

EG Group Ltd

Proposed Retail Development, Solihull Lodge  
Service Station, Shirley High Street, Solihull

# Technical Note

3710721



DECEMBER 2021

## Note Details

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<b>Report Number:</b>	3710721-TN
<b>Report Title:</b>	Technical Note, Proposed Retail Development, Solihull Lodge Service Station, Shirley High Street, Solihull
<b>Client:</b>	EG Group Ltd
<b>Date:</b>	20 December 2021
<b>Status:</b>	-

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# 1 Introduction

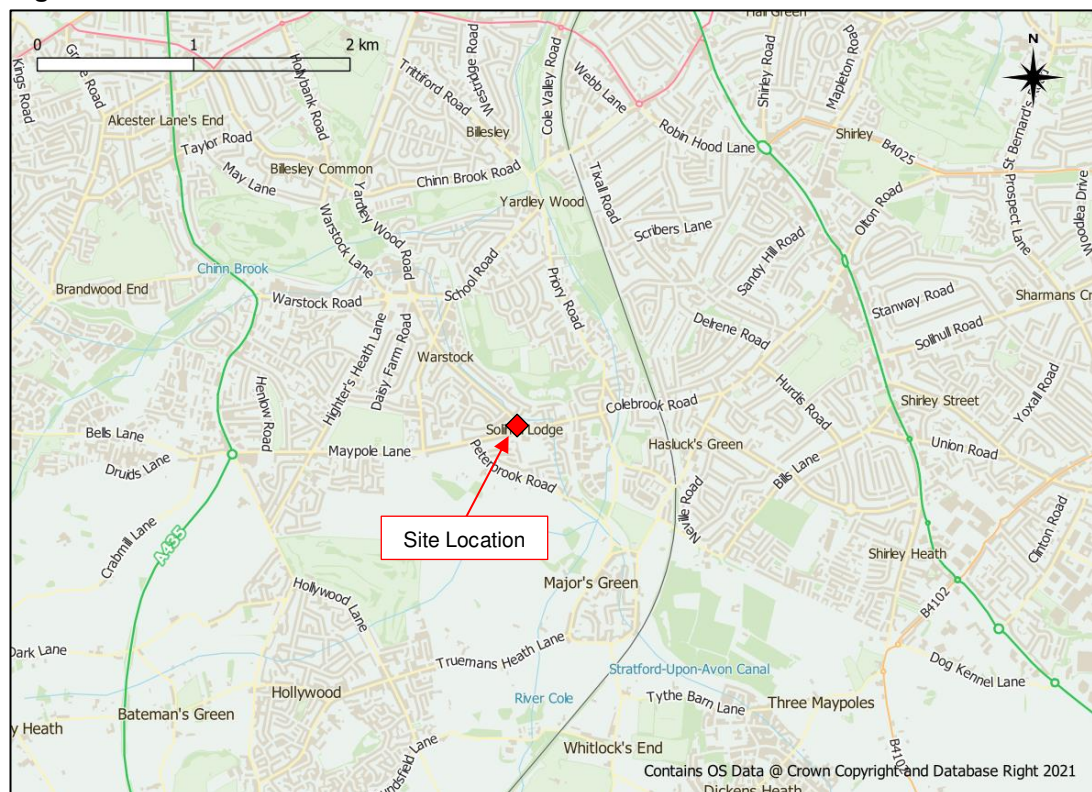
## General

- 1.1 Dynamic Transport Planning Ltd is instructed by EG Group Ltd to report on the highways and transportation issues related with the proposed demolition of the Petrol Filling Station (PFS) at Solihull Lodge Service Station and replacement development of a convenience retail unit on the site at Shirley High Street, Solihull.
- 1.2 This Technical Note (TN) has been produced to advise Solihull Metropolitan Borough Council as the Local Planning and Highway Authority on the transport planning issues associated with the proposed redevelopment.

## Site Location

- 1.3 The site is located off Shirley High Street in the residential area of Solihull Lodge, on the western edge of the town of Solihull, around 600m west of Mill Lodge Park. The site is situated approximately 2.5km west of Shirley, 5.5km west of Solihull Town Centre and 9km south of Birmingham City Centre.
- 1.4 The location of the proposed development site is illustrated at **Figure 1.1** below:

**Figure 1.1:** Site Location Plan



## Proposed Redevelopment

- 1.5 The proposed redevelopment of the site would see the existing PFS building and forecourt demolished and a new convenience retail store with a Gross Floor Area (GFA) of approximately 211m<sup>2</sup> constructed in its place.
- 1.6 The existing PFS retail unit operating on site has a GFA of approximately 114m<sup>2</sup>. The proposed convenience store would therefore provide an increase in convenience provision of around 98m<sup>2</sup>.
- 1.7 As part of the redevelopment proposals, the eastern access point to Yardley Wood Road would be removed, with footway and verge reinstatement. The northern access to Yardley Wood Road, as well as the existing southern access from Shirley High Street, will be retained to serve the redevelopment.

## 2 Existing Conditions

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### General

- 2.1 The application site is located approximately 5.5km west of Solihull Town Centre, in the residential area of Solihull Lodge. The site is situated directly south-west of the Shirley High Street/Yardley Wood Road junction. The site is bounded by Shirley High Street in the south and Yardley Wood Road in the north and east. The west of the site is bounded by residential properties.
- 2.2 The application site currently operates as a PFS with eight filling bays and associated retail unit. The retail unit has an approximate GFA of 114m<sup>2</sup>, with exterior cash machine. The site currently provides no formal parking spaces other than the filling bays. An air/water/vacuum and a jet wash service bay are provided at the northern edge of the forecourt.
- 2.3 Two vehicular access points currently provide access into the site from Yardley Wood Road, with an additional access to the south of the site from Shirley High Street.

