

PAH
HIGHWAY CONSULTANTS

Unit 2
The Office Campus
Paragon Business Park
Red Hall Court
Wakefield
WF1 2UY

PROPOSED RESIDENTIAL DEVELOPMENT, CROSS LANE, HOYLANDSWAINE

TRANSPORT STATEMENT

975 / July 2015

CONTENTS

1 INTRODUCTION 1
2 EXISTING CONDITIONS 2
2.1 Site Description 2
2.2 Local Highway Network 3
2.3 Road Traffic Accidents 8
2.4 Transport Sustainability 8
3 THE DEVELOPMENT PROPOSALS 12
3.1 Proposed Development 12
3.2 Highway Improvement Works 12
3.3 Vehicular Access 13
3.4 Parking Provision 13
3.5 Pedestrian and Cycle Provision 13
3.6 Servicing 14
3.7 Construction Traffic 14
4 TRAFFIC IMPACT 15
4.1 Development Traffic 15
5 CONCLUSIONS 17

APPENDICES

Appendix A Site Location
Appendix B Walking and Cycle Catchment Plan
Appendix C Accident Data
Appendix D Proposed Highway Improvements and Access
Appendix E TRICS Data

1 INTRODUCTION

1.1.1 PAH Highway Consultants Ltd has been appointed to prepare this Transport Statement relating to the proposed residential development on the site off Cross Lane, Hoylandswaine. Appendix A shows the site location in relation to the local highway network.

1.1.2 The proposals are to construct a new residential development of 10 dwellings, which will all be served from a new access point off Cross Lane. Drainage, street lighting and footways will be provided in accordance with the Council's current guidance contained within the South Yorkshire Residential Design Guide.

1.1.3 Scoping discussions were carried out with Barnsley Council Highways and Planning Officers on the 18th February 2015, which identified that some off site highway improvements should be included as part of the proposed development.

1.1.4 This Transport Statement considers the traffic impact and transport sustainability provision associated with the proposed development. This statement demonstrates that the proposals should be acceptable for planning approval purposes.

2 EXISTING CONDITIONS

2.1 Site Description

2.1.1 The site is an undeveloped greenfield site that has historically been used for farming purposes. The site is currently unused and contains stone walling and hedges on its west and south sides respectively, a post and wire fence along the east side, and a hedge along its north side adjacent to Cross Lane.

2.1.2 The site contains an existing access point off Cross Lane located some 27m west of its far east side boundary. This access is gated and is approximately 2.8m in width, and although an access is provided for the site there is no formal junction arrangement or hardened verge crossing.



Photograph 1 – Existing Site Access

2.1.3 The site is bounded by Cross Lane to the north, farming land to the west and the south, and playing fields associated with Hoylandswaine Primary School located to the east.

2.1.4 The site is located on the north side of Hoylandswaine approximately 2.3km northeast of Penistone Town Centre and 8.2km west of Barnsley Town Centre. The site is located within easy reach of public transport services, and the local services available within Hoylandswaine and the nearby town of Penistone.

2.2 Local Highway Network

2.2.1 Cross Lane is a local access road which is approximately 635m in length and provides access to adjacent fields, and Hoylandswaine Primary School. It joins with Renald Lane to the west and Haigh Lane to the east. Given its status, Cross Lane is subject to very low traffic volumes throughout the day.

2.2.2 Cross Lane is a two way single carriageway road with grass verges generally provided along both sides of the road, although adjacent to the school there is a short section of footway provided on its south side. The carriageway along the site frontage ranges in width between 3.3m and 3.8m, however towards the east, the carriageway gradually widens to around 6.4m at the Haigh Lane junction. The carriageway is in good condition having recently been subject to surfacing improvements. The road contains grass verges on both sides along the site frontage with the south side verge ranging between 0.5m and 1.2m in width, and the north side verge ranging between 1.0m and 2.5m in width. Both the grass verges contain ditches providing open drainage from the carriageway, and are generally flanked by boundary hedges on both sides.



Photograph 2 – Cross Lane (Along Site Frontage)

2.2.3 Cross Lane is subject to a 30mph speed limit and contains street lighting within the vicinity of Hoylandswaine Primary School. However, further to the west towards the application site it does not contain street lighting and is subject to the national speed limit (60mph), although given the width and layout of the road, actual traffic speeds are considered to be much lower than the national speed limit.

2.2.4 Cross Lane joins Haigh Lane via a simple priority junction with a kerbed radius and footway along the south side of Cross Lane as it joins Haigh Lane, and a grass verge along its north side radius of Cross Lane as it joins Haigh Lane. The junction doesn't contain any road markings and due to the north side radius of Cross Lane not being clearly defined due to verge damage, visibility splays at the junction can fall slightly short of the required 2.4m x 43m for 30mph speed limit streets.



Photograph 3 - Cross Lane/ Haigh Lane Junction

2.2.5 Haigh Lane is a local access road that travels through Hoylandswaine connecting to Barnsley Road and subsequent links to the A628 to the south, and minor access roads to the north that eventually lead to the A635. It provides direct access to a number of individually served residential properties and to a small number of residential streets. Given the status of Haigh Lane it is subject to low traffic volumes with a noticeable increase during the network peak hours.

