

Transport Statement

Site: 41 Church Road, Bexleyheath
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Date: February 2024

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1.0 Introduction

- 1.1 This Highways Report has been prepared on behalf of WK Property London in relation to the "Demolition of existing commercial buildings; erection of 7No. residential units with associated parking, landscaping and access" ('The proposed development') at 41 Church Road, Bexleyheath, DA7 4DD ('The site').
- 1.2 The site is within the administrative boundary of the London Borough of Bexley (LBB) who act as both the planning and highway authority. The site location can be seen below at Figure 1.1:

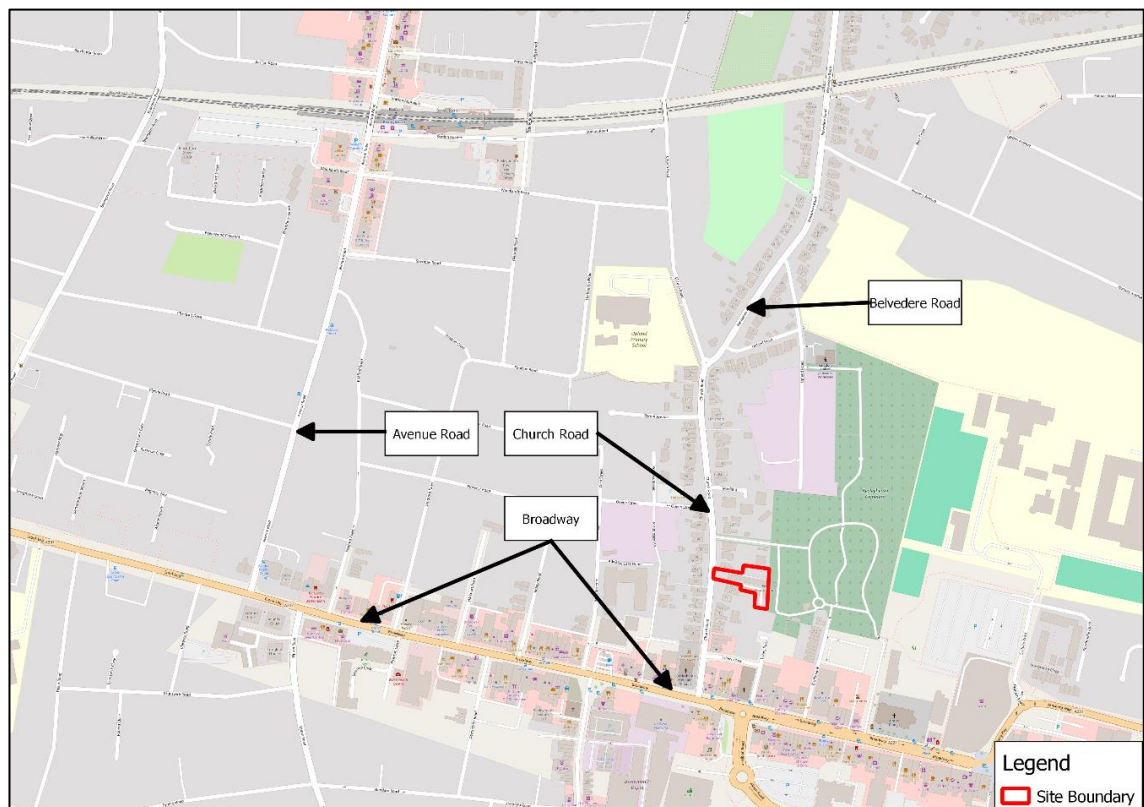


Figure 1.1 – Site Location Plan

Pre-Application Response

- 1.3 A pre-application response was received from LBB on the 06th December 2023 which discussed the following highways related matters:
- ▶ LBB accepts the provision of 7 car parking spaces for the 7 units, a provision of 1 car parking space per unit;
 - ▶ To accord with London Plan Policy T5 and table 10.2, safe secure and convenient cycle storage must be provided for each unit with independent access; and
 - ▶ Residents must move their bins out to the kerbside for refuse collection.

- 1.4 The comments received from the pre-application response have been considered and incorporated into the scheme where appropriate.

Report Structure

- 1.5 This Transport Statement is structured as follows:

- ▶ Baseline Conditions;
- ▶ Development Proposal;
- ▶ Trip Generation; and
- ▶ Summary and Conclusion.

2.0 Baseline Conditions

Overview

- 2.1 So that the context of the site can be established, a review of the local area has been undertaken. The following text provides a summary of the results of this review and makes reference to the location of the site and current use of the site.

