Bidwells
C/O Anthony Child
via Email

Unit 23 The Maltings
Stanstead Abbotts
Hertfordshire SG12 8HG

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19th February 2020

Dear Anthony,

Land South of Hattons Road, Longstanton

Introduction

EAS has been appointed to provide a transportation review of the above site in order to support its allocation in the South Cambridgeshire Local Plan Review.

Longstanton is a village in South Cambridgeshire, 6 miles (9.7 km) north-west of Cambridge City centre. The site comprises land located to the southeast of Hattons Road and to the northwest of School Lane on the southwestern outskirts of the existing village. A Site Boundary plan is attached as **Appendix A**.

The 12.4ha site is currently used as agricultural land with no built footprint. For the purposes of this report it is proposed that the site be developed for residential use for up to 150 dwellings and associated landscaping, vehicular and pedestrian access and formal and informal open space.

Indicative Site Access

Access is proposed onto Hattons Road towards the northern extremity of the site. Along this section Hattons Road is currently deristricted, ie National speed limit (60mph) although this changes to a 30mph speed limit at approximately the northeastern boundary of the site and again at the northwestern boundary. The rationale for this appears to be rather illogical as Home Farm Road is all 30mph. Ultimately, we would anticipate this anomaly becoming 30mph throughout.

A visibility splay of 2.4m x 70m has therefore been provided, as shown on the plan in **Appendix B**, which is suitable for a 30mph limit in a rural area.

At this point in time the access has been shown with a 6.5m carriageway and 2m footways. This style of highway access would be suitable for a development of over 150 units,

There are no existing footways on Hatton Road alongside the site however there is one on the opposite side of Hattons Road, northwards from where the speed limit changes to 30mph, which gives pedestrian access to the existing facilities within the village and to the bus stop on High Street. Additionally, there is also a footpath public right of way running along the eastern boundary of the site, which connects Hattons Road with School Lane

To improve pedestrian connectivity and provide safe pedestrian access to the existing local footways, a tactile paving crossing point and footway could be created along the northern boundary of the site on the south side of Hattons Road. A footpath link can also be created to the south to the existing footway on School Lane and the Citi5/5A/5C bus stop around 100m from the southeastern boundary of the site. This would provide the potential new residents with safe pedestrian access from within the site. The indicative footway improvements and informal crossing points are indicated on drawing SK01 in **Appendix B.**

Local Facilities

Longstanton, currently has a village store/Post Office, doctor's surgery, a dentist and a veterinary practice. Longstanton has a primary school (Hatton Park Primary School, around 500m from the proposed site access) and a pre-school facility and is in the catchment area for Swavesey Village College, although a closer secondary school is proposed (see below).

However, from the northeast to the southeast of Longstanton there is the new community of Northstowe, which will eventually have a total of around 10,000 homes along with employment, shopping and other facilities. The first phase of this is currently under construction and is expected to comprise of up to 1,500 residential dwellings, a three form entry primary school, a mixed-use local centre, B1, B2 and B8 employment, a sports hub, public open space; and allotments. The first phase of the Northstowe development is taking place to the northeast of Longstanton adjacent to the existing Park & Ride site.

The proposed development site is around 1.8km from the proposed Northstowe town centre and 2.4km from the proposed Northstowe Secondary School site. Northstowe has been designed with a healthy and well balanced lifestyle in mind, with a network of safe walking and cycling routes into and around the new town. The Guided Busway and its adjoining cycleway connect the town to the City of Cambridge and beyond and a development at this site can make use of the additional facilities provided at Northstowe.

Further residential development in Longstanton would therefore be likely to improve the viability of the existing and the future local facilities which in turn would promote sustainability. Likewise, a residential development would also be likely to improve the viability of existing bus services.

Walking and Cycling

Regional cycling route 24 and national cycling route 51 both pass through Longstanton and these are shown on the plan attached in **Appendix C**.

Public Transport

Long Stanton railway station on the Cambridge and Huntingdon line operated from 1847 and although services survived the Beeching Axe, they were ended in 1970. More recently the route of the railway was developed as the Cambridgeshire Guided Busway, the world's longest guided busway.

The busway opened in August 2011 and there is a stop with a park-and-ride car park at Longstanton close to the site of the old railway station. There are frequent daily services from Longstanton to Cambridge and St Ives along the busway. A bus service links Longstanton and surrounding villages with Cambridge

A bus shelter for stop 'Hattons Road', is located approximately 240m northeast of the site boundary a short distance along High Street. The shelter serves the stop for both directions and has timetable information and there is a seat nearby. This stop was previously served solely by Stagecoach route Citi 5, although from 5 January 2020 it has been served by routes Citi 5A and Citi 5C, along with a pair of Citi 5 services in the morning to Cambridge city centre and in the evening from Cambridge city centre.

Routes Citi 5/5A/5C

The Citi 5 now operates only between Cambridge and Bar Hill (aside from journeys to Fenstanton and the first departure from Cambridge City Centre). Over, Willingham, Swavesey and Longstanton are now served by two services to and from Bar Hill. Citi 5A operates from Bar Hill to Longstanton Park & Ride before travelling (in an anti-clockwise direction) to Willingham, Over and Swavesey before returning to Longstanton Park & Ride and Bar Hill and Citi 5C operates from Bar Hill to Longstanton Park & Ride before travelling (in a clockwise direction) to Swavesey, Over and Willingham before returning to Longstanton Park & Ride and Bar Hill. Both Citi 5A and Citi 5C services require changing buses at Bar Hill for journeys to/from Cambridge City Centre.

The bus service timetables for Citi 5, Citi 5A & Citi 5C are attached as **Appendix D**.

Trip Generation

EAS has reviewed the nationally recognised Trip Rate database 'TRICS' to determine an appropriate vehicle trip rate. The resulting TRICS data output is enclosed in **Appendix E** and gives the following AM and PM trip rates and subsequent vehicle trips based on 150 dwellings:

	Trip Rate (Per Dwelling)		Vehicle Trips (150 Dwellings)		
	In	Out	In	Out	Total
AM Peak Hour	0.146	0.364	22	55	77
PM Peak Hour	0.335	0.139	50	21	71

Residential Vehicle TRICS Trip Rates and Trip Numbers (allow for rounding)

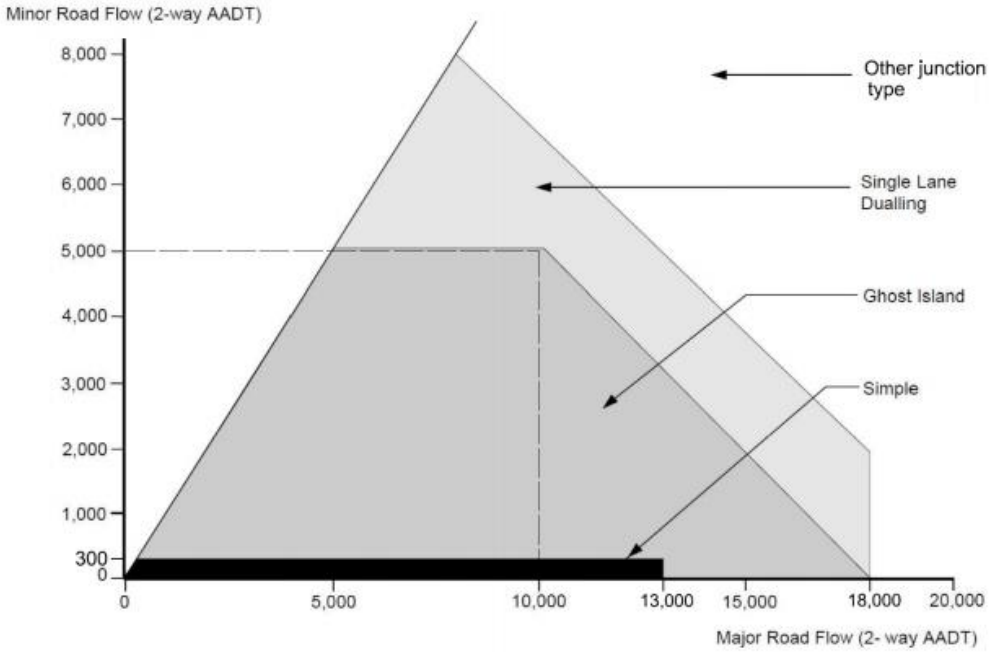
As can be seen from the above table, the peak hourly flow from the site based on 150 dwellings is around 71 to 77 peak hour vehicle movements, 77 in the AM peak and 71 in the PM peak. These would be split rough 2.5:1 (out/in) in the AM peak and around the reverse in the PM peak. The maximum flow would be around 55 vehicles in one direction (out in the AM peak) which is around 1 vehicle per minute, which is unlikely to be material on the local road network, particularly as it represents only 1.5% of the trip generation associated with the much larger Northstowe development.