2.2.6 Haigh Lane is a two way single carriageway road with a footway generally provided on its west side on the south side of the Cross Lane junction, and on its east side to the north of the Cross Lane junction. Haigh Lane generally has one footway provided along the west side of the road that leads to Hoylandswaine village centre and its local amenities, and public transport facilities.

2.2.7 Within the vicinity of the Cross Lane junction Haigh Lane has a carriageway that varies in width between 5.3m and 5.6m, and a west side footway ranging between 1.5m and 2.8m in width. The east side footway located opposite the Cross Lane junction is approximately 1.5m wide. The carriageway and footways where provided are considered to be suitable for their day to day use in terms of construction, width, and layout. Haigh Lane is subject to a 30mph speed limit and contains street lighting to a suitable standard. It contains Traffic Regulation Orders adjacent to the Cross Lane junction that restrict stopping by vehicles on the school zig zag markings between 8am and 5pm Monday to Friday.



Photograph 4 - Haigh Lane

2.2.8 Haigh Lane joins Barnsley Road via a priority junction complete with giveway markings and signage. Barnsley Road is an access road that connects Haigh Lane to the A628, and is approximately 700m in length. It provides access to the nearest bus stops from the application site and provides direct access to individually served residential properties, and a small number of short residential access roads in addition to Haigh Lane. Barnsley Road is generally subject to low traffic volumes, with heavier volumes during the network peak periods.

2.2.9 Barnsley Road generally contains a footway along its north and west sides, although there is a short section where a footway is provided on the south side of the road. Both the carriageway and footways are considered to be suitable in terms of width, construction, and layout for their day to day use. It contains street lighting to a suitable standard and is subject to a 30mph speed limit.



Photograph 5 – Barnsley Road

2.2.10 Barnsley Road joins the A628 via a priority junction with right turn lane to the east of the Haigh Lane junction. This junction contains a splitter island within the junction bellmouth and appropriate giveway markings. Barnsley Road also joins the A628 to the west of the Haigh Lane junction via another priority junction with segregated left turn entry, and also containing a right turn lane on the A628. The A628 is a primary route linking Hoylandswaine with the nearby town of Penistone and the large town of Barnsley, and is subject to heavy traffic volumes throughout the day. Within the vicinity of the Hoylandswaine junctions it is subject to the national speed limit (60mph) and contains street lighting to main road standards. In the vicinity of the Barnsley Road/ A628 junction located to the east of the Haigh Lane junction it contains a double white line system that prevents overtaking.

2.2.11 The site is located within easy reach of the bus services available on Barnsley Road. Further details of the bus services available from the local fare stages are shown in section 2.4 below.

2.3 Road Traffic Accidents

2.3.1 The personal injury accident records for the last five years along Cross Lane and its junctions with Haigh Lane and Renald Lane have been obtained from Barnsley Metropolitan Borough Council and are included at Appendix C.

2.3.2 As will be noted during the past 5 years there have been no reported injury accidents along these sections of road.

2.3.3 Therefore given the good injury accident record in the vicinity of the site, there is no indication of a road safety problem that would warrant treatment or be a cause for concern as a result of the increase peak hour flows as a result of the development proposals.

2.4 Transport Sustainability

2.4.1 The site is in a reasonably sustainable location within a short walking distance of bus services, the local services within Hoylandswaine, and within cycling distance of the shops, employment, and essential services within Penistone Town Centre.

2.4.2 The National Planning Policy Framework (NPPF) was published on 27th March 2012. This document superseded a number of national Planning Policy Statements and Guidance Notes (PPS's and PPG's). The national transport policy relating to transport and development that was formerly set out in PPG 13 'Transport' is now replaced by Section 4 of the NPPF.

2.4.3 However the guidance within PPG 13 is still useful as a reference until such time as the Local Planning Authority publishes their specific transport policies.

2.4.4 Paragraph 35 of the NPPF states that "developments should be located and designed where practical to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- consider the needs of people with disabilities by all modes of transport.

2.4.5 The catchment areas for the preferred maximum walking distance of 2km are shown on the plan at Appendix B.

2.4.6 Cross Lane will provide a good quality link to primary education facilities including Hoylandswaine Primary School, which is located around 100m to the east of the site. Cross Lane also provides access to the wider footway network providing access to local services within Hoylandswaine including a village hall, pub/ restaurants, and public transport facilities, which are shown on the plan at Appendix A. The nearest bus stops are located within this catchment, which provide frequent services to the nearby town of Penistone that contains extensive local services and amenities. There is an extensive network of leisure footpaths in the local area that can be easily reached from the application site. Within the pedestrian catchment area at Appendix B is the whole of the village of Hoylandswaine.

2.4.7 The local footway network is considered suitable in terms of width, construction, and lighting. The footways contain dropped footway crossings facilities at junctions in the majority of cases.

2.4.8 With regards to cycling, PPG 13: Transport stated that "Cycling also has the potential to substitute for short car trips, particularly those under 5km, and to form part of a longer journey by public transport". The plan at Appendix B also shows the 5km cycle catchment area from the site. Within the cycle catchment area is the local town of Penistone that contains many local shops and services including food stores/ supermarkets, conveniences stores, hair dressers, a post office, newsagents, hot food outlets, cafes, banks/ building societies, and a bakers. There are also primary health care facilities within Penistone including GP surgery, pharmacies, opticians, and dentists. The villages of Cawthorne, Silkstone, Oxspring, Thurlstone, and Ingbirchworth are also located within cycling distance of the site and offer a range of local services, amenities and coupled with the nearby town of Penistone provide employment potential for the residents of the proposed development.