Site Details

- 2.2 The site is located to the east of Church Road, accessed via two existing dropped kerbs which will be retained and not altered as part of the application. Church Road has a 20 mile per hour speed limit in the vicinity of the site with street lighting and pedestrian footways on both side of the road. Church Road has a number of traffic calming features in the form of speed humps along its course. Church Road has single yellow lines on both sides of the carriageway in the vicinity of the site, restricting any ability to park on-street.
- 2.3 Church Road connects to Broadway (A207) to the south and connects to Belvedere Road via a mini roundabout to the north.
- 2.4 A plan showing the site in relation to local public transport can be seen below at Figure 2.1:

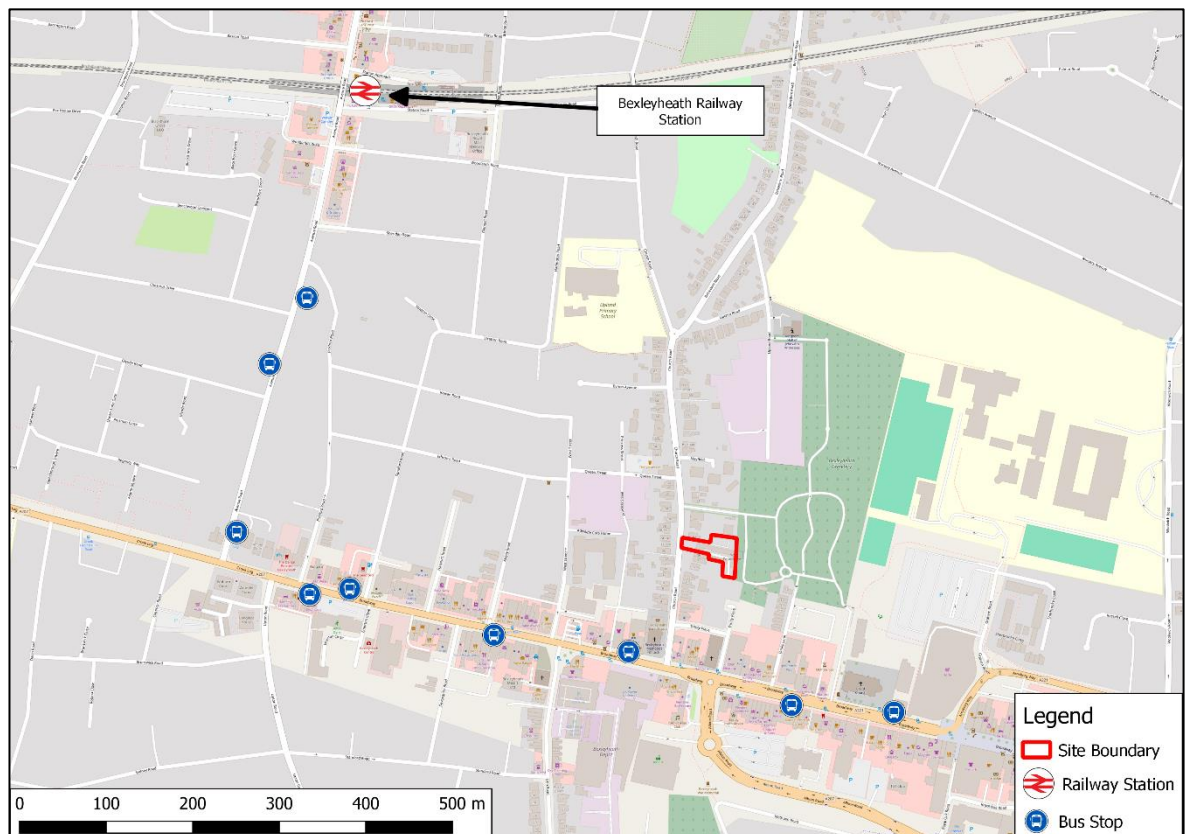


Figure 2.1 – Accessibility Plan

- 2.5 The site currently comprises a day nursery at the front of the site, with a number of industrial units located to the rear of site. The existing units have a total floorspace of 450 sqm. The industrial units rely on the use of the southern crossover, whilst the nursery utilises both crossovers in order to adequately access the existing parking spaces for parents at the front of the site.

Public Transport Accessibility

Public Transport Accessibility Level (PTAL)

- 2.6 Public Transport Accessibility Levels (PTALs) provide a guide to the relative accessibility of a site. PTAL scores range from 1 to 6b, where 1 is the lowest and 6b is the highest score. The TfL PTAL calculator indicates that the site achieves a PTAL of 4/5, demonstrating a good level of accessibility to public transport. Through discussion with LBB it was agreed at pre-application that the site falls with a PTAL 4 location. The PTAL of the site is illustrated below in Figure 2.2.