### Existing Highway Network

- 2.4 Shirley High Street runs in an east/west direction to the south of the site, providing a link to Shirley in the east and Maypole in the west. The road is a single carriageway, with each carriageway having an approximate width of 7m. The road is subject to a 30mph speed-limit, which is regulated by traffic enforcement cameras and street lighting is also provided in the vicinity of the site.
- 2.5 Footways are provided on both sides of the carriageway which offer access for pedestrians to nearby bus stops in both directions. A PUFFIN crossing facility for pedestrians is provided across the carriageways adjacent to the site.
- 2.6 Yardley Wood Road runs in a north/south direction to the north of the site, providing access to Sparkbrook. Yardley Wood Road is a single carriageway, with an approximate carriageway width of 7.5m adjacent to the site.
- 2.7 Within the vicinity of the site, Yardley Wood Road is a street-lit road subject to a 30mph speed-limit. Footways are provided on both sides of the carriageway and offer access for pedestrians to nearby bus stops in both directions. Crossing facilities for pedestrians are also provided, in the form of uncontrolled crossings with dropped kerbs, tactile paving and pedestrian refuge island, adjacent to the site.
- 2.8 Parking restrictions are in place in the form of double-yellow lines on Yardley Wood Road and single-yellow lines on Shirley High Street in the vicinity of the site.

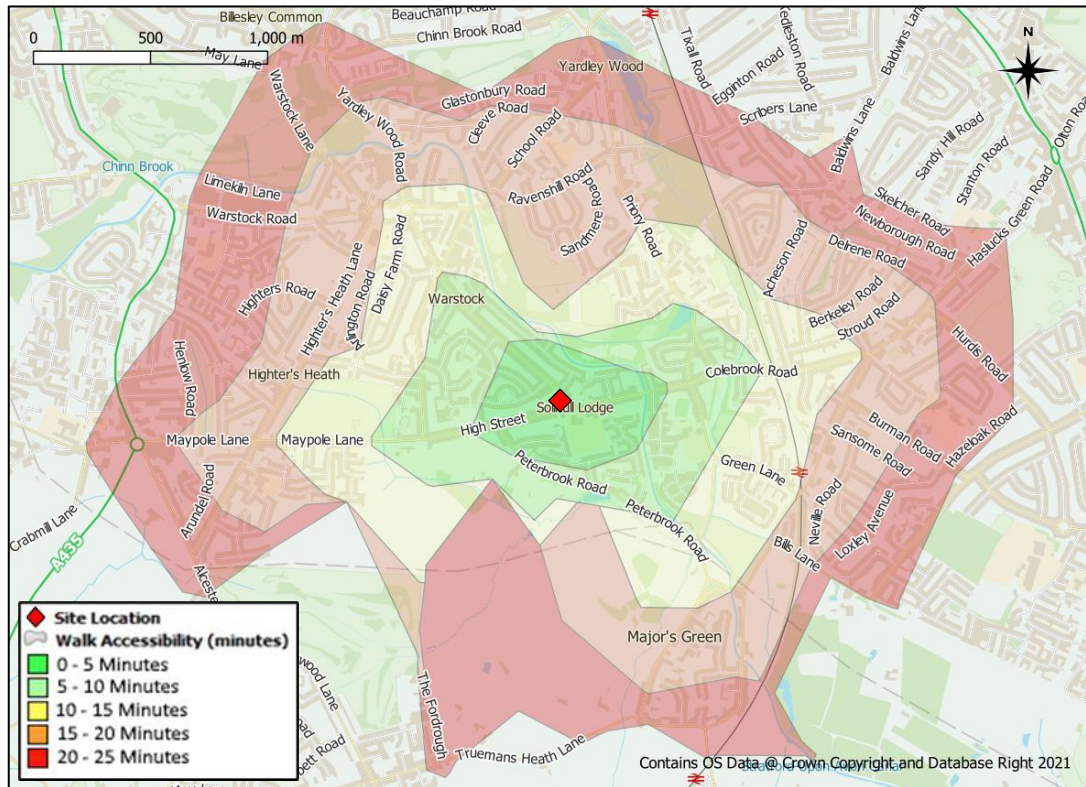
## Road Safety

- 2.9 Accident statistics have been obtained for the local highway network in the vicinity of the application site for the three years data covering 2017 to 2019 from the Department for Transport (DfT).
- 2.10 The accident data review identifies that there were no accidents have been recorded in the vicinity of the redevelopment access and egress points.
- 2.11 DfT have recently released accident data covering 2020 which shows no further accidents have been reported in the vicinity of the site since January 2020. Due to the ongoing Covid-19 pandemic and resulting periods of lockdown impacting daily traffic flows in 2020 that data has been presented separately to the previous three years.
- 2.12 On review of the data and given the nature of the local road network and associated traffic volumes it is considered that the existing accident record does not demonstrate any pre-existing patterns or trends of incidents that could be affected by the development proposals.

## Access by Non-Car Modes

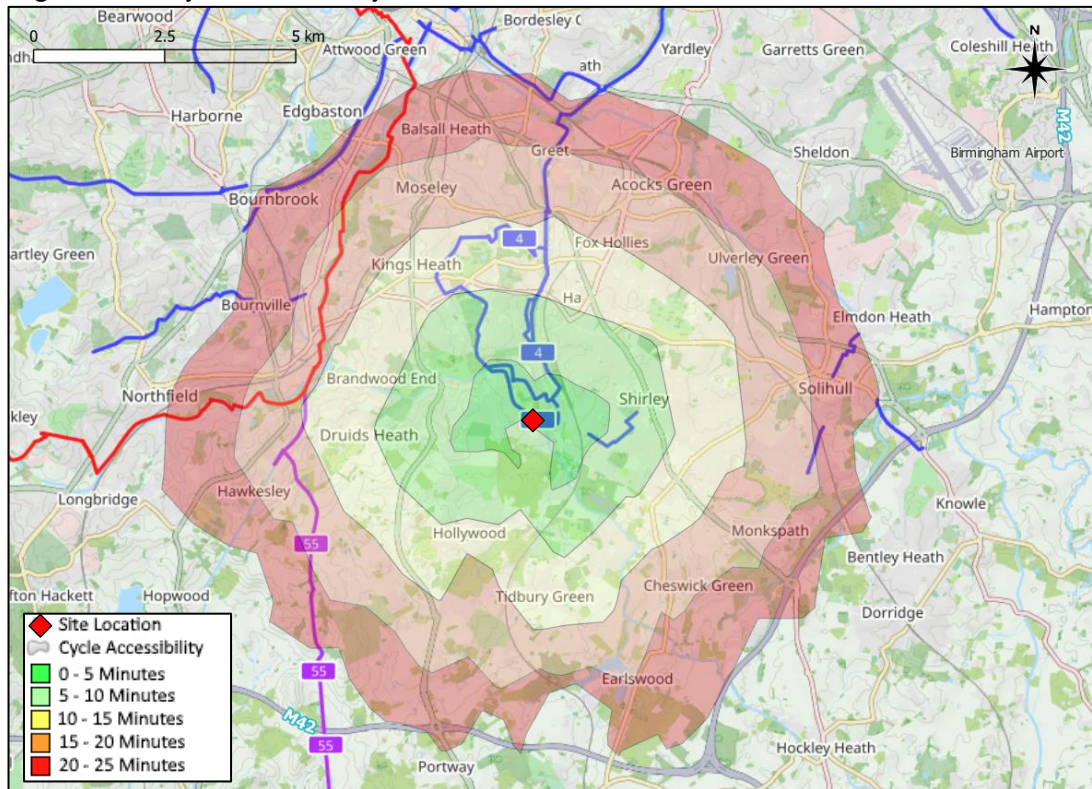
- 2.13 Relevant guidance provided in Manual for Streets (MfS) states that walking offers the greatest potential to replace short car trips, particularly those under 2km. A walk accessibility plan is provided at **Figure 2.1**, highlighting the accessible walking area within approximately 2km of the site, equivalent to around a 25-minute walk.