2.4.9 Within cycling distance of the site are Penistone and Silkstone Common railway stations. Penistone Railway Station contains sheltered and secure cycle storage facilities to accommodate 16 cycles, and Silkstone Common Railway Station contains cycle storage facilities to accommodate 8 cycles. These facilities will therefore allow for multi modal journeys by residents and visitors of the proposed development.

2.4.10 The nearest bus stops are located around 1km south of the application site on Barnsley Road. The nearest stops contain timetable information and the eastbound bus stop also has the added benefit of a passenger shelter. Whilst it is acknowledged that these stops are located further than the normally accepted maximum distance to walk to a bus stop, given the frequency of services, and the short journey time to the nearby town of Penistone, these bus stops are not considered to be located too far as not to be used by potential residents of the proposed development. The table below identifies the bus services that use the nearest stops.

Service No	From – To	Frequency Mon – Sat	Late evenings and Sundays
92/92A	Barnsley Interchange – Barugh Green – Cawthorne – Silkstone – Hoylandswaine – Penistone – Millhouse Green –- Holmfirth	2 per hour	1 per hour

Table 1: Bus Services

2.4.11 As can be identified from the above table, there are two services per hour that travel to the large town of Barnsley and the nearby town of Penistone. There are also 2 services per hour that travel to Barugh Green, Cawthorne, Silkstone, Millhouse Green, and Holmfirth. The bus services are therefore considered to be of a suitable standard and will provide an alternative to the private car in line with current Government guidelines.

2.4.12 The nearest railway station is located at Penistone approximately 3.7km southwest of the site. This station provides hourly services Monday to Saturday to the city of Sheffield and the large towns of Barnsley and Huddersfield. There are also services between 60 minutes and 120 minutes on Sunday day time that travel to these destinations. Penistone Railway Station contains cycle storage facilities allowing for multimodal journeys by the potential residents and visitors to the site.

2.4.13 In summary, the site is considered to be in a sustainable location within walking distance of the local services and amenities within Hoylandswaine including primary education facilities, and within close proximity of the local bus services on Barnsley Road, and on the A628. Within the cycle catchment area is the local town of Penistone that contains many local shops and services including primary health care facilities. The villages of Cawthorne, Silkstone, Oxspring, Thurlstone, and Ingbirchworth are also located within cycling distance of the site. Therefore the site generally conforms to current Government directives for ensuring developments are located in a sustainable locations.

3 THE DEVELOPMENT PROPOSALS

3.1 Proposed Development

3.1.1 The proposals are to provide a new residential development of 10 new dwellings, with 2 dwellings served from a shared driveway, and the remaining dwellings served from a shared surface street.

3.1.2 The internal road layout, drainage, street lighting and footways will be provided in accordance with the South Yorkshire Residential Design Guide.

3.1.3 Secure cycle storage facilities will be provided within the site, the type and location is to be agreed with the LPA.

3.2 Highway Improvement Works

3.2.1 Following scoping discussions with Barnsley Council Highways Officer, as part of the proposed development it is also proposed to carry out improvements to Cross Lane including it's junction with Haigh Lane.

3.2.2 The highway improvements include widening Cross Lane along part of the site frontage and along Cross Lane towards the Haigh Lane junction so that the carriageway is width is at least 5.5m, subsequently allowing for simultaneous two way traffic flow. It is proposed to provide a footway along the south side of Cross Lane linking the site access with the existing footway network on Cross Lane and Haigh Lane, and to extend the street lighting and 30mph speed limit along Cross Lane further west towards the far west side boundary of the application site. The proposals also include the hardening of the north side junction radius at the Cross Lane/ Haigh Lane junction, which also includes some hardening of the west side verge of Haigh Lane to the immediate north of the Cross Lane junction, and includes reducing the width of Cross Lane to 5.5m. This should improve visibility so that sight lines of 2.4m x 43m can be secured, which is appropriate for 30mph speed limits roads in accordance with Manual for Streets. The proposed improvements and site access is shown on the plan at Appendix D.

3.3 Vehicular Access

3.3.1 Vehicular access to the development will be provided from a new junction on to Cross Lane. The proposed junction will be a simple priority junction with kerbed radii on both sides, and 2m wide footways returning into the site on both sides. The internal road will take the form of a shared surface street with a shared driveway spanning the west side frontage of the site.

3.3.2 The proposed shared surface street will travel in a southern direction into the site before travelling in a western direction to serve the remaining dwellings.

3.3.3 The proposed junction will have visibility splays of 2.4m x 70m on both sides which are commensurate with the proposed 30mph speed limit changes along Cross Lane and Government guidance given within Design Manual for Roads and Bridges (DMRB), as requested by Barnsley Council Highways Officer. Considering the road traffic accident study in section 2.3 of this report, the proposed simple priority junction serving the site is considered to be suitable, and would not have a negative impact on road safety, given the good road safety record along Cross Lane, and that suitable visibility splays are to be provided.

3.3.4 The proposed internal road(s) will fully comply with the guidance given within the current South Yorkshire Residential Design Guide.