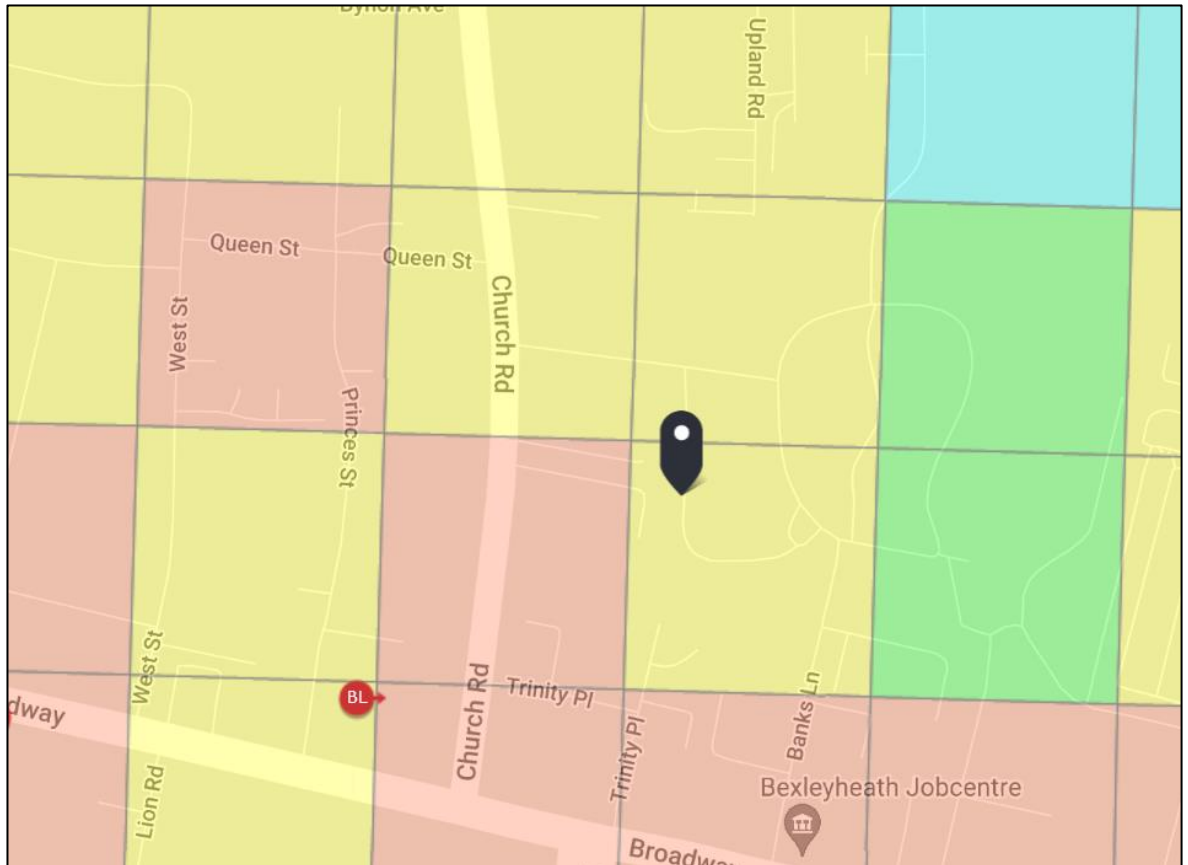


Figure 2.2 – PTAL of the site

Accessibility by Bus

- 2.7 The nearest bus stop is circa 300m from the site (Bexleyheath Lion Road Stop BL, Trinity Place Stop A). A summary of the bus services provided at the bus stop is illustrated below in Table 3.1.

Bus Service	Frequency of Services		
	Monday-Friday	Saturday	Sunday
85	5 services per hour	5 services per hour	5 services per hour
96	7 services per hour	7 services per hour	7 services per hour
422	6 services per hour	6 services per hour	5 services per hour
486	6 services per hour	5 services per hour	4 services per hour
B11	3 services per hour	3 services per hour	2 services per hour
B12	3 services per hour	3 services per hour	3 services per hour
B14	2 services per hour	2 services per hour	2 services per hour
B15	3 services per hour	3 services per hour	2 services per hour
B16	4 services per hour	4 services per hour	2 services per hour
N89	2 services per hour	2 services per hour	2 services per hour

Table 2.1 – Local Bus Services

- 2.8 The closest railway station to the site is Bexleyheath railway station, which is circa 750m north of the Site, a 10 minute walk. A summary of the existing rail services is provided at Table 2.2 below:

Station	Route	Approximate Frequency
Woolwich Arsenal	London Cannon Street – London Bridge – New Cross – St Johns – Lewisham – Blackheath – Kidbrooke – Eltham – Falconwood – Welling – Bexleyheath – Barnehurst – Slade Green – Erith – Belvedere – Abbey Wood – Plumstead – Woolwich Arsenal	2 services every hour
Gatwick Airport	Dartford – Barnehurst- Bexleyheath – Welling – Falconwood – Eltham – Kidbrooke – Blackheath – Lewisham – Nunhead – Peckham Rye – Denmark Hill – London Victoria	2 service every hour

Table 2.2 – Train Services from Bexleyheath

Road Safety

- 2.9 Personal Injury Collision (PIC) data was obtained from CrashMap for the adjoining highway network for the most recent five-year period available, 1st January 2018 to 31st December 2022.. One slight collision occurred to the north of the Site in April 2018, involving two cars. The CrashMap report can be viewed at [Appendix A](#). The location of the collision can be seen below at Figure 2.3.