**Figure 2.1 – Walk Accessibility Plan**



- 2.14 The residential areas of Maypole, Warstock and Yardley Wood are all located within a 25-minute walking time of the site, as illustrated in **Figure 2.1**.
- 2.15 It is widely recognised that cycling has the potential to substitute shorter car journeys for work and leisure purposes. **Figure 2.2** illustrates the areas located within a 25-minute cycle journey of the site.

**Figure 2.2 – Cycle Accessibility Plan**



2.16 Areas such as Shirley, Kings Heath and Solihull Town Centre are all shown to be located within a 25-minute cycling journey of the site. The site benefits from a National Cycle Network (NCN) Route within a 20-minute cycle time. Route 55 of the NCN is situated to the west of the development site connecting the site to Birmingham to the north and Redditch to the south. The local cycle Route 4 is also accessible within a five-minute cycling time of the site. Route 4 provides links to Shirley to the east of the site and Kings Heath to the north of the site.

2.17 The nearest bus stops are located on Shirley High Street, approximately 80m east of the site and on Yardley Wood Road, approximately 90m north of the site, equating to a two-minute walking time. The stop is served by bus service numbers 49 and 2. A summary of the main bus routes which serve this stop are provided in **Table 2.1** below:

**Table 2.1 – Bus Service Summary**

Service	Route Description	Core Weekday Frequency
49	Solihull – Rubery Great Park	Every 15 Minutes
2	Birmingham – Maypole	Every 20 Minutes

Source: Traveline.info

2.18 As the table shows there are frequent bus services provided connecting the site to nearby areas including Solihull, Birmingham and Maypole. The services available provide opportunities, particularly for staff and local residents, to travel to the site.



2.19 Shirley Train Station is located approximately 1km southeast of the site, equating to an 18-minute walking time. The station is served by West Midlands Railway and provides regular links to Stratford-Upon-Avon, Kidderminster and Worcester.

2.20 Overall, it can be summarised that the site offers very good potential for journeys undertaken by staff and customers by modes other than car.

## 3 Redevelopment Proposals

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### General

- 3.1 The redevelopment proposals for the site consist of the proposed demolition of an existing PFS and replacement development of a convenience retail unit on the application site.
- 3.2 The proposals would provide a convenience retail unit with a GFA of approximately 211m<sup>2</sup>. The proposed site layout is included in **Appendix 1** of this report.

### Proposed Site Access and Servicing Arrangements

- 3.3 It is proposed that the sites north-eastern access to Yardley Wood Road would be closed, with the footway and verge reinstated. The northern access to Yardley Wood Road and the southern access to Shirley High Street would be retained and unaffected by the redevelopment proposals.
- 3.4 A swept path analysis has been undertaken of the site access and internal arrangements for a 16.5 articulated vehicle, as the largest anticipated service vehicle. The vehicle tracking is shown on the plan included in **Appendix 2**.

### Parking Provision

- 3.5 The redevelopment proposals would be supported by nine standard car parking spaces, two mobility impaired bays and two Electrical Vehicle (EV) charging bays. Two Sheffield Stands will also be provided, resulting in a total of four cycle parking spaces.
- 3.6 Local parking standards are contained within the *Solihull Local Development Framework Vehicle Parking Standards and Green Travel Plans* (Solihull Metropolitan Borough Council, 2006). The standards suggest a maximum provision of one space per 14m<sup>2</sup> GFA for food retail developments. For the application site this would equate to a maximum provision of 15 parking spaces. Therefore, the parking provision proposed for the redevelopment site meets local parking standards.

### Trip Generation

#### Existing Site Operations – PFS

- 3.7 The TRICS database has been used to derive the likely numbers of trips expected for the current PFS facility based on the 'Petrol Filling Station' Land-use and Sub Land-use 'PFS with retail'. The selection criteria for the comparative sites used is as follows:
- Land use – 'Petrol Filling Station', Sub land use – 'PFS with Retail';
  - All London and Ireland sites excluded;

- Weekday surveys only;
- Covid surveys excluded; and
- Selection by bays.

3.8 A summary of the peak-hour trip rates (per bay) for the current PFS is shown in **Table 3.1**, with the TRICS output report detailing the trip rates used available within **Appendix 3**.

**Table 3.1:** Existing PFS Trip Rates

TRICS Trip Rates	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Total Vehicles	8.445	8.170	9.540	9.410

3.9 The above trip rates have been applied to the current PFS which consists of eight pumps, resulting in the following estimated vehicle movements, as shown in **Table 3.2**:

**Table 3.2:** Existing PFS Trip Generation

Trip Generation	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Total Vehicles	68	65	76	75

3.10 The results show that during the busiest hour the existing operation of the site would result in approximately 150 two-way vehicular movements.

### Trip Generation – Proposed Redevelopment

3.11 The TRICS database has also been used to derive the estimated numbers of trips for the proposed redevelopment. The selection criteria for the comparative sites used is as follows:

- Land use – ‘Retail’, Sub land use – ‘Convenience Store’;
- All London and Ireland sites excluded;
- Weekday surveys only;
- Covid surveys excluded; and
- Selection by GFA.