Looking at the potential for traffic directional split at this preliminary stage it is assumed that most vehicular traffic would turn westwards on Hattons Road towards Home Farm Road and the A14 and the wider highway network with the remainder eastwards for destinations within the new Northstowe developments, such as schools, employment or shopping and the park and ride site, although it is envisaged that most local trips would be by sustainable means and therefore car trips have the potential to be slightly lower than that predicted from TRICS.

At the western end of Hattons Road there is a ghost island tee junction with Home Farm Road located within the 30mph speed limit, as shown below, at which there is excellent visibility.

The figure 2.3.1 below from the new Highways Standard CD123 which deals with the geometric design of at-grade priority and signal-controlled junctions, shows that ghost island junctions are generally suitable for minor road flows of up to 5000 (AADT) and major road flows of up to 10000 (AADT) or 18000 (AADT) with a lower minor arm flow. However, it is unlikely that the minor arm, Hattons Road, or major arm, Home Farm Road, with the proposed development and Northstowe in place would reach the upper limit of the design traffic flows.

Figure 2.3.1 Approximate priority junction provision on single carriageway roads based on flows only



However, should traffic flows exceed these limits in future years, there is highway space to amend the junction form so that greater capacity can be achieved. A signalised junction, with pedestrian and cyclist phase integration, for example would have a significantly higher capacity.

Local Road Traffic Accidents

The CrashMap database has been interrogated and in the last five years (2014 to 2018 inclusive) there have been two accidents close to the proposed site entrance on Hattons Road. Both of these were classified as 'slight' accidents with one occurring on 28 December 2014 around 200m southwest of the proposed site access and involved one vehicle with two slight casualties, while the other occurred on 20 May 2018 at the junction of Hattons Road with High Street, around 170m northeast of the proposed site access, and involved three vehicles with a single slight casualty.

While all accidents are regrettable the incidence of just two slight accidents occurring on Hattons Road in the last five years does not suggest that there is any underlying safety problem along this stretch of road which might be exacerbated by the amount of additional traffic likely to be generated by this development. The plan obtained from CrashMap is attached as **Appendix F**.

Summary

EAS has been appointed to provide a transportation review of 'Land south of Hattons Road, Longstanton' in order to support its allocation in the South Cambridgeshire Local Plan Review.

A resident of this site would be able to access everyday needs, living, working and education, by either walking, cycling or by public transport and will not therefore need to use a private motor car.

An indicative highways access layout has been produced and a 2.4m x 70m visibility splay to the right and also to the left can be achieved in accordance with DMRB design standards for 30mph. The access designed could potentially support a higher development site in terms of highway and access layout.

Highway capacity is unlikely to be an issue however land is available for amendments to increase capacity if required.

A TRICS assessment for a residential development of approximately 150 units has been completed and the resulting AM peak hour and PM peak hour vehicle trips generated are considered to have no detrimental impact on the local road network.

There is potential to improve and promote sustainable modes of transport in the village including pedestrian connectivity and bus viability.

If you have any queries or require any clarification, please do not hesitate to contact me.