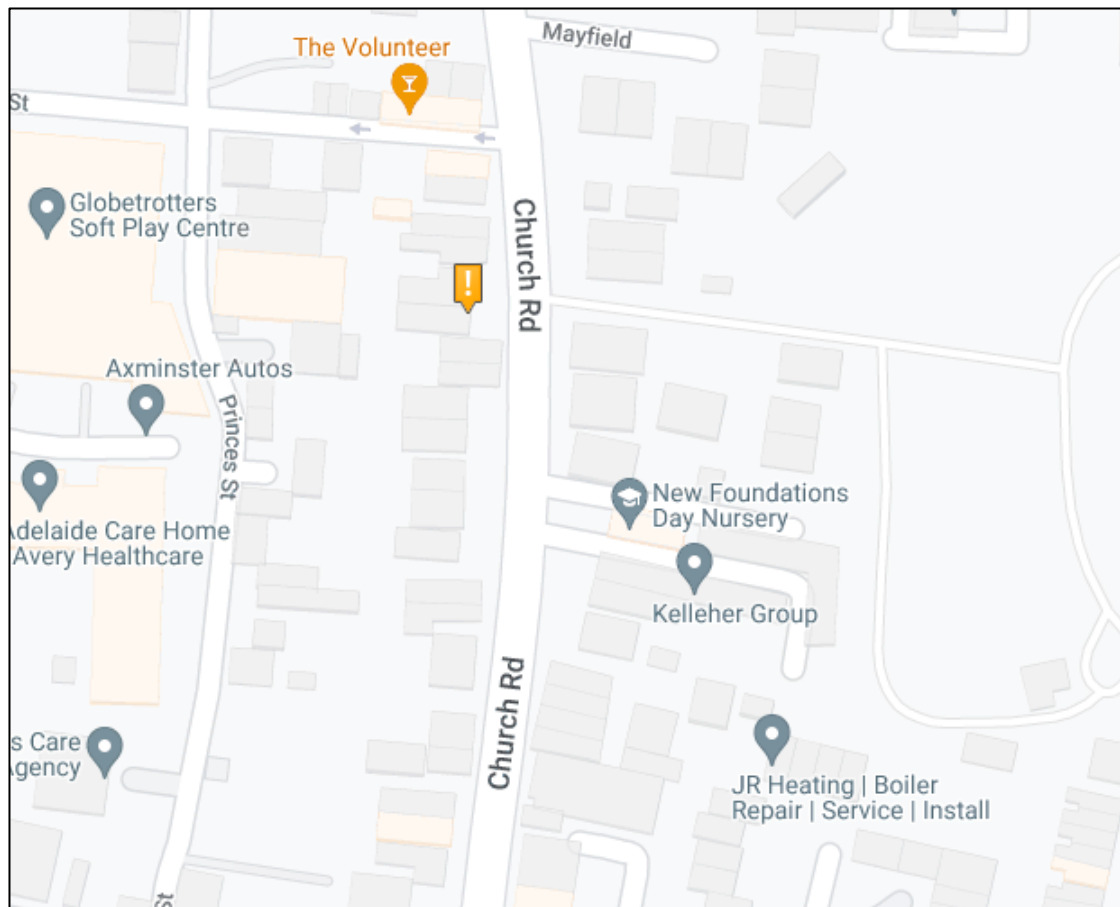


Figure 2.3 – CrashMap extract

- 2.10 The recent collision history does not suggest a highway safety deficiency and it is therefore concluded that there is no evidence of an existing road safety concern in the vicinity of the site.

Summary

- 2.1 The above review demonstrates that location of the site is accessible by a variety of modes of transport that have the potential to reduce reliance on the private car. The location of the site therefore accords with the requirements of the Local Plan.

3.0 Proposed Development

- 3.1 The following text outlines details of the development proposals and summarises how it will be accessed along with providing details of the associated parking and servicing strategies.

Development Proposals

- 3.2 The proposed development comprises the demolition of existing commercial buildings and the subsequent erection of 7No. residential units with associated parking, landscaping and access.
- 3.3 The existing on site nursery will be unaffected by the proposed development. The site layout plan is included at **Appendix B**.

Vehicular Access

- 3.4 The site has two existing vehicular accesses off Church Road (on the eastern side of the carriageway). These vehicular accesses are in the form of dropped kerbs, the size and design of these dropped kerbs is not proposed to be altered as a result of the development.
- 3.5 Swept path analysis has been undertaken of a car utilising the southern dropped kerb which will provide access to the 7no residential units parking area. This swept path can be viewed at **Appendix C**. This highlights how all parking spaces can be adequately served.
- 3.6 The nursery is unaffected by the proposals, and will continue to rely on both crossovers in order to ensure parents can adequately access both car parking spaces. Access to adjoining properties is also achieved via the two crossovers, which will be maintained.
- 3.7 Whilst it is not possible for two cars to pass at the southern crossover serving the dwellings, this is no different to the current situation. The assessment set out in Section 4 of this report will establish how the proposals will result in a material reduction in traffic flow when compared to the existing situation. Therefore the proposals will represent a betterment to the existing situation, especially when the existing use is likely to generate a higher level of LGVs.

Car Parking Provision

- 3.8 As detailed at paragraph 1.2, LBB has accepted the provision of 1 car parking space per unit. This avoids any risk of overspill parking taking place on surrounding roads.
- 3.9 Four car parking spaces will be retained at the front of the site for drop off and pick up associated with the nursery. This replicates the existing situation.

Cycle Parking

- 3.10 All units will be provided with independent, secure policy compliant cycle parking. This cycle parking will be located within the garden of each unit.

Servicing and Deliveries

- 3.11 Refuse collection will be undertaken from Church Road, as per the existing arrangement for the site and other properties along Church Road. It is recognised that the units exceed the maximum carry distance for refuse, however it is proposed that all residents will be made aware of this prior to occupation and will agree to carry their bins to the carriageway edge where a dedicated refuse collection point will be provided.
- 3.12 Deliveries will occur on street as per the arrangement for all other properties along Church Road. Considering the number of dwellings proposed, servicing trips will be infrequent and likely a combined trip with other nearby dwellings. There is a section of single yellow line fronting the site where deliveries can take place without impacting on the ability for drivers to access the two crossovers serving the site, or affecting the free flow of traffic on the adjacent highway network.

