

**PROPOSED RESIDENTIAL DEVELOPMENT
HOLYBOURNE ROAD, HAVANT**

Portsmouth City Council
Transport Statement

18 April 2016

**Portsmouth City Council
Proposed Residential Development
Holybourne Road, Havant**

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Proposed Residential Development
Holybourne Road, Havant**

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1.0 INTRODUCTION

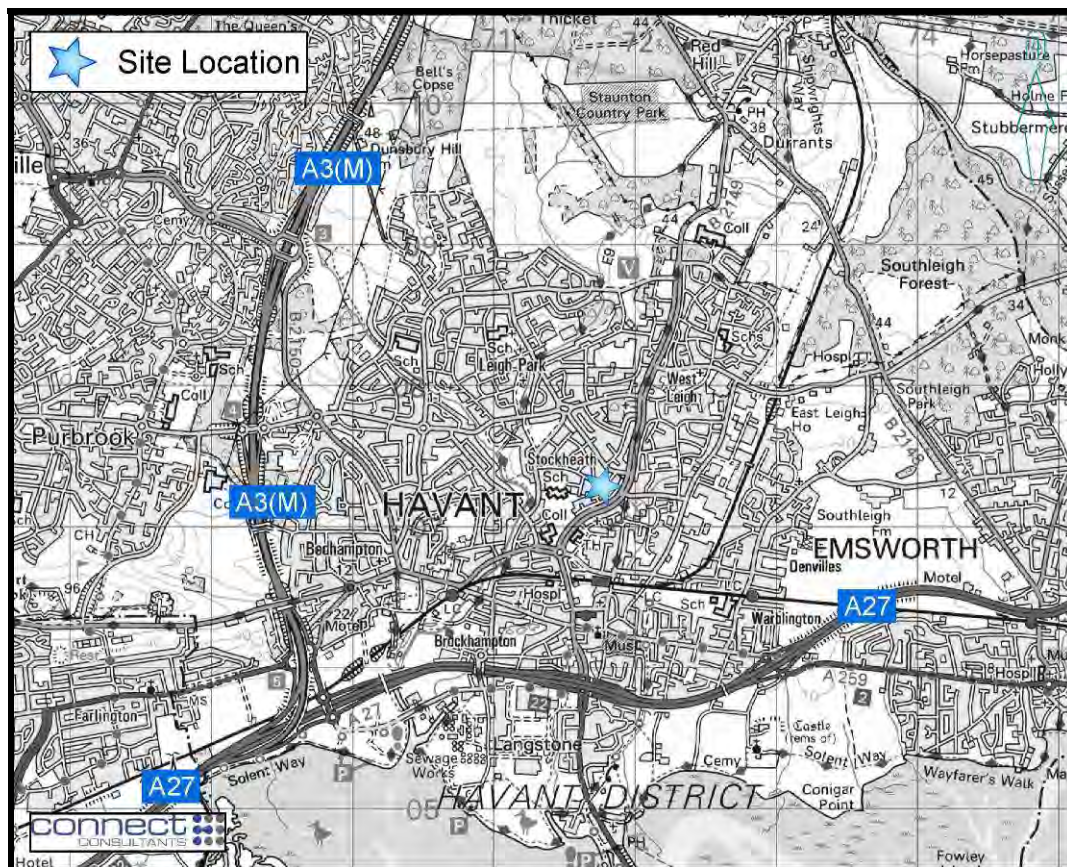
1.1 Appointment of Connect Consultants

- 1.1.1 Connect Consultants Limited is a firm of specialist highways, traffic and transportation planning consultants that have been instructed by Portsmouth City Council (PCC) in respect of the proposals for a residential development at Land East of Holybourne Road, Havant.

1.2 Location of Proposal Site

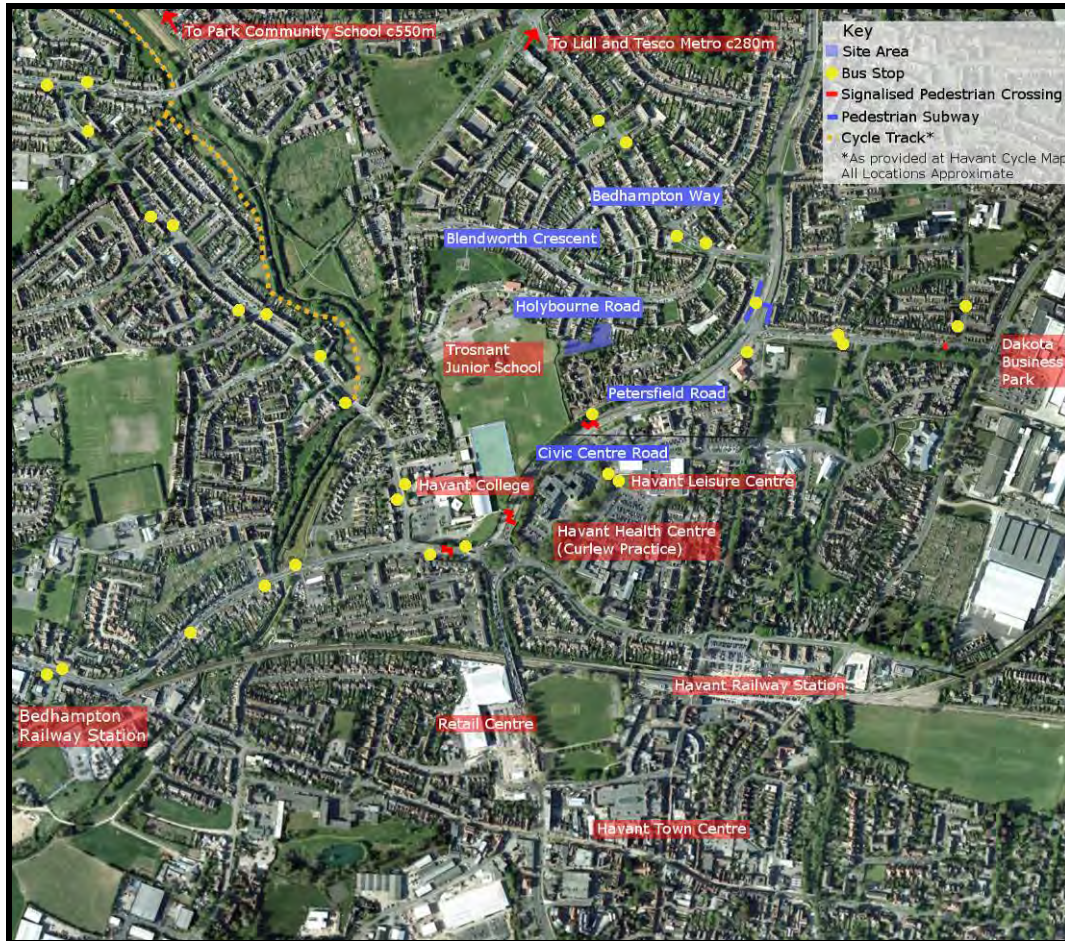
- 1.2.1 The proposal site is currently undeveloped and is bound to the west by Holybourne Road and residential dwellings and on all other sides by residential dwellings.
- 1.2.2 The site is located c800m walk distance to the north of central Havant, as shown at **Inset 1** below.

Inset 1 – Location of Proposal Site



1.2.3 **Inset 2**, below, identifies the context of the site in relation to the local area.

Inset 2 – Site in its Local Context



1.3 Development Proposals

1.3.1 **Appendix 1** contains a drawing indicating the proposed site layout.

1.3.2 The main components of the development scheme are as follows:

- Construction of 5 no. houses and 6 no. flats, which can be subdivided into:
 - o 4 no. 1 bedroom flats.
 - o 2 no. 2 bedroom flats.
 - o 5 no. 3 bedroom houses.
- Proposed access with Holybourne Road.
- Internal roads and 22 off-street car parking spaces.

1.4 Report Overview

- 1.4.1 The remainder of this Transport Statement (TS) is divided into five further sections, details of which are set out below.

SECTION 2.0 Transport Context

This provides details of the existing transport infrastructure in the vicinity of the site and identifies the level of accessibility of the site by available travel modes.

SECTION 3.0 Proposed Site Access Arrangements

This provides details for the proposed vehicle and pedestrian site access arrangements.

SECTION 4.0 Parking Assessment

This includes details of parking arrangements within the development for vehicles and cycles, relative to local parking standards.

SECTION 5.0 Traffic Assessment

This provides details of an assessment of the existing and proposed development traffic effect.

SECTION 6.0 Summary and Conclusions

A summary of the report contents and the Transport Statement conclusions are provided in this final section of the report.

2.0 TRANSPORT CONTEXT

2.1 Introduction

2.1.1 This section of the report provides details of the transport context for the site, focusing on the accessibility of the site by non-car modes of transport and the existing transport infrastructure. Also included are details of local facilities which residents may be likely to access on a regular basis.

