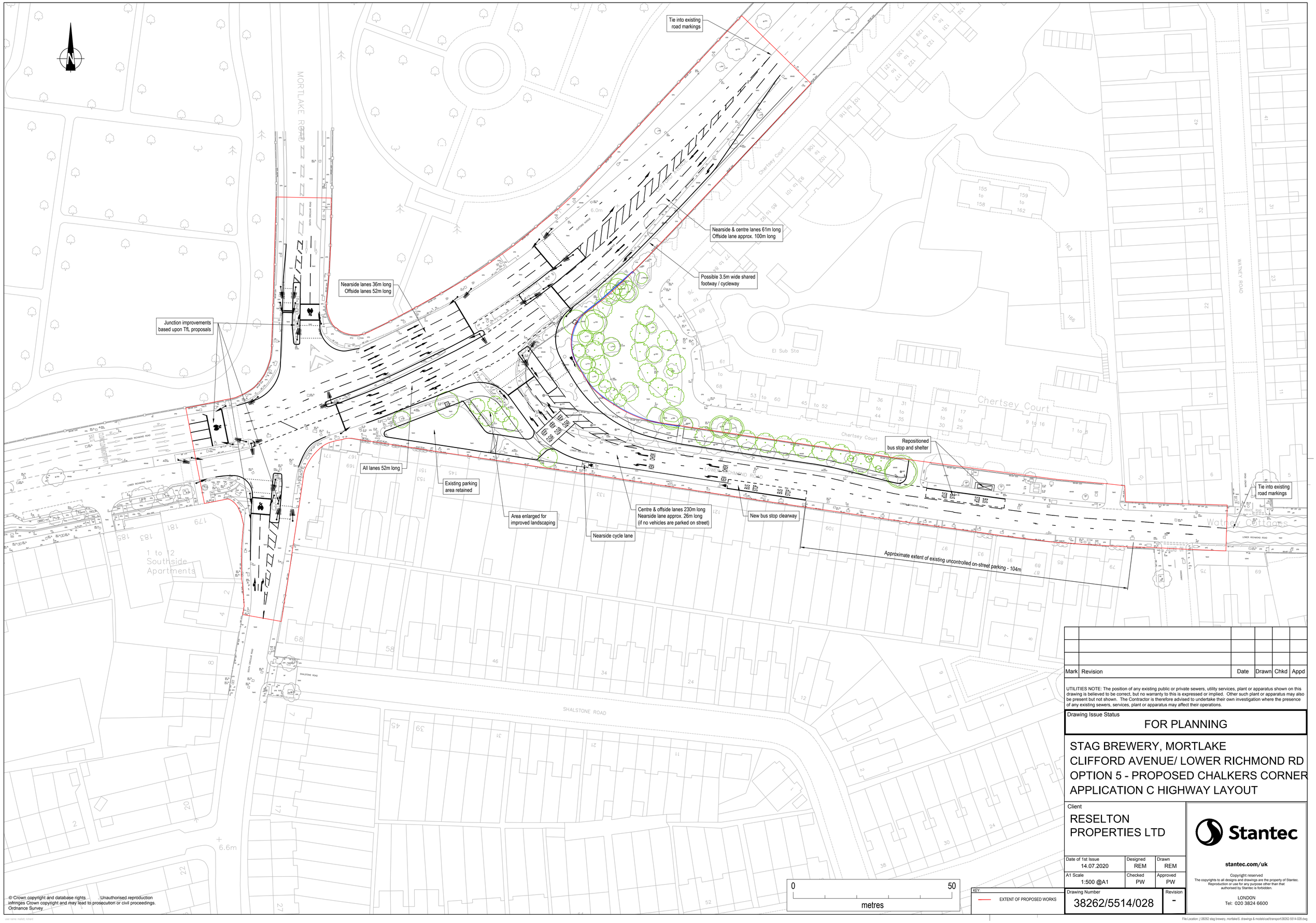
Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600

0 50
metres

© Crown copyright and database rights Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Ordinance Survey Stantec.

File Location: j:\38262-stag brewery, mortlake\3. drawings & models\acad\transport\38262-5514-026.dwg



Mark	Revision	Date	Drawn	Chkd	Appd

UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status

FOR PLANNING

STAG BREWERY, MORTLAKE
CLIFFORD AVENUE/ LOWER RICHMOND RD
OPTION 5 - PROPOSED CHALKERS CORNER
APPLICATION C HIGHWAY LAYOUT

Client

RESELTON PROPERTIES LTD

Date of 1st Issue	Designed	Drawn
14.07.2020	REM	REM
A1 Scale	Checked	Approved
1:500 @A1	PW	PW
Drawing Number		Revision
38262/5514/028		-

0 50 metres

KEY:
EXTENT OF PROPOSED WORKS

Stantec

stantec.com/uk

Copyright reserved
The copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorised by Stantec is forbidden.

LONDON
Tel: 020 3824 6600

© Crown copyright and database rights Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Ordnance Survey

user name: mallett, richard

File Location: j:\38262 stag brewery, mortlake\5. drawings & models\cad\transport\38262-5514-028.dwg

Appendix H TfL Modelling Expectations Report

Stag Brewery, Richmond

Modelling Expectations Document

11/03/2020



EVERY JOURNEY MATTERS

Modelling Expectations for Stag Brewery, Richmond

Scheme Summary

The proposals constitute redevelopment of area around Stag Brewery Mortlake in Richmond. The red line boundary covers land either side of Ship Lane with main site bounded by River Thames along the northern perimeter and by Lower Richmond Road from the south. The nearest TLRN network is A316 GREAT CHERTSEY ROAD and A205 CLIFFORD AVENUE. Proximity of TLRN network to the site is shown in figure below.



The application is supported by a Transport Assessment(**TA**)[1] dated back to February 2018 setting out development traffic and highway design changes associated with the proposals. In essence the application seeks approval for following:

- *Application A - A hybrid application to include the demolition of existing buildings to*

[1] TA Part 1.pdf

allow for the comprehensive phased redevelopment of the Site.

- *Application B - A detailed planning application for the school (on land to the west of Ship Lane).*
- *Application C - detailed planning application for highways and landscape works at Chalkers Corner.*

At present the applicant and TFL is assessing possibility of using survey data as collected in 2017 by the applicant for purpose of TA. Thus there is no exact reference in modelling scope as to what survey dates are expected to be used.

Study Area

As discussed with TfL Network Performance team the study area must include SCOOT region R278 (Chalkers Corner) as well as R578 (Clifton Avenue/ Upper Richmond Road) and partially R620 (A316 Chertsey Road) as shown on the figure below (Figure 1). At present it is expected that following signalised junction within the required SCOOT regions:

- 24/ 011 & 24/201 & 24/202 - A205 CLIFFORD AVENUE - A205 MORTLAKE RD - A316 LOWER RICHMOND ROAD - CHALKERS CORNER;
- 24/199 & 24/200) - (A316 CLIFFORD AVENUE - A3003 LOWER RICHMOND ROAD - CHALKERS CORNER)
- 25/068 - GREAT CHERTSEY ROAD - HARTINGTON ROAD - DAN MASON WAY
- 24/147 - A205 CLIFFORD AVENUE BY TANGIER ROAD (NEARSIDE TOUCAN)
- 24/004 - A205 UPPER RICHMOND ROAD WEST - A205 CLIFFORD AVENUE
- 24/215 - A205 UPPER RICHMOND ROAD BY DEANHILL ROAD BY GRAEMESDYKE AVENUE

Priority junctions that should also be incorporated in modelling scope are as follows:

- Sheen Lane/ Lower Richmond Road/ Mortlake High Street
- Any new/existing development access roads (either signalised or priority controlled)

If necessary, entry links should be extended so that all vehicles can enter the network and consideration should be given to whether the proposal might increase queuing. The links should be long enough so that a journey time marker can be placed beyond the back of the queue in both base and proposed models.

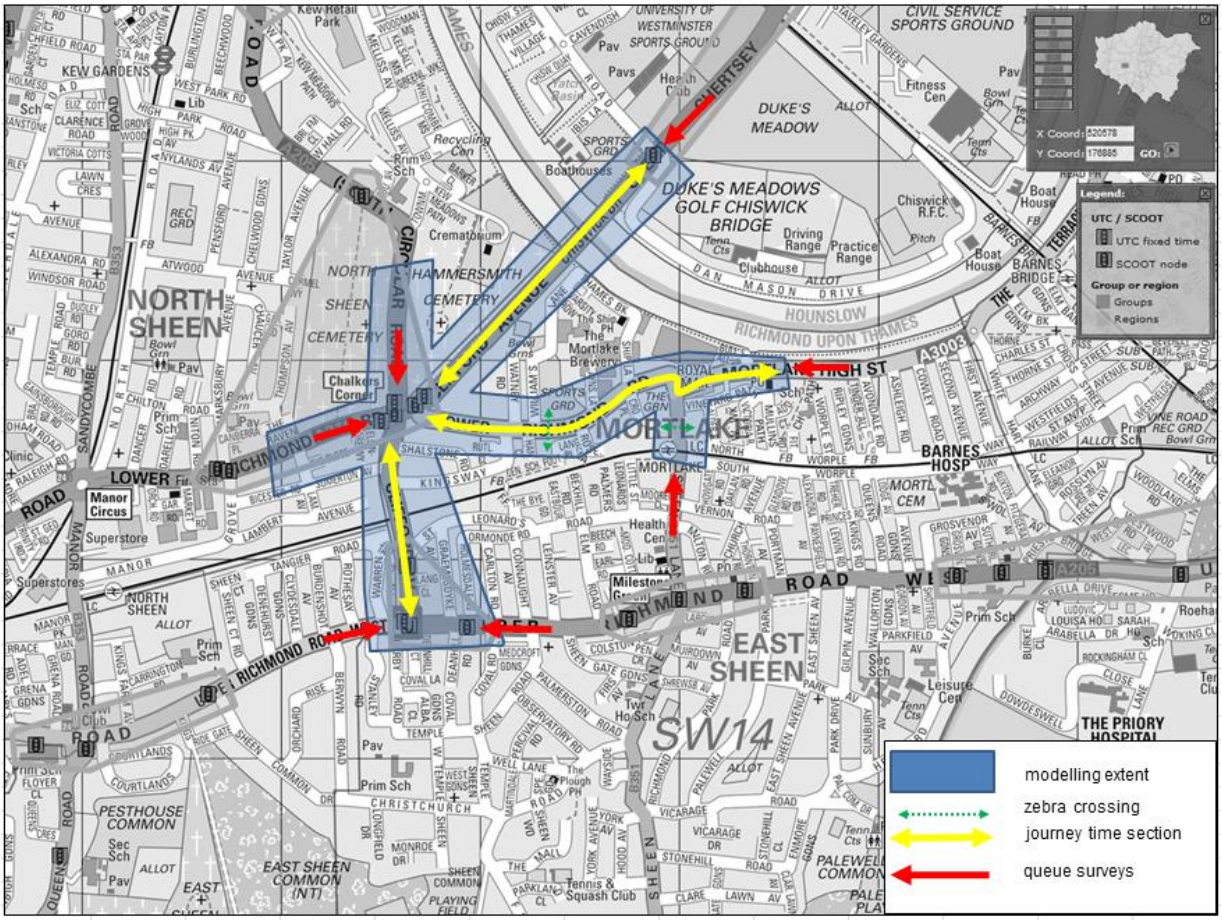
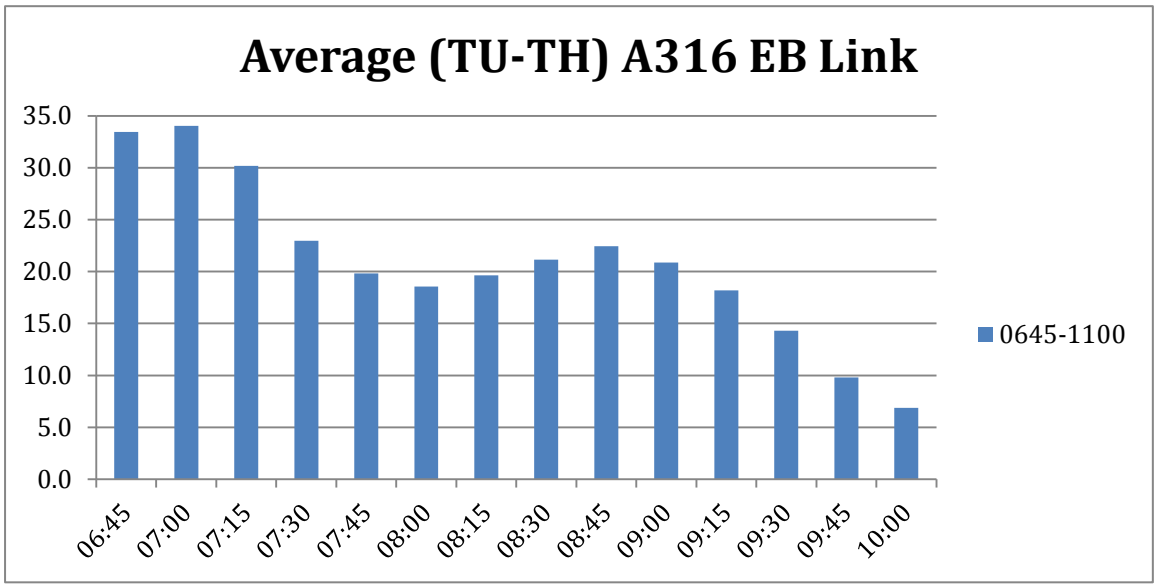


Figure 1: Study area

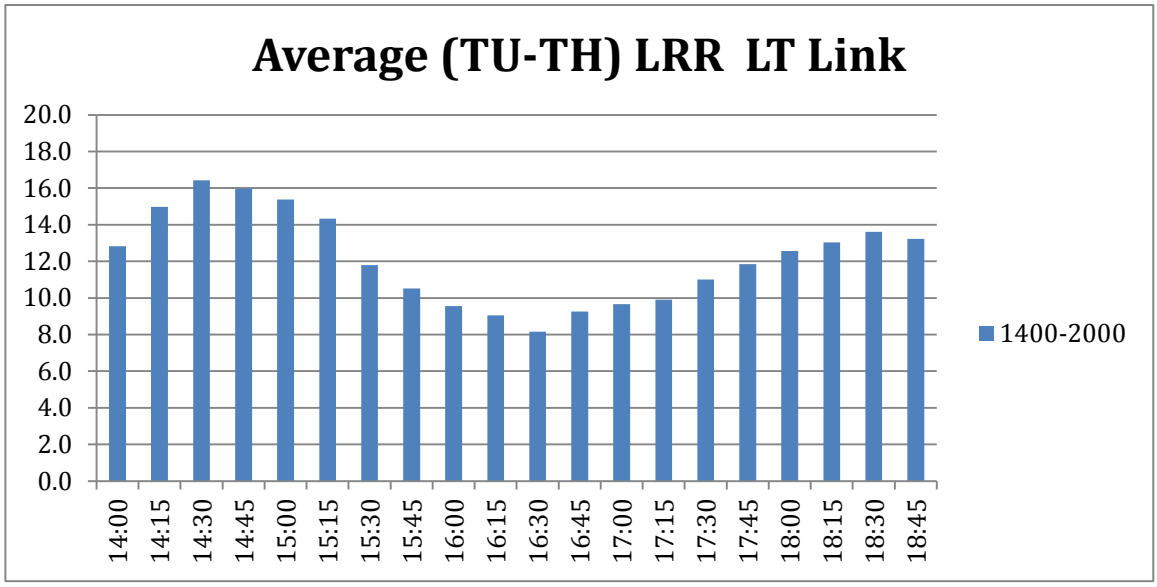
Peak Periods

The weekday morning and evening peak as well as one the school afternoon peak hour should be modelled. At present, based on current SCOOT link analysis (congestion outputs), the following simulation periods should be considered:

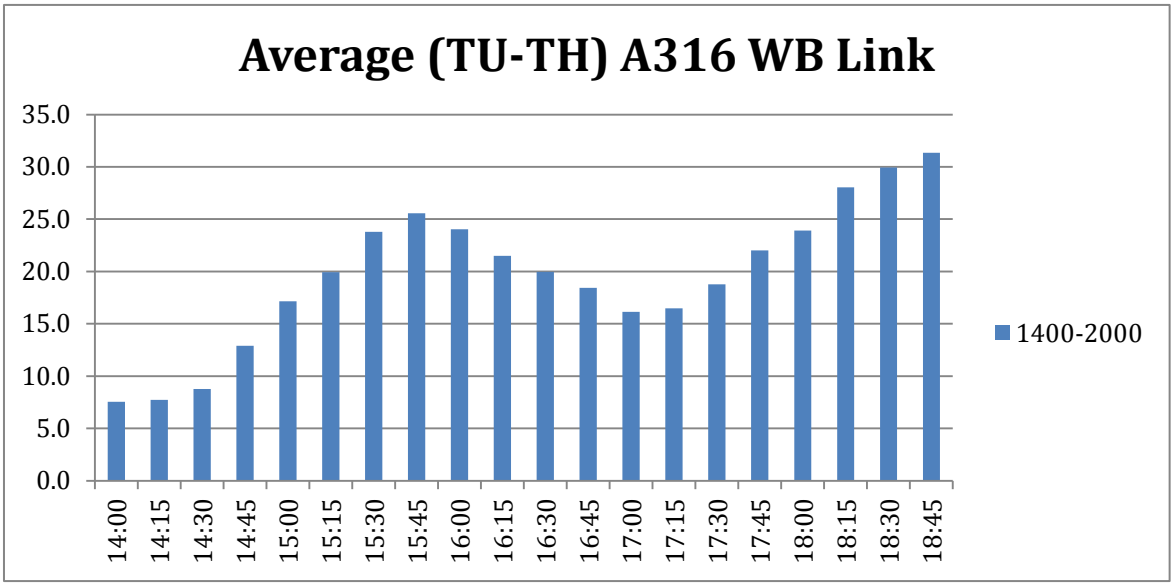
- AM Peak (1hr peak model) – please consider setting up queue and flow surveys between 06:30-10:00



- School Peak (1hr peak model) - please consider setting up queue and flow surveys between 14:00-16:00



- PM Peak (2hr peak model) – please consider setting up queue and flow surveys between 16:00-20:00



The peak hour(s) will be established based on peak period surveys, with the busiest network and development peak selected for testing.