4.0 Trip Generation

Overview

- 4.1 This section outlines the trip generating potential of the proposed residential development and compares it with the existing use during the morning (AM) and evening (PM) peak hours and across the course of a typical day, which for the purposes of this assessment is taken to be between 07:00 and 19:00.

Existing Trip Generation

- 4.2 The TRICS database has been interrogated to find comparable sites in order to obtain trip rate information for the existing and proposed land uses at the site. The subsequent TRICS output files are attached at **Appendix D**. It is noteworthy that sites outside of Greater London have been utilised due to the lack of suitable sites within London. This is particularly relevant when considering the need to compare to comparable smaller units rather than large industrial units/estates.
- 4.3 Table 4.1 below shows the daily number of vehicle trips associated with the existing industrial units. It should be noted that the rows may not add up due to rounding.

Time Period	Trip Generation (450sqm Industrial Unit)		
	Arrivals	Departures	Two-Way
AM Peak (08:00-09:00)	2	3	4
PM Peak (17:00-18:00)	2	2	4
Daily (07:00-19:00)	39	39	78

Table 4.1 – Vehicular Trip Generation of the industrial unit

- 4.4 Table 4.1 illustrates how the existing industrial units generate circa 4-5 vehicle trips in each peak period, with a total of 78 vehicle movements over a daily profile.

Proposed Trip Generation

- 4.5 Table 4.2 below shows the daily number of vehicle trips associated with the proposed 7 residential units. It should be noted that the rows may not add up due to rounding. The TRICS output is included at **Appendix E**.

Time Period	Trip Generation (7 units)		
	Arrivals	Departures	Two-Way
AM Peak (08:00-09:00)	2	3	4
PM Peak (17:00-18:00)	2	2	4
Daily (07:00-19:00)	20	20	40

Table 4.2 – Vehicular Trip Generation of the proposed 7 units

- 4.6 Table 4.2 illustrates how the proposed houses would generate circa 4-5 vehicle trips in each peak period, with a total of 49 vehicle movements over a daily profile.

Net Change

- 4.7 Table 4.3 below compares the two-way vehicular trips generated between the existing industrial units and proposed dwellings.

Time Period	Trip Generation (7 Units)		
	Existing	Proposed	Net Change
AM Peak (08:00-09:00)	+/-0	+/-0	+/-0
PM Peak (17:00-18:00)	+/-0	+/-0	+/-0
Daily (07:00-19:00)	-19	-19	-38

Table 4.3 – Net Change

- 4.8 Table 5.3 indicates that the change of use of the site from industrial unit to seven residential units is unlikely to generate any extra vehicle movements during the morning and evening peak periods, whilst the number of vehicle movements over the course of a day has the potential to decrease by 38 as a result of the proposed development.
- 4.9 The above reduction in traffic flow supports the retention of the existing access arrangements, particularly as the existing industrial use is more likely to generate larger vehicle movements. With no accident record on the surrounding road network and a reduction in traffic flow envisaged, it is considered appropriate to retain the existing access arrangements as existing.
- 4.10 Furthermore, by reducing traffic flow over a daily profile it is expected that the nursery operation will remain unaffected by the dwellings. Indeed, there would be a reduced risk of conflict between the two uses due to the overall reduction in traffic flow.

5.0 Summary and Conclusions

- 5.1 This Highways Report has been prepared on behalf of WK Property London in relation to the "Demolition of existing commercial buildings; erection of 7No. residential units with associated parking, landscaping and access" ('The proposed development') at 41 Church Road, Bexleyheath, DA7 4DD ('The site').
- 5.2 It has been shown that the proposals are unlikely to have a material impact upon the local transport networks. Indeed, the assessment indicates that the proposals will lead to a reduction in vehicle trips associated with the site.
- 5.3 In summary, this report demonstrates that:
- ▶ Through the provision of seven car parking spaces on site, the development will not place any additional parking stress upon the local highway network and;
 - ▶ The proposed development will lead to a decrease in vehicle trips, and will therefore reduce any interaction with the retained day nursery; and,
 - ▶ The proposals will not lead to any harm to the existing operation and free flow of traffic on the adjoining highway network.
- 5.4 On the basis of the above, it is concluded that the proposals accord with national and local transport related policies and can be accommodated without detriment to the operating capacity of the local transport networks. As such, the proposed development represents a sustainable development for the future, and we see no reason why the proposals should be resisted on traffic and transportation grounds.

Appendix A

CrashMap Report



Validated Data

Crash Date: Sunday, April 08, 2018 **Time of Crash:** 10:55:00 AM **Crash Reference:** 2018010100543

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Bexley			Number of Vehicles:	2
Local Authority:	Bexley			OS Grid Reference:	548630 175530
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				

Map temporarily unavailable.
Once map functionality is restored CrashMap will automatically email an updated report to you.