2.2 Access by Foot

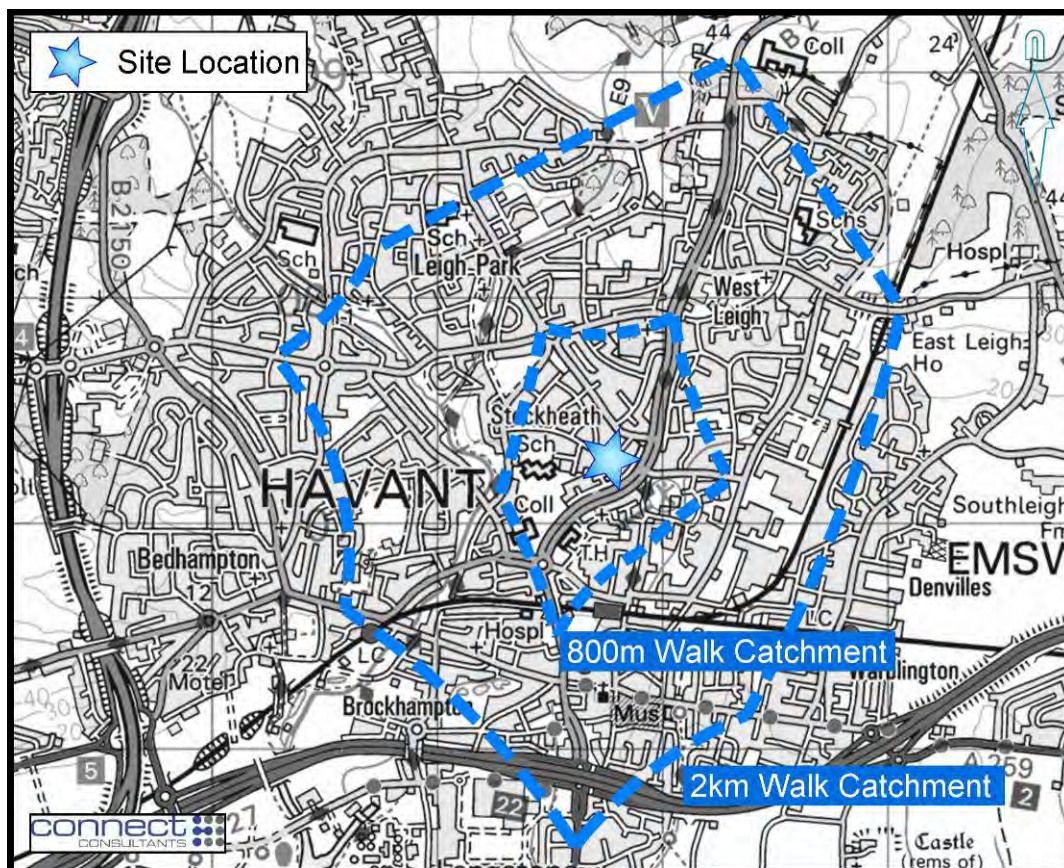
2.2.1 The Department for Transport's (DfT) document entitled 'Manual for Streets' dated 2007 at Section 4.4 sets out the requirements for pedestrians stating:-

"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes' (up to about 800 m) walking distance of residential areas which residents may access comfortably on foot".

2.2.2 Paragraph 6.3.1 of the Department for Transport (DfT) document 'Manual for Streets' (2007) identifies that a 20 minute walk time (equivalent to a 1.6km walk distance) is acceptable subject to an attractive walking environment.

2.2.3 Table 3.2 of the Institute of Highways and Transportation (IHT) document 'Providing for Journeys on Foot' sets out acceptable maximum walk distances of, 2km for commuting and school journeys, 800m for Town Centres, and 1.2km for elsewhere. **Inset 2**, below, highlights the 2km and 800m walk isochrones.

Inset 2 – 800m and 2km Walk Catchments



2.2.4 The proposals envisage that the development will be accessed by the proposed site access with Holybourne Road.

2.2.5 **Table 1**, below, contains a selection of local destinations along with their approximate walk distance from broadly the centroid of the proposal site.

Table 1 – Local Destinations

Destination	Walk Distance
Havant Town Centre (edge of)	c800m
Trosnant Junior School	c220m
Havant Leisure Centre	c360m
The Curlew Public House	c500m
Havant Health Centre – The Curlew Practice	c560m
Havant College	c700m
Havant Railway Station	c770m
Whitecross Dental Care	c930m
Central Retail Shopping Centre*	c980m
Tesco Metro	c1.1km
Lidl Discount Foodstore	c1.1km
Dakota Business Park (nearest unit)	c1.1km
Park Community School	c1.8km

*Includes Aldi Discount Foodstore

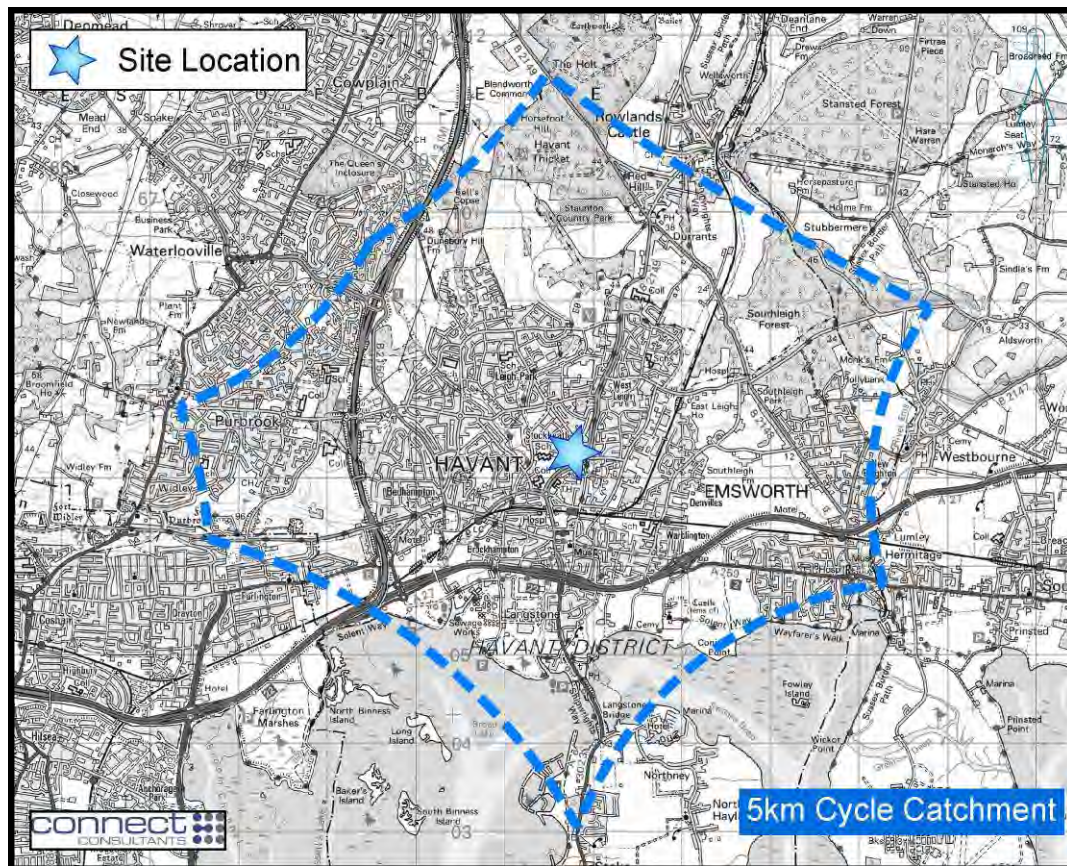
2.2.6 Overall, the Town Centre, public transport links, schools, medical facilities, employment, leisure and a variety of retail destinations are within easy walking distance of the proposal site, thus making walking a viable and applicable mode of transport to/from the proposal site.

2.3 Access by Cycle

2.3.1 Sustrans indicate in their 'Travel Behaviour Research Baseline Survey – 2004' under the subheading 'measuring the potential for change' that cycling offers an alternative to car travel, and particularly for trips of less than 6 kilometres. This research is supported by the 2014 National Travel Survey, which specified average journey lengths, by cycle, of 5.0km.

2.3.2 Assuming a five kilometre cycle distance, the catchment area of the site by cycle is shown at **Inset 3** below.

Inset 3 – Cycle Catchment



- 2.3.3 **Inset 3** above shows that the entirety Havant is within an acceptable cycling distance of the site. Given the range of trip destinations available within the local vicinity, cycling presents a viable alternative to the private car.
- 2.3.4 Havant benefits from several cycle routes, **Appendix 2** contains the Havant Cycle Map which highlights these routes.
- 2.3.5 Considering the above, cycling offers a viable mode of transport for facilitating a variety of journey types.

2.4 Access by Bus

- 2.4.1 The guidance contained within the IHT Guidelines entitled 'Planning for Public Transport in Developments' suggests a catchment area of 400m to bus stops.
- 2.4.2 The closest bus stops to the proposal site are situated on Petersfield Road (northeast bound) and Civic Centre Road (northwest and southeast bound bus stops), the northeast bound Petersfield Road bus stop is located c240m walk distance from the approximate centroid of the proposal site; the Civic Centre Road bus stops are c340m and c350m walk distance south of the centroid of the proposal site for the northwest bound and southeast bound stops respectively.
- 2.4.3 The northeast bound Petersfield Road bus stop benefits from seating, a shelter, timetable information and raised kerbs. The northwest bound Civic Centre Road bus stop benefits from a pole, and the southeast bound stop benefits from seating, a shelter, timetable information, raised kerbs and lay-by facility. The nearest southwest bound Petersfield Road bus stop is situated c570m north east of the proposal site.

Inset 5 – Bus Context



- 2.4.4 **Table 2** below indicates the route destinations and approximate frequencies of the bus route serving the bus stops in the local area.