Software Requirements

MAP standards are set up for either Aimsun or VISSIM models, thus these two would be preferable choices when it comes to software requirements. TfL does not insist on which version of microsimulation will be used for this exercise but recommends that the applicant will inform TfL about the version that is planned to use so TfL model file templates can be passed over to the applicant. This will ensure initial modelling parameters are set in accordance to TfL standards.

Calibration / Validation Criteria

As per MAP standards calibration and validation require following modelling outputs to be checked against onsite collected data;

1) Traffic Flows
2) Signal demand data (obtained from TfL signals directorate)
3) Queues (as specified in Figure 1)
4) Saturation flows (all signalised stop lines)
5) General traffic journey times
6) Public transport journey times (TfL iBus data or alternative)

Supporting SCOOT messages should be set to record green times/cycle times for the day of new surveys (date to be confirmed). Should the TfL system failed to record signal data for specified day,

a video surveying should be used to confirm green split and cycle time and reflect the peak hour signal timings' fluctuation. Alternately different date can be chosen to re-record the data if needed.

As part of model calibration and validation, on-site collection of saturation flow is expected to be collected for signalised stop lines. Onsite saturation flow measures can be replaced by RR67 values if observed conditions are not optimal for data collection.

As part of internal checks, saturation flow values should be reviewed for correctness and any unrealistic values should be excluded before the average is used in the model. It is accepted to use separate saturation flow values per peak should they prove different due to peak specific characteristics and/or conditions. Although for consistently it is preferable if average of two peaks collection is used.

In terms of details of microsimulation calibration/ validation criteria these should follow MAP requirements and be as follows

1) Turn volume validation 85% within GEH of 5 or less (all entry links into the network should show modelled flows within 5% of observed flows.
2) Saturation flow within 10%
3) ACHK Data within 10%
4) Journey time validation 85% within 15% or 1 min

Modelling Data

It is expected that the applicant will collect all relevant data to calibrate and validate microsimulation models according to MAP standards.

At present it is expected that the applicant will collect new survey data in 2020 including ATC, MCC, queue surveys etc. within proposed model extent (Figure 1). These will be checked against already provided data to see if the Hammersmith Bridge closure has material impact on validity of previously collected surveys. Should it be agreed that the "old" surveys are not fit for purpose, the modelling exercise will be carried out using "yet to be collected" 2020 surveys.

It is expected that impact of the level crossing (Mortlake Station) will also be captured in the during the simulation period. Both length and frequency of crossing barriers being down will be established through video surveying or details obtained from Network Rail (if possible).

Chalkers Corner junction is expected to be surveys as OD (origin-destination) rather than MCC.

The applicant is expected to gather bus journey times and dwell times for any routes within the scope of modelling. This can be either collected on site or using iBus data. Once bus route sections are identified the request for above data can be sent directly to iBus team - iBusCountdownDataTeam@tfl.gov.uk. It is expected that bus journey times will be collected on bus stop to bus stop basis with separate dwell time data obtained for each stop and of each individual route.

With respect to general traffic journey time data, it is TfL preference to obtain GPS based data as it provides far larger overall sample than ordinary floating car surveys.

Please contact TfL should you wish to seek clarification on survey spec.

Data to be collected on site

Collection on modelling data should be performed according to Traffic Modelling Guidelines (TMG) and include the following:

1) Traffic surveys- *as per TMG requirements*
2) Saturation flow measurements – *as per TMG requirements*
3) Journey time surveys - either according to Traffic Master database sections or "stopline to stopline" markers (see Figure 1 for details)
4) Signal data surveys (via TfL UTC SCOOT messages/ manual on site collection for non-UTC sites)
5) Queue surveys - *as per TMG requirements*
6) Parking and loading – optional should it affect capacity and traffic progression
7) Speed limits - as per site observation/ limit
8) Pedestrian flows – for zebra crossings (mandatory) or/and signalised pedestrian crossing operating outside of UTC system (optional)

It is expected that PT (Public Transport) will be entered separately from the rest of the traffic composition. This will allow more accurate analysis of the future year scenarios given vital role of buses in the area. Decision about incorporating cyclists/motorcycles will be made once new surveys are completed based on combination of factors i.e. total cycle flows and/or their % ratio in overall vehicle composition.

Signal Data Coding

Consultant is expected to obtain relevant signal data for the junctions listed within study area. That includes UTC Plans and SCOOT/ UTC Timetable for the date of surveys as well as possible retrospective Astrid data and ACHK) Should the scope of modelling include any sites that aren't UTC, onsite collection is required to establish following (where applicable): demand dependency, extended blackout or flashing-amber usage as well as average green, stage sequence, cycle time

If agreed with the TfL representative additional SCOOT messages (different days) may need to be recorded to confirm on cycle and green split.

Depending on modelling scenario the applicant can use "Anyplan VAP" files or UTC SCOOT to develop microsimulation models.

For purpose of this exercise, in design scenario models, it is expected that the signal timings and method of control of each individual junction is to be kept as currently coded unless network

performance deteriorate significantly or design changes force signal operation amendments- these should ideally be discussed with TfL Auditor prior amendments in microsimulation models.

Any new / revised signal operation that includes new phases, revised stage arrangements or/ and changes to intergreens are to be coded in LinSig first and agreed before coding in microsimulation models.

Vehicle types to be modelled

1) Car
2) HGV
3) Taxi
4) Motorbikes
5) Cyclists
6) Pedestrians

All models should include Cars/LGV, HGV, MGV, and Taxis, and possibly Cyclists/ Motorbikes and Pedestrians. All bus routes should also be modelled as separate type.

Alternatively "Cyclist/ Motorbike" inputs could be incorporated within Cars/ LGV using PCU factor should survey results concluded its volumetric impact is minimal. This will be determined through discussion with TfL once vehicle composition statistics per approach per signalised junction is presented to the auditor.

It is accepted that committed and proposed dev flows may be grouped into separate types and assigned using bespoke routings.

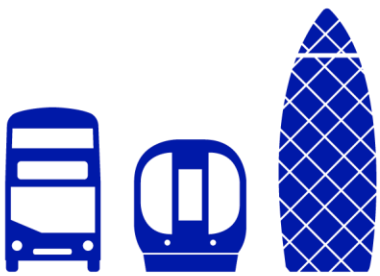
It is expected that vehicle behaviour and link types will be kept as per provided microsimulation template and used accordingly to on site characteristics.

If cyclist modelling is required, there may be a need for additional behaviour/s relating to the accurate modelling and interaction of vehicles and cyclists – this will need to be assessed when more is understood regarding the local network. On occasion a further additional behaviour may be needed if more aggressive merging happens anywhere within the local network.

Additional Modelling

As discussed it is expected that LinSig models will be used to develop signal strategy and tests of new signals/ revised operation before it get transferred into microsimulation models.

The performance analysis will be done using microsimulation model for the area as described in Figure 1. All models should be future-proofed using "Opening year" flow predictions.



Proposed Modelling

At this stage in time it is expected that models will be built to reflect current most up to date trip generation scenarios from the site. Any background flow patterns with possible global factors that being used on entry links to capture the corridor-wide growth from developments outside of the study area that were agreed in the previous modelling exercise will need to be reviewed in light of revised survey date. That also applies to all other committed development trips that are assigned within modelling boundary – it means reviewing and agreeing list of committed developments as used in planning application documents.

All future year modelling assumptions and methodologies including Future Year, Do Nothing and Do Something will need to be agreed and signed off at the Stage 4 meeting (latest) to ensure that any Future Year modelling is developed based on widely accepted modelling principles

When it comes to the Stage Brewery (SB) demand flows, as long as demand and distribution as provided in submitted TA is agreed with TfL Case Officer, this should be applied in proposed scenario modelling. Same applies to predicted servicing and delivery trips and routing.

It is expected that consultant will summarise all above agreements as part of modelling technical note.

The network performance analysis will need to focus on predicted impact of the scheme on bus, cycle (to be confirmed), pedestrian (ped wait time) and general traffic according to Scheme Impact Report (SIR) requirements. This should be summarised in a short technical note.

Any new signalised junction designs should be accompanied by LinSig models with measured new intergreen matrices, phase mins, method of control and proposed phase delays (if applicable).

Any changes to signal operational that do not require physical changes should also be recorded and corresponding signal update sheets to be provided.

Future year scenario models will be expected to be built to maintain TfL modelling standards including saturation flow calibration and flow distribution checks. Model submissions should include all validation and calibration data as well as supporting technical note describing any modelling assumptions and caveats including those carried over to proposed modelling.

All models should also be available for checks and submitted in advance in accordance to MAP. Should consultant have any questions please refer to TfL Modelling & MAP guidelines for more information.

Any LinSig signal development work will be carried out in version 3.2 of the software.

Seed Runs

A minimum of 20 random seed runs will be required for model validation and comparison between base and proposed model runs. However, the number may be increased if required, i.e. if discrepancy between seed runs has been observed.

Documentation

The following guidance documents will be used for assistance in model building, calibration and validation.

1) TfL Modelling Guidelines Version 3.0
2) VISSIM Saturation Flow Tool v1.03 - User Guide
3) SQA-0685 - MAP Engineer Guide for DE, CE & MAE
4) Software Manuals

Programme

In order to ensure smooth modelling audit process the consultant is asked to provide modelling programme with expected modelling submission dates according to TfL response times as listed in MAP documents. Once received the timescales will be subject to discussion to ensure that the resources can be secured in advance and proposed programme is achievable considering proposed modelling expectations.

Working Relationship

Any meetings between modeller and auditor will need to be agreed, e.g. frequency, location, time of the meetings as and when required, as the project progresses.

Contact Details

Michal Miklasz - Spatial Planning/ Network Performance Modelling Liaison, Spatial Planning
Matthew Lloyd – Principal Network Manager (South) – Network Performance Delivery, Surface Transport
Rachel Taylor -Principal Network Manager (North West) – Network Performance Delivery, Surface Transport

Contact

Michal Miklasz
Email michalmiklasz@tfl.co.uk
Phone 0203 054 5525



Appendix I TN036 Stantec Response to TfL Modelling Report

TECHNICAL NOTE

Job Name:	Stag Brewery, Mortlake
Job No:	38262 (draft final)
Note No:	036
Date:	20th April 2020
Prepared by:	George Daugherty and Siddharth Iyer
Reviewed by:	Peter Wadey and Greg Callaghan
Subject:	**Response to the TfL Modelling Expectation Report (11th March 2020)**

Introduction

This note provides a response to the Modelling Expectations Document (MED) issued by TfL on the 17th March 2020. The MED sets out the scope for the traffic modelling, TfL deem necessary to assess the highway impacts and mitigation being proposed by the redevelopment of the Stag Brewery site in Mortlake.

We understand TfL guidelines state that the extent of the modelled area should include all junctions close to the development that have a dependency on each other. The MED therefore recommends the modelled area is extended beyond Chalkers Corner to include adjacent junctions on the A205 South Circular and A316.

The following makes a case for the scope to be revised in line with the previous planning application for the site. This is predominantly based on the level of development trips forecast and their likely impact on the wider network but also additional external factors. These factors include the temporary closure of Hammersmith Bridge and the impact the COVID-19 lockdown is having on the opportunity undertake traffic surveys. These two factors limit model development to data collected in 2016 and 2017 which were not specified to develop a VISSIM model for the area. This potentially compromises the integrity of the model defined by the MED so a more compact model is proposed to provide a more accurate assessment of the highway mitigation proposed at Chalkers Corner and on A3003 Lower Richmond Road.

Following the closure of Hammersmith Bridge in April 2019, traffic surveys were undertaken at, and on the approaches to the Chalkers Corner junction. These surveys were undertaken to understand the impact the bridge closure on traffic flows through Chalkers Corner and so were limited in the data they collected. There is however an opportunity to use this data to develop a post-bridge closure model of Chalkers Corner and the challenges involved are discussed in the final section of this note.

Background

Pre-Planning

The development of highway proposals to mitigate the impacts of the development required extensive traffic surveys and traffic modelling assessments. These assessments included:

- **Strategic Road Network**. The South London Highway Assignment Model (SoLHaM) was re-calibrated/ validated for the base year and 2031 future year models. Agreed development trips were assigned to the 2031 future year models which indicated that the only junction likely to be significant impacted was the Chalkers Corner junction. Highway mitigation was therefore focused on this junction.
- **Chalkers Corner**. LinSig models (LMAP compliant) were developed as part of the Transport Assessment to demonstrate the scheme proposals for Chalkers Corner would mitigate development trips.
- **Mortlake Roundabout** (Lower Richmond Road j/w Sheen Lane and Mortlake High Street). This was modelled in ARCADY with the results concluding the junction would benefit from an additional left turn flare lane along the north side (eastbound movement) of Lower Richmond Road.
- **Sheen Lane j/w Upper Richmond Road**. This was modelled in LinSig but no mitigation proposed.

In addition, a preliminary VISSIM model was developed for Chalkers Corner and the Lower Richmond Road/ Mortlake High Street corridor including the Mortlake Roundabout and the Sheen Lane Level Crossing. This model was developed for public consultation purposes to give an indication of the likely changes to traffic queues on the approach to Chalkers Corners. While TfL data sets were used to ensure the model provided a good representation of traffic conditions after the implementation of the Chalkers Corner scheme it was not taken through TfL's MAP.

The Chalkers Corner scheme realigned Lower Richmond Road north-eastwards towards Chiswick Bridge to lengthen the internal reservoir (see Drawing Number: 38262/5501/51E). The LinSig assessment established that this provided the additional capacity required to accommodate car trips generated by the development but also improve the crossing facilities for pedestrians and cyclists. Through discussions with TfL it was agreed that a standalone LinSig assessment[1] (via LMAP) for the junction would be acceptable for the purposes of planning for the following reasons.