3.12 A summary of the peak-hour trip rates (per 100 m<sup>2</sup> GFA) for the proposed increase in retail use is shown in **Table 3.3**, with the TRICS output report detailing the trip rates used available within **Appendix 3**.

**Table 3.3:** Convenience Store Trip Rates

TRICS Trip Rates	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Total Vehicles	7.592	7.612	9.264	9.028

- 3.13 The above trip rates have been applied to the proposed redevelopment which consists of 211m<sup>2</sup> GFA, resulting in the following anticipated vehicle movements for the development, as shown in **Table 3.4**:

**Table 3.4:** Convenience Store Trip Generation

Trip Generation	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Total Vehicles	16	16	20	19

- 3.14 The results show that during the busiest hour the proposed redevelopment of the site would result in approximately 40 two-way vehicular movements.

### Comparative Assessment

- 3.15 A comparative assessment has been undertaken between the existing operation and the proposed new use shown in **Table 3.5**.

**Table 3.5:** Development Trip Generation Comparison

Trip Generation	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Current Operation	68	65	76	75
Proposed Operation	16	16	20	19
Difference	-52	-49	-56	-56

- 3.16 The comparison identifies that the redeveloped site would generate significantly reduced levels of vehicle movements, shown to be less than one third of the existing volume during the busier PM peak hour.

## 4 Summary and Conclusions

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- 4.1 Dynamic Transport Planning is instructed by EG Group to report on the anticipated highways and transportation issues related with the proposals for the redevelopment of a PFS site at Solihull Lodge Service Station, Shirley High Street, Solihull.
- 4.2 The proposed redevelopment of the site consists of the demolition of the existing PFS and construction of a new convenience store with associated car parking. The proposals include the closure of the north-eastern access to Yardley Wood Road, with the footway and verge reinstated. No changes are proposed to the existing northern access to Yardley Wood Road or the southern access to Shirley High Street.
- 4.3 A review of the highway accident data for the site access locations and adjacent highway has been reviewed and identified no pre-existing patterns or trends of incidents that could be impacted by the redevelopment proposals.
- 4.4 As part of the redevelopment a total of 13 car parking spaces will be provided inclusive of mobility impaired and EV charging spaces. This level of provision is consistent with the local parking standards.
- 4.5 The servicing arrangements for the site will remain essentially unchanged with vehicle tracking provided to demonstrate the largest anticipated service vehicle can be accommodated within the site.
- 4.6 A review of the sites accessibility by non-car modes of travel has identified that a very good level of access would be available.
- 4.7 A trip-generation assessment has been undertaken which demonstrates that the proposals, would result in a significant reduction in vehicular activity during the highway peak periods. It is therefore considered that the redevelopment would have a beneficial impact on the operation of the local highway network as vehicle movements associated with this site would be significantly reduced.
- 4.8 On the basis of this TN, it is concluded that there are no reasons why the proposed redevelopment of the site should not be granted planning permission on highways grounds.