Table 2 – Bus Service Details

Service Number	Destinations	Monday - Friday	Saturday	Sunday
20	The Hard – Havant via Portsmouth	30 minutes	30 minutes	-
21	Portsmouth – Havant	30 minutes	30 minutes	60 minutes
27	Emsworth – Rowlands Castle via Havant	120 minutes	120 minutes	-
39	Havant – Wecock Farm via Purbrook	10 minutes	10 minutes	60 minutes

2.4.5 These bus routes connect the site with several key nearby areas, including Havant Town Centre, Purbrook and Portsea. Details of the identified bus routes are provided at **Appendix 3**.

2.4.6 On the above basis, there is reasonable bus linkage between the site and the surrounding area, making bus travel a realistic alternative transportation mode for a significant proportion of journeys.

2.5 Access by Rail

2.5.1 The advice in the Institution of Highways and Transportation's (IHT) publication entitled 'Planning for Public Transport in Developments' suggests that railway stations have a walk catchment of 800m.

2.5.2 The closest railway station is Havant Railway Station, which is located approximately c770m walk distance to the south of the site. Services from Havant connect with Portsmouth Harbour (via Portsmouth and Southsea), Brighton, Southampton and London (Waterloo and Victoria), with several destinations en route. There are also multiple local smaller stations across the region.

2.5.3 The site therefore benefits from access to the mainline rail network.

2.6 Highway Network

2.6.1 The site is adjacent to Holybourne Road which connects to Petersfield Road (via Blendworth Crescent and Bedhampton Way) to the north and east of the proposal site. Petersfield Road can be categorised as a two lane dual carriageway along most of its length. Petersfield Road and other adjoining roads connect with the A3(M), A27 and Hayling Island. The A27 further connects to the M27 at Portsmouth to the west.

2.6.2 Based on the above, the site benefits from a high level of accessibility via the highway network.

2.7 Access to Facilities

2.7.1 The DfT publishes annual measures of accessibility in England by public transport, walking, cycling and car to several service types including the following: primary schools, secondary schools, GPs, hospitals, food stores, town centres and employment centres. These are collectively referred to as Core Accessibility Indicators (CAI), the latest set of which are available were recorded in 2013.

2.7.2 The 2013 CAI “cycle time” has been converted to distance using the assumption that average cycle speed is 16 km/h. This is the most common cycle speed input to the program used when calculating the CAI.

2.7.3 The accessibility distance has been calculated for each local authority included in the CAI data; these distances have then been combined with population data to calculate a weighted average distance.

2.8 Access to Employment

2.8.1 The 2013 CAI weighted average distance to the nearest employment centre is 1.7km.

2.8.2 The closest employment centres to the proposed development is Havant Town Centre and is, as above, c800m walk distance from the centre of the proposed development. This is less than the weighted average 2013 CAI; therefore residents of the proposed development will benefit from being closer to their nearest employment centre than the average resident of England is.

2.9 Access to Education

2.9.1 The statutory maximum walking distance for primary school pupils is 2 miles (3.2km), for secondary school pupils, the distance is 3 miles (4.8km). Data from the National Travel Survey¹ shows that the proportion of primary pupils walking to school decreases sharply for trip lengths in excess of 1 mile (1.6km). **Table 3** below contains a summary of National Travel Survey (NTS) table 0614, “trips to school by main mode, trip length and age”.

Table 3 – NTS 0614 Summary

Age Group	Mode \ Distance	<1 mile	1-2 miles	2-5 miles	5+ miles
5-10 years	Walk	83.3%	28.1%	2.6%	0.4%
	Bicycle	1.7%	1.0%	0.4%	0.0%
	Car/van	14.5%	65.7%	80.7%	61.0%
	Bus	0.2%	5.0%	14.7%	30.9%
	Other	0.4%	0.2%	1.6%	7.7%
11-16 years	Walk	91.9%	60.0%	9.3%	0.0%
	Bicycle	0.9%	3.7%	1.3%	0.0%
	Car/van	4.1%	22.0%	35.0%	24.3%
	Bus	2.4%	12.5%	52.1%	60.9%
	Other	0.6%	1.8%	2.3%	14.8%

2.9.2 The CAI weighted average distance to the nearest primary school is 1.4km, and for the nearest secondary school, the weighted average distance is 2.2km

2.9.3 The closest primary school is Trosnant Junior School, which is understood to also benefit from an infant department. Trosnant Junior School is located c220m walk distance from the proposal site, which is within the recommended walking distance for children of primary school age, as well as being within the distance where c86% of trips to school by 5-10 year olds are made by non-car modes.

¹ Table 0614 “trips to school by main mode, trip length and age”, National Travel Survey, 2013

- 2.9.4 The closest secondary school is Park Community School. It is approximately 1.8km from the proposal site and so is within the statutory walking distance for children over the age of eight. The NTS data suggests that c78% of trips to secondary schools would be undertaken by non-car modes of transport.
- 2.9.5 The distances to the nearest primary and secondary schools are less than the CAI weighted average distances and less than the statutory maximum walking distance for pupils. The close proximity of the schools to the proposal site makes it highly likely that students will use walking, cycling or possibly public transport as modes of transport for journeys to / from school.

2.10 Access to Other Facilities

- 2.10.1 The 2013 CAI weighted average distance to the nearest foodstore is 1.6km; Aldi, Central Retail Park is an approximate 980m walk distance south of the proposal site.
- 2.10.2 The 2013 CAI weighted average distance to the nearest Town Centre is 3.2 km. The edge of Havant Town Centre is located an approximate c800m walk from the site and contains a variety of commercial attractions in addition to a range of restaurants, pubs and other entertainment venues. The town centre is accessible by walking and cycling.
- 2.10.3 The 2013 CAI weighted average distance to the nearest GP surgery is 1.6km; Havant Health Centre – The Curlew Practice is an approximate 560m walk distance south east of the proposal site.
- 2.10.4 Havant Leisure Centre is located an approximate 360m walk from the site, meaning it is accessible by foot and cycle. It has a variety of facilities, which include swimming pool(s), a sports hall, and squash courts. Although CAI does not include leisure, NTS Table 405 indicates that the average distance travelled for the purpose “sport: participate” was 9.6km in 2013.

2.11 Conclusions

- 2.11.1 The proposal site has a high level of accessibility to the surrounding area by foot and cycle. Bus routes pass within close proximity of the site and allow for access to local facilities and attractions, as well as the wider area, and the site benefits from access to Havant Railway Station providing access to the UK mainline rail network. The proposed site access arrangements are conducive to the development being accessed by non-car modes.
- 2.11.2 An assessment has been made comparing the accessibility of the proposed development with national measures of accessibility. It concludes that the proposed development accords with the statutory walking distance for primary and secondary school pupils, and is significantly within the CAI weighted average distances for the facilities included at **Table 4**.

Table 4 – Accessibility Distance Summary

Destination / Purpose	CAI	Proposed Development	Destination Name
Employment	1.7km	c800m	Havant Town Centre
Primary School	1.4km	c220m	Trosnant Junior School
Secondary School	2.2km	c1.8km	Park Community School
GP Surgery	1.6km	c560m	Havant Health Centre – The Curlew Practice
Town Centre	3.2km	c800m	Havant Town Centre
Foodstore	1.6km	c980m	Aldi Discount Foodstore, Central Retail Park
Leisure Centre	9.6km*	c360m	Havant Leisure Centre

*taken from the 2013 NTS Table 405

- 2.11.3 Based on the above assessment, the proposed residential development site benefits from a high level of accessibility to key services, facilities and destinations, demonstrating that, by virtue of its locations, the proposed residential development is likely to reduce reliance on the private car by providing essential mode choice for key, every-day journey purposes.

3.0 PROPOSED SITE ACCESS ARRANGEMENTS

3.1 Introduction

- 3.1.1 This section of the report will provide details of the proposed site access arrangements, including vehicular access, pedestrian access and servicing. The plan at **Appendix 1** shows the proposed site layout.

3.2 Vehicular Site Access Arrangements

- 3.2.1 The proposed development will be served by a proposed site access junction with Holybourne Road.
- 3.2.2 An internal access road and turning head will benefit internal site vehicular movements.

3.3 Pedestrian and Cycle Site Access Arrangements

- 3.3.1 Pedestrian and cycle access to the proposed development will be provided at the proposed site access with Holybourne Road.

3.4 Servicing

- 3.4.1 Service vehicles, including refuse vehicles, will be able to service the proposed development via the modified existing site access, utilising the internal access road and turning area as manoeuvring areas.
- 3.4.2 The proposed site layout has been assessed for an 11.2m refuse vehicle manoeuvres by Andrew Malcolm Associated Limited and is provided at **Appendix 4** for completeness.

4.0 PARKING ASSESSMENT

4.1 Introduction

- 4.1.1 This section of the report provides details of the proposed car and cycle parking provision serving the proposed residential development and compares them with the requirements set out in the relevant planning policy.

4.2 Car Parking Provision

- 4.2.1 The document entitled 'Havant Borough Residential Draft Parking Supplementary Planning Document' (Parking SPD), April 2015 has been used to assess the suitability of proposed car parking provision.

- 4.2.2 The residential dwellings will benefit from 22 car parking spaces of which, 10 will be allocated (at a rate of 2 spaces per 3 bedroom house) and the remainder will be unallocated.

- 4.2.3 An initial car parking assessment has been undertaken as set out at Table 4A and Table 4B of the Parking SPD as set out below (the area was classified as 'standard' i.e. not part of Havant or Waterlooville town centres):

- 4 no. 1 bed units: 0.9 unallocated spaces per unit. A total of 3.6 unallocated spaces are *"required"* to accommodate these units.
- 2 no. 2 bed units: 1.3 unallocated spaces per unit. A total of 2.6 unallocated spaces are *"required"* to accommodate these units.
- 5 no. 3 bed units: 2 allocated spaces per unit. A total of 10 allocated spaces are *"required"* to accommodate these units.