3.4 Parking Provision

3.4.1 The level of parking provision on the site will be in accordance with Barnsley Council's Parking Standards given within the LDF at a ratio of 2 spaces per dwelling.

3.5 Pedestrian and Cycle Provision

3.5.1 Pedestrian routes through the site will follow natural desire lines and lead pedestrians to proposed crossing facilities.

3.5.2 Secure cycle storage facilities will be provided within the site, the type and location is to be agreed with the LPA.

3.5.3 Cross Lane will give convenient access via the proposed footway to the wider network and nearby bus stops, and local services.

3.6 Servicing

3.6.1 Service vehicles will use the same access to the site as all other traffic. A turning head is to be provided to allow such vehicles (such as a large refuse vehicle) to enter and leave the site in a forward gear.

3.6.2 The servicing requirements for the proposed development can be adequately catered for.

3.7 Construction Traffic

3.7.1 The developer is committed to minimise the impact of construction traffic in particular with regard to the nearby school. It is therefore proposed to provide a Construction Traffic Management Plan (CTMP) which is to be agreed with the LPA prior to works commencing on site.

4 TRAFFIC IMPACT

4.1 Development Traffic

4.1.1 The proposed development is for 10 new dwellings. To determine the anticipated traffic generation from the new development, it has been necessary to interrogate data from the national TRICS database.

4.1.2 Table 4A provides the typical peak hour trip rates (morning peak 0800-0900 hours and evening peak 1700-1800 hours) and likely traffic generation of the proposed new dwellings. The TRICS data is shown at Appendix E.

	Morning Peak			Evening Peak		
	ARRIVE	**DEPART**	**TOTAL**	**ARRIVE**	**DEPART**	**TOTAL**
Trip Rate	0.151	0.416	0.567	0.390	0.225	0.615
Generated Trips	1	5	6	4	2	6

Table 4A – Predicted Development Trip Rates & Generation

4.1.3 As can be seen from the above table, the proposed development is anticipated to generate approximately 6 trips during the morning peak and evening peak hours. It is estimated that the development would generate a daily trip rate of around 52 vehicle movements.

4.1.4 The development proposes visibility splays of 2.4m x 70m in both directions at the proposed access in accordance with latest Government guidance given within Design Manual for Roads and Bridges (DMRB) for 30mph speed limit roads. The Cross Lane/ Haigh Lane junction provides visibility splays of 2.4m x 43m in accordance with the SSD requirements within Manual for Streets (MfS) for 30mph speed limit streets. It is therefore considered that the proposed junction layout of the site access will provide a safe arrangement and will not cause any delays to through traffic, given the relatively small increase in traffic to the local network.

4.1.5 The development proposes substantial highway improvement measures to Cross Lane and its junction with Haigh Lane including the provision of a footway linking the site with the existing footway network. These improvements also include the extension of street lighting and 30mph speed limit on Cross Lane, and verge hardening works on the north side of the Cross Lane/ Haigh Lane junction to secure suitable visibility splays at the junction. The traffic generated by the proposed development can be easily offset by the proposed highway improvements along Cross Lane and its junction with Haigh Lane.

4.1.6 Cross Lane and its junctions with Haigh Lane and Renald Lane has a good injury accident record and does not indicate a road safety problem which would warrant treatment or be a cause for concern as a result of the increase peak hour flows as a result of the development proposals.

4.1.7 It is considered that the anticipated increase in the level of traffic generated by the proposed development would not be discernible from the daily fluctuations in flows that could be expected on the highway network. Therefore the level of traffic generated by the proposals can easily be accommodated and will have no material impact on the safe operation of the local highway and will not significantly add to any congestion at the peak times on the local network.

5 CONCLUSIONS

5.1.1 This Transport Statement presents the existing traffic characteristics and infrastructure in the surrounding area of the proposed development. The development proposals are then presented. The traffic impact of the development of 10 new dwellings is also assessed, and compares the traffic generations, highway safety and access proposals with the existing situation. Accident records were also obtained, and revealed that Cross Lane has a good road safety record.

5.1.2 The site is considered to be in a sustainable location within walking distance of the local services and amenities within Hoylandswaine including primary education facilities, and within close proximity of the local bus services on Barnsley Road and the A628. Within the cycle catchment area is the local town of Penistone that contains many local shops and services including primary health care facilities. The villages of Cawthorne, Silkstone, Oxspring, Thurlstone, and Ingbirchworth are also located within cycling distance of the site. Therefore the site generally conforms to current Government directives for ensuring developments are located in a sustainable locations.

5.1.3 It is considered that the anticipated increase in the level of traffic generated by the proposed development would not be discernible from the daily fluctuations in flows that could be expected on the highway network. Therefore the level of traffic generated by the proposals can easily be accommodated and will have no material impact on the safe operation of the local highway and will not significantly add to any congestion at the peak times on the local network. It is therefore concluded that the development is considered acceptable, and that there are no highway safety or efficiency reasons why planning consent for the proposed development should not be granted.