- The SoLHAM assessment indicated that development trips would have only a minor impact on the wider highway network (see TN03 – SoLHAM Forecast Assessment).
- Following planning approval, the scheme would be subject to a full VMAP as part of the Works and Scheme Notification processes required by the Traffic Management Act 2004 (TMAN).

Post-Planning

Following rejection of the Chalkers Corner scheme at Planning Committee in January, the scheme was revised to respond to the reasons for refusal. This resulted in a highway layout that retained the existing alignment of Lower Richmond Road but added a left turn flare, ensuring the proposals remained within the highway boundary (see Drawing Number: 38262/5501/138). This layout reflected an option developed by TfL as part of proposals for a Quietway cycle route along the A316.

This updated road layout was tested using LinSig by revising the approved Stage 3 LMAP models but due to limitations of the LinSig software the assessment proved inconclusive in assessing the benefits. Part of this included the need to understand how bus journey times along Lower Richmond Road would be affected.

To provide a more accurate assessment of the left turn flare and how it could improve the operation of the internal reservoir, a preliminary VISSIM model was developed. The base model used the traffic signal timings and saturation flows from the approved Stage 3 LinSig model. The base models where only partially calibrated/ validated but the proposed models suggested the updated scheme would have a positive impact on the operation of the junction. It should be noted that the proposed models used a revised trip generation but same distribution analysis to reflect an enlarged development with more affordable housing and less car parking. The net effect of the enlarged scheme was to reduce the overall number of car trips generated by the development and this is currently being reviewed by TfL.

The findings of this outline modelling assessment and revised trip generations are described in Technical Note 34. A summary of the trip generation and distribution is provided in Appendix A of this note but which is still to be agreed with TfL.

Data Collection

As part of the Pre- and Post-Planning stages traffic surveys were undertaken. These are summarised in Table 1 and
Figure 1. Some locations indicate 'no data' which will be discussed further in later sections that assess the feasibility of developing a VISSIM model using existing data sets.

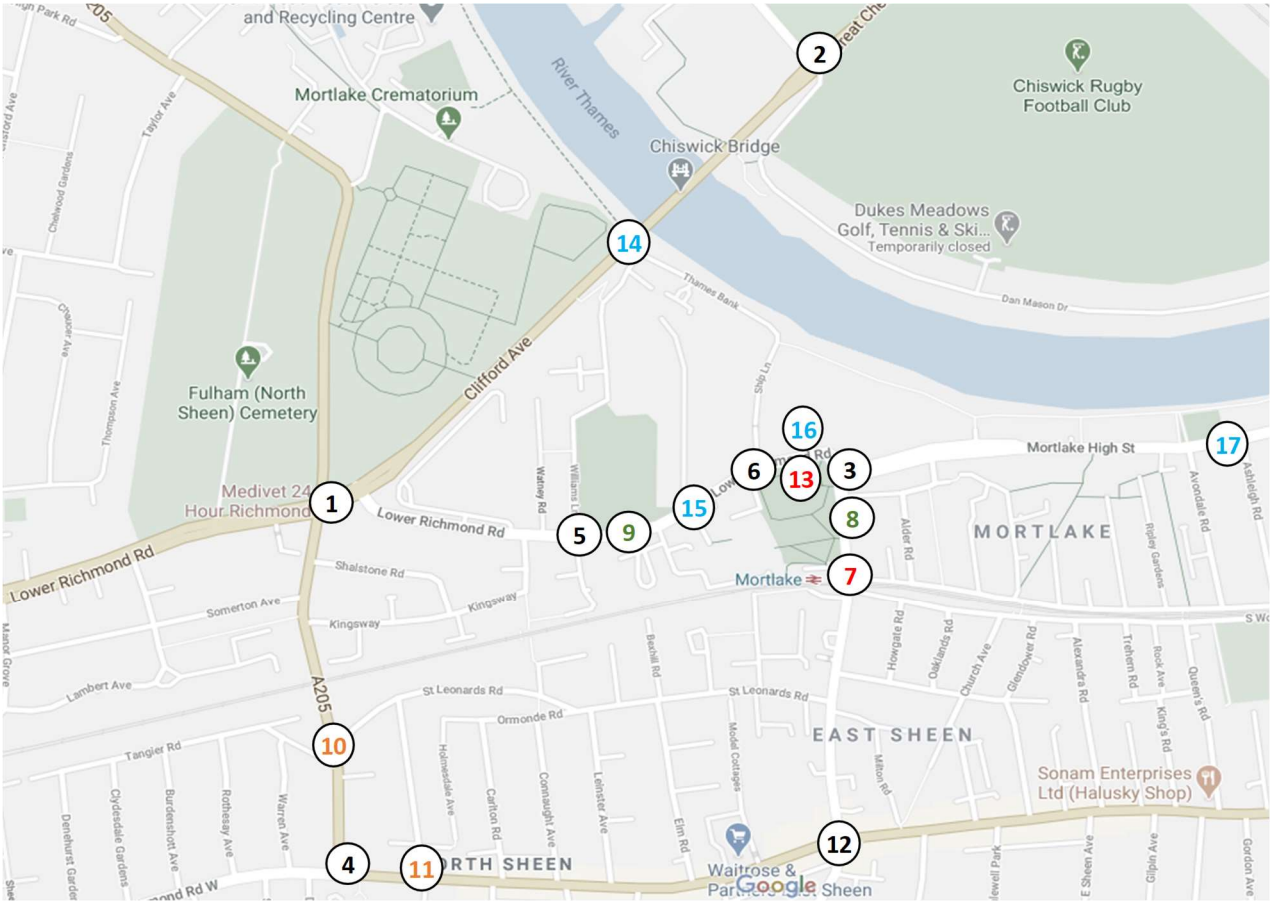
Table 1: Summary of traffic data collection

No.	Location	Description Survey
1	Chalkers Corner junction	CTC (Jun-16, Jun-17, Sept-17, June-19) Queue Length (Jun-16)
2	A316 Great Chertsey Road j/w Hartington Road	No data
3	Mortlake roundabout	CTC (Jun-16, Jun-17) Queue Length (Jun-16, Jun-17)

[1] This used survey data collected in September 2017

No.	Location	Description Survey
4	A205 Upper Richmond Rd j/w Clifford Avenue (South)	CTC (Sept-17)
5	Lower Richmond Road j/w Williams Lane	No data
6	Lower Richmond Road j/w Ship Lane	CTC (Jun-17)
7	Sheen Lane Level Crossing	CTC (Jun-16) Queue Length (Jun-16) Downtime (Jun-17)
8	Sheen Lane Zebra Crossing	Pedestrian crossings (Jun-17)
9	Lower Richmond Road Zebra Crossing	No data
10	A205 Clifford Avenue (South) Toucan Crossing	No data
11	A205 Upper Richmond Road Puffin Crossing	No data
12	A205 Upper Richmond Road j/w Sheen Lane	CTC (Jun-16, Jun-17, Sept-17)
13	Lower Richmond Road (Puffin)	No data
14	A316 Clifford Avenue (North)	ATC (Jun-17, Jun-19)
15	Lower Richmond Road	ATC (Jun-17)
16	Lower Richmond Road	ATC (Jun-17)
17	Mortlake High Street	ATC (Jun-16, Jun-17)

Figure 1: Traffic data collection sites



Modelling Expectation Document

To confirm the benefits suggested by the preliminary VISSIM assessment, the scheme now needs to progress through TfL's MAP and as a precursor to the MAP Stage 1 meeting, a Modelling Expectation Document (MED) has been issued by TfL.

The MED sets out the requirements of a VISSIM model to assess the impact of the development and that the model extents should include a wider network of junctions including:

- A316 Lower Richmond Road j/w A205 Clifford Avenue and A205 Mortlake Road (Chalkers Corner)

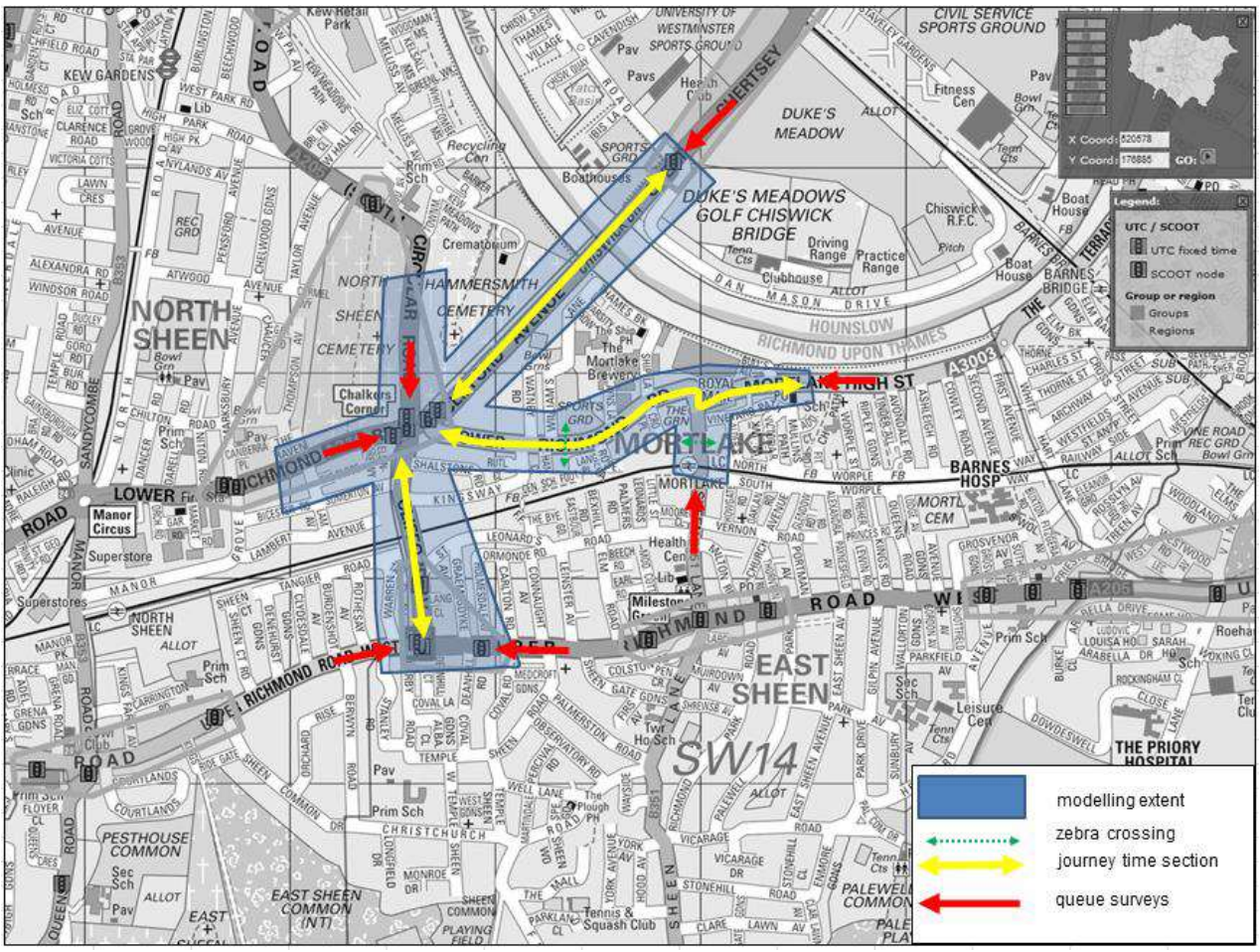
- A316 Clifford Avenue j/w A3003 Lower Richmond Road (Chalkers Corner)
- A316 Great Chertsey Road j/w Hartington Road and Dan Mason Way
- A205 Clifford Avenue (South) by Tangier Road (nearside Toucan)
- A205 Upper Richmond Road j/w A205 Clifford Avenue
- A205 Upper Richmond Road by Deanhill Road and Graemedyke Avenue (Puffin Crossing)

Priority junctions that should also be incorporated are:

- Sheen Lane j/w Lower Richmond Road and Mortlake High Street (Mortlake Roundabout)
- Any new/ existing development access roads (either signalised or priority controlled)

The proposed study area is provided in Figure 2 taken from the MED report.

Figure 2: MED Study Area



Furthermore, the MED states '*If necessary, entry links should be extended so that all vehicles can enter the network and consideration should be given to whether the proposal might increase queuing. The links should be long enough so that a journey time marker can be placed beyond the back of the queue in both base and proposed models.*'

Response to the MED

Model extent

The justification for including the above junctions is not clear but the MED states it is based on discussions with TfL Network Performance team that confirm the '*study area must include SCOOT region R278 (Chalkers Corner) as well as R578 (Clifton Avenue/ Upper Richmond Road) and partially R620 (A316 Chertsey Road)'*.

The following sets out why it is felt the model extents should be reduced to cover only Chalkers Corner junction and its immediate approaches from A205 Mortlake Road, A316 Clifford Avenue (North), Lower Richmond Road, A205 Clifford Avenue (South) and A316 Lower Richmond Road. This will include the Lower Richmond Road junctions with Ship Lane, Williams Lane, the Mortlake roundabout and the new development accesses.

Development trip impacts

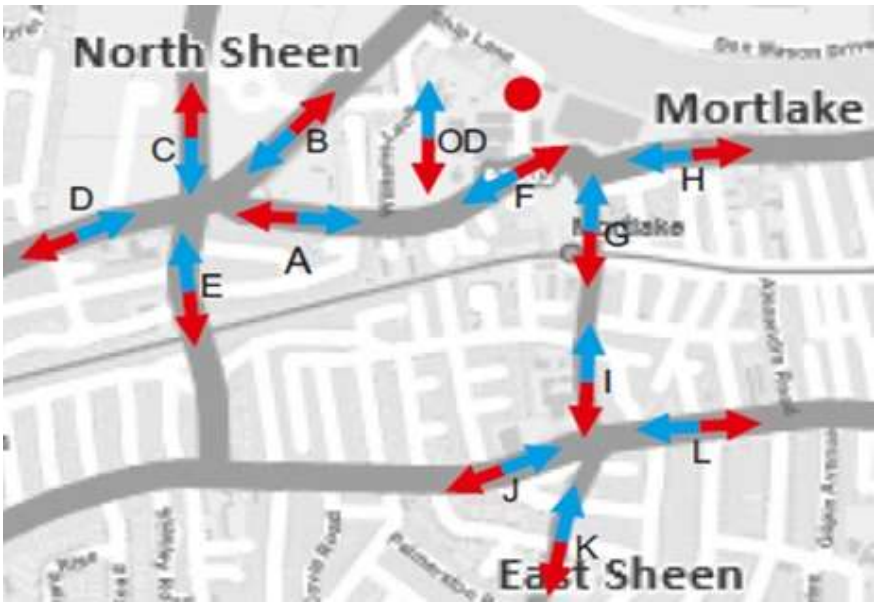
Overview

The car trips generated by the development were approved by TfL as part of the previous Transport Assessment, however these have subsequently been revised to reflect an enlarged development with more affordable housing and less car parking. TfL are currently reviewing the updated trip generation as set out in Technical Note 34, but the expectation is that the number of development car trips will be lower than those previously reported.

To understand how these car trips potentially impact the local highway network, the trips have been distributed based on the origin and destination of those generated by Zone 58139 within the approved HAM model [This needs to be confirmed/ referenced]. The percentage split of trips across the highway network is summarised in Table 1.

Table 2: Percentage trip distribution across local junctions

Junction Arm	Development Trip %			
	AM		PM	
A	53	44	42	58
B	16	11	8	33
C	5	11	8	8
D	26	22	17	17
E	5	0	8	0
F	47	56	58	42
G	16	22	17	8
H	32	33	42	33
I	16	22	17	8
J	0	0	0	0
K	11	11	8	8
L	5	11	8	0



Trip distribution figures for the enlarged development can be found in Appendix A and to understand how these trips could impact on the local highway network the following provides a comparison with existing flows at junctions included in the MED.

A316 Great Chertsey Road j/w Hartington Road and Dan Mason Way

The percent of development trips passing through this junction (i.e. arrow B) in the northbound direction (red) is 16% (AM) and 8% (PM) and in the southbound direction (blue) 11% (AM) and 33% (PM). This reflects tidal commuter flows and based on current but unconfirmed development trips, would result in an increase of between 9 to 27 car trips in the peak hour.