- 4.2.4 The total parking *"requirement"* is therefore 16 car parking spaces. The Parking SPD states:

"With the exception of small residential developments an additional 20% of unallocated parking for visitors should be accommodated."

- 4.2.5 The proposed residential development is small in nature, notwithstanding the 20% unallocated visitor parking equates to 3 unallocated spaces. The total parking requirement is therefore 19 car parking. The 22 proposed parking spaces accords with the draft standard.

4.3 Cycle Parking Provision

4.3.1 An initial cycle parking assessment has been undertaken as set out at Table 4D of the Parking SPD as set out below:

- 4 no. 1 bed units: 1 long stay space per unit. A total of 4 long stay spaces are *"required"* to accommodate these units.
- 2 no. 2 bed units: 2 long stay spaces per unit. A total of 4 long stay spaces are *"required"* to accommodate these units.
- 5 no. 3 bed units: 2 long stay spaces per unit. A total of 10 long stay spaces are *"required"* to accommodate these units.
- The total long stay parking *"requirement"* is therefore 18 long stay cycle parking spaces.
- Additional short stay cycle parking at a rate of *"1 loop/hoop per unit"* is also set out at Table 4D of the Parking SPD for 1 to 4+ bed units. The total short stay provision is therefore 11 loops/hoops (i.e. 22 spaces).

4.3.2 It is intended that residents of the proposed dwellings and their guests will store cycles within their properties.

4.4 Conclusion

4.4.1 The assessment has shown that the proposed provision of 22 car parking spaces is likely to be suitable for the proposed development.

5.0 TRAFFIC ASSESSMENT

5.1 Introduction

5.1.1 This section of the report considers the potential trip generation of the proposed residential development.

5.2 Existing Site Use

5.2.1 The existing site has been assumed to currently have no significant peak hour traffic attraction as the site is currently undeveloped.

5.3 Assumed Peak Hours

5.3.1 The traffic assessment has been based on the assumed network peak hours identified below:-

Weekday AM: 08:00 – 09:00.

Weekday PM: 17:00 – 18:00.

5.4 Traffic Assessment

5.4.1 The TRICS version 7 database has been interrogated to calculate the potential trip effects of the residential development. Although a not insignificant proportion of the dwellings are understood to be marketed as affordable, to be conservative, all units have been assessed as privately owned as this results in higher trip rates and will reflect the potential trip generation should the tenancy profile of the residencies vary in the future.

5.4.2 Weekday sites in the TRICS categories 'Residential – Houses Privately Owned' and 'Residential – Flats Privately Owned' have been filtered as being located in the 'Suburban Area' category, in England excluding Greater London, and for the default date range (01/01/07 – most recent). **Appendix 5** contains the outputs from the TRICS database.

Table 5 – Proposed Residential Development Traffic Generation

Peak Hour	Dwelling Type	Average Trip Rates (per dwelling)			Calculated Trips (5 Houses and 6 Flats)		
		In	Out	Total	In	Out	Total
AM Peak	House	0.149	0.375	0.524	1	2	3
	Flat	0.081	0.289	0.370	0	2	2
PM Peak	House	0.342	0.209	0.551	2	1	3
	Flat	0.298	0.133	0.431	2	1	3

5.4.3 **Table 5** above indicates a calculated, average, traffic generation of 5 and 6 vehicles during the assumed local network AM and PM peak hours respectively. This is a negligible traffic effect.

5.5 Section Conclusions

- 5.5.1 The proposed development's traffic effect has been calculated as negligible during the assumed network peak hours. No further traffic analysis or junction capacity testing has been undertaken and road collision data has not been analysed.

6.0 SUMMARY & CONCLUSIONS

6.1 Summary

6.1.1 Connect Consultants Limited have been instructed by Portsmouth City Council in respect to their proposal for a residential development at Land East of Holybourne Road, Havant.

6.1.2 A summary of this report is as follows:-

- The proposal is for the construction of 5 houses and 6 flats.
- The proposal site is within walking distance of a wide range of facilities including food stores, schools, leisure destinations and Havant Town Centre.
- There are further facilities within the cycle catchment, including opportunities in terms of education and employment, as well as further choice in terms of leisure, shopping and transport.
- The site is accessible by public transport with bus stops within walking distance of the site.
- The proposed on-site parking provision has been assessed as being suitable for the proposed development.
- An assessment of the net development traffic effect has identified the development is likely to have a negligible traffic effect on the local area during both the weekday AM peak and the PM peaks.

6.2 Conclusions

6.2.1 On the basis of the above, it is concluded that the development is acceptable from a transport perspective.

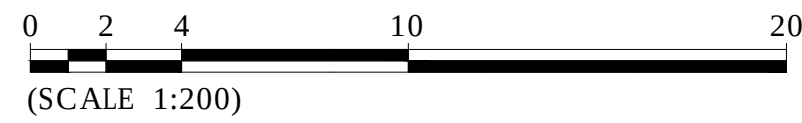
APPENDICES

Appendix 1

Proposed Site Layout Plan



Site Plan 1:200



GENERAL NOTES:

1. This drawing is to be read in conjunction with all relevant architects, structural engineers, mechanical & electrical engineers and specialists drawings / specifications.
2. Any discrepancies in dimensions or details between the various drawings should be reported immediately.
3. All dimensions are in millimetres and all levels are in metres.
4. Do not scale from this drawing, if in doubt ASK

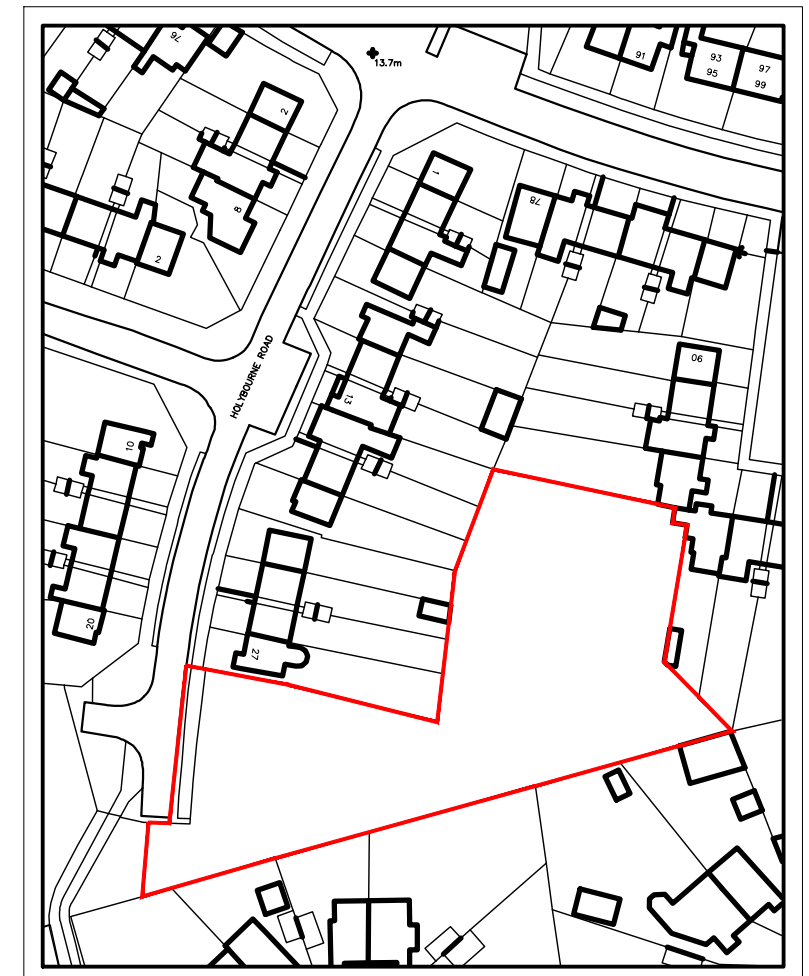
Rev.	Description	Date	Dn	Ch'd
A	Parking amended.	03.06.16	RL	DK
B	Culvert and easement shown	15.04.16	RL	DK

SCHEDULE OF ACCOMMODATION

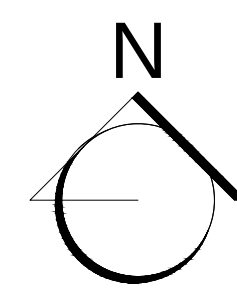
5	no. 3B/6P Houses @ 108m ²
2	no. 2B/4P Flats @ 71.8m ²
4	no. 1B/2P Flats @ 52.5-57.8m ²
11	no. Units Total

PARKING

10	no. Allocated parking spaces
12	no. Unallocated parking spaces
22	no. Total spaces



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SITE LOCATION PLAN SCALE 1:1250



CONCEPT HOUSE, 35 KINGSTON CRESCENT, NORTH END, PORTSMOUTH, HAMPSHIRE, PO2 8AA
t - 023 9267 3618 f - 023 9267 9819 www.ksaltd.co.uk info@ksaltd.co.uk

PROJECT
HOLYBOURNE ROAD

DRAWING TITLE

SITE PLAN

Date	Drawn by	Scale		Drawing No.	Rev.
JAN. 15	PJ/RL	1:200	A1	1103-PD101	B
architecture	planning	design		project management	

Appendix 2

Havant Cycle Map

Highway Code for Cyclists

Remember - the Highway Code applies to cyclists as well as other road users.