# Appendix 1

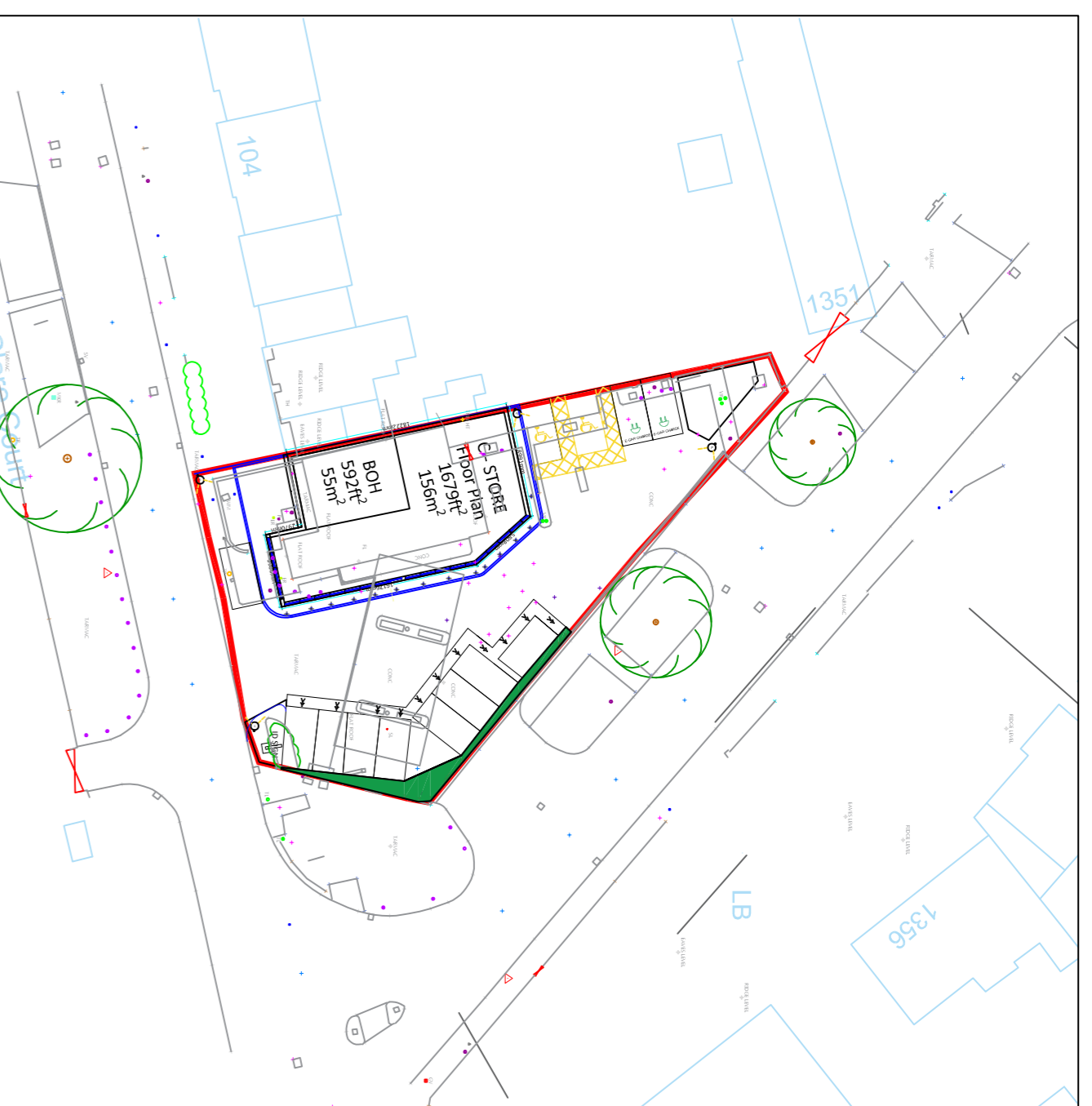
## Site Layout Plan

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# Appendix 2

## Swept-Path Analysis

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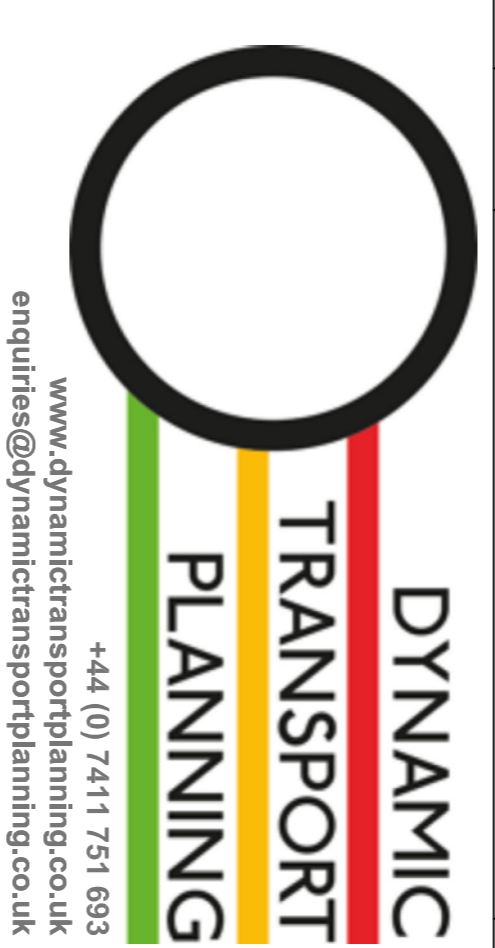


Proposed Site Layout - Scale 1/500



Swept Path Analysis - Scale 1/250

Rev.	Date	Revisions	Drawn
A	15/1/21	Minor Layout Update	DA
-	17/1/21	First Issue	JW



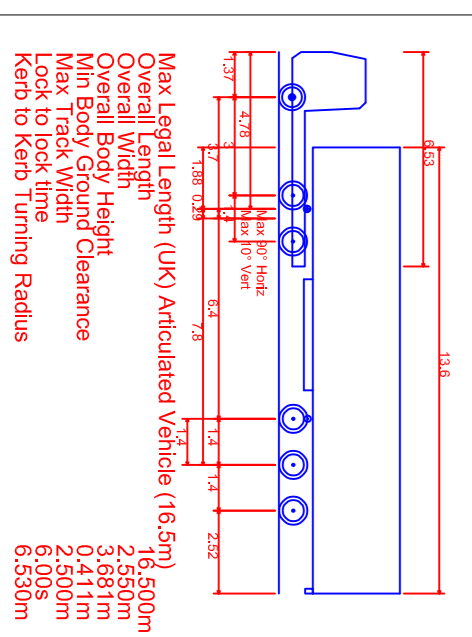
Client

EG Group Ltd

Project  
**Proposed Retail Development, Solihull  
 Lodge Service Station, Shirley High  
 Street, Solihull**

Drawing Title  
**Proposed Site Layout  
 Swept Path Analysis  
 16.5m Artic**

Date	Scale
November 2021	As Specified @ A1
Drawn JW	Approved GS
Drawing Number DTP/3710721/ATTR001	Rev. A



Max Legal Length (UK) Articulated Vehicle (16.5m) 16.500m  
 Overall Width 2.550m  
 Overall Height 2.550m  
 Min Body Ground Clearance 0.411m  
 Max Track Width 2.500m  
 Kerb to Kerb Turning Radius 6.530m



# Appendix 3

## TRICS Output Reports

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**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use : 13 - PETROL FILLING STATIONS

Category : B - PFS - WITH RETAIL

**TOTAL VEHICLES**Selected regions and areas:

<b>03</b>	<b>SOUTH WEST</b>	
	DC DORSET	2 days
	DV DEVON	1 days
<b>04</b>	<b>EAST ANGLIA</b>	
	CA CAMBRIDGESHIRE	1 days
	SF SUFFOLK	2 days
<b>05</b>	<b>EAST MIDLANDS</b>	
	DS DERBYSHIRE	1 days
	LE LEICESTERSHIRE	1 days
	LN LINCOLNSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
<b>06</b>	<b>WEST MIDLANDS</b>	
	HE HEREFORDSHIRE	1 days
	WM WEST MIDLANDS	1 days
<b>07</b>	<b>YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>	
	NY NORTH YORKSHIRE	2 days
<b>08</b>	<b>NORTH WEST</b>	
	GM GREATER MANCHESTER	1 days
	LC LANCASHIRE	1 days
	MS MERSEYSIDE	1 days
<b>09</b>	<b>NORTH</b>	
	TW TYNE & WEAR	1 days
<b>10</b>	<b>WALES</b>	
	DB DENBIGHSHIRE	1 days
	MM MONMOUTHSHIRE	1 days
<b>11</b>	<b>SCOTLAND</b>	
	EB CITY OF EDINBURGH	2 days
	FI FIFE	1 days

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

**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: Filling bays  
 Actual Range: 6 to 16 (units: )  
 Range Selected by User: 4 to 16 (units: )

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 01/01/20

*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	3 days
Tuesday	8 days
Wednesday	3 days
Thursday	1 days
Friday	8 days

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

Selected survey types:

Manual count	23 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)	13
Edge of Town	7
Neighbourhood Centre (PPS6 Local Centre)	3

*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	1
Development Zone	1
Residential Zone	16
High Street	1
No Sub Category	4

*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:

Sui Generis 23 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 500m Range:

All Surveys Included

**Secondary Filtering selection (Cont.):**Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	2 days
10,001 to 15,000	6 days
15,001 to 20,000	1 days
20,001 to 25,000	3 days
25,001 to 50,000	5 days
50,001 to 100,000	2 days

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

Population within 5 miles:

25,001 to 50,000	2 days
50,001 to 75,000	4 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	7 days
250,001 to 500,000	6 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	8 days
1.1 to 1.5	12 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:

No	23 days
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*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	23 days
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*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

<b>1</b>	<b>CA-13-B-02</b> LINCOLN ROAD PETERBOROUGH	<b>MURCO &amp; COSTCUTTER</b>	<b>CAMBRIDGESHIRE</b>
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Filling bays: 8 Survey date: TUESDAY 16/12/14		Survey Type: MANUAL
<b>2</b>	<b>DB-13-B-02</b> RHYL ROAD RHUDDLAN	<b>TEXACO &amp; CO-OP</b>	<b>DENBIGHSHIRE</b>
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Filling bays: 8 Survey date: TUESDAY 12/11/13		Survey Type: MANUAL
<b>3</b>	<b>DC-13-B-01</b> 271 BARRACK ROAD CHRISTCHURCH	<b>ESSO &amp; TESCO EXPRESS</b>	<b>DORSET</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Filling bays: 6 Survey date: MONDAY 24/03/14		Survey Type: MANUAL
<b>4</b>	<b>DC-13-B-02</b> 71-75 SOMERFORD ROAD CHRISTCHURCH	<b>M&amp;S &amp; BP</b>	<b>DORSET</b>
	Suburban Area (PPS6 Out of Centre) No Sub Category Total Filling bays: 8 Survey date: FRIDAY 21/03/14		Survey Type: MANUAL
<b>5</b>	<b>DS-13-B-01</b> NOTTINGHAM ROAD DERBY CHADDESSEN	<b>ESSO &amp; TESCO EXPRESS</b>	<b>DERBYSHIRE</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Filling bays: 8 Survey date: FRIDAY 26/06/15		Survey Type: MANUAL
<b>6</b>	<b>DV-13-B-01</b> TORBAY ROAD PAIGNTON	<b>BP &amp; COSTCUTTER</b>	<b>DEVON</b>
	Edge of Town Residential Zone Total Filling bays: 8 Survey date: TUESDAY 18/07/17		Survey Type: MANUAL
<b>7</b>	<b>EB-13-B-01</b> CALDER ROAD EDINBURGH SIGHTHILL	<b>BP</b>	<b>CITY OF EDINBURGH</b>
	Edge of Town No Sub Category Total Filling bays: 8 Survey date: FRIDAY 15/10/10		Survey Type: MANUAL
<b>8</b>	<b>EB-13-B-02</b> BULLYEON ROAD QUEENSFERRY	<b>BP CONNECT &amp; M&amp;S SIMPLY FOOD</b>	<b>CITY OF EDINBURGH</b>
	Edge of Town Residential Zone Total Filling bays: 15 Survey date: THURSDAY 26/06/14		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

<b>9</b>	<b>FI-13-B-01</b> HARBOUR DRIVE DALGETY BAY	<b>BP &amp; M&amp;S SIMPLY FOOD</b>	<b>FIFE</b>
	Edge of Town No Sub Category Total Filling bays: 13 Survey date: WEDNESDAY 23/03/16		Survey Type: MANUAL
<b>10</b>	<b>GM-13-B-01</b> NEW STREET ROCHDALE MILNROW	<b>BP &amp; SPAR</b>	<b>GREATER MANCHESTER</b>
	Edge of Town Residential Zone Total Filling bays: 8 Survey date: WEDNESDAY 21/10/15		Survey Type: MANUAL
<b>11</b>	<b>HE-13-B-01</b> HOLMER ROAD HEREFORD	<b>TEXACO/SOMERFIELD</b>	<b>HEREFORDSHIRE</b>
	Suburban Area (PPS6 Out of Centre) No Sub Category Total Filling bays: 12 Survey date: MONDAY 18/10/10		Survey Type: MANUAL
<b>12</b>	<b>LC-13-B-03</b> GARSTANG ROAD PRESTON FULWOOD	<b>TEXACO &amp; MORRISONS DAILY</b>	<b>LANCASHIRE</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Filling bays: 8 Survey date: TUESDAY 06/11/18		Survey Type: MANUAL
<b>13</b>	<b>LE-13-B-02</b> FOSSE ROAD NORTH LEICESTER	<b>TESCO EXPRESS &amp; ESSO</b>	<b>LEICESTERSHIRE</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Filling bays: 8 Survey date: TUESDAY 28/10/14		Survey Type: MANUAL
<b>14</b>	<b>LN-13-B-01</b> CARHOLME ROAD LINCOLN	<b>GULF &amp; CO-OP</b>	<b>LINCOLNSHIRE</b>
	Edge of Town Residential Zone Total Filling bays: 8 Survey date: WEDNESDAY 04/10/17		Survey Type: MANUAL
<b>15</b>	<b>MM-13-B-01</b> MALPAS ROAD NEWPORT MALPAS	<b>BP &amp; M&amp;S SIMPLY FOOD</b>	<b>MONMOUTHSHIRE</b>
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Filling bays: 8 Survey date: FRIDAY 27/09/19		Survey Type: MANUAL
<b>16</b>	<b>MS-13-B-01</b> ULLET ROAD LIVERPOOL SEFTON PARK	<b>ESSO &amp; SPAR</b>	<b>MERSEYSIDE</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Filling bays: 6 Survey date: TUESDAY 18/11/14		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