Yours Sincerely,

Anthony Parker MCIHT

Appendix A – Site Boundary Plan

Appendix B SK01 Visibility Splay and Indicative Site Access

Appendix C – Local Footpaths and Cycle Routes

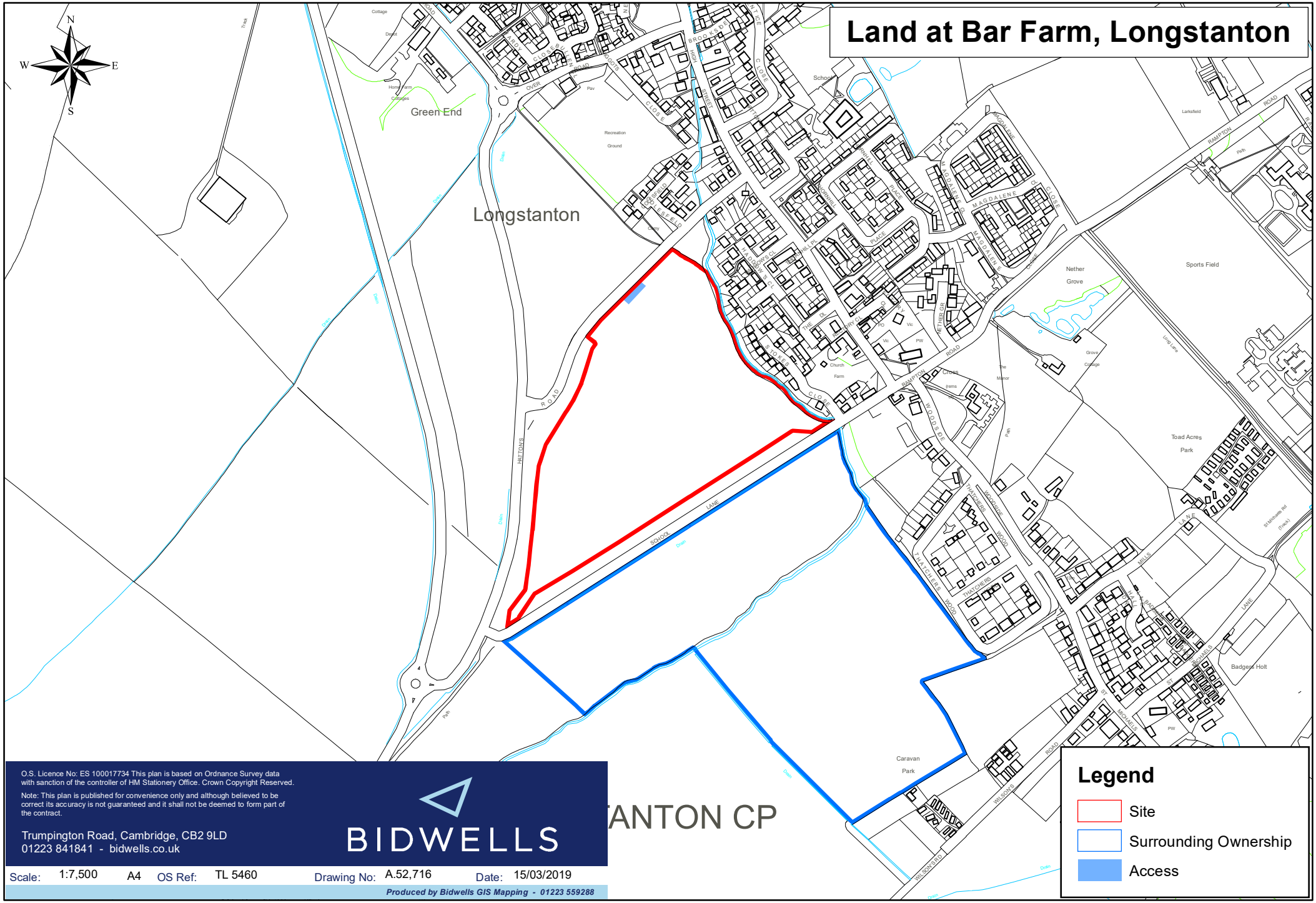
Appendix D – Citi 5/5A/5C Bus Timetable

Appendix E TRICS Data

Appendix F CrashMap Plan

Appendix A- Site Boundary Plan

Land at Bar Farm, Longstanton



Trumpington Road, Cambridge, CB2 9LD
01223 841841 - bidwells.co.uk

BIDWELLS

Scale: 1:7,500 A4 OS Ref: TL 5460 Drawing No: A.52,716 Date: 15/03/2019

Produced by Bidwells GIS Mapping - 01223 559288

Appendix B – Highway Access and Footway Improvements

N

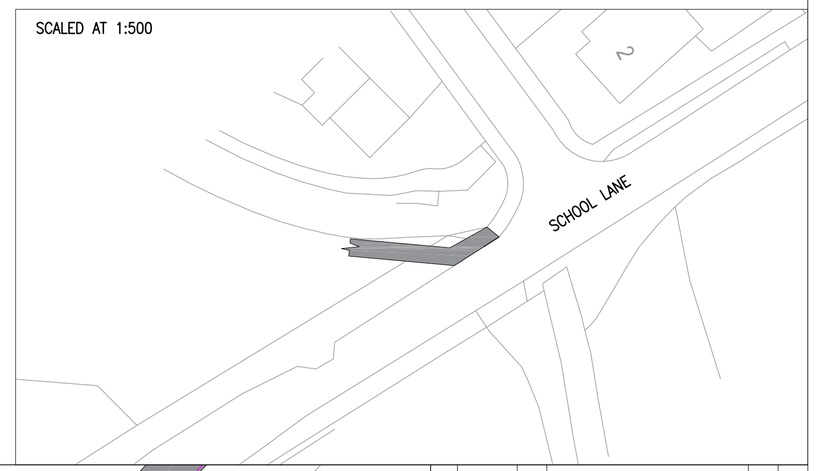
SCALED AT 1:500

LAYBY HAS BEEN DRAWN TO MIRROR WHAT IS PRESENT.

PROPOSED NEW FOOTWAY.

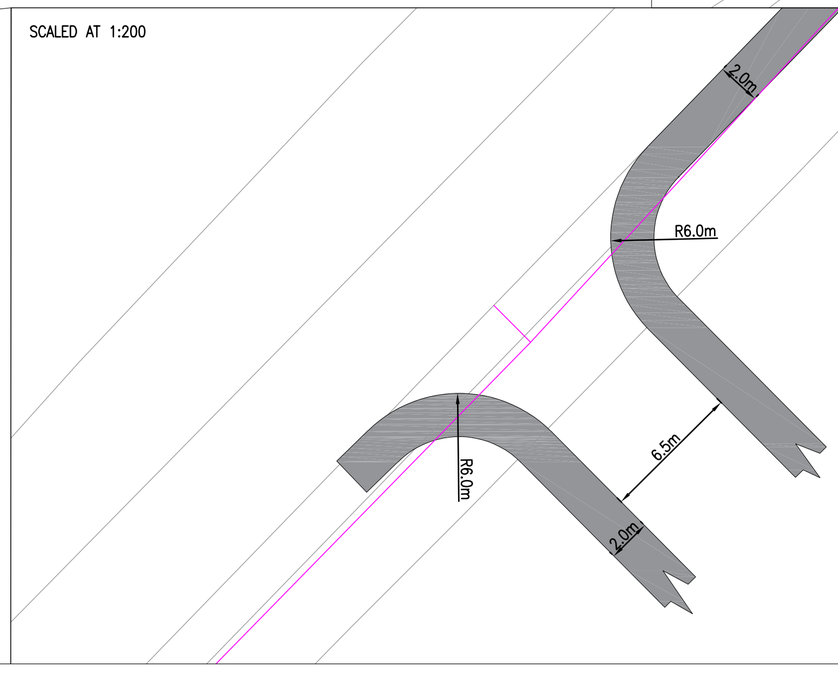
2.4m X 70m VISIBILITY SPLAY CAN BE ACHIEVED IN ACCORDANCE WITH THE DMRB DESIGN STANDARDS FOR 30mph SPEED LIMIT.

SCALED AT 1:500



2.4m X 70m VISIBILITY SPLAY CAN BE ACHIEVED IN ACCORDANCE WITH THE DMRB DESIGN STANDARDS FOR 30mph SPEED LIMIT.

SCALED AT 1:200



REV	DATE	BY	DESCRIPTION	CHK	APD

DRAWING STATUS:

EAS

Unit 23, The Maltings, Stanstead Abbotts, Hertfordshire, SG12 8HG
Tel: 01920 871777

www.eastp.co.uk

CLIENT:

ARCHITECT:

PROJECT:

LAND SOUTH OF HATTONS ROAD
LONGSTANTON

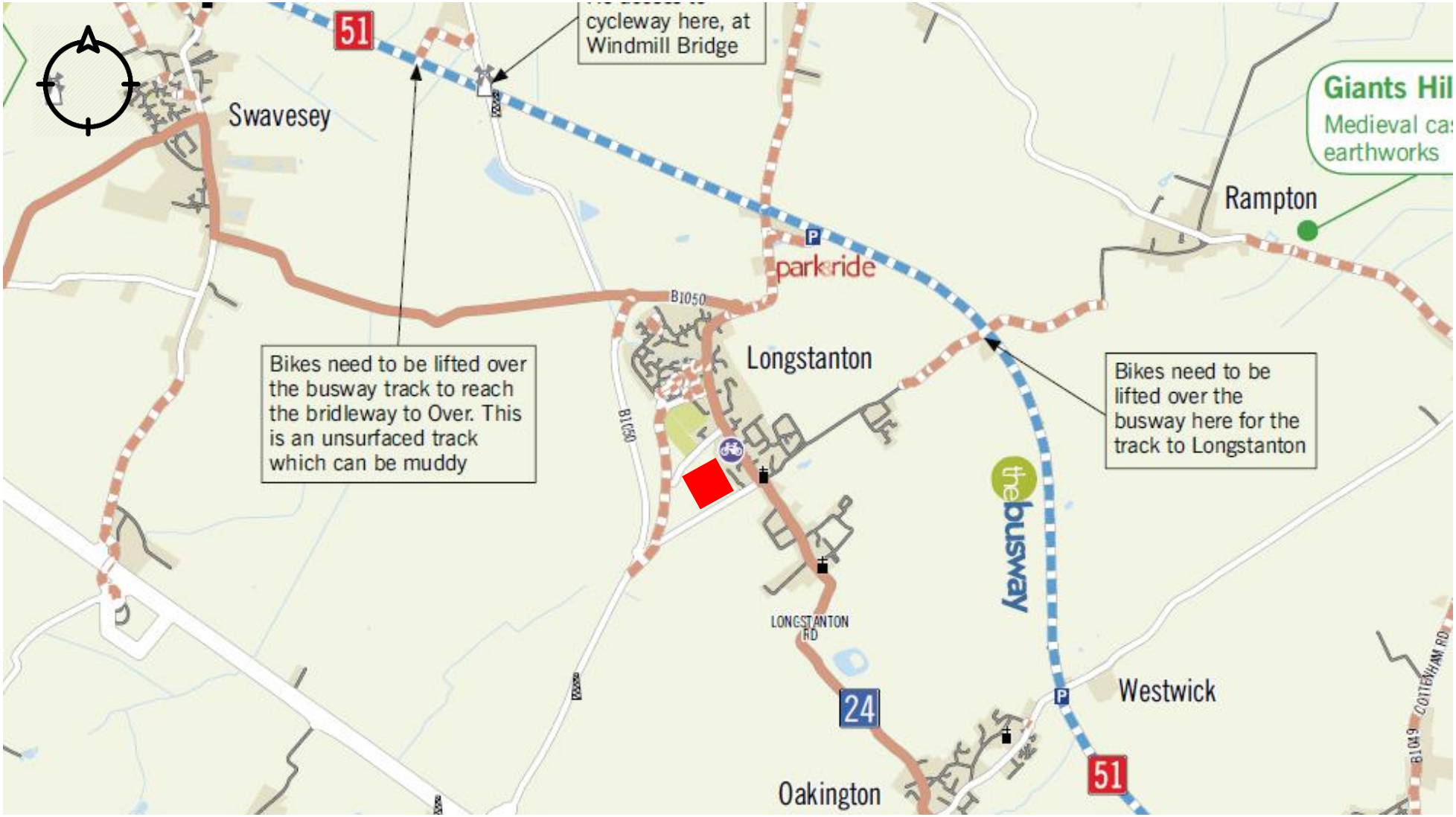
TITLE:

ACCESS ARRANGEMENT AND VISIBILITY SPLAYS

SCALE @ A2:	DESIGN–DRAWN:	DATE:
SEE VIEWPORTS	ET	29.01.2020

PROJECT No:	DRAWING No:
2555	SK01 REV A

Appendix C – Local Cycle Routes



Local Cycle Routes

Site Location

EAS

Appendix D – Citi 5/5A/5C Bus Timetable

Cambridge • Bar Hill • Willingham • Swavesey • Fenstanton

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MONDAYS TO SATURDAYS EXCLUDING BANK HOLIDAYS

route number	5	5	5	5	5C	5	5	5	5A	5	5	5	5C	5	5	5	5	5A
	Sch	#Sch																
City Centre Emmanuel Street E4	0715	0720	0750	0810	-	0830	0850	0910	-	0930	0950	1010	-	1030	1050	1110	1130	-
Girton Corner	0729	0734	0804	0824	-	0844	0904	0924	-	0944	1004	1024	-	1044	1104	1124	1144	-
Bar Hill Shopping Centre	0739	0744	0815	0835	0851	0855	0915	0935	0951	0955	1015	1035	1051	1055	1115	1135	1155	1201
Bar Hill Appletrees	0744	0749	0820	0840	▼	0900	0920	0940	▼	1000	1020	1040	▼	1100	1120	1140	1200	▼
Longstanton Church	0751	0756	-	-	0858	-	-	-	0958	-	-	-	1058	-	-	-	-	1208
Longstanton Park & Ride	0757	0802	-	-	0904	-	-	-	1004	-	-	-	1104	-	-	-	-	1214
Willingham Willford Furlong	0804	0809	-	-	▼	-	-	-	1011	-	-	-	▼	-	-	-	-	1221
Over Green	0814	0819	-	-	▼	-	-	-	1021	-	-	-	▼	-	-	-	-	1231
Swavesey Village College	0821	▼	-	-	▼	-	-	-	▼	-	-	-	▼	-	-	-	-	▼
Swavesey Middle Watch (to Longstanton)	0831	0826	-	-	▼	-	-	-	1028	-	-	-	▼	-	-	-	-	1238
Swavesey Middle Watch (to Over)	-	-	-	-	0911	-	-	-	-	-	-	-	1111	-	-	-	-	-

MONDAYS TO SATURDAYS EXCLUDING BANK HOLIDAYS

route number	5	5	5	5C	5	5	5	5A	5	5	5	5C	5C	5	5	5	5A	5
												Sch	#Sch					
City Centre Emmanuel Street E4	1150	1210	1230	-	1250	1310	1330	-	1350	1410	1430	-	-	1450	1510	1530	-	1550
Girton Corner	1204	1224	1244	-	1304	1324	1344	-	1404	1424	1444	-	-	1504	1524	1544	-	1604
Bar Hill Shopping Centre	1215	1235	1255	1301	1315	1335	1355	1401	1415	1435	1455	1500	1500	1515	1535	1555	1601	1615
Bar Hill Appletrees	1220	1240	1300	▼	1320	1340	1400	▼	1420	1440	1500	▼	▼	1520	1540	1600	▼	1620
Longstanton Church	-	-	-	1308	-	-	-	1408	-	-	-	1507	1507	-	-	-	1608	-
Longstanton Park & Ride	-	-	-	1314	-	-	-	1414	-	-	-	1510	1513	-	-	-	1614	-
Willingham Willford Furlong	-	-	-	▼	-	-	-	1421	-	-	-	▼	▼	-	-	-	1621	-
Over Green	-	-	-	▼	-	-	-	1431	-	-	-	▼	▼	-	-	-	1631	-
Swavesey Middle Watch (to Longstanton)	-	-	-	▼	-	-	-	1438	-	-	-	▼	▼	-	-	-	1638	-
Swavesey Middle Watch (to Over)	-	-	-	1321	-	-	-	-	-	-	-	1517	1520	-	-	-	-	-

MONDAYS TO SATURDAYS EXCLUDING BANK HOLIDAYS

route number	5	5	5C	5	5	5	5	5	5	5	5	5	5	5	5
									M-F	SAT					X
City Centre Emmanuel Street E4	1610	1630	-	1650	1710	1730	1750	1810	1830	1835	1910	2010	2110	2210	2310
Girton Corner	1624	1644	-	1704	1724	1744	1804	1824	1844	1849	▼	▼	▼	▼	▼
Girton Corner	▼	▼	-	▼	▼	▼	▼	▼	▼	▼	1923	2023	2123	2223	2323
Girton Church	▼	▼	-	▼	▼	▼	▼	▼	▼	▼	1926	2026	2126	2226	2326
Oakington Crossroads	▼	▼	-	▼	▼	▼	▼	▼	▼	▼	1931	2031	2131	2231	2331
Bar Hill Shopping Centre	1635	1655	1701	1715	1735	1754	1823	1843	1854	1859	1943	2043	2143	2243	2343
Bar Hill Appletrees	1640	1700	▼	1720	1740	1759	1828	1848	1859	1904	1948	2048	2148	2248	2346
Longstanton Church	-	-	1708	-	-	1806	-	-	1906	1911	-	-	-	-	-
Longstanton Park & Ride	-	-	1714	-	-	1812	-	-	1912	1917	-	-	-	-	-
Willingham Willford Furlong	-	-	▼	-	-	1819	-	-	1919	1924	-	-	-	-	-
Over Green	-	-	▼	-	-	1829	-	-	1929	1934	-	-	-	-	-
Swavesey Middle Watch (to Longstanton)	-	-	▼	-	-	1836	-	-	1936	1941	-	-	-	-	-
Swavesey Middle Watch (to Over)	-	-	1721	-	-	▼	-	-	▼	▼	-	-	-	-	-
Fen Drayton	-	-	-	-	-	1844	-	-	1944	1949	-	-	-	-	-
Fenstanton Clock Tower	-	-	-	-	-	1850	-	-	1950	1955	-	-	-	-	-

SUNDAYS INCLUDING BANK HOLIDAYS

route number	5		5		5	5
City Centre Emmanuel Street E4	0940	THEN	40	UNTIL	1640	1740
Girton Corner	0954	THESE	54		1654	1754
Bar Hill Shopping Centre	0906	TIMES	06		1706	1804
Bar Hill Appletrees	0911	EACH	11		1711	1809
Bar Hill Acorn Avenue	-	HOUR	-		-	1810

LEGEND

Sch	Operates on School Days Only
#Sch	Operates on Saturdays & School Holidays Only
M-F	Operates on Mondays to Fridays Only
SAT	Operates on Saturdays Only
X	Terminates at Bar Hill Acorn Avenue at 2347

This timetable starts **5 January 2020**

All of our vehicles are low floor and wheelchair accessible. Each vehicle can carry one wheelchair user.