- Cycle signs
- It is illegal to cycle on the pavement, unless signs say otherwise
 - You must obey all traffic signs and signals.
 - Please refer to The Highway Code for further detailed information. www.direct.gov.uk/highwaycode

Here is a selection of the most commonly used road signs for cyclists.

-  Route recommended for cyclists on main road
-  Route to be used by cycles ONLY
-  Shared pededstrain and cycle route
-  Segregated cycle and pedestrian route
-  Contra-flow cycle route
-  Cycle and bus route
-  With-flow cycle land ahead (a solid line prohibits all other vehicles)
-  Warning (for motorists) Cycle route ahead
-  No cycling
-  Motor Vehicles Prohibited (Cycles permitted)

- Cycle safe:
- You must display front and rear lights at night, as well as a rear reflector
 - Wear bright or reflective clothing for extra visibility
 - For your own safety - always wear a safety helmet
 - Always lock your bike



- Signs and Lines
- Blue line: Off road cycle track (hard surfaced)
 - Orange line: On-road cycle lane
 - Yellow line: Bus and cycle lane
 - Blue line: Cycle network link (signposted)
 - Yellow line: Suggested link route (not signposted)
 - Blue dashed line: Brideway or other track available for cyclist use (typically loose surfaced)
 - Blue dashed line: One way traffic INCLUDING CYCLISTS
 - Blue dashed line: Controlled crossing
 - Blue dashed line: Cycle parking
 - Blue dashed line: NB - All Stations and most public buildings have cycle parking facilities
 - Blue dashed line: Cycle Shop
- Buildings and Places of Interest
- WC: Public toilets
 - Church: Church
 - Caravan site: Caravan site
 - Other places of interest: Other places of interest
 - Mainline railway station: Mainline railway station
 - Narrow gauge railway station: Narrow gauge railway station
 - Bus interchange: Bus interchange
 - Ferry terminal: Ferry terminal
 - South Downs National Park boundary: South Downs National Park boundary
 - Woods and forests: Woods and forests
 - Parks and other open spaces: Parks and other open spaces
 - Countryside or arable: Countryside or arable
 - School or college: School or college
 - Shopping area/Retail park: Shopping area/Retail park
 - Blue Flag beach: Blue Flag beach

Havant

BOROUGH COUNCIL

Cycling in Havant

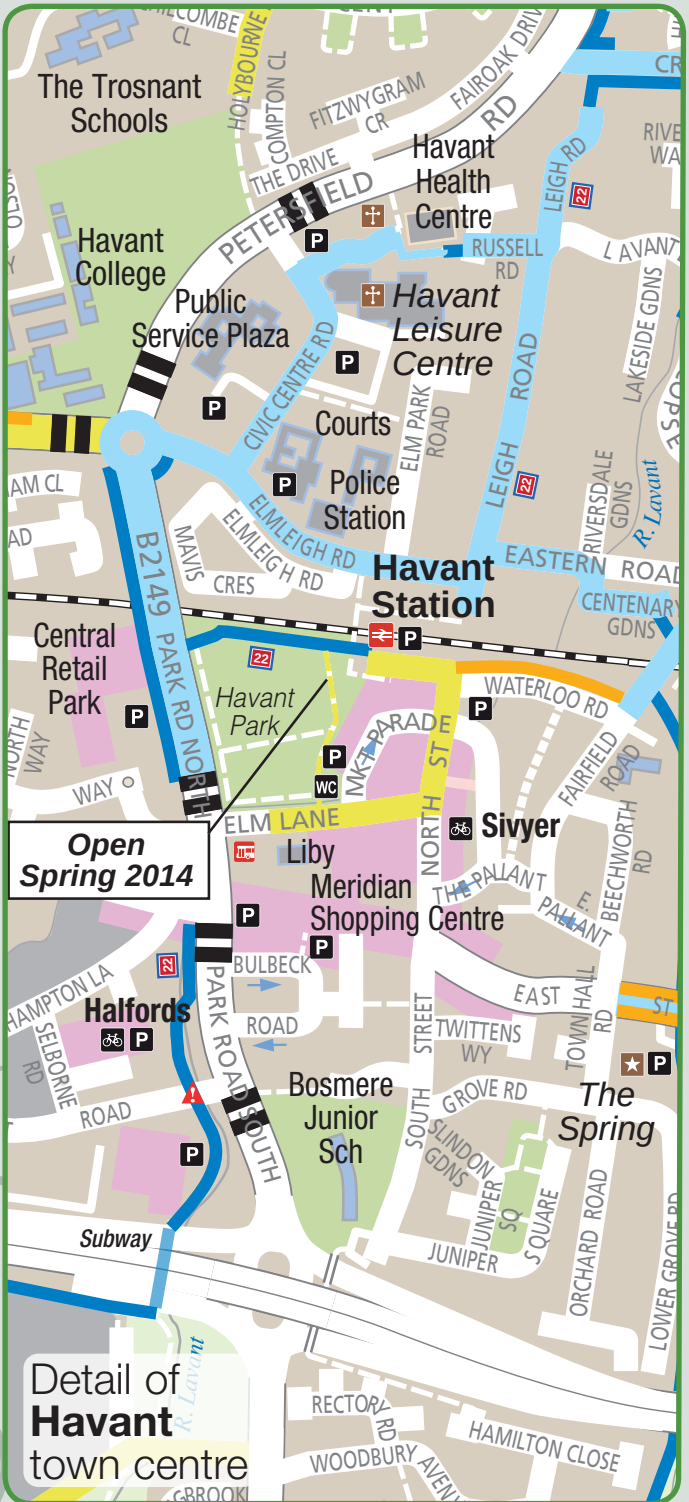
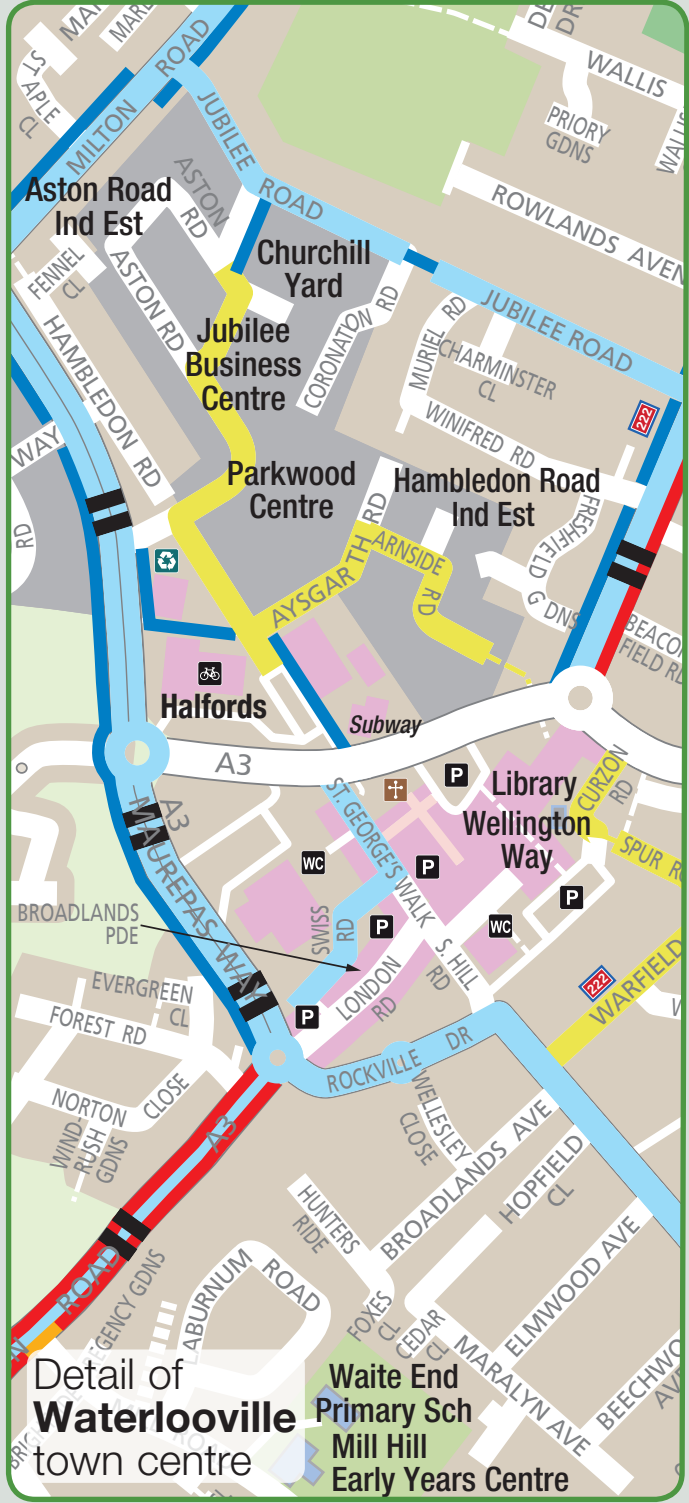
Including Waterloo, Emsworth, Hayling Island, Horndean, Clanfield and Rowlands Castle

Cycle Paths | Cycle Shops | Cycle Safety

Cycle Shops

There are a good range of retailers in the area offering new bikes, accessories and servicing. Look for this symbol 