Appendix A

Location plan



KEY:

- SITE LOCATION
- BUS STOPS

PAH HIGHWAY CONSULTANTS
UNIT 2, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY

JOB	FIG
975	A

SCALE: NTS @A4

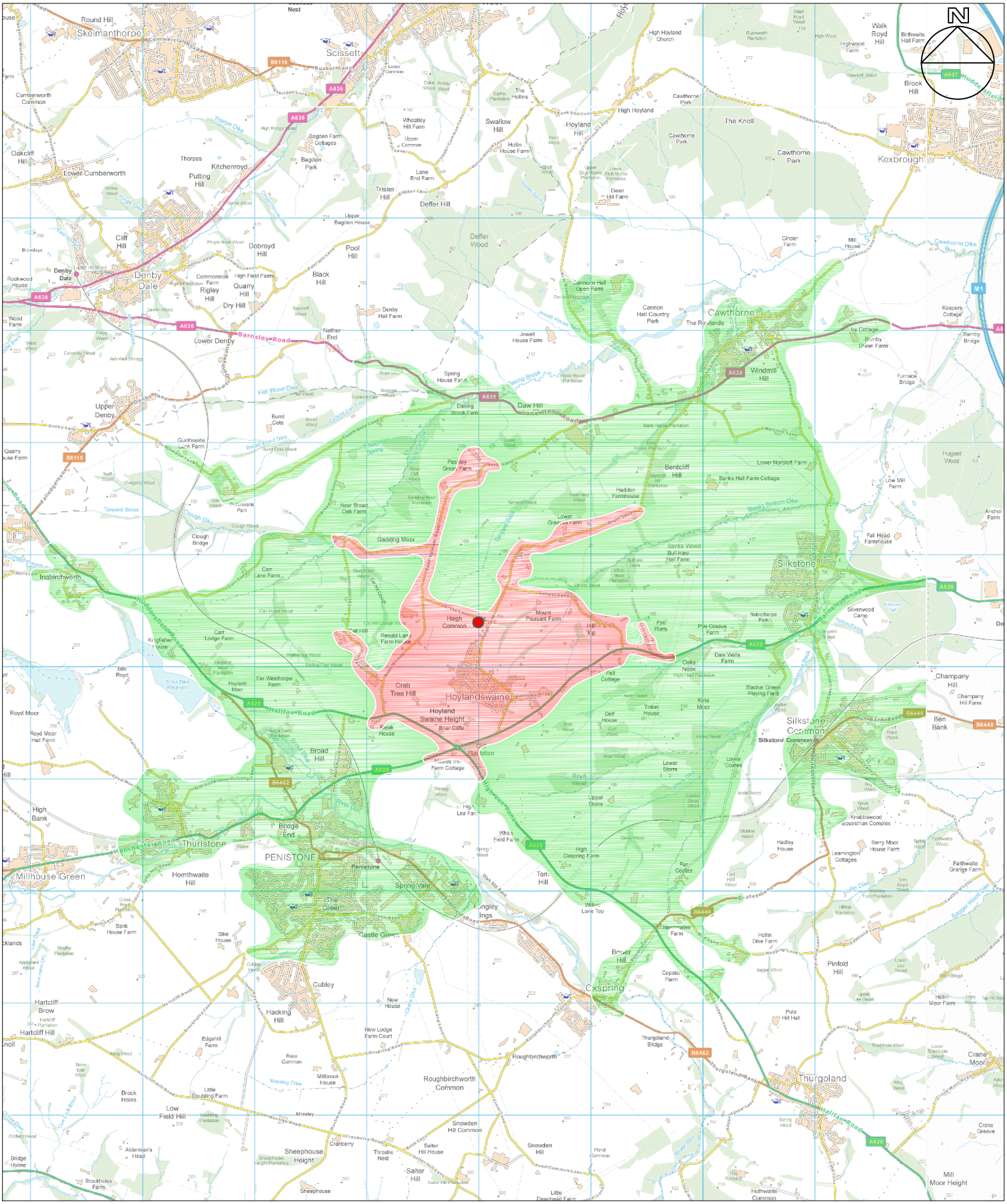
DATE: Apr 2015

CROSS LANE. HOYLANDSWAINE

SITE LOCATION

Appendix B

Pedestrian and Cycle Catchment



KEY:

- SITE LOCATION
- 2km CATCHMENT
- 5km CATCHMENT

PAH HIGHWAY CONSULTANTS
UNIT 2, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY

JOB	FIG
975	B

SCALE: NTS @A4

DATE: Apr 2015

CROSS LANE, HOYLANDSWAINE

CATCHMENT PLAN

Appendix C

Accident Data

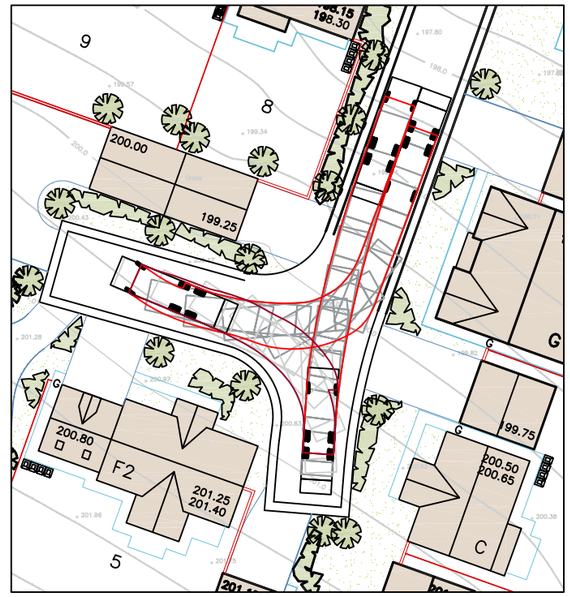
Location of where data is required: (PLEASE NOTE A PLAN MUST BE ATTACHED OUTLINING THE EXACT AREA WHERE THE ACCIDENT SEARCH IS REQUIRED)	
Number of years of data required:	5 years