If you've searched online for this timetable, it may not be the most up to date. To get the latest version go to ***stagecoachbus.com***

Fenstanton • Swavesey • Willingham • Bar Hill • Cambridge

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MONDAYS TO SATURDAYS EXCLUDING BANK HOLIDAYS

route number	5	5	5	5	5	5	5	5	5A	5A	5	5	5	5C	5	5	5	5A
				M-F	SAT				SAT	M-F								
Madingley Cambridge Road	-	-	-	0725	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dry Drayton Park Lane	-	-	-	0729	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fenstanton Clock Tower	-	0600	-	▼	-	0656	-	-	-	-	-	-	-	-	-	-	-	-
Fen Drayton	-	0606	-	▼	-	0702	-	-	-	-	-	-	-	-	-	-	-	-
Swavesey Middle Watch (to Longstanton)	-	▼	-	▼	-	▼	-	-	0826	0831	-	-	-	-	-	-	-	1028
Swavesey Middle Watch (to Over)	-	0611	-	▼	-	0707	-	-	▼	▼	-	-	-	0911	-	-	-	▼
Over Green	-	0619	-	▼	-	0715	-	-	▼	▼	-	-	-	0918	-	-	-	▼
Willingham Willford Furlong	-	0629	-	▼	-	0725	-	-	▼	▼	-	-	-	0926	-	-	-	▼
Longstanton Park & Ride	-	0640	-	▼	-	0736	-	-	0834	0839	-	-	-	0937	-	-	-	1037
Longstanton Church	-	0643	-	▼	-	0743	-	-	0837	0842	-	-	-	0940	-	-	-	1040
Bar Hill Shopping Centre	0625	0655	0715	0735	0735	0755	0815	0835	0844	0849	0855	0915	0935	0947	0955	1015	1035	1047
Bar Hill Appletrees	0630	0700	0720	0740	0740	0800	0820	0840	-	-	0900	0920	0940	-	1000	1020	1040	-
Girton Corner	0638	0710	0730	0750	0750	0810	0830	0850	-	-	0910	0930	0950	-	1010	1030	1050	-
City Centre Emmanuel Street E4	0651	0725	0745	0805	0805	0825	0845	0905	-	-	0925	0945	1005	-	1025	1045	1105	-

MONDAYS TO SATURDAYS EXCLUDING BANK HOLIDAYS

route number	5	5	5	5C	5	5	5	5	5A	5	5	5	5C	5	5	5	5A	5
Swavesey Middle Watch (to Longstanton)	-	-	-	-	-	-	-	-	1238	-	-	-	-	-	-	-	1438	-
Swavesey Middle Watch (to Over)	-	-	-	1111	-	-	-	-	▼	-	-	-	1321	-	-	-	▼	-
Over Green	-	-	-	1118	-	-	-	-	▼	-	-	-	1328	-	-	-	▼	-
Willingham Willford Furlong	-	-	-	1126	-	-	-	-	▼	-	-	-	1336	-	-	-	▼	-
Longstanton Park & Ride	-	-	-	1137	-	-	-	-	1247	-	-	-	1347	-	-	-	1447	-
Longstanton Church	-	-	-	1140	-	-	-	-	1250	-	-	-	1350	-	-	-	1450	-
Bar Hill Shopping Centre	1055	1115	1135	1147	1155	1215	1235	1255	1257	1315	1335	1355	1357	1415	1435	1455	1457	1515
Bar Hill Appletrees	1100	1120	1140	-	1200	1220	1240	1300	-	1320	1340	1400	-	1420	1440	1500	-	1520
Girton Corner	1110	1130	1150	-	1210	1230	1250	1310	-	1330	1350	1410	-	1430	1450	1510	-	1530
City Centre Emmanuel Street E4	1125	1145	1205	-	1225	1245	1305	1325	-	1345	1405	1425	-	1445	1505	1525	-	1545

MONDAYS TO SATURDAYS EXCLUDING BANK HOLIDAYS

route number	5	5	5C	5C	5	5	5	5A	5	5	5	5	5	5	5	5	5
			Sch	#Sch													
Swavesey Middle Watch (to Longstanton)	-	-	-	-	-	-	-	1638	-	-	-	-	-	-	-	-	-
Swavesey Middle Watch (to Over)	-	-	1517	1520	-	-	-	▼	-	-	1721	-	-	-	-	-	-
Swavesey Village College	-	-	1522	▼	-	-	-	▼	-	-	▼	-	-	-	-	-	-
Over Green	-	-	1530	1527	-	-	-	▼	-	-	1728	-	-	-	-	-	-
Willingham Willford Furlong	-	-	1538	1535	-	-	-	▼	-	-	1736	-	-	-	-	-	-
Longstanton Park & Ride	-	-	1546	1546	-	-	-	1647	-	-	1747	-	-	-	-	-	-
Longstanton Church	-	-	1549	1549	-	-	-	1650	-	-	1750	-	-	-	-	-	-
Bar Hill Shopping Centre	1535	1555	1556	1556	1615	1635	1655	1657	1715	1735	1800	1823	1843	1943	2043	2143	2243
Bar Hill Appletrees	1540	1600	-	-	1620	1640	1700	-	1720	1740	1805	1828	1848	1948	2048	2148	2248
Oakington Manor Farm Close	▼	▼	-	-	▼	▼	▼	-	▼	▼	▼	1841	1901	2001	2101	2201	2301
Oakington Mill Road	▼	▼	-	-	▼	▼	▼	-	▼	▼	▼	1844	1904	2004	2104	2204	2304
Oakington Crossroads	▼	▼	-	-	▼	▼	▼	-	▼	▼	▼	1846	1906	2006	2106	2206	2306
Girton Church	▼	▼	-	-	▼	▼	▼	-	▼	▼	▼	1851	1911	2011	2111	2211	2311
Girton Corner	1550	1610	-	-	1630	1650	1710	-	1730	1750	1815	1854	1914	2014	2114	2214	2314
City Centre Emmanuel Street E4	1605	1625	-	-	1645	1705	1725	-	1745	1805	1830	1905	1925	2025	2125	2225	2325
				***													

SUNDAYS INCLUDING BANK HOLIDAYS

route number	5		5		5
Bar Hill Shopping Centre	0906	THESE TIMES EACH HOUR	06	UNTIL	1706
Bar Hill Appletrees	0911		11		1711
Girton Corner	0921		21		1721
City Centre Emmanuel Street E4	0936		36		1736

LEGEND

Sch	Operates on School Days Only
#Sch	Operates on Saturdays & School Holidays Only
M-F	Operates on Mondays to Fridays Only
SAT	Operates on Saturdays Only
***	Operates one minute later on Saturdays

This timetable starts **5 January 2020**

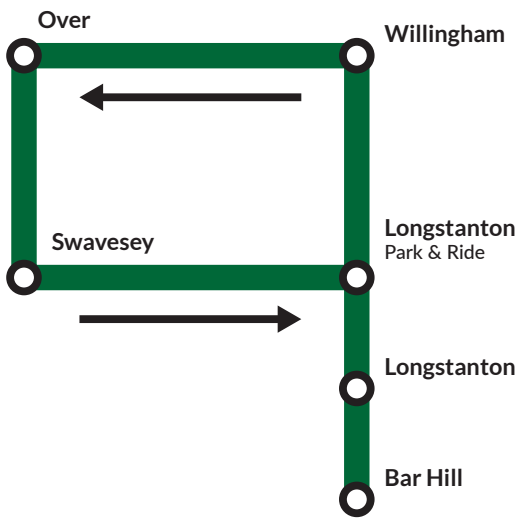
All of our vehicles are low floor and wheelchair accessible. Each vehicle can carry one wheelchair user.