An ATC survey undertaken in 2017 shows the peak hourly traffic flows along this section of the A316 Great Chertsey Road ranges from 965 to 1,417vehicles per hour giving a 0.7% to 2.3% increase in traffic as a result of the development (Table 3).

Table 3: Comparison of development trips with peak hour flows on the A316 Great Chertsey Road

Direction	Key	Peak	Development Trips		Traffic Flow (veh/hr) (average)	(st.dev)	% increase
Northbound		AM	16%	19 veh/hr	1,417	83	1.3%
		PM	8%	9 veh/hr	1,285	83	0.7%
Southbound		AM	11%	15 veh/hr	965	57	1.6%
		PM	33%	27 veh/hr	1,185	43	2.3%

When these 'Development Trips' are compared with the 'Traffic Flow' standard deviation for peak hour traffic flows along the A316, it is clear the increase is well within normal day to day variability.

For this reason, the A316 Great Chertsey Road j/w Hartington Road and Dan Mason Way should not be included in the modelled network.

A205 Upper Richmond Road j/w A205 Clifford Avenue (South)

As part of the A205 South Circular, this congested junction suffers exit blocking as a result of traffic queuing back from Chalkers Corner. Google traffic suggests this can result in a queue extending back along A205 Upper Richmond Road and through the junction with Sheen Lane. As suggested previously, this situation is likely to have worsened considerably since the closure of Hammersmith Bridge and that the scope to improve the operation of the junction is very limited.

Trips generated by the development and forecast to travel through this junction are low. Arrows E and J in Table 2 suggests no development trips approach the junction from the east (J) and that only 5% (AM) to 8% (PM) approach the junction from the north (A205 Clifford Avenue) and west (A305 Upper Richmond Road). Based on current development trip estimates, this would add 6 and 10 car trips to the AM and PM peak hours respectively making the right turn from Clifford Avenue into Upper Richmond Road and visa versa. This is summarised in Figure 3 and Figure 4 where the Green and Yellow boxes show the distribution of development trips (number and percentage) with the peak hourly flow shown in red text.

A classified vehicle turning count undertaken in September 2017 indicates the peak hourly flow on this approach is 733 vehicles per hour in the AM peak and 826 vehicles per hour in the PM peak giving respective increases in trips as a result of the development of 0.8% and 1.2%. This again is well within the daily variability of traffic flows along the South Circular.

For these reasons, the A205 Upper Richmond Road j/w A205 Clifford Avenue (South) should not be included within the modelled network.

Figure 3: Upper Richmond Road j/w Clifford Avenue (AM development trip distribution)

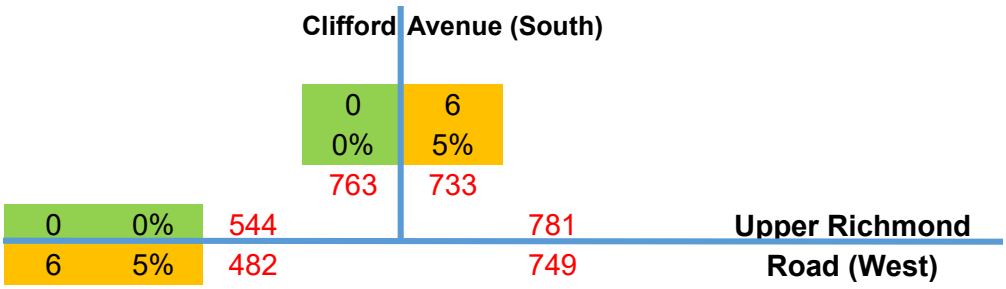
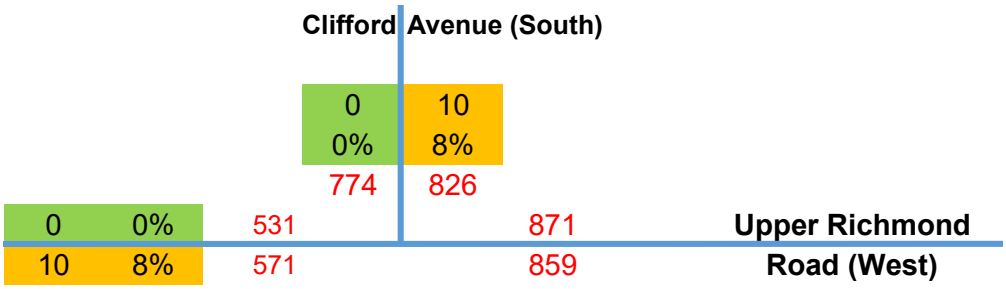


Figure 4: Upper Richmond Road j/w Sheen Lane (PM development trip distribution)



A205 Upper Richmond Road j/w Sheen Lane

Although this junction is not included in the MED the same issues described above for the Upper Richmond Road j/w Clifford Avenue (South) apply. As shown in Figure 5 and Figure 6 the development trips are slightly higher at this junction but they are still only a small proportion of the peak hourly flows approaching the junction from the A205 Upper Richmond Road.

- Sheen Lane (North) AM – +12.3% on the southbound flow
- Sheen Lane (North) PM - +8.1% on southbound flow
- Upper Richmond Road (AM) - +3.4% on the westbound flow
- Upper Richmond Road (PM) - 0% on the westbound flow
- Sheen Lane (South) AM – +7.8% on the southbound flow
- Sheen Lane (South) PM - +4.1% on southbound flow

While the flows on the Sheen Lane approaches increase by up to 12% those on the strategic road network are much lower (0 to 3.4%) are likely to be within normal day to day variability.

For this reason, the A205 Upper Richmond Road j/w Sheen Lane should not be included within the modelled network.

Figure 5: Upper Richmond Road j/w Sheen Lane (AM development trip distribution)

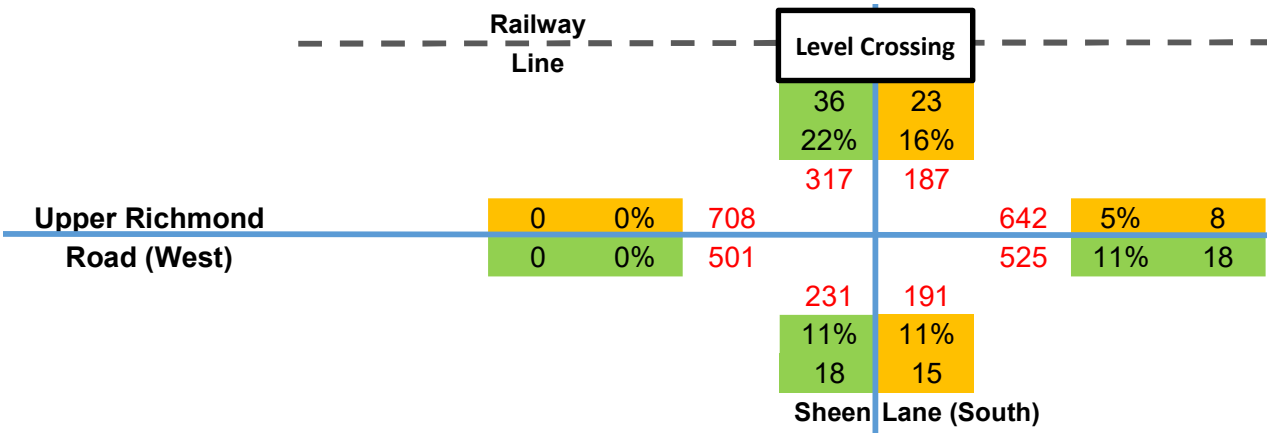
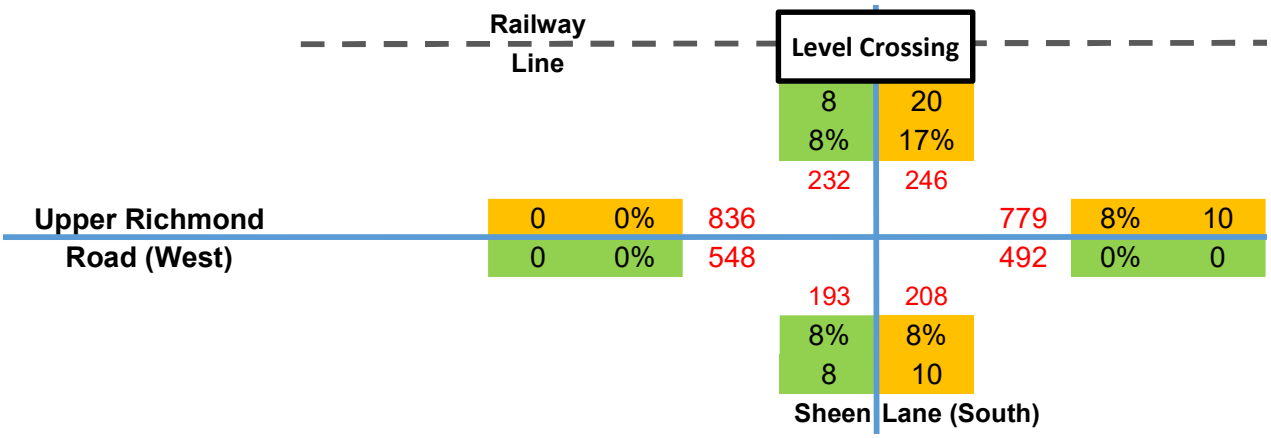


Figure 6: Upper Richmond Road j/w Sheen Lane (PM development trip distribution)



Congestion on the A205 South Circular

'Typical' google traffic outputs indicate that at peak times, traffic queues build up from Chalkers Corner and block back through adjacent junctions including the A205 Clifford Avenue j/w A205 Upper Richmond Road and the A205 Upper Richmond Road j/w Sheen Lane. The extent of queuing currently shown by google traffic is however likely to be heavily influenced by the closure of Hammersmith Bridge in April 2019 with reassigned traffic increasing demand for these routes and congestion along them.

With these junctions fully saturated and opportunity to increase highway capacity highly constrained by the highway boundary, a traffic modelling assessment that includes the A205 Upper Richmond Road would provide little insight into what is a wider traffic management issue. More importantly, the following section indicates that the number of development trips at these junctions is very low, with the increase well within the day to day variability of traffic flows along the South Circular.

Traffic Survey Data Limitations

A summary of the traffic data collected in 2016 and 2017 before the Hammersmith Bridge was closed is provided in Table 1. This showed that Classified Turning Counts (CTC) where undertaken for all junctions defined by the MED except for the A316 Great Chertsey Road j/w Hartington Road and Dan Mason Way. The remaining junctions were surveyed at various times in June 2106, June 2017 and September 2017.

To understand if the data is sufficient and consistent enough to develop a reliable model as defined by the MED, the flows where compared between junctions to see how well they matched. The closer the match, to more likely the survey data could be used to develop a balanced network and so comply with the calibration and validation requirements of VMAP.

To assess the compatibility of the 2016/ 2017 data and understand the optimum use, two scenarios have been defined (Table 4).

Table 4: Classified Turning Count scenarios for 2016/ 17 data

Scenario	Traffic Survey dates			
	Chalkers Corner	Mortlake Roundabout	A205 Upper Richmond Road j/w Sheen Lane	A205 Upper Richmond Road j/w Clifford Ave
Scenario 1	Sep-17	Jun-16	Sep-17	Sep-17
Scenario 2	Sep-17	Jun-17	Sep-17	Sep-17

Appendix B provides a network diagram showing how closely traffic flows between adjacent junction's match. This has been done for the development peaks of 0800-0900 hrs to cover the AM peak and 1700-1800 hrs for the PM peak.

The only difference between Scenario 1 and Scenario 2 is the data collected for the Mortlake roundabout. A comparison with the adjacent junctions at Chalkers Corner and the Upper Richmond Road j/w Sheen Lane indicates Scenario 1 has the best matched data.

For both Scenarios, the matching of traffic flows on Clifford Avenue (South) between Chalkers Corner and the junction with Upper Richmond Road indicate good correlation with some of the difference probably explained by traffic exiting St. Leonards Road.

The main issue occurs between traffic flows on A205 Upper Richmond Road between the junctions with Clifford Avenue (South) and Sheen Lane. A comparison of traffic flows indicates a substantial difference in both directions but particularly westbound where the hourly flows differs by 244 in the AM and 313 in the PM. This discrepancy would make it difficult validate the A205 Upper Richmond Road section of the model proposed by the MED. It is thought that this discrepancy is partly due to traffic routing through roads to the south of Upper Richmond Road, creating increased levels of uncertainty in the movement of traffic along this section of the South Circular.

For this reason, this section of the A205 Upper Richmond Road should not be included within the modelled network.

2017 VISSIM model requirements

Overview

To develop a VISSIM model in line with VMAP for the area defined in the MED raises further challenges to those already discussed. The following table sets out the data requirements for Stage 2 and 3 of the VMAP process and provides an indication of availability and suitability based on the above assessments. Where data is not available potential sources for the data are suggested.

Table 5: Data requirements to develop a 2017 VISSIM model for the above network

No.	Junction	Stage 2 (Calibration)					Stage 3 (Validation)	
		CTC	Sat. Flow	Signal Data	Ped. Flow	Level Crossing	Queue Lengths	Journey Times (5)
1	Chalkers Corner	✓ Sept-17	✓ (4)	✓ (2)	✓	n/a	✓ Jun-16	✘
2	A316 Clifford Avenue j/w Harington Road	✘	✘	✘	✘ (1)	n/a	✘	n/a
3	Mortlake Roundabout	✓ Jun-17	n/a	n/a	n/a	n/a	✓ Jun-17	n/a
4	A205 Upper Richmond Road j/w Clifford Avenue	✓ Sep-17	✘ (3)	✘ (2)	✘ (1)	n/a	✘	n/a
5	Williams Lane j/w Hanson Close	✘	n/a	n/a	n/a	n/a	✘	n/a
6	Lower Richmond Road j/w Ship Lane	✓ Jun-17	n/a	n/a	n/a	n/a	✘	n/a
7	Sheen Lane Level Crossing	n/a	n/a	n/a	✘	✓ Jun-17	✓ Jun-17	n/a
8	Sheen Lane Zebra crossing	n/a	n/a	n/a	✘	n/a		n/a
9	Lower Richmond Road Zebra crossing	n/a	n/a	n/a	✘	n/a	n/a	n/a
10	A205 Clifford Avenue/ Tangier Road Toucan crossing	n/a	n/a	✘ (2)	✘ (1)	n/a	n/a	n/a

No.	Junction	Stage 2 (Calibration)				Stage 3 (Validation)		
		CTC	Sat. Flow	Signal Data	Ped. Flow	Level Crossing	Queue Lengths	Journey Times (5)
11	A205 Upper Richmond Road/ Graemesdyke Road Puffin Crossing	n/a	n/a	✘ (2)	✘ (1)	n/a	n/a	n/a
12	A205 Upper Richmond Road j/w Sheen Lane	✓ Sep-17	✓ Sep-17	✘ (2)	✘ (1)	n/a	✘	n/a
13	Lower Richmond Road Puffin crossing	n/a	n/a	n/a	✘	n/a	n/a	n/a

Notes:

✓ available ✘ required from TfL/ Third Party

1. TfL ACHK data to provide demand dependency data for the crossings. Needs a request to TfL for data backdated to date of survey (13/09/2017).
2. TfL SCOOT logs. Unlikely to be available for the junctions required given the time that has passes since the survey. As an alternative ASTRID data (3 month average stage lengths) to be requested from TfL.
3. RR67 Saturation Flows to be used. Alternatively, TfL to provide from any approved LinSig model developed as part of the A205 corridor models.
4. Measured Saturation Flows for Chalkers Corner (September 2017) and used in approved LMAP models.
5. No journey time data is available or collected for 2017.

Summary

Based on the availability of data the following junctions should be excluded from the model extents.

- **A316 Clifford Avenue j/w Harington Road**. This backs up the previous assessment that any increase in development trips through the junction would be insignificant.
- **A205 Upper Richmond Road j/w Clifford Avenue (South)**. Only a CTC survey for this junction is available with no saturation flow, signal timing, demand dependency or queue length data.