For more information about the data please visit: www.crashmap.co.uk/home/Faq
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services



Validated Data

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	11	Female	Over 75	Vehicle is passing a stationary vehicle on its offside	Front	Unknown	Parked vehicle	None
2	Car (excluding private hire)	8	Unknown	Unknown	Vehicle is parked in the carriageway	Back	Unknown	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	Over 75	Unknown or other	Unknown or other

For more information about the data please visit: www.crashmap.co.uk/home/Faq

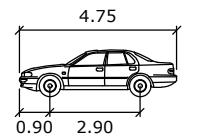
To subscribe to unlimited reports using CrashMap Pro visit www.crashmap.co.uk/Home/Premium_Services

Appendix B

Site Layout

Appendix C

Swept Path Analysis – Car - Access



Car		units
Width	: 1.80	meters
Track	: 1.80	
Lock to Lock Time	: 6.0	
Steering Angle	: 30.2	

Legend:

- █ Vehicle body
- █ Vehicle wheelbase



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Project:
41 Church Road, Bexleyheath

Title:
**Swept Path Analysis
Car**

Client:
Robinson Escott Planning LLP

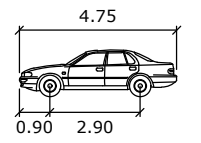
Drawing Status:

Scale: 1:250 (@ A3) Date: 26/02/2024

Drawn: AN Checked: DM Approved: DM

Drawing: **2308078 - TK01** Revision: **A**





Car

	units
Width	: 1.80
Track	: 1.80
Lock to Lock Time	: 6.0
Steering Angle	: 30.2

Legend:

- █ Vehicle body
- █ Vehicle wheelbase



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Project:
41 Church Road, Bexleyheath

Title:
**Swept Path Analysis
Car Access**

Client:
Robinson Escott Planning LLP

Drawing Status:

Scale: 1:250 (@ A3) Date: 26/02/2024

Drawn: AN Checked: DM Approved: DM

Drawing: **2308078 - TK02** Revision:



Appendix D

TRICS Output – Industrial Units

Motion High Street Guildford

Licence No: 734001

Calculation Reference: AUDIT-734001-240226-0222

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : C - INDUSTRIAL UNIT
TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	WM WEST MIDLANDS	1 days
08	NORTH WEST	
	LC LANCASHIRE	1 days

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

Motion High Street Guildford

Licence No: 734001

Primary 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: Gross floor area
Actual Range: 150 to 260 (units: sqm)
Range Selected by User: 150 to 500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/15 to 17/06/22

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 1 days
Tuesday 1 days
Thursday 1 days

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

Selected survey types:

Manual count 3 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre) 2
Edge of Town 1

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:

Industrial Zone 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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included X days - Selected
Servicing vehicles Excluded 3 days - Selected

Secondary Filtering selection:

Use Class:

Not Known 3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

20,001 to 25,000	2 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:

125,001 to 250,000	2 days
500,001 or More	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	2 days
1.1 to 1.5	1 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:

No	3 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	3 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	LC-02-C-03 GOLDEN HILL LANE LEYLAND	TIMBER SUPPLIES	LANCASHIRE
	Suburban Area (PPS6 Out of Centre) Industrial Zone		
	Total Gross floor area:	150 sqm	
	Survey date: <i>TUESDAY</i>	<i>06/11/18</i>	<i>Survey Type: MANUAL</i>
2	NF-02-C-03 ELVIN WAY NORWICH HELLESDON	SHEET METAL CONTRACTOR	NORFOLK
	Edge of Town Industrial Zone		
	Total Gross floor area:	260 sqm	
	Survey date: <i>THURSDAY</i>	<i>07/11/19</i>	<i>Survey Type: MANUAL</i>
3	WM-02-C-05 ICKNIELD STREET BIRMINGHAM HOCKLEY	INDIAN CATERING	WEST MIDLANDS
	Suburban Area (PPS6 Out of Centre) Industrial Zone		
	Total Gross floor area:	256 sqm	
	Survey date: <i>MONDAY</i>	<i>22/11/21</i>	<i>Survey Type: MANUAL</i>

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.

Motion High Street Guildford

Licence No: 734001

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	205	0.244	2	205	0.000	2	205	0.244
07:30 - 08:00	2	205	1.220	2	205	0.488	2	205	1.708
08:00 - 08:30	2	205	0.000	2	205	0.000	2	205	0.000
08:30 - 09:00	2	205	0.488	2	205	0.976	2	205	1.464
09:00 - 09:30	3	222	0.150	3	222	0.000	3	222	0.150
09:30 - 10:00	3	222	0.300	3	222	0.150	3	222	0.450
10:00 - 10:30	3	222	0.601	3	222	0.300	3	222	0.901
10:30 - 11:00	3	222	0.150	3	222	0.150	3	222	0.300
11:00 - 11:30	3	222	0.751	3	222	0.601	3	222	1.352
11:30 - 12:00	3	222	0.601	3	222	0.450	3	222	1.051
12:00 - 12:30	3	222	0.751	3	222	0.450	3	222	1.201
12:30 - 13:00	3	222	0.300	3	222	0.751	3	222	1.051
13:00 - 13:30	3	222	0.450	3	222	0.450	3	222	0.900
13:30 - 14:00	3	222	0.150	3	222	0.300	3	222	0.450
14:00 - 14:30	3	222	0.601	3	222	0.300	3	222	0.901
14:30 - 15:00	3	222	0.150	3	222	0.450	3	222	0.600
15:00 - 15:30	3	222	0.751	3	222	0.601	3	222	1.352
15:30 - 16:00	3	222	0.150	3	222	0.300	3	222	0.450
16:00 - 16:30	3	222	0.300	3	222	0.751	3	222	1.051
16:30 - 17:00	3	222	0.000	3	222	0.300	3	222	0.300
17:00 - 17:30	3	222	0.150	3	222	0.300	3	222	0.450
17:30 - 18:00	3	222	0.300	3	222	0.150	3	222	0.450
18:00 - 18:30	3	222	0.150	3	222	0.150	3	222	0.300
18:30 - 19:00	3	222	0.000	3	222	0.300	3	222	0.300
19:00 - 19:30	1	256	0.000	1	256	0.000	1	256	0.000
19:30 - 20:00	1	256	0.000	1	256	0.000	1	256	0.000
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			8.708			8.668			17.376