<b>17</b>	<b>NT-13-B-03</b>	<b>SAINSBURY'S PFS</b>	<b>NOTTINGHAMSHIRE</b>
	CASTLE BRIDGE ROAD NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre) Development Zone		
	Total Filling bays:	16	
	Survey date: FRIDAY	25/11/16	Survey Type: MANUAL
<b>18</b>	<b>NY-13-B-02</b>	<b>BP &amp; SPAR</b>	<b>NORTH YORKSHIRE</b>
	NORTH STREET RIPON		
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total Filling bays:	6	
	Survey date: MONDAY	23/09/13	Survey Type: MANUAL
<b>19</b>	<b>NY-13-B-03</b>	<b>ESSO &amp; CO-OP</b>	<b>NORTH YORKSHIRE</b>
	WETHERBY ROAD NORTH KNARESBOROUGH		
	Suburban Area (PPS6 Out of Centre) Industrial Zone		
	Total Filling bays:	8	
	Survey date: FRIDAY	30/09/16	Survey Type: MANUAL
<b>20</b>	<b>SF-13-B-01</b>	<b>TOTAL</b>	<b>SUFFOLK</b>
	HILLSIDE ROAD EAST BUNGAY		
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total Filling bays:	8	
	Survey date: TUESDAY	09/10/12	Survey Type: MANUAL
<b>21</b>	<b>SF-13-B-02</b>	<b>BP CONNECT &amp; M&amp;S</b>	<b>SUFFOLK</b>
	ROUGHAM ROAD BURY ST EDMUNDS		
	Edge of Town Residential Zone		
	Total Filling bays:	8	
	Survey date: FRIDAY	19/07/13	Survey Type: MANUAL
<b>22</b>	<b>TW-13-B-05</b>	<b>SHELL &amp; SPAR</b>	<b>TYNE &amp; WEAR</b>
	THE BROADWAY SUNDERLAND		
	Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total Filling bays:	6	
	Survey date: FRIDAY	24/05/19	Survey Type: MANUAL
<b>23</b>	<b>WM-13-B-05</b>	<b>TEXACO &amp; CO-OPERATIVE</b>	<b>WEST MIDLANDS</b>
	HIGH STREET BIRMINGHAM HARBORNE		
	Suburban Area (PPS6 Out of Centre) High Street		
	Total Filling bays:	8	
	Survey date: TUESDAY	22/10/13	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 13 - PETROL FILLING STATIONS/B - PFS - WITH RETAIL

**TOTAL VEHICLES****Calculation factor: 1 BAYS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BAYS	Trip Rate	No. Days	Ave. BAYS	Trip Rate	No. Days	Ave. BAYS	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	22	9	5.026	22	9	4.745	22	9	9.771
07:00 - 08:00	23	9	7.960	23	9	7.620	23	9	15.580
08:00 - 09:00	23	9	8.455	23	9	8.170	23	9	16.625
09:00 - 10:00	23	9	8.310	23	9	8.335	23	9	16.645
10:00 - 11:00	23	9	7.680	23	9	7.620	23	9	15.300
11:00 - 12:00	23	9	7.400	23	9	7.425	23	9	14.825
12:00 - 13:00	23	9	8.675	23	9	8.680	23	9	17.355
13:00 - 14:00	23	9	8.360	23	9	8.390	23	9	16.750
14:00 - 15:00	23	9	8.115	23	9	7.935	23	9	16.050
15:00 - 16:00	23	9	8.290	23	9	8.390	23	9	16.680
16:00 - 17:00	23	9	8.615	23	9	8.905	23	9	17.520
17:00 - 18:00	<b>23</b>	<b>9</b>	<b>9.540</b>	<b>23</b>	<b>9</b>	<b>9.410</b>	<b>23</b>	<b>9</b>	<b>18.950</b>
18:00 - 19:00	23	9	8.810	23	9	8.880	23	9	17.690
19:00 - 20:00	22	9	7.297	22	9	7.583	22	9	14.880
20:00 - 21:00	22	9	5.130	22	9	5.318	22	9	10.448
21:00 - 22:00	22	9	3.984	22	9	4.089	22	9	8.073
22:00 - 23:00	1	8	2.125	1	8	2.750	1	8	4.875
23:00 - 24:00	1	8	0.000	1	8	0.250	1	8	0.250
Total Rates:			123.772			124.495			248.267

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: 6 - 16 (units: )  
Survey date range: 01/01/10 - 01/01/20  
Number of weekdays (Monday-Friday): 23  
Number of Saturdays: 0  
Number of Sundays: 0  
Surveys automatically removed from selection: 2  
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.



**TRIP RATE CALCULATION SELECTION PARAMETERS:**

Land Use : 01 - RETAIL  
 Category : 0 - CONVENIENCE STORE

**TOTAL VEHICLES**Selected regions and areas:

<b>02</b>	<b>SOUTH EAST</b>	
	ES EAST SUSSEX	1 days
<b>03</b>	<b>SOUTH WEST</b>	
	DV DEVON	1 days
	WL WILTSHIRE	1 days
<b>04</b>	<b>EAST ANGLIA</b>	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
<b>05</b>	<b>EAST MIDLANDS</b>	
	LE LEICESTERSHIRE	1 days
<b>07</b>	<b>YORKSHIRE &amp; NORTH LINCOLNSHIRE</b>	
	NY NORTH YORKSHIRE	1 days
	SY SOUTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	2 days
<b>09</b>	<b>NORTH</b>	
	DH DURHAM	1 days
	TW TYNE & WEAR	1 days
<b>10</b>	<b>WALES</b>	
	CF CARDIFF	2 days
<b>11</b>	<b>SCOTLAND</b>	
	AD ABERDEEN CITY	1 days

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

**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: 70 to 539 (units: sqm)  
 Range Selected by User: 70 to 1500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 25/09/19

*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	4 days
Wednesday	3 days
Thursday	2 days
Friday	6 days

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

Selected survey types:

Manual count	15 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)	9
Edge of Town	1
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.*

*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:

Not Known	3 days
E(a)	12 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 500m Range:

All Surveys Included

#### Population within 1 mile:

5,001 to 10,000	3 days
10,001 to 15,000	2 days
15,001 to 20,000	4 days
20,001 to 25,000	2 days
25,001 to 50,000	4 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	1 days
25,001 to 50,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	6 days
250,001 to 500,000	5 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	7 days
1.1 to 1.5	8 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.*

#### Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	15 days

*This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.*

#### Travel Plan:

No	15 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	15 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