There are other minor junctions and controlled pedestrian crossings that do not have any data but assumptions can be made within the model to incorporate minor junctions such as Williams Lane and Ship Lane while data from TfL may be available for the controlled pedestrian crossings.

Validation of the models is highly dependent on getting TrafficMaster and iBus data. If TfL is unable to provide TrafficMaster data then this will be purchased from Basemap or TeletracNavman but the availability of data for September 2017 will need to be checked.

The iBus data would be dependent on TfL providing this information for June 2017 and for the agreed routes. Once the modelling extent has been agreed and through our discussions with TfL we will ensure the Traffic Master and iBus timing points correlate as closely as possible.

Conclusion

The above assessment has informed our view of which junctions can be reliably modelled in VISSIM and in turn provide a response to the MED. The conclusion is that the model extents should include Chalkers Corner and all approach routes with the A3003 Lower Richmond Road extended back along the development frontage into Mortlake High Street to incorporate all the development access points. The adjacent junctions on the A316 (Hartington Road) and A205 (Upper Richmond Road) should be excluded. See Figure 7.

While the impact of development trips on the Upper Richmond Road j/w Clifford Avenue (South) has been shown to be small, there is some justification (for base model validation purposes) to include this junction as a controlled point for traffic entering and exiting the Clifford Avenue (South) link.

This conclusion is based on the likely '*development trips impacts*', '*congestion levels on the A205 Upper Richmond Road*' and '*traffic survey data limitations*' including '*VISSIM model requirements*' for Stage 2 and 3 of the VMAP process.

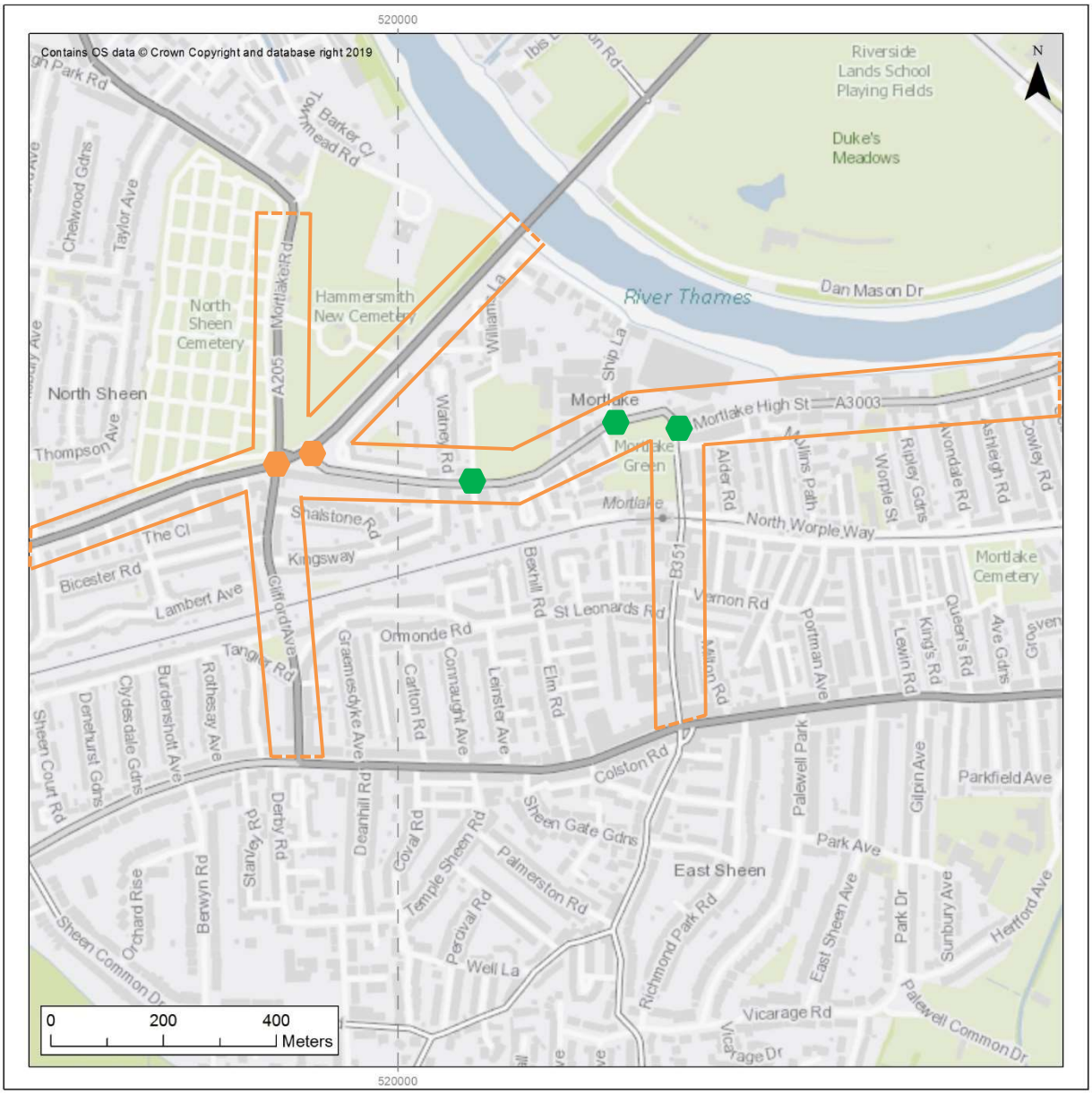
The following table provides a summary response to the sections in the MED.

Table 6: Summary response to the MED

MED Section	Response
Study Area	As shown in Figure 7 for the reasons set out in this note
Peak Hours	CTC data covers 7-10am and 4-7pm so there is limited scope to include the school peak 3-4pm
Software Requirements	VISSIM (version 2020) will be used.
Calibration/ Validation Criteria	▪ There is insufficient queue length data for validation purposes so validation will need to be carried out on bus and general journey times over agreed links (tbc). ▪ Saturation flows are available for Chalkers Corner but not for the A316 Clifford Avenue (North) j/w Hartington Road and the A205 Upper Richmond Road j/w Clifford Road (South). In part, this is the reason for these junctions being excluded from the model extents.
Modelling Data	▪ See caveats set out above regarding the Hammersmith Bridge closure and the COVID-19 lockdown and its impact on new traffic surveys. The modelling approach has therefore been based on existing data sets complimented by third party data. In part, this is the reason for model extents being revised. ▪ Separate requests will be made to TfL for TrafficMaster data and iBus data. Should TrafficMaster data not be available then this will be purchased from Basemap or TeletracNavman but this is dependent on availability.
Data to be collected on Site	As above. Data sources for the models will rely on existing data sets.
Signal Data Coding	Relevant signal data will be requested but it should be noted that SCOOT log are unlikely to be available given the time that has passed since the surveys where undertaken.
Vehicle types to be modelled	Agreed
Additional Modelling	Agreed for those junctions within the revised model extents
Proposed Modelling	To be agreed and confirmed at MAP Stage 4
Seed Runs	Agreed
Programme	Agreed. This will be provided once the MAP Stage 1 has been completed.

It is proposed a 2017 VISSIM model of the local highway is produced excluding the A205 Upper Richmond Road and the A316 Clifford Avenue j/w Hartington Road. The extent of the model is shown in Figure 7 and will include the length of Lower Richmond Road and Mortlake High Street from Chalkers Corner to the White Hart Lane roundabout. For the reasons given, the model should exclude the A205 Upper Richmond Road but we would welcome the opportunity to discuss this further with TfL to ensure a workable solution is found and can be agreed as part of the MAP Stage 1.

Figure 7: Revised model extents based on 2016/ 2017 data



Z:\Projects\38262\MXD\38262_Basemapping.mxd
23/04/2020

2019 VISSIM Model (To be discussed further with TfL)

Background

Following the closure of the Hammersmith Bridge in April 2019 the client team wanted to understand the impact this was having on Chalkers Corner and traffic flows along Lower Richmond Road. Traffic surveys where commissioned in June/ July 2019 that included a Classified Turning Count at Chalker Corner and a classified vehicle counts (ACT) on A316 Clifford Avenue (North) just south of Chiswick Bridge, Mortlake High Street and Lower Richmond Road.

To understand if this data could be used to develop a post Hammersmith bridge model for the model extents described above, two further traffic flow comparison scenarios where defined. See Table 7 and the Figure provided in Appendix B.

Table 7: Classified Turning Count scenarios for 2016/ 17 data

Scenario	Traffic Survey dates			
	Chalkers Corner	Mortlake Roundabout	A205 Upper Richmond Road j/w Sheen Lane	A205 Upper Richmond Road j/w Clifford Ave
Scenario 3	Jul-19	Jun-16	Sep-17	Sep-17
Scenario 4	Jul-19	Jun-17	Sep-17	Sep-17

The comparison indicated survey data collected in 2019 for Chalkers Corner was not compatible with wider data collected in 2017. The difference between peak hour flows between Chalkers Corner and adjacent junctions on A205 Clifford Avenue (South) and Mortlake roundabout were consistently over 100 vehicles with values over 200 vehicles in some cases. This is not surprising given the extend of traffic reassignment likely to have been caused by the closure of a key river crossing.

Proposal

A 2019 “Chalkers Corner only” VISSIM could be produced if the following additional information was available.

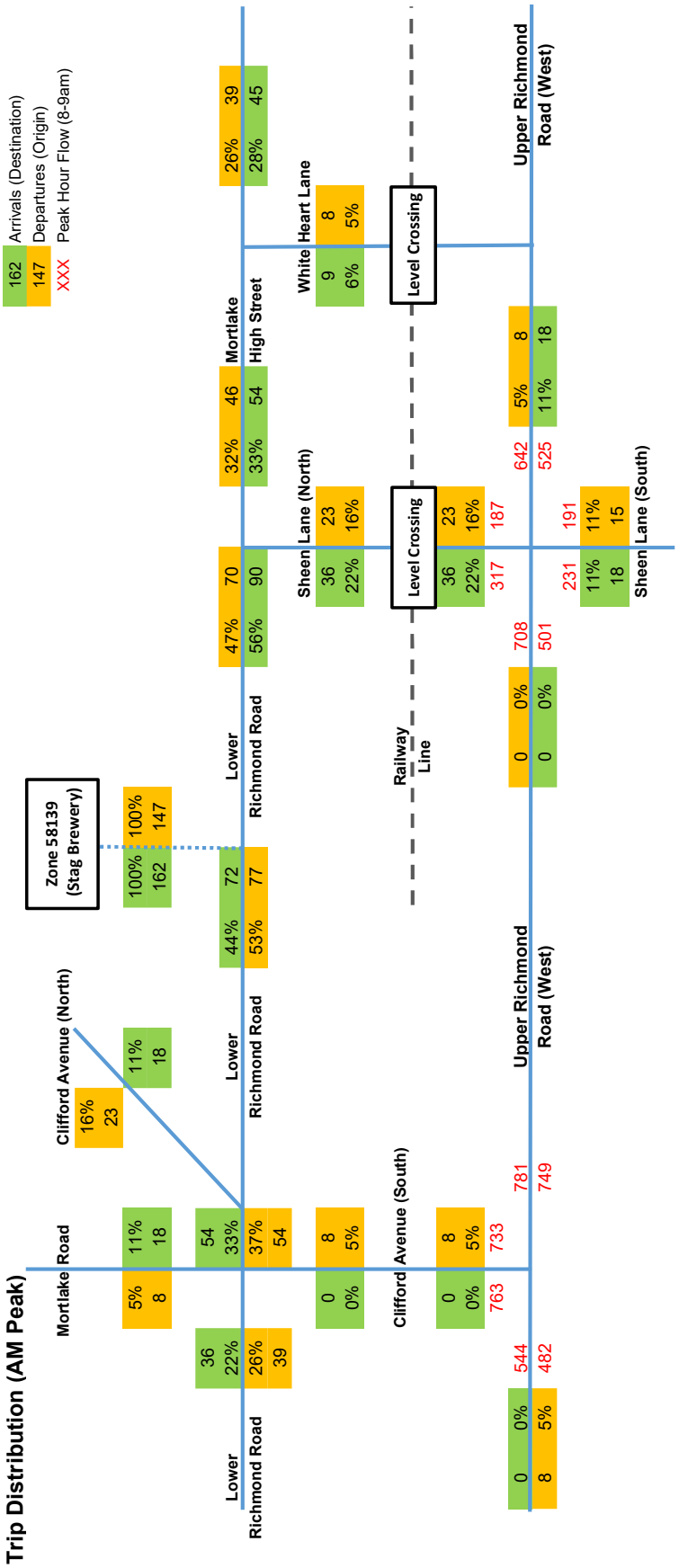
- Saturation flow data from previously approved LinSig models could be used to calibrate stop lines in VISSIM but this will need to be agreed with TfL.
- In the absence of SCOOT logs, 3-month average stage lengths from the ASTRID database could support model calibration but would need be provided by TfL.
- As no queue length data was collected in 2019, base model validation will therefore depend on the availability of TrafficMaster data from either TfL or Basemap.
- Similarly, with iBus data this would need to be provided by TfL for the agreed routes through the junction. Origin and destination bus stops for each route will also need to be agreed to support the data request.
- ACHK data to provide demand dependency information at Chalkers Corner backdated to 02/07/2019 (the date of the survey).
- Traffic flows – input from observed MCC

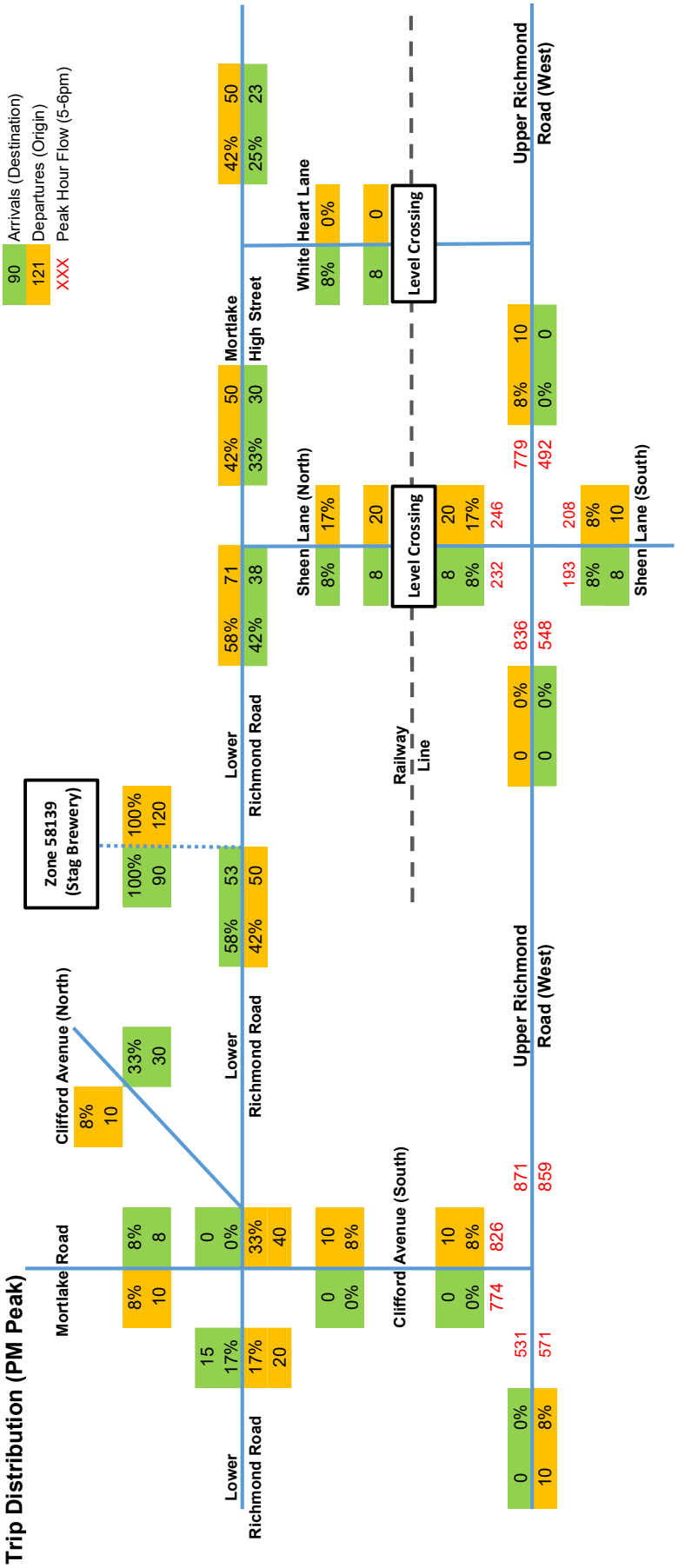
In addition, it may also be possible to produce a validated (with caveats) a LinSig model for the 2019 flows. The video footage can be utilised where possible to collect Degree of Saturation data in order to calibrate/validate the LinSig model. Similar to VISSIM, some signal data may be required from TfL.