If you've searched online for this timetable, it may not be the most up to date. To get the latest version go to ***stagecoachbus.com***

MONDAYS TO FRIDAYS EXCLUDING BANK HOLIDAYS

route number	5A	5A	5A	5A	5A
City Centre Emmanuel Street E4	-	*0910*	*1130*	*1330*	*1530*
Girton Corner	-	*0924*	*1144*	*1344*	*1544*
Bar Hill Shopping Centre	-	*0934*	*1154*	*1354*	*1554*
interchange point		**Trn**	**Trn**	**Trn**	**Trn**
Bar Hill Shopping Centre	-	0951	1201	1401	1601
Longstanton Church	-	0958	1208	1408	1608
Longstanton Park & Ride	-	1004	1214	1414	1614
Willingham Willford Furlong	-	1011	1221	1421	1621
Over Green	-	1021	1231	1431	1631
Swavesey Middle Watch	0831	1028	1238	1438	1638
Longstanton Park & Ride	0839	1037	1247	1447	1647
Longstanton Church	0842	1040	1250	1450	1650
Bar Hill Shopping Centre	0849	1047	1257	1457	1657
interchange point	**Trn**	**Trn**	**Trn**	**Trn**	**Trn**
Bar Hill Shopping Centre	*0855*	*1055*	*1315*	*1515*	*1715*
Bar Hill Appletrees	*0900*	*1100*	*1320*	*1520*	*1720*
Girton Corner	*0910*	*1110*	*1330*	*1530*	*1730*
City Centre Emmanuel Street E4	*0925*	*1125*	*1345*	*1545*	*1745*

Bar Hill • Longstanton • Willingham • Over • Swavesey **5A**



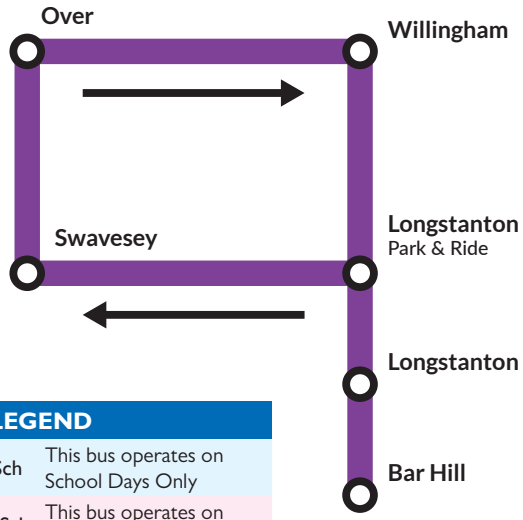
SATURDAYS EXCLUDING BANK HOLIDAYS

route number	5A	5A	5A	5A
City Centre Emmanuel Street E4	-	*0910*	*1130*	*1330*	*1530*
Girton Corner	-	*0924*	*1144*	*1344*	*1544*
Bar Hill Shopping Centre	-	*0934*	*1154*	*1354*	*1554*
interchange point		**Trn**	**Trn**	**Trn**	**Trn**
Bar Hill Shopping Centre	-	0951	1201	1401	1601
Longstanton Church	-	0958	1208	1408	1608
Longstanton Park & Ride	-	1004	1214	1414	1614
Willingham Willford Furlong	-	1011	1221	1421	1621
Over Green	-	1021	1231	1431	1631
Swavesey Middle Watch	0826	1028	1238	1438	1638
Longstanton Park & Ride	0834	1037	1247	1447	1647
Longstanton Church	0837	1040	1250	1450	1650
Bar Hill Shopping Centre	0844	1047	1257	1457	1657
interchange point	**Trn**	**Trn**	**Trn**	**Trn**	**Trn**
Bar Hill Shopping Centre	*0855*	*1055*	*1315*	*1515*	*1715*
Bar Hill Appletrees	*0900*	*1100*	*1320*	*1520*	*1720*
Girton Corner	*0910*	*1110*	*1330*	*1530*	*1730*
City Centre Emmanuel Street E4	*0925*	*1125*	*1345*	*1545*	*1745*

MONDAYS TO FRIDAYS EXCLUDING BANK HOLIDAYS

route number	5C	5C	5C	5C	5C	5C
				Sch	#Sch	
City Centre Emmanuel Street E4	*0810*	*1010*	*1230*	*1430*	*1430*	*1630*
Girton Corner	*0824*	*1024*	*1244*	*1444*	*1444*	*1644*
Bar Hill Shopping Centre	*0835*	*1035*	*1255*	*1455*	*1455*	*1655*
interchange point	**Trn**	**Trn**	**Trn**	**Trn**	**Trn**	**Trn**
Bar Hill Shopping Centre	0851	1051	1301	1500	1500	1701
Longstanton Church	0858	1058	1308	1507	1507	1708
Longstanton Park & Ride	0904	1104	1314	1510	1513	1714
Swavesey Middle Watch	0911	1111	1321	1517	1520	1721
Swavesey Village College	▼	▼	▼	1522	▼	-
Over Green	0918	1118	1328	1530	1527	-
Willingham Willford Furlong	0926	1126	1336	1538	1535	-
Longstanton Park & Ride	0937	1137	1347	1546	1546	-
Longstanton Church	0940	1140	1350	1549	1549	-
Bar Hill Shopping Centre	0947	1147	1357	1556	1556	-
interchange point	**Trn**	**Trn**	**Trn**	**Trn**	**Trn**	
Bar Hill Shopping Centre	*0955*	*1155*	*1415*	*1615*	*1615*	-
Bar Hill Appletrees	*1000*	*1200*	*1420*	*1620*	*1620*	-
Girton Corner	*1010*	*1210*	*1430*	*1630*	*1630*	-
City Centre Emmanuel Street E4	*1025*	*1225*	*1445*	*1645*	*1645*	-

Bar Hill • Longstanton • Swavesey • Over • Willingham **5C**



LEGEND

Sch	This bus operates on School Days Only
#Sch	This bus operates on School Holidays Only

SATURDAYS EXCLUDING BANK HOLIDAYS

route number	5C	5C	5C	5C	5C
City Centre Emmanuel Street E4	*0810*	*1010*	*1230*	*1430*	*1630*
Girton Corner	*0824*	*1024*	*1244*	*1444*	*1644*
Bar Hill Shopping Centre	*0835*	*1035*	*1255*	*1455*	*1655*
interchange point	**Trn**	**Trn**	**Trn**	**Trn**	**Trn**
Bar Hill Shopping Centre	0851	1051	1301	1501	1701
Longstanton Church	0858	1058	1308	1508	1708
Longstanton Park & Ride	0904	1104	1314	1514	1714
Swavesey Middle Watch	0911	1111	1321	1521	1721
Over Green	0918	1118	1328	1528	-
Willingham Willford Furlong	0926	1126	1336	1536	-
Longstanton Park & Ride	0937	1137	1347	1547	-
Longstanton Church	0940	1140	1350	1550	-
Bar Hill Shopping Centre	0947	1147	1357	1557	-
interchange point	**Trn**	**Trn**	**Trn**	**Trn**	
Bar Hill Shopping Centre	*0955*	*1155*	*1415*	*1615*	-
Bar Hill Appletrees	*1000*	*1200*	*1420*	*1620*	-
Girton Corner	*1010*	*1210*	*1430*	*1630*	-
City Centre Emmanuel Street E4	*1025*	*1225*	*1445*	*1645*	-