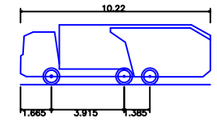
E-mail for the attention of Mick Haywood/ Lisa Kenny to:
traffic@barnsley.gov.uk

Appendix D

Proposed Highway Improvements and Access







PHOENIX 2–20W (WITH ELITE 2 6X4 CHASSIS)
10.220m OVERALL LENGTH
2.530m OVERALL WIDTH
3.211m OVERALL BODY HEIGHT
0.416m MIN BODY GROUND CLEARANCE
2.530m TRACK WIDTH
4.00s LOCK TO LOCK TIME
9.450m KERB TO KERB TURNING RADIUS

REV	DATE	DESCRIPTION
B	07/15	ADDED NOTES
A	06/15	REVISED INTERNAL LAYOUT

PAH HIGHWAY CONSULTANTS
UNIT 2, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY

JOB	DWG	REV
975	01	B

SCALE: 1:1000 @A3

DATE: July 2015

GENERAL NOTES:

- THIS DRAWING SHOWS THE PROVISIONAL DESIGN ONLY AND IS SUBJECT TO LOCAL AUTHORITY APPROVAL. THIS DRAWING SHOULD NOT BE SCALED FOR SETTING OUT PURPOSES.
- THIS DRAWING IS BASED ON A TOPOGRAPHICAL SURVEY PROVIDED BY OTHERS.

CROSS LANE, HOYLANDSWAINE

PROPOSED SPOT LEVELS

Appendix E

TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	BD	BEDFORDSHIRE	2 days
	EX	ESSEX	1 days
	HF	HERTFORDSHIRE	1 days
	SC	SURREY	2 days
03	SOUTH WEST		
	CW	CORNWALL	2 days
	DC	DORSET	1 days
	GS	GLOUCESTERSHIRE	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	SF	SUFFOLK	3 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LE	LEICESTERSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	1 days
	WM	WEST MIDLANDS	3 days
	WO	WORCESTERSHIRE	6 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	3 days
08	NORTH WEST		
	CH	CHESHIRE	3 days
	LC	LANCASHIRE	2 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	CB	CUMBRIA	3 days
	TV	TEES VALLEY	1 days
	TW	TYNE & WEAR	1 days
10	WALES		
	CF	CARDIFF	3 days
	CP	CAERPHILLY	1 days
	WR	WREXHAM	1 days

Filtering Stage 2 selection:

Parameter: Number of dwellings
Range: 10 to 792 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/02 to 05/09/10

Selected survey days:

Monday	10 days
Tuesday	13 days
Wednesday	7 days
Thursday	14 days
Friday	7 days

Selected survey types:

Manual count	51 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	20
Edge of Town	24
Neighbourhood Centre (PPS6 Local Centre)	3

Selected Location Sub Categories:

Residential Zone	36
Village	1
Out of Town	1
No Sub Category	13

LIST OF SITES relevant to selection parameters

1 BD-03-A-01 SEMI DETACHED, LUTON BEDFORDSHIRE
NEW BEDFORD ROAD

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 131

2 BD-03-A-02 SEMI DETACHED, LUTON BEDFORDSHIRE
RIDDY LANE

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 82

3 CA-03-A-02 MIXED HOUSES, PETERBOROUGH CAMBRIDGESHIRE
THORPE ROAD

PETERBOROUGH
Edge of Town Centre
Residential Zone
Total Number of dwellings: 363

4 CB-03-A-02 SEMI DETACHED, WORKINGTON CUMBRIA
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40

5 CB-03-A-03 SEMI DETACHED, WORKINGTON CUMBRIA
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40

6 CB-03-A-04 SEMI DETACHED, WORKINGTON CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82

7 CF-03-A-01 MIXED HOUSES, CARDIFF CARDIFF
VIRGIL STREET
NINIAN PARK
CARDIFF
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 222

8 CF-03-A-02 MIXED HOUSES, CARDIFF CARDIFF
DROPE ROAD

CARDIFF
Edge of Town
Residential Zone
Total Number of dwellings: 196

9 CF-03-A-03 DETACHED, CARDIFF CARDIFF
LLANTRISANT ROAD

CARDIFF
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 29

LIST OF SITES relevant to selection parameters (Cont.)

10 CH-03-A-02 HOUSES/FLATS, CREWE CHESHIRE
SYDNEY ROAD

CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 174

11 CH-03-A-05 DETACHED, CREWE CHESHIRE
SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17

12 CH-03-A-06 SEMI-DET./BUNGALOWS,CREWE CHESHIRE
CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129

13 CP-03-A-02 SEMI DETACHED, PENGAM CAERPHILLY
THE RISE

PENGAM
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 41

14 CW-03-A-01 TERRACED, PENZANCE CORNWALL
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13

15 CW-03-A-02 SEMI D./DETATCHED, TRURO CORNWALL
BOSVEAN GARDENS

TRURO
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73

16 DC-03-A-01 DETACHED, POOLE DORSET
ISAACS CLOSE

POOLE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 51

17 DS-03-A-01 SEMI D./TERRACED, DRONFIELD DERBYSHIRE
THE AVENUE
HOLMESDALE
DRONFIELD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 20

18 EX-03-A-01 SEMI-DET., STANFORD-LE-HOPE ESSEX
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237

LIST OF SITES relevant to selection parameters (Cont.)