Conclusion

It may be possible to develop a 2019 VISSIM model of Chalkers Corner reflecting a post Hammersmith Bridge closure scenario but the data available is limited which will impact on the reliability of the model. Any decision to progress this element of work will therefore need further discussions with TfL to ensure the development of a 2019 model has sufficient benefits to the approval process.

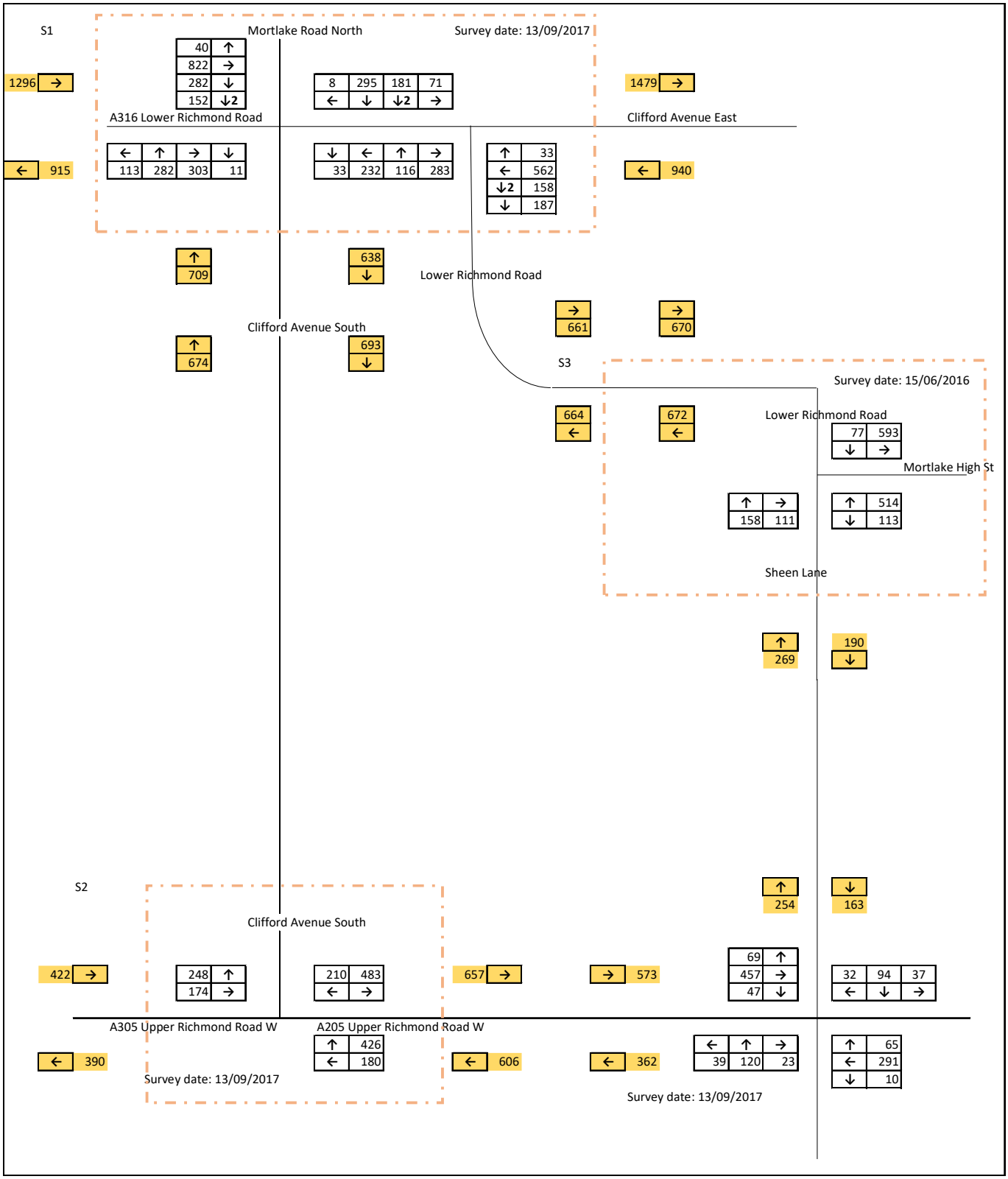
Appendix A: Trip Distribution Figures (AM and PM)



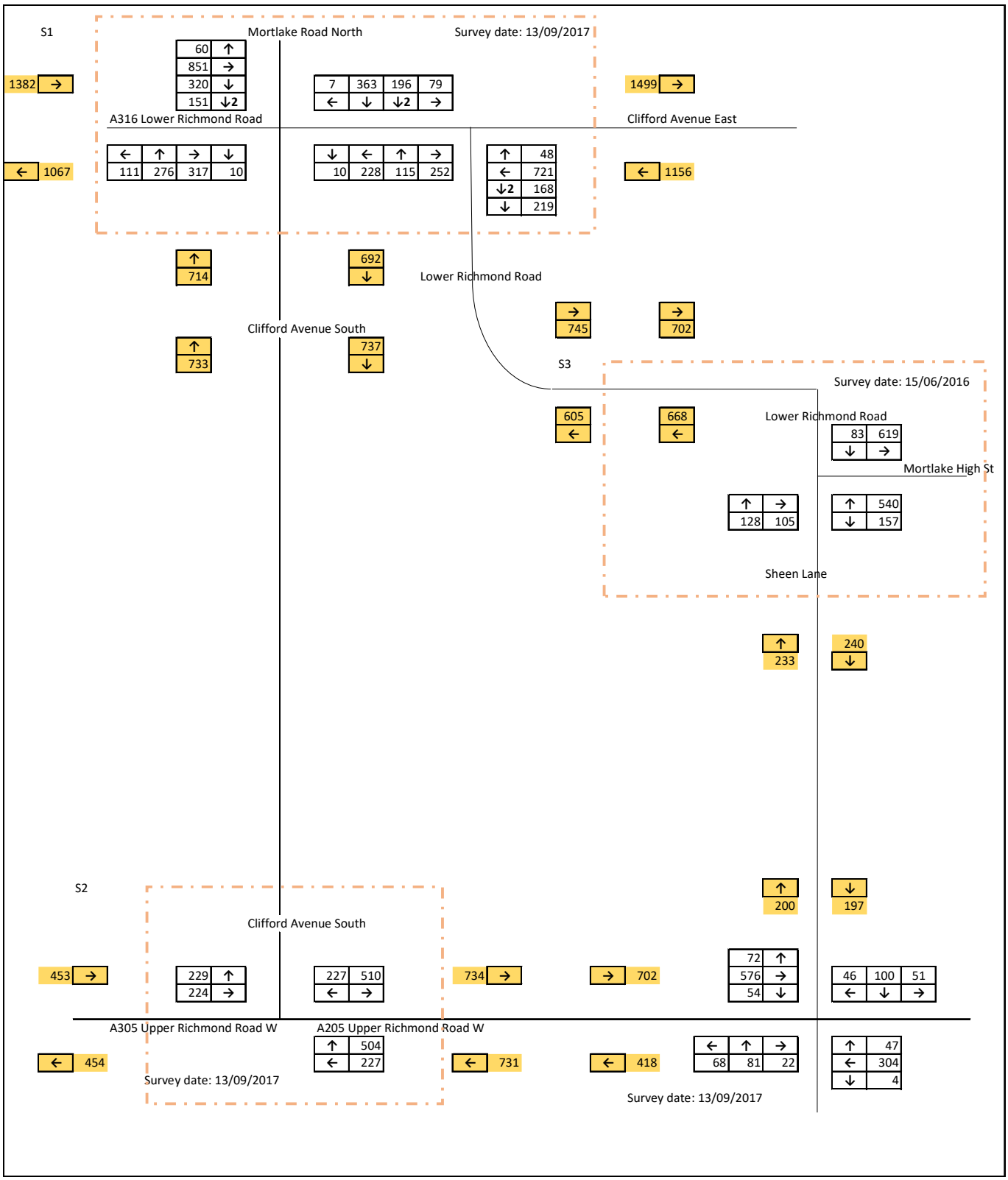

Trip Distribution (PM Peak)
Arrivals (Destination)
Departures (Origin)
XXX Peak Hour Flow (5-6pm)
90
121
Zone 58139 (Stag Brewery)
100% 120
100% 90
Clifford Avenue (North)
8% 10
33% 30
Mortlake Road
8% 10
8% 8
15 17%
17% 20
Lower Richmond Road
58% 53
42% 50
0 0%
33% 40
58% 71
42% 38
42% 50
33% 30
42% 50
25% 23
Mortlake High Street
Railway Line
Clifford Avenue (South)
0 0%
10 8%
0 0%
10 8%
0 0%
10 8%
774
826
531
571
871
859
Upper Richmond Road (West)
0 0%
0 0%
0 0%
10 8%
836
548
White Heart Lane
8% 0%
8 0
Level Crossing
Sheen Lane (North)
8% 17%
8 20
Level Crossing
8 20
8% 17%
232
246
779
492
Upper Richmond Road (West)
8% 10
0% 0
208
193
Sheen Lane (South)
8% 8%
8 10

Appendix B: Traffic Flow Comparison

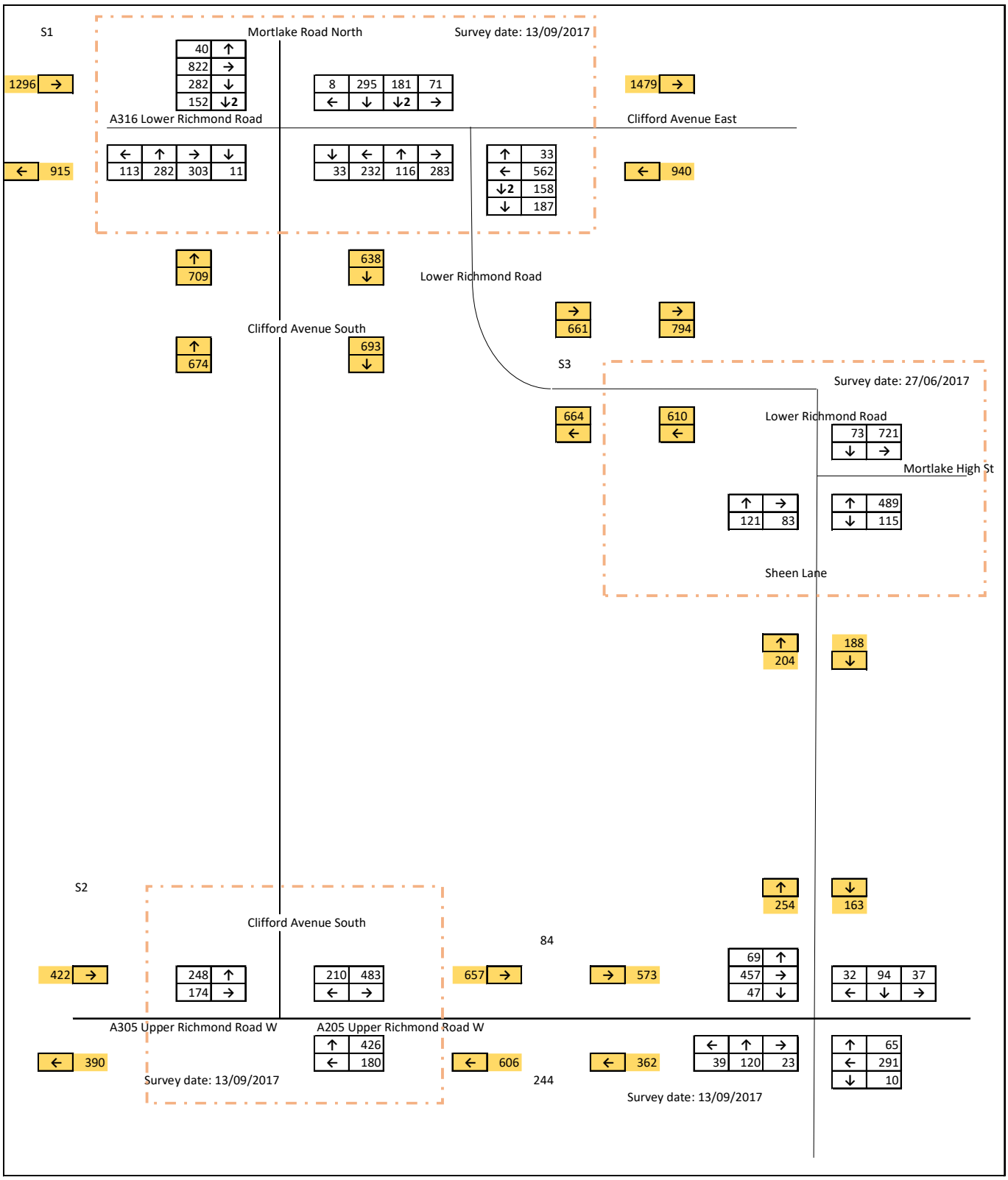
Scenario 1 (0800-0900hrs)



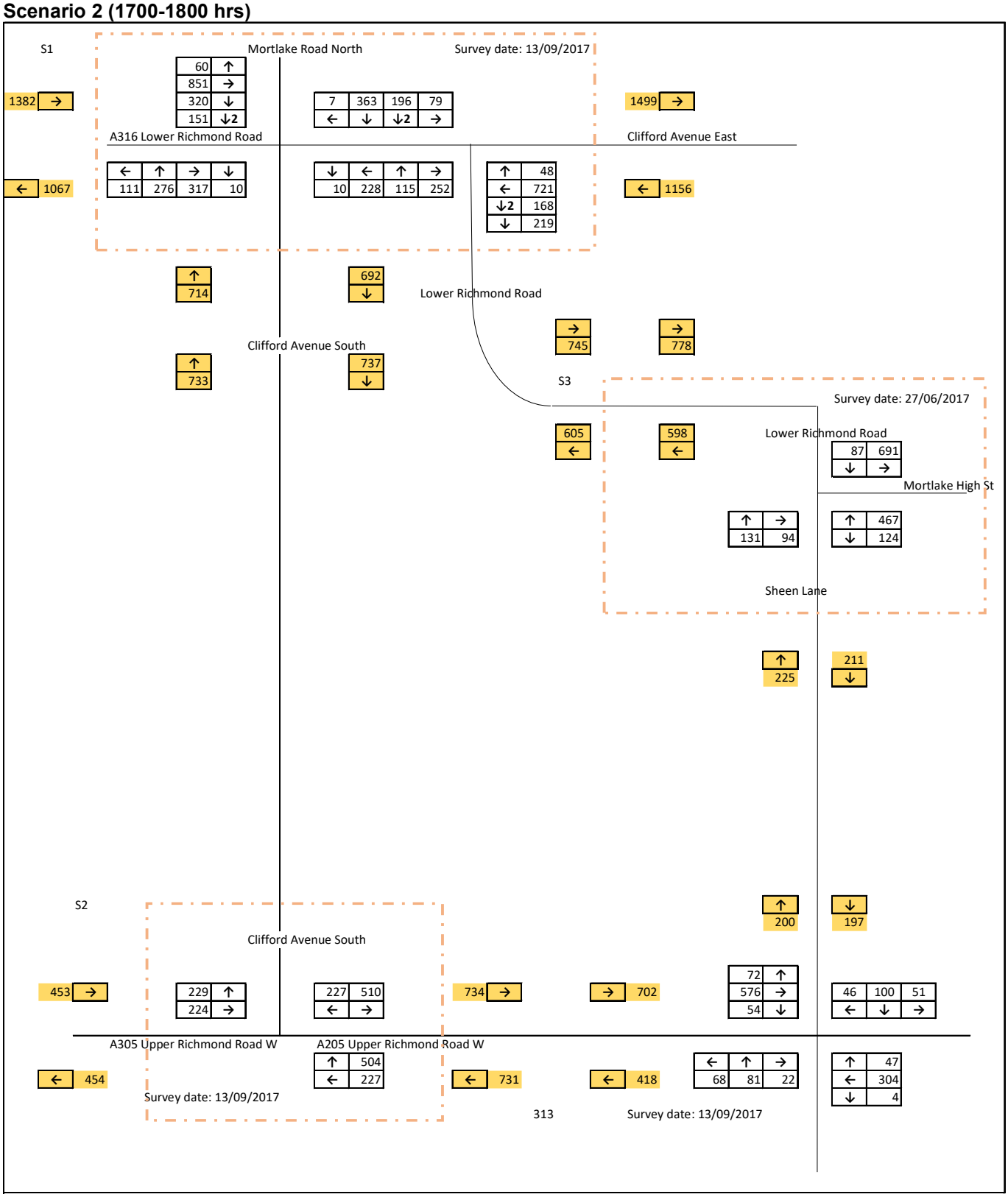
Scenario 1 (1700-1800 hrs)