This timetable starts **5 January 2020**

Trn *TRANSFER AT BAR HILL FOR JOURNEYS TO AND FROM CAMBRIDGE*

NO SUNDAY & PUBLIC HOLIDAY SERVICE ON **5A** OR **5C**

Appendix E – TRICS Data

Calculation Reference: AUDIT-743101-200219-0249

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	2 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	2 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	SM	SOMERSET	3 days
04	EAST ANGLIA		
	NF	NORFOLK	4 days
	SF	SUFFOLK	2 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WM	WEST MIDLANDS	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
09	NORTH		
	DH	DURHAM	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 10 to 288 (units:)
Range Selected by User: 10 to 288 (units:)

Parking Spaces Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 23/09/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	5 days
Tuesday	4 days
Wednesday	7 days
Thursday	2 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	21 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town	16
Neighbourhood Centre (PPS6 Local Centre)	5

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	18
Village	3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	21 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	4 days
5,001 to 10,000	6 days
10,001 to 15,000	4 days
15,001 to 20,000	4 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	3 days
50,001 to 75,000	4 days
75,001 to 100,000	5 days
125,001 to 250,000	5 days
250,001 to 500,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	13 days
1.6 to 2.0	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	9 days
No	12 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	21 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CH-03-A-10 SEMI-DETACHED & TERRACED CHESHIRE
MEADOW DRIVE
NORTHWICH
BARNTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: TUESDAY *04/06/19* *Survey Type: MANUAL*

2 DH-03-A-02 MIXED HOUSES DURHAM
LEAZES LANE
BISHOP AUCKLAND
ST HELEN AUCKLAND
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 125
Survey date: MONDAY *27/03/17* *Survey Type: MANUAL*

3 DH-03-A-03 SEMI-DETACHED & TERRACED DURHAM
PILGRIMS WAY
DURHAM

Edge of Town
Residential Zone
Total Number of dwellings: 57
Survey date: FRIDAY *19/10/18* *Survey Type: MANUAL*

4 HC-03-A-21 TERRACED & SEMI-DETACHED HAMPSHIRE
PRIESTLEY ROAD
BASINGSTOKE
HOUNDMILLS
Edge of Town
Residential Zone
Total Number of dwellings: 39
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

5 HC-03-A-22 MIXED HOUSES HAMPSHIRE
BOW LAKE GARDENS
NEAR EASTLEIGH
BISHOPSTOKE
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: WEDNESDAY *31/10/18* *Survey Type: MANUAL*

6 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total Number of dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

7 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total Number of dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

8 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total Number of dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

10 NF-03-A-04 MIXED HOUSES NORFOLK
NORTH WALSHAM ROAD
NORTH WALSHAM

Edge of Town
Residential Zone
Total Number of dwellings: 70
Survey date: WEDNESDAY *18/09/19* *Survey Type: MANUAL*

11 NF-03-A-05 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

12 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total Number of dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

13 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total Number of dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

14 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

15 SF-03-A-06 DETACHED & SEMI-DETACHED SUFFOLK
BURY ROAD
KENTFORD

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 38
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

16 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

17 SM-03-A-02 MIXED HOUSES SOMERSET
HYDE LANE
NEAR TAUNTON
CREECH SAINT MICHAEL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 42
Survey date: TUESDAY *25/09/18* *Survey Type: MANUAL*

18 SM-03-A-03 MIXED HOUSES SOMERSET
HYDE LANE
NEAR TAUNTON
CREECH ST MICHAEL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 41
Survey date: TUESDAY *25/09/18* *Survey Type: MANUAL*

19 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total Number of dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

20 WM-03-A-04 TERRACED HOUSES WEST MIDLANDS
OSBORNE ROAD
COVENTRY
EARLSDON
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 39
Survey date: MONDAY *21/11/16* *Survey Type: MANUAL*

21 WS-03-A-10 MIXED HOUSES WEST SUSSEX
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total Number of dwellings: 79
Survey date: WEDNESDAY *07/11/18* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	95	0.094	21	95	0.308	21	95	0.402
08:00 - 09:00	21	95	0.146	21	95	0.364	21	95	0.510
09:00 - 10:00	21	95	0.137	21	95	0.181	21	95	0.318
10:00 - 11:00	21	95	0.120	21	95	0.143	21	95	0.263
11:00 - 12:00	21	95	0.116	21	95	0.149	21	95	0.265
12:00 - 13:00	21	95	0.144	21	95	0.142	21	95	0.286
13:00 - 14:00	21	95	0.150	21	95	0.139	21	95	0.289
14:00 - 15:00	21	95	0.172	21	95	0.177	21	95	0.349
15:00 - 16:00	21	95	0.279	21	95	0.173	21	95	0.452
16:00 - 17:00	21	95	0.273	21	95	0.160	21	95	0.433
17:00 - 18:00	21	95	0.335	21	95	0.139	21	95	0.474
18:00 - 19:00	21	95	0.283	21	95	0.155	21	95	0.438
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.249			2.230			4.479

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	10 - 288 (units:)
Survey date date range:	01/01/11 - 23/09/19
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	95	0.004	21	95	0.003	21	95	0.007
08:00 - 09:00	21	95	0.004	21	95	0.004	21	95	0.008
09:00 - 10:00	21	95	0.003	21	95	0.003	21	95	0.006
10:00 - 11:00	21	95	0.002	21	95	0.003	21	95	0.005
11:00 - 12:00	21	95	0.000	21	95	0.001	21	95	0.001
12:00 - 13:00	21	95	0.002	21	95	0.002	21	95	0.004
13:00 - 14:00	21	95	0.002	21	95	0.002	21	95	0.004
14:00 - 15:00	21	95	0.002	21	95	0.002	21	95	0.004
15:00 - 16:00	21	95	0.003	21	95	0.004	21	95	0.007
16:00 - 17:00	21	95	0.003	21	95	0.003	21	95	0.006
17:00 - 18:00	21	95	0.004	21	95	0.003	21	95	0.007
18:00 - 19:00	21	95	0.002	21	95	0.003	21	95	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.031			0.033			0.064

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	95	0.003	21	95	0.002	21	95	0.005
08:00 - 09:00	21	95	0.003	21	95	0.003	21	95	0.006
09:00 - 10:00	21	95	0.006	21	95	0.005	21	95	0.011
10:00 - 11:00	21	95	0.003	21	95	0.002	21	95	0.005
11:00 - 12:00	21	95	0.002	21	95	0.004	21	95	0.006
12:00 - 13:00	21	95	0.003	21	95	0.004	21	95	0.007
13:00 - 14:00	21	95	0.003	21	95	0.002	21	95	0.005
14:00 - 15:00	21	95	0.002	21	95	0.003	21	95	0.005
15:00 - 16:00	21	95	0.003	21	95	0.003	21	95	0.006
16:00 - 17:00	21	95	0.003	21	95	0.003	21	95	0.006
17:00 - 18:00	21	95	0.004	21	95	0.002	21	95	0.006
18:00 - 19:00	21	95	0.002	21	95	0.002	21	95	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.035			0.072

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	95	0.003	21	95	0.003	21	95	0.006
08:00 - 09:00	21	95	0.001	21	95	0.001	21	95	0.002
09:00 - 10:00	21	95	0.002	21	95	0.002	21	95	0.004
10:00 - 11:00	21	95	0.002	21	95	0.002	21	95	0.004
11:00 - 12:00	21	95	0.001	21	95	0.001	21	95	0.002
12:00 - 13:00	21	95	0.001	21	95	0.001	21	95	0.002
13:00 - 14:00	21	95	0.002	21	95	0.002	21	95	0.004
14:00 - 15:00	21	95	0.001	21	95	0.001	21	95	0.002
15:00 - 16:00	21	95	0.002	21	95	0.002	21	95	0.004
16:00 - 17:00	21	95	0.001	21	95	0.001	21	95	0.002
17:00 - 18:00	21	95	0.002	21	95	0.002	21	95	0.004
18:00 - 19:00	21	95	0.001	21	95	0.001	21	95	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.019			0.038