19 GS-03-A-01 SEMI D./TERRACED, GLOUCESTER GLOUCESTERSHIRE
KINGSHOLM ROAD
KINGSHOLM
GLOUCESTER
Edge of Town Centre
No Sub Category
Total Number of dwellings: 73

20 HF-03-A-01 MIXED HOUSES, WELWYN GC HERTFORDSHIRE
LONGCROFT LANE

WELWYN GARDEN CITY
Edge of Town Centre
Residential Zone
Total Number of dwellings: 53

21 LC-03-A-22 BUNGALOWS, BLACKPOOL LANCASHIRE
CLIFTON DRIVE NORTH

BLACKPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 98

22 LC-03-A-29 DETACHED/SEMI D., BLACKBURN LANCASHIRE
REVIDGE ROAD
FOUR LANE ENDS
BLACKBURN
Edge of Town
Residential Zone
Total Number of dwellings: 185

23 LE-03-A-01 DETACHED, MELTON MOWBRAY LEICESTERSHIRE
REDWOOD AVENUE

MELTON MOWBRAY
Edge of Town
Residential Zone
Total Number of dwellings: 11

24 LN-03-A-01 MIXED HOUSES, LINCOLN LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150

25 LN-03-A-02 MIXED HOUSES, LINCOLN LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186

26 MS-03-A-01 TERRACED, RUNCORN MERSEYSIDE
PALACE FIELDS AVENUE

RUNCORN
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 372

27 NT-03-A-03 SEMI DETACHED,KIRKBY-IN-ASHFD NOTTINGHAMSHIRE
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166

LIST OF SITES relevant to selection parameters (Cont.)

28 NY-03-A-01 MIXED HOUSES,NORTHALLERTON NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52

29 NY-03-A-03 PRIVATE HOUSING, BOROUGHBRIDGE NORTH YORKSHIRE
NEW ROW

BOROUGHBRIDGE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 14

30 NY-03-A-05 HOUSES AND FLATS, RIPON NORTH YORKSHIRE
BOROUGHBRIDGE ROAD

RIPON
Edge of Town
No Sub Category
Total Number of dwellings: 71

31 SC-03-A-03 DETACHED, EAST MOLESEY SURREY
A3050 HURST ROAD
HURST PARK
EAST MOLESEY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 54

32 SC-03-A-04 HOUSES & FLATS,NEAR FRIMLEY SURREY
DEEPCUT BRIDGE ROAD
DEEPCUT
NEAR FRIMLEY
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 288

33 SF-03-A-01 SEMI DETACHED, IPSWICH SUFFOLK
A1156 FELIXSTOWE ROAD
RACECOURSE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 77

34 SF-03-A-02 SEMI DET./TERRACED, IPSWICH SUFFOLK
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230

35 SF-03-A-03 MIXED HOUSES, BURY ST EDMDS SUFFOLK
BARTON HILL
FORNHAM ST MARTIN
BURY ST EDMUNDS
Edge of Town
Out of Town
Total Number of dwellings: 101

36 SH-03-A-03 DETATCHED, SHREWSBURY SHROPSHIRE
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10

LIST OF SITES relevant to selection parameters (Cont.)

37 SH-03-A-04 TERRACED, SHREWSBURY SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108

38 ST-03-A-05 TERRACED/DETACHED, STOKE STAFFORDSHIRE
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14

39 TV-03-A-01 MIXED HOUSES/FLATS, HARTLEPL TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225

40 TW-03-A-01 SEMI DETACHED, SUNDERLAND TYNE & WEAR
LEECHMERE ROAD
HILLVIEW
SUNDERLAND
Edge of Town
Residential Zone
Total Number of dwellings: 81

41 WL-03-A-01 SEMI D./TERRACED W. BASSETT WILTSHIRE
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99

42 WM-03-A-01 TERRACED, COVENTRY WEST MIDLANDS
FOLESHILL ROAD
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 79

43 WM-03-A-02 DETACHED/SEMI D., STRBRIDGE WEST MIDLANDS
HEATH STREET

STOURBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12

44 WM-03-A-03 MIXED HOUSING, COVENTRY WEST MIDLANDS
BASELEY WAY
ROWLEYS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 84

45 WO-03-A-01 DETACHED, BROMSGROVE WORCESTERSHIRE
MARLBOROUGH AVENUE
ASTON FIELDS
BROMSGROVE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10

LIST OF SITES relevant to selection parameters (Cont.)