<b>1</b>	<b>AD-01-O-01</b>	<b>TESCO EXPRESS</b>	<b>ABERDEEN CITY</b>
	VICTORIA STREET		
	ABERDEEN		
	DYCE		
	Suburban Area (PPS6 Out of Centre)		
	Built-Up Zone		
	Total Gross floor area:	400 sqm	
	Survey date: FRIDAY	18/05/12	Survey Type: MANUAL
<b>2</b>	<b>CA-01-O-01</b>	<b>CO-OP</b>	<b>CAMBRIDGESHIRE</b>
	MAYORS WALK		
	PETERBOROUGH		
	NETHERTON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	375 sqm	
	Survey date: MONDAY	17/10/11	Survey Type: MANUAL
<b>3</b>	<b>CF-01-O-01</b>	<b>TESCO EXPRESS</b>	<b>CARDIFF</b>
	BUTE STREET		
	CARDIFF		
	CARDIFF BAY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Commercial Zone		
	Total Gross floor area:	450 sqm	
	Survey date: WEDNESDAY	18/07/12	Survey Type: MANUAL
<b>4</b>	<b>CF-01-O-02</b>	<b>CO-OPERATIVE</b>	<b>CARDIFF</b>
	HEOL-Y-DERI		
	CARDIFF		
	RHIWBINA		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	350 sqm	
	Survey date: FRIDAY	07/10/16	Survey Type: MANUAL
<b>5</b>	<b>DH-01-O-01</b>	<b>SAINSBURY'S LOCAL</b>	<b>DURHAM</b>
	132 STATION LANE		
	HARTLEPOOL		
	SEATON CAREW		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	469 sqm	
	Survey date: MONDAY	26/11/12	Survey Type: MANUAL
<b>6</b>	<b>DV-01-O-01</b>	<b>PREMIER</b>	<b>DEVON</b>
	MELROSE AVENUE		
	PLYMOUTH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	70 sqm	
	Survey date: WEDNESDAY	18/07/12	Survey Type: MANUAL
<b>7</b>	<b>ES-01-O-01</b>	<b>ONE STOP</b>	<b>EAST SUSSEX</b>
	THE SIDINGS		
	HASTINGS		
	ORE VALLEY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	280 sqm	
	Survey date: WEDNESDAY	19/12/12	Survey Type: MANUAL
<b>8</b>	<b>LE-01-O-01</b>	<b>BEST ONE</b>	<b>LEICESTERSHIRE</b>
	THE FAIRWAY		
	LEICESTER		
	AYLESTONE PARK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	220 sqm	
	Survey date: THURSDAY	27/09/12	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

<b>9</b>	<b>NF-01-O-01</b> DEREHAM ROAD NORWICH	<b>TESCO EXPRESS</b>	<b>NORFOLK</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 298 sqm Survey date: FRIDAY 26/10/12		Survey Type: MANUAL
<b>10</b>	<b>NY-01-O-03</b> FOREST ROAD NORTHALLERTON	<b>CO-OPERATIVE</b>	<b>NORTH YORKSHIRE</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 305 sqm Survey date: MONDAY 19/09/16		Survey Type: MANUAL
<b>11</b>	<b>SY-01-O-02</b> ECCLESALL ROAD SHEFFIELD	<b>SAINSBURY'S LOCAL</b>	<b>SOUTH YORKSHIRE</b>
	Neighbourhood Centre (PPS6 Local Centre) High Street Total Gross floor area: 306 sqm Survey date: FRIDAY 14/12/12		Survey Type: MANUAL
<b>12</b>	<b>TW-01-O-02</b> ETHEL TERRACE SUNDERLAND CASTLETOWN	<b>CO-OPERATIVE</b>	<b>TYNE &amp; WEAR</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 330 sqm Survey date: FRIDAY 07/04/17		Survey Type: MANUAL
<b>13</b>	<b>WL-01-O-01</b> THE CIRCLE SWINDON	<b>ONE STOP</b>	<b>WILTSHIRE</b>
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 292 sqm Survey date: FRIDAY 23/09/16		Survey Type: MANUAL
<b>14</b>	<b>WY-01-O-01</b> KEIGHLEY ROAD BRADFORD	<b>SAINSBURY'S LOCAL</b>	<b>WEST YORKSHIRE</b>
	Edge of Town Residential Zone Total Gross floor area: 400 sqm Survey date: THURSDAY 06/12/12		Survey Type: MANUAL
<b>15</b>	<b>WY-01-O-02</b> AINSTY ROAD WETHERBY	<b>CO-OPERATIVE</b>	<b>WEST YORKSHIRE</b>
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Gross floor area: 539 sqm Survey date: MONDAY 26/09/16		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 01 - RETAIL/O - CONVENIENCE STORE

**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 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00	1	400	0.500	1	400	0.000	1	400	0.500
06:00 - 07:00	8	327	3.630	8	327	2.904	8	327	6.534
07:00 - 08:00	15	339	6.806	15	339	6.196	15	339	13.002
08:00 - 09:00	15	339	7.592	15	339	7.612	15	339	15.204
09:00 - 10:00	15	339	6.432	15	339	6.216	15	339	12.648
10:00 - 11:00	15	339	6.235	15	339	6.058	15	339	12.293
11:00 - 12:00	15	339	6.432	15	339	6.471	15	339	12.903
12:00 - 13:00	15	339	8.694	15	339	8.340	15	339	17.034
13:00 - 14:00	15	339	6.491	15	339	6.471	15	339	12.962
14:00 - 15:00	15	339	7.258	15	339	6.963	15	339	14.221
15:00 - 16:00	15	339	7.730	15	339	7.789	15	339	15.519
16:00 - 17:00	15	339	8.045	15	339	7.455	15	339	15.500
17:00 - 18:00	15	339	9.264	15	339	9.028	15	339	18.292
18:00 - 19:00	<b>15</b>	<b>339</b>	<b>9.933</b>	<b>15</b>	<b>339</b>	<b>10.366</b>	<b>15</b>	<b>339</b>	<b>20.299</b>
19:00 - 20:00	15	339	7.022	15	339	7.848	15	339	14.870
20:00 - 21:00	13	363	3.283	13	363	4.108	13	363	7.391
21:00 - 22:00	12	375	2.332	12	375	2.688	12	375	5.020
22:00 - 23:00	3	415	0.965	3	415	1.608	3	415	2.573
23:00 - 24:00	1	400	0.000	1	400	0.250	1	400	0.250
<b>Total Rates:</b>			108.644			108.371			217.015

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: 70 - 539 (units: sqm)  
 Survey date range: 01/01/10 - 25/09/19  
 Number of weekdays (Monday-Friday): 15  
 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.