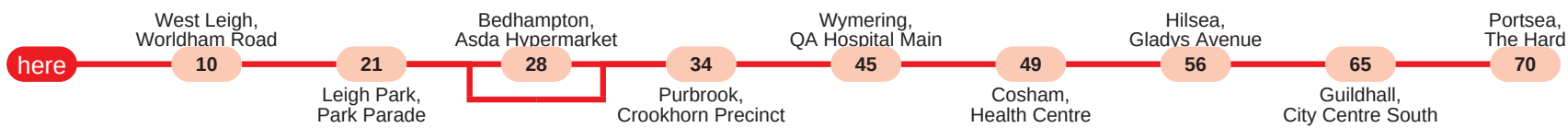
- EMSWORTH CAR AND CYCLE
41-43 North Street, Emsworth, PO10 7DA
CALL 01243 372742
www.emsworthcycles.co.uk
Trading hours: Mon-Sat 9.00 – 5.30
- HALFORDS
7 Hambledon Road, Waterloo, PO7 7UL
CALL 023 9224 0946
www.halfords.com
Trading hours: Mon – Fri 9.00 – 8.00; Sat 9.00 – 6.00; Sun 10.00 – 5.00
- SIVYER CYCLES
10 North Street Arcade, Havant, PO9 1PX
CALL 023 9245 5644
Trading hours: Mon, Tue, Thur, Fri, 9.15 – 5.30; Sat 9.15 – 5.00
- HAYLING CYCLES
100 Elm Grove, Hayling Island, PO11 9EH
CALL 023 9246 5882
www.hayingcycles.co.uk
Trading hours: Tues-Sat 9.00 – 5.00



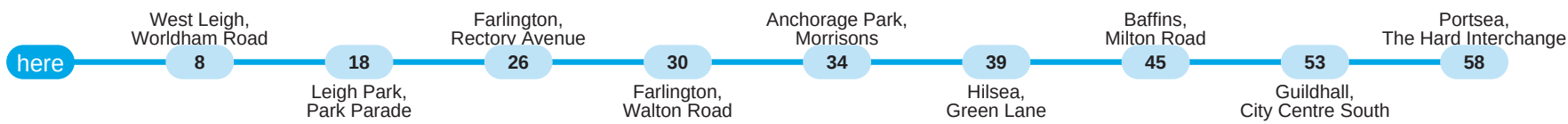
Appendix 3

Public Transport Details

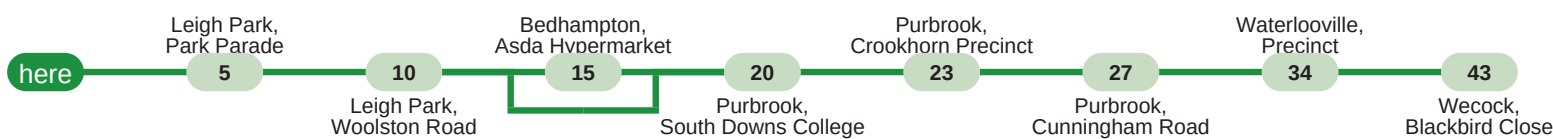
20 Havant - Portsmouth - The Hard Stagecoach in Portsmouth



21 Havant - Portsmouth Stagecoach in Portsmouth



39 Havant - Wecock Farm Stagecoach in Portsmouth



The numbers circled indicate approximate timings in minutes from Leigh Park, Civic Centre

Mondays to Fridays Bus times as at 19th April 2016

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0541	21		0754	39	2	0932	39		1112	39		1244	21		1422	39		1559	20	1
0602	39	2	0757	20	1	0942	39		1114	21		1252	39		1429	20		1603	39	2
0611	21		0806	39	2	0944	21		1122	39		1259	20		1432	39		1613	39	2
0627	39	2	0817	21		0952	39		1129	20		1302	39		1442	21		1614	21	
0632	20	1	0818	39	2	0959	20		1132	39		1312	39		1444	39		1623	39	2
0637	21		0827	20	1	1002	39		1142	39		1314	21		1452	39		1629	20	1
0647	39	2	0830	39	2	1012	39		1144	21		1322	39		1459	20		1633	39	2
0657	21		0842	21		1014	21		1152	39		1329	20		1502	39		1643	39	2
0702	20	1	0842	39	2	1022	39		1159	20		1332	39		1512	39		1644	21	
0707	39	2	0852	39		1029	20		1202	39		1342	39		1514	21		1653	39	2
0717	21		0857	20		1032	39		1212	39		1344	21		1522	39		1659	20	1
0727	20	1	0902	39		1042	39		1214	21		1352	39		1529	20	1	1703	39	2
0727	39	2	0912	39		1044	21		1222	39		1359	20		1533	39	2	1713	39	2
0737	21		0914	21		1052	39		1229	20		1402	39		1543	39	2	1714	21	
0742	39	2	0922	39		1059	20		1232	39		1412	39		1544	21		1723	39	2
0752	21		0929	20		1102	39		1242	39		1414	21		1553	39	2	1729	20	1

Saturdays Bus times as at 23rd April 2016

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0634	21		0844	21		1014	21		1144	21		1314	21		1444	21		1629	20	1
0644	20	1	0852	39		1022	39		1152	39		1322	39		1452	39		1632	39	2
0702	39	2	0859	20		1029	20		1159	20		1329	20		1459	20		1644	21	
0714	21		0902	39		1032	39		1202	39		1332	39		1502	39		1647	39	2
0727	39	2	0912	39		1042	39		1212	39		1342	39		1512	39		1659	20	1
0729	20	1	0914	21		1044	21		1214	21		1344	21		1514	21		1702	39	2
0742	39	2	0922	39		1052	39		1222	39		1352	39		1522	39		1714	21	
0744	21		0929	20		1059	20		1229	20		1359	20		1529	20	1	1717	39	2
0757	39	2	0932	39		1102	39		1232	39		1402	39		1532	39		1729	20	1
0759	20	1	0942	39		1112	39		1242	39		1412	39		1544	21		1732	39	2
0812	39	2	0944	21		1114	21		1244	21		1414	21		1547	39	2	1744	21	
0814	21		0952	39		1122	39		1252	39		1422	39		1559	20	1	1747	39	2
0827	39	2	0959	20		1129	20		1259	20		1429	20		1602	39	2	1759	20	1
0829	20	1	1002	39		1132	39		1302	39		1432	39		1614	21		1802	39	2
0842	39	2	1012	39		1142	39		1312	39		1442	39		1617	39	2	1814	21	

Sundays Bus times as at 24th April 2016

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0732	21		0932	21		1052	39		1232	21		1352	39		1532	21		1657	39	2
0832	21		0952	39		1132	21		1252	39		1432	21		1552	39		1732	21	
0857	39	2	1032	21		1152	39		1332	21		1452	39		1632	21		1757	39	2

Notes: 1- does not serve Bedhampton, Asda Hypermarket 2- does not serve Bedhampton, Asda Hypermarket
Times shown in italics are approximate times

BY SMS
Bus times by
text message



Get the times of the next four buses
from this stop on your phone
Scan the QR code or send the stop code below to:

84268

Return texts cost up to 25p, plus normal text messaging charge.
Normal mobile internet charges apply.

Code for this stop: hamgmjag

NextBuses
Bus times by
mobile browser



27

Emsworth - Havant - Rowlands Castle

First in Hampshire



here

Leigh Park, Park Parade

8

17

23

Durrants, Staunton Arms

Rowlands Castle, Uplands Green

27

Rowlands Castle - Havant - Emsworth

First in Hampshire



here

Havant, Bus Station

4

16

22

27

Denvilles, Spindle Close

New Brighton, Southleigh Roundabout

Emsworth, Hospital

The numbers circled indicate approximate timings in minutes from Havant, Leisure Centre

Mondays to Fridays
Bus times as at 19th April 2016

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0822	27	E	1022	27	E	1222	27	E	1422	27	E	1622	27	E
0929	27	R	1129	27	R	1329	27	R	1529	27	R	1729	27	R

Saturdays
Bus times as at 23rd April 2016

Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0822	27	E	1022	27	E	1222	27	E	1422	27	E	1622	27	E
0929	27	R	1129	27	R	1329	27	R	1529	27	R	1729	27	R

Sundays
No Service

Notes: E -towards Emsworth R -towards Rowlands Castle

BY SMS

Bus times by text message





Get the times of the next four buses from this stop on your phone

Scan the QR code or send the stop code below to:

84268

Return texts cost up to 25p, plus normal text messaging charge. Normal mobile internet charges apply.