46 WO-03-A-02 SEMI DETACHED, REDDITCH WORCESTERSHIRE
MEADOWHILL ROAD

REDDITCH
Edge of Town
No Sub Category
Total Number of dwellings: 48

47 WO-03-A-03 DETACHED, KIDDERMINSTER WORCESTERSHIRE
BLAKEBROOK
BLAKEBROOK
KIDDERMINSTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 138

48 WO-03-A-04 MIXED HOUSES, WORCESTER WORCESTERSHIRE
MALVERN ROAD

WORCESTER
Edge of Town
Residential Zone
Total Number of dwellings: 792

49 WO-03-A-05 TERRACED/DET., BROMSGROVE WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 215

50 WO-03-A-06 DET./TERRACED, BROMSGROVE WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232

51 WR-03-A-01 SEMI DETACHED, WREXHAM WREXHAM
MOLD ROAD
RHOSDDU
WREXHAM
Edge of Town
No Sub Category
Total Number of dwellings: 82

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	51	125	0.074	51	125	0.260	51	125	0.334
08:00 - 09:00	51	125	0.151	51	125	0.416	51	125	0.567
09:00 - 10:00	51	125	0.167	51	125	0.215	51	125	0.382
10:00 - 11:00	51	125	0.148	51	125	0.183	51	125	0.331
11:00 - 12:00	51	125	0.180	51	125	0.178	51	125	0.358
12:00 - 13:00	51	125	0.203	51	125	0.177	51	125	0.380
13:00 - 14:00	51	125	0.184	51	125	0.177	51	125	0.361
14:00 - 15:00	51	125	0.193	51	125	0.195	51	125	0.388
15:00 - 16:00	51	125	0.280	51	125	0.210	51	125	0.490
16:00 - 17:00	51	125	0.320	51	125	0.200	51	125	0.520
17:00 - 18:00	51	125	0.390	51	125	0.225	51	125	0.615
18:00 - 19:00	51	125	0.283	51	125	0.214	51	125	0.497
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			2.573			2.650			5.223

Parameter summary

Trip rate parameter range selected:	10 - 792 (units:)
Survey date date range:	01/01/02 - 05/09/10
Number of weekdays (Monday-Friday):	51
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	51	125	0.003	51	125	0.003	51	125	0.006
08:00 - 09:00	51	125	0.003	51	125	0.003	51	125	0.006
09:00 - 10:00	51	125	0.005	51	125	0.003	51	125	0.008
10:00 - 11:00	51	125	0.003	51	125	0.004	51	125	0.007
11:00 - 12:00	51	125	0.002	51	125	0.002	51	125	0.004
12:00 - 13:00	51	125	0.004	51	125	0.004	51	125	0.008
13:00 - 14:00	51	125	0.004	51	125	0.004	51	125	0.008
14:00 - 15:00	51	125	0.002	51	125	0.003	51	125	0.005
15:00 - 16:00	51	125	0.002	51	125	0.002	51	125	0.004
16:00 - 17:00	51	125	0.002	51	125	0.001	51	125	0.003
17:00 - 18:00	51	125	0.001	51	125	0.001	51	125	0.002
18:00 - 19:00	51	125	0.001	51	125	0.001	51	125	0.002
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.032			0.031			0.063

Parameter summary

Trip rate parameter range selected:	10 - 792 (units:)
Survey date date range:	01/01/02 - 05/09/10
Number of weekdays (Monday-Friday):	51
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	51	125	0.000	51	125	0.001	51	125	0.001
08:00 - 09:00	51	125	0.001	51	125	0.002	51	125	0.003
09:00 - 10:00	51	125	0.001	51	125	0.001	51	125	0.002
10:00 - 11:00	51	125	0.001	51	125	0.001	51	125	0.002
11:00 - 12:00	51	125	0.001	51	125	0.001	51	125	0.002
12:00 - 13:00	51	125	0.001	51	125	0.001	51	125	0.002
13:00 - 14:00	51	125	0.001	51	125	0.001	51	125	0.002
14:00 - 15:00	51	125	0.001	51	125	0.001	51	125	0.002
15:00 - 16:00	51	125	0.001	51	125	0.001	51	125	0.002
16:00 - 17:00	51	125	0.001	51	125	0.001	51	125	0.002
17:00 - 18:00	51	125	0.001	51	125	0.001	51	125	0.002
18:00 - 19:00	51	125	0.001	51	125	0.001	51	125	0.002
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.011			0.013			0.024

Parameter summary

Trip rate parameter range selected:	10 - 792 (units:)
Survey date date range:	01/01/02 - 05/09/10
Number of weekdays (Monday-Friday):	51
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	51	125	0.006	51	125	0.010	51	125	0.016
08:00 - 09:00	51	125	0.004	51	125	0.013	51	125	0.017
09:00 - 10:00	51	125	0.002	51	125	0.004	51	125	0.006
10:00 - 11:00	51	125	0.003	51	125	0.003	51	125	0.006
11:00 - 12:00	51	125	0.004	51	125	0.003	51	125	0.007
12:00 - 13:00	51	125	0.004	51	125	0.003	51	125	0.007
13:00 - 14:00	51	125	0.003	51	125	0.004	51	125	0.007
14:00 - 15:00	51	125	0.003	51	125	0.003	51	125	0.006
15:00 - 16:00	51	125	0.011	51	125	0.006	51	125	0.017
16:00 - 17:00	51	125	0.011	51	125	0.009	51	125	0.020
17:00 - 18:00	51	125	0.012	51	125	0.008	51	125	0.020
18:00 - 19:00	51	125	0.009	51	125	0.006	51	125	0.015
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.072			0.072			0.144

Parameter summary

Trip rate parameter range selected:	10 - 792 (units:)
Survey date date range:	01/01/02 - 05/09/10
Number of weekdays (Monday-Friday):	51
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0