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.

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Parameter summary

Trip rate parameter range selected:	150 - 260 (units: sqm)
Survey date date range:	01/01/15 - 17/06/22
Number of weekdays (Monday-Friday):	3
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.

Motion High Street Guildford

Licence No: 734001

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	205	0.000	2	205	0.000	2	205	0.000
07:30 - 08:00	2	205	0.000	2	205	0.244	2	205	0.244
08:00 - 08:30	2	205	0.000	2	205	0.000	2	205	0.000
08:30 - 09:00	2	205	0.000	2	205	0.000	2	205	0.000
09:00 - 09:30	3	222	0.000	3	222	0.000	3	222	0.000
09:30 - 10:00	3	222	0.150	3	222	0.150	3	222	0.300
10:00 - 10:30	3	222	0.300	3	222	0.150	3	222	0.450
10:30 - 11:00	3	222	0.000	3	222	0.150	3	222	0.150
11:00 - 11:30	3	222	0.150	3	222	0.000	3	222	0.150
11:30 - 12:00	3	222	0.000	3	222	0.000	3	222	0.000
12:00 - 12:30	3	222	0.150	3	222	0.150	3	222	0.300
12:30 - 13:00	3	222	0.000	3	222	0.000	3	222	0.000
13:00 - 13:30	3	222	0.150	3	222	0.150	3	222	0.300
13:30 - 14:00	3	222	0.150	3	222	0.150	3	222	0.300
14:00 - 14:30	3	222	0.000	3	222	0.150	3	222	0.150
14:30 - 15:00	3	222	0.150	3	222	0.000	3	222	0.150
15:00 - 15:30	3	222	0.150	3	222	0.150	3	222	0.300
15:30 - 16:00	3	222	0.000	3	222	0.150	3	222	0.150
16:00 - 16:30	3	222	0.000	3	222	0.000	3	222	0.000
16:30 - 17:00	3	222	0.000	3	222	0.000	3	222	0.000
17:00 - 17:30	3	222	0.000	3	222	0.000	3	222	0.000
17:30 - 18:00	3	222	0.000	3	222	0.000	3	222	0.000
18:00 - 18:30	3	222	0.000	3	222	0.000	3	222	0.000
18:30 - 19:00	3	222	0.000	3	222	0.000	3	222	0.000
19:00 - 19:30	1	256	0.000	1	256	0.000	1	256	0.000
19:30 - 20:00	1	256	0.000	1	256	0.000	1	256	0.000
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.350			1.594			2.944

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.*

Motion High Street Guildford

Licence No: 734001

TRIP RATE for Land Use 02 - EMPLOYMENT/C - INDUSTRIAL UNIT

LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	2	205	0.244	2	205	0.000	2	205	0.244
07:30 - 08:00	2	205	0.244	2	205	0.000	2	205	0.244
08:00 - 08:30	2	205	0.000	2	205	0.000	2	205	0.000
08:30 - 09:00	2	205	0.488	2	205	0.732	2	205	1.220
09:00 - 09:30	3	222	0.000	3	222	0.000	3	222	0.000
09:30 - 10:00	3	222	0.000	3	222	0.000	3	222	0.000
10:00 - 10:30	3	222	0.150	3	222	0.000	3	222	0.150
10:30 - 11:00	3	222	0.000	3	222	0.000	3	222	0.000
11:00 - 11:30	3	222	0.150	3	222	0.150	3	222	0.300
11:30 - 12:00	3	222	0.300	3	222	0.150	3	222	0.450
12:00 - 12:30	3	222	0.450	3	222	0.300	3	222	0.750
12:30 - 13:00	3	222	0.150	3	222	0.450	3	222	0.600
13:00 - 13:30	3	222	0.150	3	222	0.300	3	222	0.450
13:30 - 14:00	3	222	0.000	3	222	0.000	3	222	0.000
14:00 - 14:30	3	222	0.150	3	222	0.000	3	222	0.150
14:30 - 15:00	3	222	0.000	3	222	0.150	3	222	0.150
15:00 - 15:30	3	222	0.300	3	222	0.150	3	222	0.450
15:30 - 16:00	3	222	0.150	3	222	0.000	3	222	0.150
16:00 - 16:30	3	222	0.150	3	222	0.601	3	222	0.751
16:30 - 17:00	3	222	0.000	3	222	0.000	3	222	0.000
17:00 - 17:30	3	222	0.150	3	222	0.150	3	222	0.300
17:30 - 18:00	3	222	0.150	3	222	0.150	3	222	0.300
18:00 - 18:30	3	222	0.150	3	222	0.000	3	222	0.150
18:30 - 19:00	3	222	0.000	3	222	0.150	3	222	0.150
19:00 - 19:30	1	256	0.000	1	256	0.000	1	256	0.000
19:30 - 20:00	1	256	0.000	1	256	0.000	1	256	0.000
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			3.526			3.433			6.959