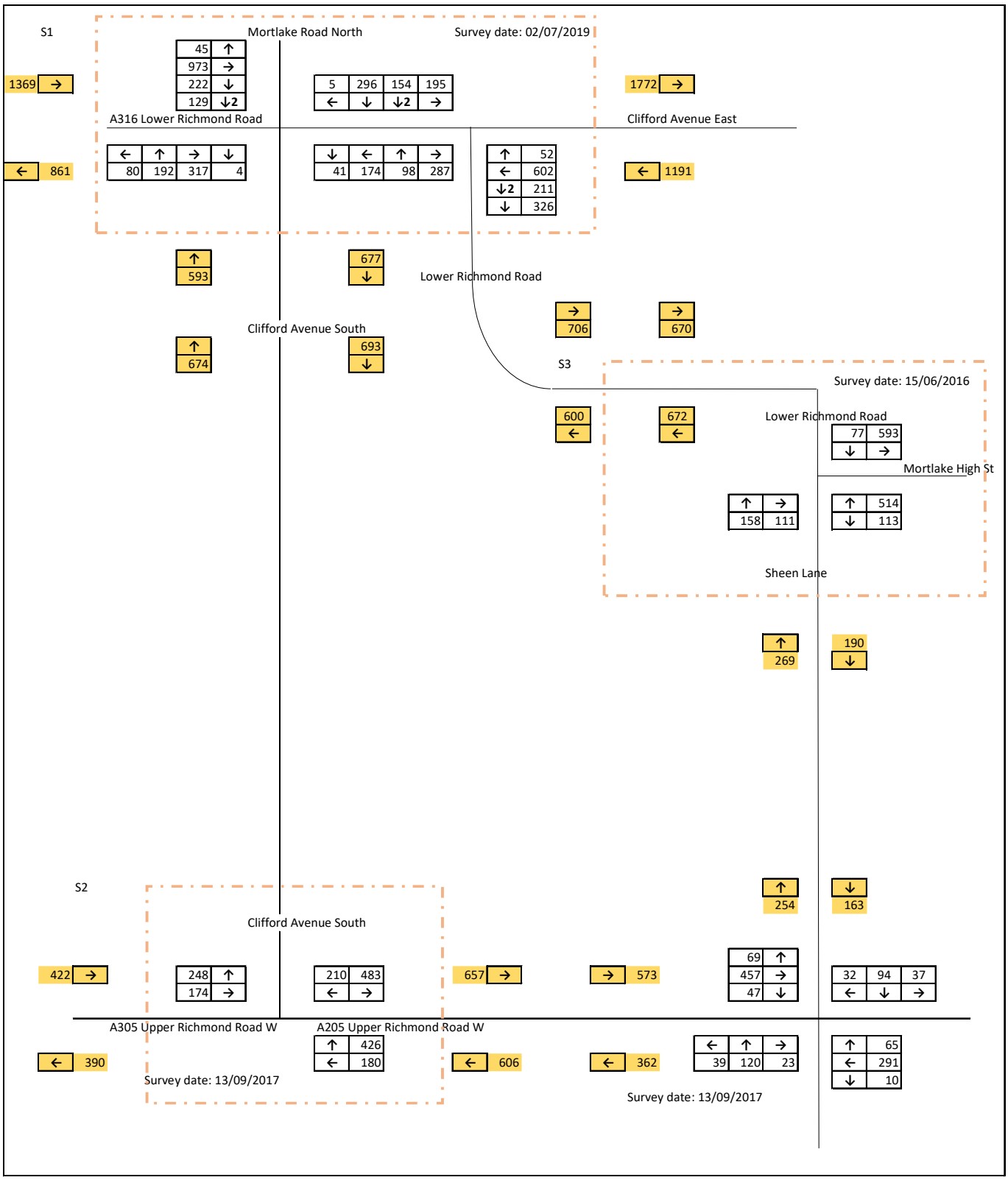
Scenario 2 (0800-0900 hrs)



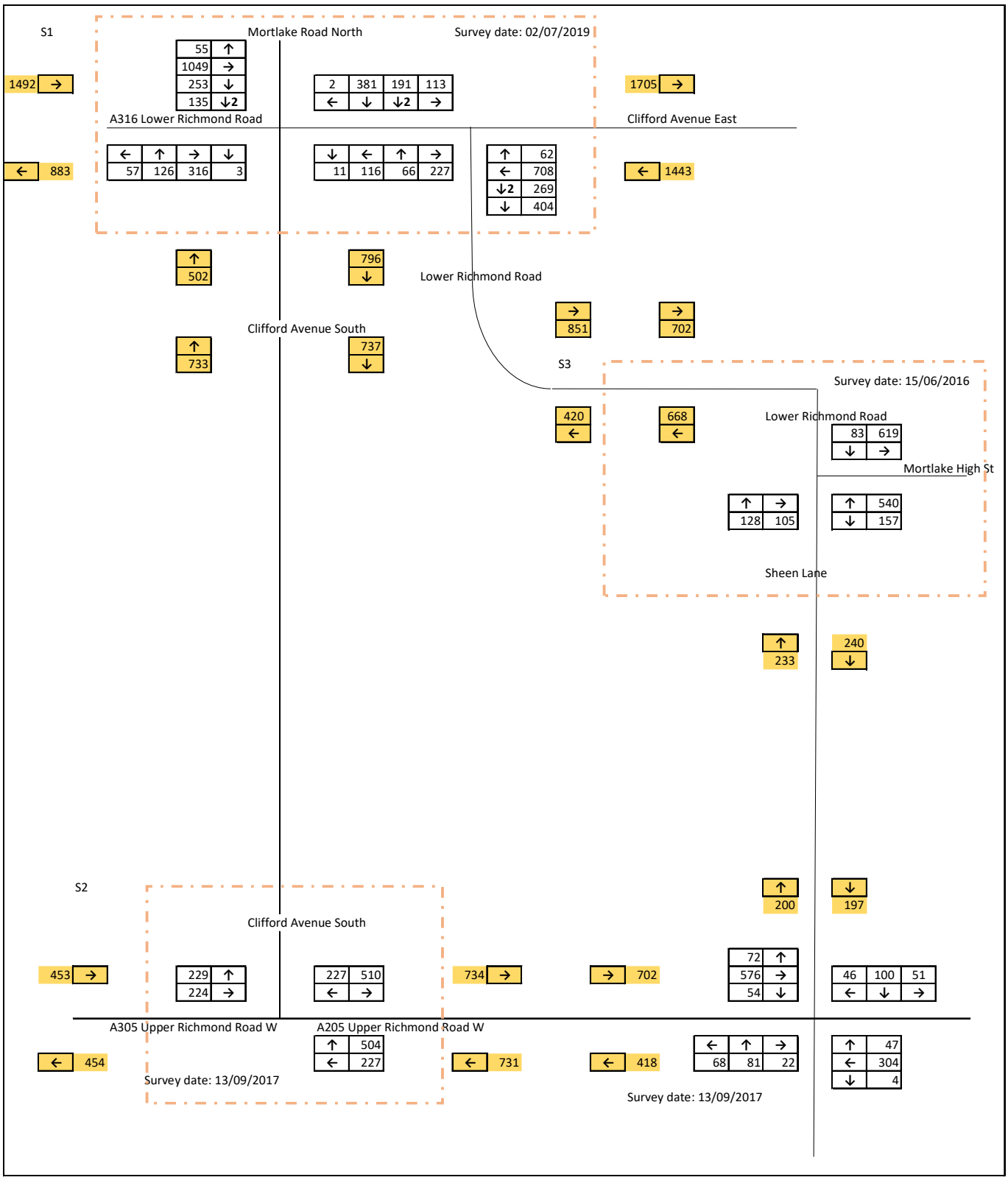
Scenario 2 (1700-1800 hrs)



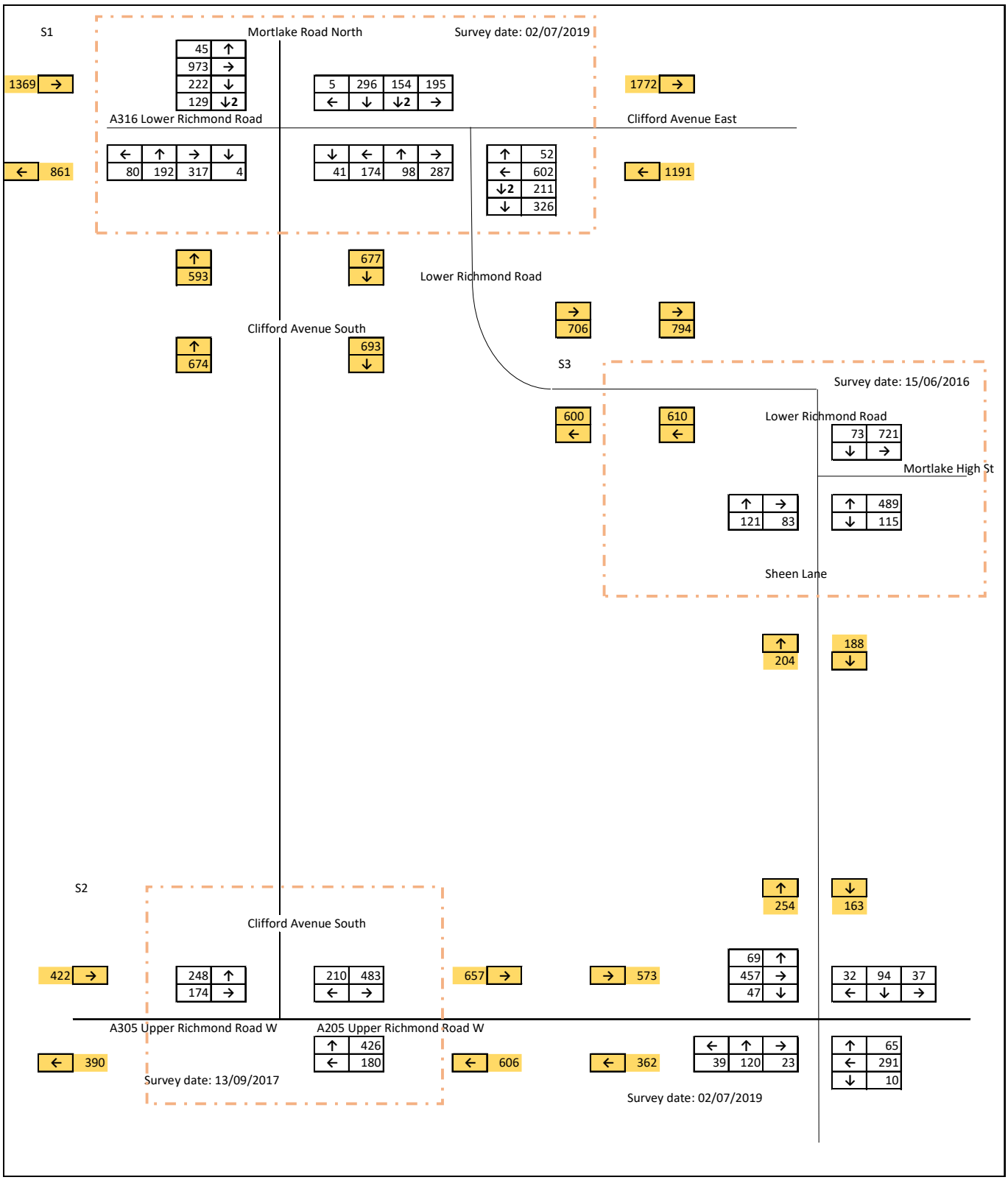
Scenario 3 (0800-0900 hrs)



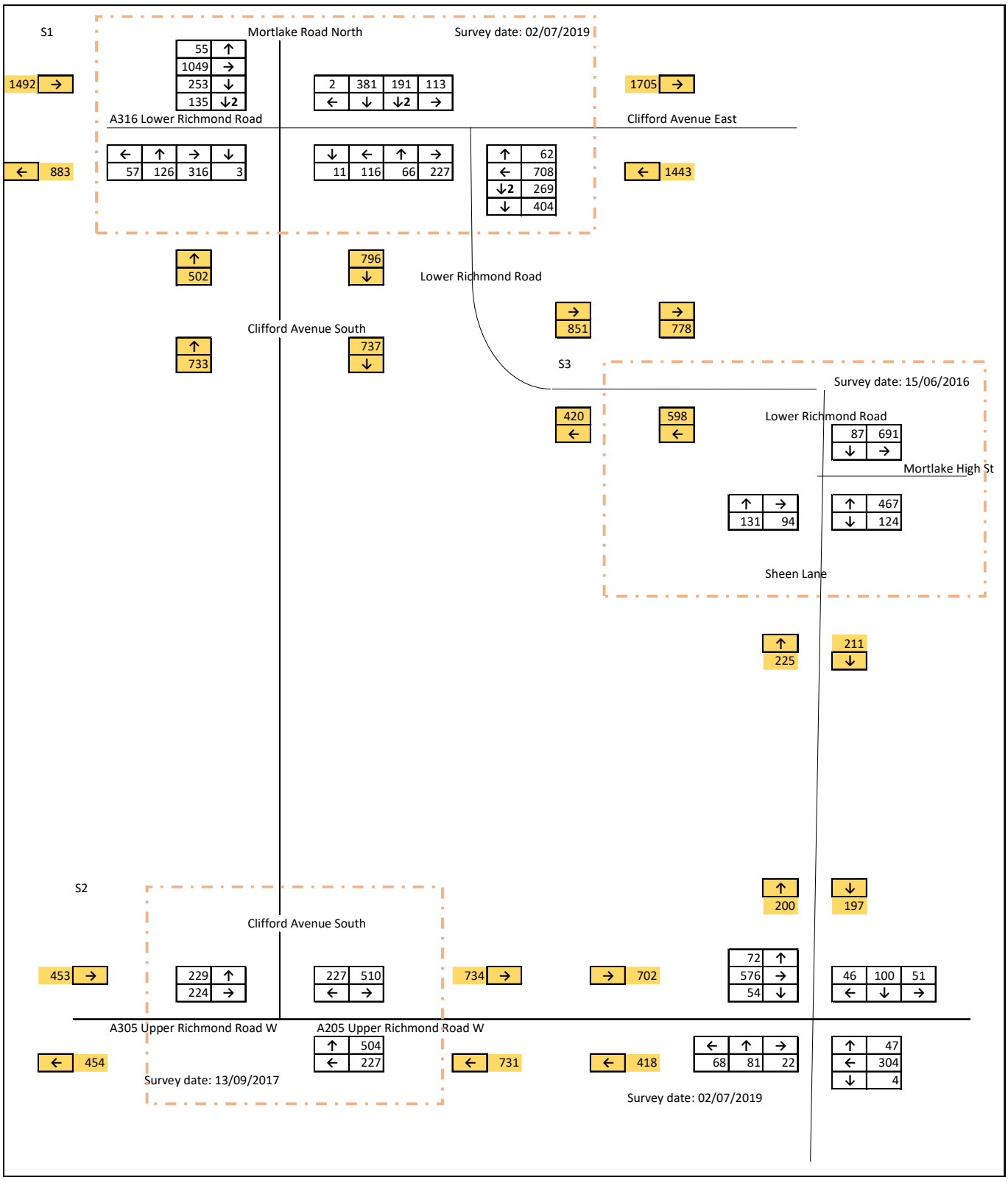
Scenario 3 (1700-1800 hrs)



Scenario 4 (0800-0900 hrs)



Scenario 4 (1700-1800 hrs)



DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
38262/5514/TN036	-	20.04.20	G. Daugherty	P. Wadey		G. Callaghan

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.
Registered Office: Buckingham Court Kingsmead Business Park, London Road, High Wycombe, Buckinghamshire, HP11 1JU
London Office Address: 88 Gray's Inn Road, London, UK, WC1X 8AA. T: +44 (0)203 824 6600 E: PBA.London@stantec.com

Appendix J Further Correspondence with TfL

Hi Sid,

Please see below feedback as promised.
Let me know your thoughts.