Code for this stop: hamjdtaj

NextBuses

Bus times by mobile browser



20 The Hard - Portsmouth - Havant

Stagecoach in Portsmouth



21 Portsmouth - Havant

Stagecoach in Portsmouth



39 Wecock Farm - Havant

Stagecoach in Portsmouth



The numbers circled indicate approximate timings in minutes from Havant, Leisure Centre

Mondays to Fridays												Bus times as at 19th April 2016											
Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0619	39		0849	39		1029	39		1211	21		1356	20		1539	39		1719	39		1906	20	
0627	21		0856	20		1039	39		1219	39		1359	39		1541	21		1726	20		1912	39	
0647	21		0859	39		1041	21		1226	20		1409	39		1549	39		1729	39		1927	21	
0654	39		0909	39		1049	39		1229	39		1411	21		1556	20		1739	39		1937	20	
0707	20		0911	21		1056	20		1239	39		1419	39		1559	39		1741	21		1952	39	
0714	39		0919	39		1059	39		1241	21		1426	20		1609	39		1749	39		1957	21	
0727	21		0926	20		1109	39		1249	39		1429	39		1611	21		1756	20		2012	20	
0729	39		0929	39		1111	21		1256	20		1439	39		1619	39		1759	39		2032	39	
0744	39		0939	39		1119	39		1259	39		1441	21		1626	20		1801	21		2057	21	
0747	20		0941	21		1126	20		1309	39		1449	39		1629	39		1809	39		2112	39	
0759	39		0949	39		1129	39		1311	21		1456	20		1639	39		1819	39		2152	39	
0811	21		0956	20		1139	39		1319	39		1459	39		1641	21		1821	21				
0814	39		0959	39		1141	21		1326	20		1509	39		1649	39		1826	20				
0821	20		1009	39		1149	39		1329	39		1511	21		1656	20		1832	39				
0827	39		1011	21		1156	20		1339	39		1519	39		1659	39		1841	21				
0839	39		1019	39		1159	39		1341	21		1526	20		1709	39		1852	39				
0841	21		1026	20		1209	39		1349	39		1529	39		1711	21		1901	21				

Saturdays												Bus times as at 23rd April 2016											
Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0719	39		0929	39		1059	39		1229	39		1359	39		1529	39		1714	39		1912	39	
0732	20		0939	39		1109	39		1239	39		1409	39		1539	39		1721	20		1927	21	
0744	39		0941	21		1111	21		1241	21		1411	21		1541	21		1729	39		1937	20	
0747	21		0949	39		1119	39		1249	39		1419	39		1549	39		1741	21		1952	39	
0804	39		0956	20		1126	20		1256	20		1426	20		1556	20		1744	39		1957	21	
0812	20		0959	39		1129	39		1259	39		1429	39		1559	39		1751	20		2012	20	
0819	39		1009	39		1139	39		1309	39		1439	39		1611	21		1759	39		2032	39	
0831	21		1011	21		1141	21		1311	21		1441	21		1614	39		1807	21		2057	21	
0834	39		1019	39		1149	39		1319	39		1449	39		1621	20		1814	39		2112	39	
0847	20		1026	20		1156	20		1326	20		1456	20		1629	39		1822	20		2152	39	
0849	39		1029	39		1159	39		1329	39		1459	39		1641	21		1832	21				
0904	39		1039	39		1209	39		1339	39		1509	39		1644	39		1832	39				
0911	21		1041	21		1211	21		1341	21		1511	21		1651	20		1852	39				
0919	39		1049	39		1219	39		1349	39		1519	39		1659	39		1857	21				
0921	20		1056	20		1226	20		1356	20		1526	20		1711	21		1902	20				

Sundays												Bus times as at 24th April 2016											
Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note	Time	Service	Note
0822	21		1020	39		1137	21		1320	39		1437	21		1620	39		1737	21		1932	21	
0915	39		1037	21		1220	39		1337	21		1520	39		1637	21		1815	39		2032	21	
0937	21		1120	39		1237	21		1420	39		1537	21		1715	39		1832	21				

Times shown in italics are approximate times

BY SMS

Bus times by
text message



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Code for this stop: hamgmjga

NextBuses

Bus times by
mobile browser



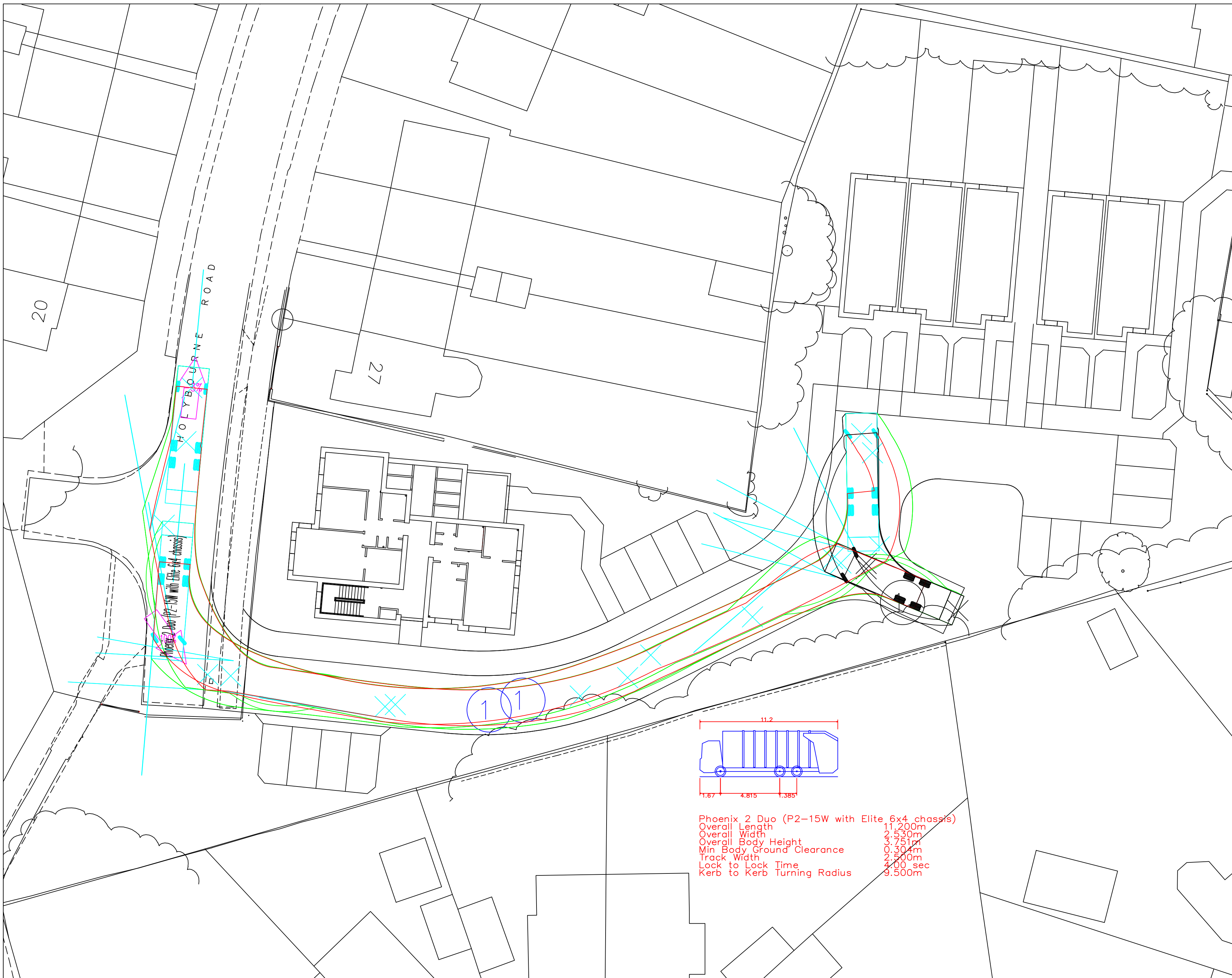
Appendix 4

Swept Path Analysis

AMA

Andrew Malcolm Associates Ltd
15 Wild Rose Crescent
Locks Heath
Southampton,
SO31 6TG
Tel/Fax: 01489 605526

Revision:



Project:

**PROPOSED RESIDENTIAL
DEVELOPMENT
HOLYBOURNE ROAD
HAVANT**

Title:

**REFUSE VEHICLE
TRACKING LAYOUT**

Date:

feb 16

Scales:

1:200@A2

Drawn:

ajm

Drawing Number:

HAVANT-001

Rev:

Appendix 5 TRICS Outputs

Calculation Reference: AUDIT-142301-150924-0917

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST	
	CW CORNWALL	1 days
	DC DORSET	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	2 days
	SF SUFFOLK	2 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	ST STAFFORDSHIRE	1 days
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	3 days
	SY SOUTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	2 days
	MS MERSEYSIDE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days

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

Filtering Stage 2 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: 6 to 186 (units:)
 Range Selected by User: 6 to 4334 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 to 11/12/14

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	7 days
Wednesday	4 days
Thursday	1 days
Friday	3 days

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

Selected survey types:

Manual count	20 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) 20

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

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.

Filtering Stage 3 selection:

Use Class:

C3

19 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:

1,001 to 5,000	3 days
5,001 to 10,000	4 days
10,001 to 15,000	2 days
15,001 to 20,000	5 days
20,001 to 25,000	3 days
25,001 to 50,000	3 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
50,001 to 75,000	1 days
75,001 to 100,000	4 days
100,001 to 125,000	3 days
125,001 to 250,000	5 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	8 days
1.1 to 1.5	12 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

20 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.