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	95	0.007	21	95	0.006	21	95	0.013
08:00 - 09:00	21	95	0.011	21	95	0.021	21	95	0.032
09:00 - 10:00	21	95	0.001	21	95	0.006	21	95	0.007
10:00 - 11:00	21	95	0.003	21	95	0.004	21	95	0.007
11:00 - 12:00	21	95	0.003	21	95	0.007	21	95	0.010
12:00 - 13:00	21	95	0.007	21	95	0.005	21	95	0.012
13:00 - 14:00	21	95	0.002	21	95	0.002	21	95	0.004
14:00 - 15:00	21	95	0.006	21	95	0.003	21	95	0.009
15:00 - 16:00	21	95	0.006	21	95	0.008	21	95	0.014
16:00 - 17:00	21	95	0.017	21	95	0.009	21	95	0.026
17:00 - 18:00	21	95	0.013	21	95	0.011	21	95	0.024
18:00 - 19:00	21	95	0.007	21	95	0.004	21	95	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.083			0.086			0.169

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	95	0.068	21	95	0.274	21	95	0.342
08:00 - 09:00	21	95	0.121	21	95	0.330	21	95	0.451
09:00 - 10:00	21	95	0.104	21	95	0.145	21	95	0.249
10:00 - 11:00	21	95	0.094	21	95	0.117	21	95	0.211
11:00 - 12:00	21	95	0.096	21	95	0.119	21	95	0.215
12:00 - 13:00	21	95	0.121	21	95	0.121	21	95	0.242
13:00 - 14:00	21	95	0.119	21	95	0.115	21	95	0.234
14:00 - 15:00	21	95	0.142	21	95	0.150	21	95	0.292
15:00 - 16:00	21	95	0.252	21	95	0.143	21	95	0.395
16:00 - 17:00	21	95	0.242	21	95	0.134	21	95	0.376
17:00 - 18:00	21	95	0.294	21	95	0.120	21	95	0.414
18:00 - 19:00	21	95	0.269	21	95	0.140	21	95	0.409
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.922			1.908			3.830

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	95	0.018	21	95	0.027	21	95	0.045
08:00 - 09:00	21	95	0.018	21	95	0.025	21	95	0.043
09:00 - 10:00	21	95	0.023	21	95	0.027	21	95	0.050
10:00 - 11:00	21	95	0.020	21	95	0.020	21	95	0.040
11:00 - 12:00	21	95	0.017	21	95	0.024	21	95	0.041
12:00 - 13:00	21	95	0.016	21	95	0.015	21	95	0.031
13:00 - 14:00	21	95	0.026	21	95	0.020	21	95	0.046
14:00 - 15:00	21	95	0.022	21	95	0.020	21	95	0.042
15:00 - 16:00	21	95	0.018	21	95	0.022	21	95	0.040
16:00 - 17:00	21	95	0.020	21	95	0.019	21	95	0.039
17:00 - 18:00	21	95	0.032	21	95	0.013	21	95	0.045
18:00 - 19:00	21	95	0.012	21	95	0.009	21	95	0.021
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.242			0.241			0.483

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

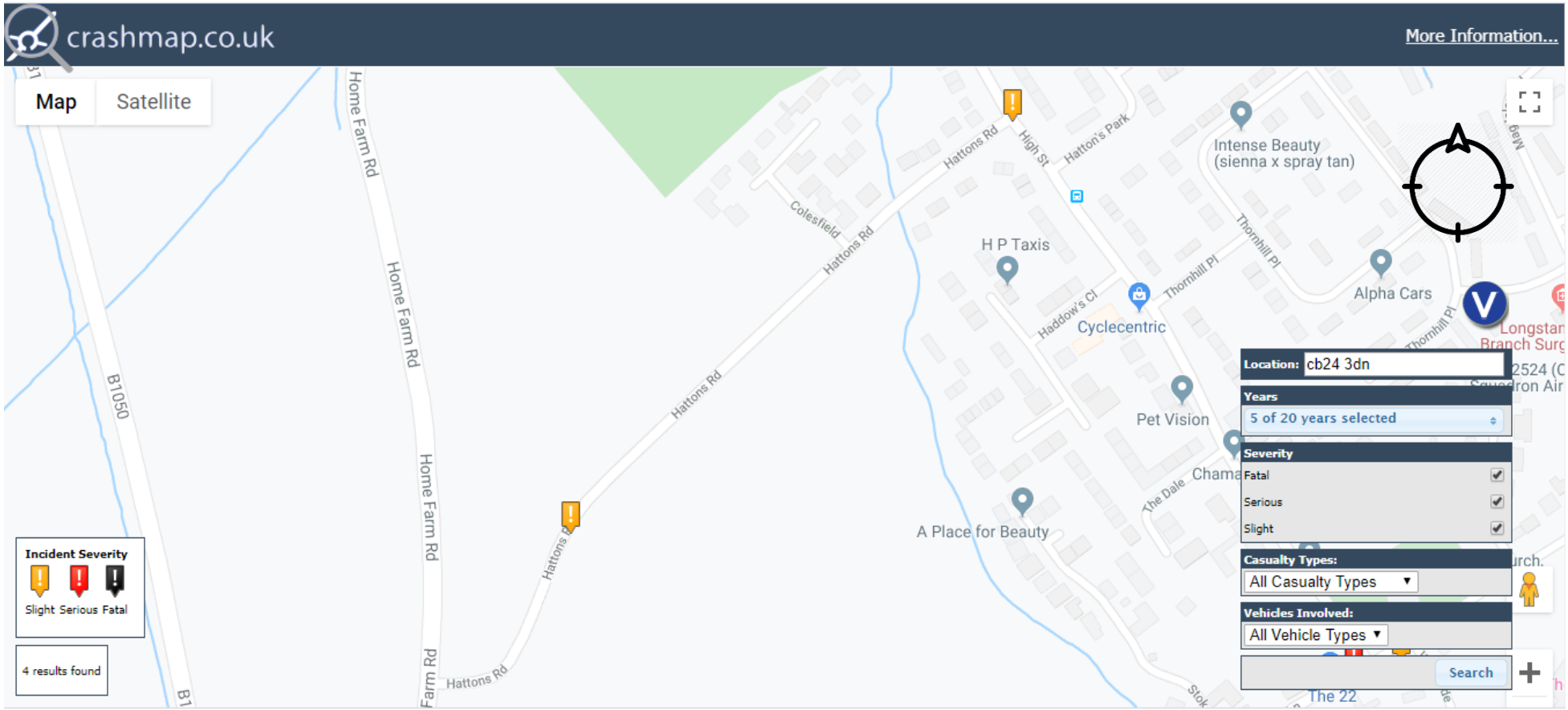
TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	95	0.001	21	95	0.002	21	95	0.003
08:00 - 09:00	21	95	0.001	21	95	0.003	21	95	0.004
09:00 - 10:00	21	95	0.001	21	95	0.001	21	95	0.002
10:00 - 11:00	21	95	0.001	21	95	0.000	21	95	0.001
11:00 - 12:00	21	95	0.001	21	95	0.001	21	95	0.002
12:00 - 13:00	21	95	0.001	21	95	0.001	21	95	0.002
13:00 - 14:00	21	95	0.000	21	95	0.001	21	95	0.001
14:00 - 15:00	21	95	0.002	21	95	0.002	21	95	0.004
15:00 - 16:00	21	95	0.001	21	95	0.001	21	95	0.002
16:00 - 17:00	21	95	0.004	21	95	0.003	21	95	0.007
17:00 - 18:00	21	95	0.002	21	95	0.001	21	95	0.003
18:00 - 19:00	21	95	0.001	21	95	0.001	21	95	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.017			0.033

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

Appendix F – Crashmap Plan



(Data from Crashmap)

Local Accidents (2014-2018)