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 E

TRICS Output – Residential Dwellings

Motion High Street Guildford

Licence No: 734001

Calculation Reference: AUDIT-734001-240226-0200

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

01	GREATER LONDON WF WALTHAM FOREST	1 days
03	SOUTH WEST SD SWINDON	1 days
04	EAST ANGLIA PB PETERBOROUGH	1 days
05	EAST MIDLANDS LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE NY NORTH YORKSHIRE	1 days
08	NORTH WEST AC CHESHIRE WEST & CHESTER	1 days

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

Motion High Street Guildford

Licence No: 734001

Primary 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: No of Dwellings
Actual Range: 9 to 30 (units:)
Range Selected by User: 1 to 30 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling 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: 01/01/15 to 09/11/22

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 2 days
Wednesday 2 days
Thursday 3 days

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

Selected survey types:

Manual count 7 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 undertaken using machines.

Selected Locations:

Edge of Town Centre 2
Suburban Area (PPS6 Out of 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 7

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 2 days - Selected
Servicing vehicles Excluded 5 days - Selected

Secondary Filtering selection:

Use Class:

C3 7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	2 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	2 days
50,001 to 100,000	1 days

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

Population within 5 miles:

50,001 to 75,000	2 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	3 days
1.1 to 1.5	3 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	1 days
No	6 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	6 days
5 Very Good	1 days

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

LIST OF SITES relevant to selection parameters

1	AC-03-A-04 LONDON ROAD NORTHWICH LEFTWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 24 <i>Survey date: THURSDAY 06/06/19</i>	TOWN HOUSES	CHESHIRE WEST & CHESTER	<i>Survey Type: MANUAL</i>
2	LN-03-A-04 EGERTON ROAD LINCOLN Edge of Town Centre Residential Zone Total No of Dwellings: 30 <i>Survey date: MONDAY 29/06/15</i>	DETACHED & SEMI -DETACHED	LINCOLNSHIRE	<i>Survey Type: MANUAL</i>
3	NY-03-A-13 CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 10 <i>Survey date: WEDNESDAY 10/05/17</i>	TERRACED HOUSES	NORTH YORKSHIRE	<i>Survey Type: MANUAL</i>
4	PB-03-A-04 EASTFIELD ROAD PETERBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 <i>Survey date: MONDAY 17/10/16</i>	DETACHED HOUSES	PETERBOROUGH	<i>Survey Type: MANUAL</i>
5	SD-03-A-01 HEADLANDS GROVE SWINDON Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 27 <i>Survey date: THURSDAY 22/09/16</i>	SEMI DETACHED	SWINDON	<i>Survey Type: MANUAL</i>
6	WF-03-A-02 PALMERSTON ROAD WALTHAMSTOW Edge of Town Centre Residential Zone Total No of Dwellings: 9 <i>Survey date: THURSDAY 06/06/19</i>	SEMI DETACHED & TERRACED	WALTHAM FOREST	<i>Survey Type: MANUAL</i>
7	WK-03-A-03 BRESE AVENUE WARWICK GUYS CLIFFE Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 23 <i>Survey date: WEDNESDAY 25/09/19</i>	DETACHED HOUSES	WARWICKSHIRE	<i>Survey Type: MANUAL</i>

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	7	22	0.106	7	22	0.305	7	22	0.411
08:00 - 09:00	7	22	0.232	7	22	0.397	7	22	0.629
09:00 - 10:00	7	22	0.172	7	22	0.179	7	22	0.351
10:00 - 11:00	7	22	0.205	7	22	0.232	7	22	0.437
11:00 - 12:00	7	22	0.179	7	22	0.132	7	22	0.311
12:00 - 13:00	7	22	0.185	7	22	0.185	7	22	0.370
13:00 - 14:00	7	22	0.219	7	22	0.212	7	22	0.431
14:00 - 15:00	7	22	0.245	7	22	0.265	7	22	0.510
15:00 - 16:00	7	22	0.364	7	22	0.325	7	22	0.689
16:00 - 17:00	7	22	0.358	7	22	0.252	7	22	0.610
17:00 - 18:00	7	22	0.285	7	22	0.252	7	22	0.537
18:00 - 19:00	7	22	0.205	7	22	0.152	7	22	0.357
19:00 - 20:00	1	9	0.000	1	9	0.000	1	9	0.000
20:00 - 21:00	1	9	0.111	1	9	0.000	1	9	0.111
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.866			2.888			5.754

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.

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Parameter summary

Trip rate parameter range selected:	9 - 30 (units:)
Survey date range:	01/01/15 - 09/11/22
Number of weekdays (Monday-Friday):	7
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.