LIST OF SITES relevant to selection parameters

1	CA-03-A-04	DETACHED		CAMBRIDGESHIRE
	THORPE PARK ROAD			
	PETERBOROUGH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	9		
	Survey date: TUESDAY	18/10/11		Survey Type: MANUAL
2	CH-03-A-06	SEMI-DET./BUNGALOWS		CHESHIRE
	CREWE ROAD			
	CREWE			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of dwellings:	129		
	Survey date: TUESDAY	14/10/08		Survey Type: MANUAL
3	CH-03-A-08	DETACHED		CHESHIRE
	WHITCHURCH ROAD			
	BOUGHTON HEATH			
	CHESTER			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	11		
	Survey date: TUESDAY	22/05/12		Survey Type: MANUAL
4	CW-03-A-02	SEMI D./DETACHED		CORNWALL
	BOSVEAN GARDENS			
	TRURO			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	73		
	Survey date: TUESDAY	18/09/07		Survey Type: MANUAL
5	DC-03-A-01	DETACHED		DORSET
	ISAACS CLOSE			
	POOLE			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	51		
	Survey date: WEDNESDAY	16/07/08		Survey Type: MANUAL
6	LN-03-A-02	MIXED HOUSES		LINCOLNSHIRE
	HYKEHAM ROAD			
	LINCOLN			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	186		
	Survey date: MONDAY	14/05/07		Survey Type: MANUAL
7	LN-03-A-03	SEMI DETACHED		LINCOLNSHIRE
	ROOKERY LANE			
	BOULTHAM			
	LINCOLN			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	22		
	Survey date: TUESDAY	18/09/12		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	MS-03-A-03 BEMPTON ROAD OTTERSPOOL LIVERPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 15 Survey date: FRIDAY 21/06/13	MERSEYSIDE	Survey Type: MANUAL
9	NF-03-A-01 YARMOUTH ROAD CAISTER-ON-SEA Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 27 Survey date: TUESDAY 16/10/12	NORFOLK	Survey Type: MANUAL
10	NF-03-A-02 DEREHAM ROAD NORWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 98 Survey date: MONDAY 22/10/12	NORFOLK	Survey Type: MANUAL
11	NY-03-A-06 HORSEFAIR BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11	NORTH YORKSHIRE	Survey Type: MANUAL
12	NY-03-A-08 NICHOLAS STREET YORK Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 21 Survey date: MONDAY 16/09/13	NORTH YORKSHIRE	Survey Type: MANUAL
13	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: MONDAY 16/09/13	NORTH YORKSHIRE	Survey Type: MANUAL
14	SF-03-A-01 A1156 FELIXSTOWE ROAD RACECOURSE IPSWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 77 Survey date: WEDNESDAY 23/05/07	SUFFOLK	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15	SF-03-A-04	DETACHED & BUNGALOWS	SUFFOLK
	NORMANSTON DRIVE		
	LOWESTOFT		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	7	
	Survey date: TUESDAY	23/10/12	Survey Type: MANUAL
16	SH-03-A-04	TERRACED	SHROPSHIRE
	ST MICHAEL'S STREET		
	SHREWSBURY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings:	108	
	Survey date: THURSDAY	11/06/09	Survey Type: MANUAL
17	ST-03-A-05	TERRACED & DETACHED	STAFFORDSHIRE
	WATERMEET GROVE		
	ETRURIA		
	STOKE-ON-TRENT		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	14	
	Survey date: WEDNESDAY	26/11/08	Survey Type: MANUAL
18	SY-03-A-01	SEMI DETACHED HOUSES	SOUTH YORKSHIRE
	A19 BENTLEY ROAD		
	BENTLEY RISE		
	DONCASTER		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: WEDNESDAY	18/09/13	Survey Type: MANUAL
19	TW-03-A-02	SEMI-DETACHED	TYNE & WEAR
	WEST PARK ROAD		
	GATESHEAD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	16	
	Survey date: MONDAY	07/10/13	Survey Type: MANUAL
20	WK-03-A-01	TERRACED/SEMI/DET.	WARWICKSHIRE
	ARLINGTON AVENUE		
	LEAMINGTON SPA		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	6	
	Survey date: FRIDAY	21/10/11	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

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	20	55	0.070	20	55	0.263	20	55	0.333
08:00 - 09:00	20	55	0.149	20	55	0.375	20	55	0.524
09:00 - 10:00	20	55	0.152	20	55	0.208	20	55	0.360
10:00 - 11:00	20	55	0.146	20	55	0.158	20	55	0.304
11:00 - 12:00	20	55	0.169	20	55	0.167	20	55	0.336
12:00 - 13:00	20	55	0.200	20	55	0.173	20	55	0.373
13:00 - 14:00	20	55	0.170	20	55	0.161	20	55	0.331
14:00 - 15:00	20	55	0.154	20	55	0.181	20	55	0.335
15:00 - 16:00	20	55	0.233	20	55	0.173	20	55	0.406
16:00 - 17:00	20	55	0.279	20	55	0.172	20	55	0.451
17:00 - 18:00	20	55	0.342	20	55	0.209	20	55	0.551
18:00 - 19:00	20	55	0.226	20	55	0.184	20	55	0.410
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.290			2.424			4.714

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: 6 - 186 (units:)
 Survey date date range: 01/01/07 - 11/12/14
 Number of weekdays (Monday-Friday): 20
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 1

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.

Calculation Reference: AUDIT-142301-150924-0936

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	1 days
	HF HERTFORDSHIRE	1 days
	OX OXFORDSHIRE	1 days
	SC SURREY	1 days
03	SOUTH WEST	
	BR BRISTOL CITY	1 days
	DC DORSET	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	NR NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
09	NORTH	
	TV TEES VALLEY	2 days

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

Filtering Stage 2 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: 8 to 102 (units:)
 Range Selected by User: 6 to 215 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/07 to 13/05/14

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
Tuesday	1 days
Wednesday	5 days
Thursday	2 days
Friday	2 days

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

Selected survey types:

Manual count	12 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)	12
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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

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.

Filtering Stage 3 selection:

Use Class:

C3

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 1 mile:

1,001 to 5,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	5 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
100,001 to 125,000	1 days
125,001 to 250,000	5 days
250,001 to 500,000	4 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	10 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

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.

LIST OF SITES relevant to selection parameters

1	BR-03-C-01 CLARENCE ROAD	FLATS & TERRACED		BRISTOL CITY
	BRISTOL			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	102		
	Survey date: MONDAY	09/11/09		Survey Type: MANUAL
2	CA-03-C-02 WESTFIELD ROAD	BLOCK OF FLATS		CAMBRIDGESHIRE
	NETHERTON			
	PETERBOROUGH			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of dwellings:	44		
	Survey date: TUESDAY	18/10/11		Survey Type: MANUAL
3	DC-03-C-02 PALM COURT	FLATS IN BLOCKS		DORSET
	SPA ROAD			
	WEYMOUTH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	14		
	Survey date: FRIDAY	28/03/14		Survey Type: MANUAL
4	DS-03-C-01 DRAGE STREET	BLOCK OF FLATS		DERBYSHIRE
	LITTLE CHESTER			
	DERBY			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of dwellings:	8		
	Survey date: THURSDAY	25/06/09		Survey Type: MANUAL
5	HC-03-C-02 WORTING ROAD	FLATS		HAMPSHIRE
	BASINGSTOKE			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	16		
	Survey date: THURSDAY	21/10/10		Survey Type: MANUAL
6	HF-03-C-02 BRIDGE ROAD EAST	FLATS		HERTFORDSHIRE
	WELWYN GARDEN CITY			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of dwellings:	86		
	Survey date: WEDNESDAY	16/07/08		Survey Type: MANUAL
7	NR-03-C-01 ROCKINGHAM ROAD	BLOCK OF FLATS		NORTHAMPTONSHIRE
	CORBY			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	20		
	Survey date: FRIDAY	21/11/08		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	OX-03-C-01	BLOCK OF FLATS		OXFORDSHIRE
	OXFORD ROAD			
	COWLEY			
	OXFORD			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	14		
	Survey date: WEDNESDAY	20/10/10		Survey Type: MANUAL
9	SC-03-C-02	FLATS		SURREY
	CONSTITUTION HILL			
	WOKING			
	Suburban Area (PPS6 Out of Centre)			
	Built-Up Zone			
	Total Number of dwellings:	36		
	Survey date: WEDNESDAY	23/07/08		Survey Type: MANUAL
10	ST-03-C-01	BLOCKS OF FLATS		STAFFORDSHIRE
	ETRURIA COURT			
	HUMBERT ROAD			
	STOKE-ON-TRENT			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of dwellings:	33		
	Survey date: WEDNESDAY	26/11/08		Survey Type: MANUAL
11	TV-03-C-01	APARTMENTS BLOCKS		TEES VALLEY
	OXFORD ROAD			
	LINTHORPE			
	MIDDLESBROUGH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	85		
	Survey date: MONDAY	06/10/08		Survey Type: MANUAL
12	TV-03-C-02	FLATS		TEES VALLEY
	ACKLAM ROAD			
	LINTHORPE			
	MIDDLESBROUGH			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Number of dwellings:	85		
	Survey date: WEDNESDAY	29/06/11		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/C - FLATS PRIVATELY OWNED
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	12	45	0.035	12	45	0.155	12	45	0.190
08:00 - 09:00	12	45	0.081	12	45	0.289	12	45	0.370
09:00 - 10:00	12	45	0.061	12	45	0.107	12	45	0.168
10:00 - 11:00	12	45	0.077	12	45	0.099	12	45	0.176
11:00 - 12:00	12	45	0.087	12	45	0.087	12	45	0.174
12:00 - 13:00	12	45	0.099	12	45	0.112	12	45	0.211
13:00 - 14:00	12	45	0.105	12	45	0.087	12	45	0.192
14:00 - 15:00	12	45	0.099	12	45	0.103	12	45	0.202
15:00 - 16:00	12	45	0.133	12	45	0.092	12	45	0.225
16:00 - 17:00	12	45	0.140	12	45	0.107	12	45	0.247
17:00 - 18:00	12	45	0.298	12	45	0.133	12	45	0.431
18:00 - 19:00	12	45	0.206	12	45	0.157	12	45	0.363
19:00 - 20:00	2	15	0.333	2	15	0.200	2	15	0.533
20:00 - 21:00	2	15	0.100	2	15	0.033	2	15	0.133
21:00 - 22:00	2	15	0.133	2	15	0.100	2	15	0.233
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.987			1.861			3.848

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: 8 - 102 (units:)
 Survey date range: 01/01/07 - 13/05/14
 Number of weekdays (Monday-Friday): 12
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 1

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.