Thanks
Michal

Michal Miklasz
TfL Planning/ Network Performance Modelling Liaison
TfL Planning | Planning | Palestra | 3rd Floor | 197 Blackfriars Road | London | SE1 8NJ
Tel (Auto): 85525|**External:** 020 3054 5525|**Fax (Auto):** 82008|**Fax:** 020 3054 2008|**Email:** michalmiklasz@tfl.gov.uk

From: Iyer, Siddharth [mailto:siddharth.iyer@stantec.com]
Sent: 05 May 2020 10:06
To: Miklasz Michal
Cc: Daugherty, George; Wadey, Peter
Subject: Re: Stag Brewery - Modelling Expectations Meeting

Hi Michal,

Thanks for your time on Friday. As discussed in our meeting, this email will hopefully list out additional data required to undertake the modelling scope stated in the MED by TfL as part of the planning application for redevelopment of Stag Brewery.

A summary of the requirements is provided in table below with each data set discussed in further detail within this email:

Site No.	Site Name	Data Required for modelling				
		Traffic Survey MCC	SCOOT logs	ASTRID stage lengths	ACHK Data	Saturation Flows
25/068	GREAT CHERTSEY ROAD - HARTINGTON ROAD - DAN MASON WAY	✓	✓	✓	✓	✓
25/147	A205 CLIFFORD AVENUE BY TANGIER ROAD (NEARSIDE TOUCAN)	✗	✓	✗	✓	✗
24/004	A205 UPPER RICHMOND ROAD WEST - A205 CLIFFORD AVENUE	✗	✓	✓	✓	✓
24/215	A205 UPPER RICHMOND ROAD BY DEANHILL ROAD BY GRAEMESDYKE AVENUE	✗	✓	✗	✓	✗

Traffic Survey MCCs

As discussed in our meeting and also detailed in 'TN036 - Response to the TfL MED (draft final)', we agreed to use September 2017 MCCs for Chalkers Corner Junction as well as 24/004 Upper Richmond Road/Clifford Avenue Junction. June 2016 or 2017 flows for Mortlake High St/Sheen Ln roundabout will be used to develop the models by choosing the

more compatible data in terms of traffic flow balancing between the junctions. Some flow balancing may be required by adding Ship Lane/Lower Richmond road and/or Hanson Close/Lower Richmond Road side road junctions. Please let us know if you disagree and also suggest an alternative methodology if you have one in mind.- Correct but with consideration to flow data for 25/068 as well (as described below)

However, we do not hold any data for 25/068 Great Chersey Road-Hartington Road Junction. We are happy to approach Asset Management at TfL and check if TfL hold any MCCs for that junction, albeit this could be from the different time period altogether. If available, it would be useful to check if the data is compatible in terms of flow consistency on the A316 Great Chertsey Road between 25/068 and Chalkers Corner Junction. Are you able to check for us if TfL have any MCCs for 25/068 and if so share the information with us so we can conduct a flow check?. Alternatively, if there is a significant discrepancy in flows, this junction can be modelled using the flows arriving/leaving Chalkers Corner junction with no traffic added onto Hartington Road. As SCOOT logs/ASTRID data will not be from September 2017 manual adjustments to stage length can be made (with MAE's agreement) to ensure the best possible representation of site conditions for this junction.- more as FYI, as you already have requested data via PCAM for 25/068 as well as remaining ped crossing. Happy with the approach in principle but as pointed out any further discussions (as I imagine they will be few unexpected turn of events with flow balancing, signal strategies etc.) will need to be cleared off with auditor.

SCOOT logs

SCOOT logs (M16 messages) and/or ASTRID data (historic stage lengths) to be requested from TfL for 25/068, 25/147, 24/004 and 24/215. It is understood that the SCOOT logs need to logged in advance and therefore any logs recorded now may not necessarily provide the typical stage lengths due to the impact of COVID-19. It would be useful to have both M16 messages as well as ASTRID data for 25/068 and 24/004 in case some manual adjustments need to be made to the stage lengths to achieve validation, this could well be the case as discussed in our meeting given the different time periods data sets are being collated from.- will provide Astrid for junctions as requested but given time-lapse this is likely to be trend based of 3hr average. So you have MCC for 24/004 but you never requested signal data for back in Sept 2017?

We have the SCOOT logs and ACHK data for Chalkers Corner junction (September 2017) from previously undertaken LMAP modelling for Stag Brewery so will use them for consistency as MCC for Chalkers Corner was observed on same day. – great!

Timings Sheets, Controller Specifications and UTC Plans

Required for 25/068, 25/147, 24/004 and 24/215. Unless the timing sheet for 24/011 & 24/199 (Chalkers Corner) has changed since the LinSig model was last developed and approved in 2017/18 we are happy to use what we have. This includes UTC plan, ACHK data and timing sheet from previously undertaken LinSig modelling.- again FYI as the request was already issued. Not sure if Chalkers Cnr should be changed as your modelled year would

ultimately be Sep 2017 (correct?) so as long s your signals were requested around the same time, this should suffice. Please confirm

ACHK data

ACHK data to be requested from TfL for 25/068, 25/147, 24/004 and 24/215. These will need to be from 13 September 2017 (same day as MCC for Chalkers Corner and Upper Richmond Road/Clifford Avenue Junctions).- should be able to provide you those by end of this week

Time periods (Stantec to model AM and PM peaks for below stated times as these reflect the development peak hours):

- AM Peak - 0800 to 0900
- PM Peak - 1700 to 1800

As stated in TN036 (Stantec's response to MED) CTC data covers 7-10am and 4-7pm so there is limited scope to include the school peak 3-4pm.- need to speak to Lucy Simpson to get confirmation on inclusion of school trips

Saturation Flows

We are happy to contact TfL and enquire if there are any existing LinSig models for 25/068 and 24/004. Can you confirm if it is the Modelling Team at TfL that we need to directly contact for any available LinSigs or Saturation Flows used in the existing corridor models (A316 model for 25/068 and A205 model for 24/004)? Alternatively, if this is something you are able to find out internally and provide us directly, perhaps you could include the costs (if any) along with the quote for the audit?- that was already actioned when you contacted PCAM. Re alternative approach, I would imagine in terms of added costs, this needs to be passed over to PCAM who are in charge of financial side of the audit

If observed Sat Flow data is unavailable for above mentioned junctions, Stantec suggest using RR67 sat flows as the 2 junctions in question are at the periphery of the model extent.- agree

Queue Lengths

Queue lengths surveys were not undertaken when the September 2017 MCCs were observed. This was because the previously agreed approach was to model Chalkers Corner in LinSig and to validate on DoS rather than using queue length data. Therefore, it is not possible to undertake a base model queue comparison. Comparison of Base (modelled) vs Forecast (modelled) Scenarios will be included in forecast note. – could you please confirmed what is the latest with video surveys and whether this can be requested from survey company?

ibus data

ibus data will be requested from TfL to input bus dwell times into Vissim model and undertake bus journey time validation. Stantec are happy to contact TfL directly and we will

send our request to iBusCountdownDataTeam@tfl.gov.uk but if you could provide a named contact in the Bus Client Team it would help speed things up.

The following table shows the start and end stops for each bus route that will be included in the Vissim model. It is assumed that bus journey time validation will only be undertaken for routes that have more than 1 intermediate stop. Please confirm otherwise. Please include routes 33, 337, 493 and R68. Their stops are likely to be within distance covered by external link extent and first three will support validation of Upper Richmond Road approaches 24/004. 969 can be excluded as infrequent service

Bus Route & Direction	**Start Stop**	**End Stop**
190 towards Richmond	Staveley Road Stop Y	Mortlake Road Stop G
190 towards Hammersmith	Mortlake Road Stop B	Staveley Road Stop R
533 towards Hammersmith Bus Station	Avondale Road Stop Q	Staveley Road Stop R
533 towards Castlenau	Staveley Road Stop Y	Sheen Lane / Mortlake Station Stop A
419 towards Roehampton	Mortlake Road Stop B	Sheen Lane / Mortlake Station Stop A
419 towards Richmond	Avondale Road Stop Q	Mortlake Road Stop G
R68 EB	Mortlake Road Stop B	Chalkers Corner Stop C
R68 WB	Chalkers Corner Stop F	Mortlake Road Stop G
969 EB	Mortlake Station Stop E	Sheen Lane / Mortlake Station Stop A
969 WB	Avondale Road Stop Q	Mortlake Station Stop F
33 EB	Berwyn Road Stop T	Graemesdyke Avenue Stop U
33 WB	Temple Sheen Road Stop X	Berwyn Road Stop Y
337 EB	Berwyn Road Stop T	Graemesdyke Avenue Stop U
337 WB	Temple Sheen Road Stop X	Berwyn Road Stop Y
493 EB	Berwyn Road Stop T	Graemesdyke Avenue Stop U
493 WB	Temple Sheen Road Stop X	Berwyn Road Stop Y
969 EB	Berwyn Road Stop T	Graemesdyke Avenue Stop U

969 WB	Temple Sheen Road Stop X	Berwyn Road Stop Y

OD Matrix (Static routing assignment)

LinSig matrix estimation tool will be used following a flow balancing exercise to develop a robust matrix that will be fed into the Vissim as routing proportions. Vehicle input will be based on site observed MCCs. Plus ensure that OD for Chalkers is not being compromised by LinSig matrix as don't wish to see too many u-turners between Clifford Av and LRR (unless there is evidence of those happening back in 2017)

Zebra crossings

The TfL MED includes two zebra crossings, one on Lower Richmond Road East of Hanson Close/LRR junction and the other just south of Mortlake High St/Sheen Lane roundabout. Unfortunately, no pedestrian data is available for these crossings. Can TfL provide anything for this? If not, Stantec suggest these be excluded from the MED or some engineering judgement be applied when it comes to calibration/validation of the models? i.e. add pedestrians to validate journey time (if required) if modelled JT is quicker than observed. Please let us know your thoughts? Agreed although needs to be thought through if any of these zebras are being converted to signals or new zebras are being introduced, how this will be reflect in proposed modelling. Please let me know your thoughts how you planning to approach these scenarios (if they form part of highway proposal for this app)

TfL template file and version

Can you confirm what version of Vissim would you like the models to be developed in? And kindly provide us with the TfL template file for the same. We are able to develop the model in the latest version (v2020).- have no preference. Will leave it to yourself and auditor to make conclude

LinSigs

Previously approved Chalkers Corner LinSig will be used to support development of the Stage 2b Vissim model. Skeleton LinSigs will be developed for 25/068 and 24/004 with manual adjustments being made to the latter junctions when it comes to Proposed Vissim modelling. Approved Base LinSig can be used for Chalkers Corner to derive proposed timings. Agree in principle but need to mention that any adjustment to proposed signal strategy will need approval of NP Engineer – that applies to any signal including Chalkers Cnr

Summary

Hope the above provides an accurate summary our conversation on Friday. Based on your replies to above, George and/or myself are happy to update the MED to include what we agree here. If you can please provide us with a word version of the document we will update the document with tracked changes so any departures from the original document are clearly shown. We will need a couple of days to do this but if we receive it tomorrow we should be able to get this back to you by the end of the week to review/agree. – will do

As you already know, we need to collate this data, develop the models and assess the mitigation in a relatively short period of time. We will provide an outline programme that tries to balance the standard MAP reporting durations with our clients programme. We would therefore be grateful if you are able to expedite any of the above data requests via the TfL departments. Our main concern is ibus data so any help from your side on getting this over to us as soon as possible will be greatly appreciated. I would hope that PCAM team will be able to assist you with iBus data. if not please let me know and will do my best

Please give us your views on the above at your earliest convenience so we can proceed with placing the requests with different departments within TfL. We would ideally like to send the requests out as soon as possible.

I hope I have included everything we discussed on Friday but if you feel I have missed something or have any other questions please do not hesitate to contact myself or George.

Look forward to your response.

Regards,
Sid

From: Daugherty, George <george.daugherty@stantec.com>
Sent: 23 April 2020 19:27
To: Miklasz Michal <MichalMiklasz@tfl.gov.uk>
Cc: Taylor Rachel (ST) <Rachel.Taylor@tfl.gov.uk>; Lloyd Matthew (ST) <Matthew.Lloyd@tfl.gov.uk>; Simpson Lucy <LucySimpson@tfl.gov.uk>; Wadey, Peter <Peter.Wadey@stantec.com>; Callaghan, Greg <greg.callaghan@stantec.com>; Iyer, Siddharth <siddharth.iyer@stantec.com>
Subject: RE: Stag Brewery - Modelling Expectations Meeting

Hi Michal,

Firstly, apologies for the delay sending this response to the Modelling Expectation Document for the Stag Brewery development. It has taken us longer than anticipated to pull together all the relevant data and traffic modelling to bring it together what I hope will be viewed as a constructive response.

We are keen to ensure our modelling provides a reliable assessment of the development and proposed mitigation under what are exceptional times. Hopefully the response sets out an acceptable approach to navigating the issues created by the Hammersmith Bridge closure and COVID-19 lockdown but should any further clarification be required, please let me know.

If it would help, I'm happy to go through the document tomorrow to explain our thought processes before you start your review. I realise it is short notice but if convenient, please let me know what time works and I will set up the call.

Best. George

George Daugherty
Senior Associate – Transport
On behalf of Stantec UK Limited
T: +44 7917 372801

From: Miklasz Michal <MichalMiklasz@tfl.gov.uk>
Sent: 17 March 2020 16:26
To: George Daugherty <GDaugherty@peterbrett.com>; Wadey, Peter <Peter.Wadey@stantec.com>; Callaghan, Greg <greg.callaghan@stantec.com>
Cc: Taylor Rachel (ST) <Rachel.Taylor@tfl.gov.uk>; Lloyd Matthew (ST) <Matthew.Lloyd@tfl.gov.uk>; Simpson Lucy <LucySimpson@tfl.gov.uk>
Subject: RE: Stag Brewery - Modelling Expectations Meeting

Hi all,

Following up our meeting last week please find attached modelling expectation document for Stag Brewery covering existing scenarios assessment including modelling scope and methodology (principles behind future year assessment will be covered inn details as part of MAP Stage 4).

As mentioned the decision about what flow scenarios should be used for this scheme will be decided upon assessment of new survey which includes Hammersmith Bridge closure.
Obviously we have to take into consideration recent and future developments around global pandemic but for now please let me know if you have any other comments with relation to attached

Regards,
Michal

Michal Miklasz
TfL Planning/ Network Performance Modelling Liaison
TfL Planning | Planning | Palestra | 3rd Floor | 197 Blackfriars Road | London | SE1 8NJ
Tel (Auto): 85525|**External:** 020 3054 5525|**Fax (Auto):** 82008|**Fax:** 020 3054 2008|**Email:** michalmiklasz@tfl.gov.uk