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Prepared on behalf of

Dathan Tool & Gauge Co Limited

Proposed Residential Development
Land off Helme Lane, Meltham

Transport Statement

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Acknowledgements:

Imagery from ©2019 Google have been used to generate figures in this report.

Personal injury accident data has been obtained from the online Crashmap database.

The TRICS database has been used in this report to calculate traffic generations.

National Geographic Society Interactive MapMaker has been used to generate figures in this report.

Extracts from Kirklees Council's Local Plan Policies Map and PROW Map have been used in this report.

An extract of West Yorkshire Interactive Cycle Map has been used in this report.

Disclaimer

The methodology adopted and the sources of information used by Sanderson Associates (Consulting Engineers) Ltd in providing its services are outlined within this Report.

Any information provided by third parties and referred to herein has not been checked or verified by Sanderson Associates (Consulting Engineers) Ltd, unless otherwise expressly stated within this report.

This report was checked and approved on the 24th February 2020 and the Report is therefore valid on this date, circumstances, regulations and professional standards do change which could subsequently affect the validity of this Report.

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1 Introduction

1.1 Sanderson Associates (Consulting Engineers) Ltd has been appointed by Dathan Tool & Gauge Co Limited to advise on traffic and transport related issues surrounding a proposed residential development on land off Helme Lane, Meltham. This Transport Statement has been prepared to support a planning application for the proposals.

1.2 The development proposes 21 dwellings in two parcels of land that currently comprise fields with access taken from Helme Lane via two sites that gained planning permission for a residential development in October 2014 (ref 2014/90722) and April 2019 (ref 2018/92937).

1.3 In accordance with the Planning Practice Guidance 'Transport evidence bases in plan making and decision taking' this Transport Statement addresses key transport issues including:

- the local highway network
- the access arrangements to the proposed development
- the existing use of the site
- the proposed development and its operational facilities
- the impact of the development on the local highway network in terms of highway safety
- accessibility of the site in relation to sustainable transport and local facilities

1.4 A Travel Plan Statement has also been prepared for the site which sets out the strategy and initiatives that will be adopted in order to encourage the use of sustainable modes of travel associated with the development.

2 Planning Policy

2.1 National Planning Policy Framework

2.1.1 In July 2018 a new National Planning Policy Framework (NPPF) was published, which sets out the Government's planning policies for England and how these are expected to be applied. This was then updated in February 2019. This NPPF replaces the previous NPPF dated March 2012.

2.1.2 At NPPF paragraph 38 it is stated that;

'Decision-makers at every level should seek to approve applications for sustainable development where possible.'

2.1.3 Paragraph 108 states that in assessing development applications;

'a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.'

2.1.4 NPPF Paragraphs 109 and 110 state that;

'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.'

2.1.5 NPPF Paragraph 111 states that;

'All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.'

2.2 Kirklees Local Plan

2.2.1 The Kirklees Local Plan was adopted in February 2019 and contains *"a vision and strategic objectives for the development of Kirklees up to 2031"*.

2.2.2 Policy LP1 states that:

"When considering development proposals, the council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. The council will always work pro-actively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area. Proposals that accord with the policies in the Kirklees Local Plan (and, where relevant, with policies in neighbourhood plans) will be approved without delay, unless material considerations indicate otherwise."

3 Existing Situation

3.1 Site and Surrounding Area

3.1.1 The site is located between Helme Lane and Mean Lane in Meltham, approximately 7km southwest of Huddersfield town centre. The site comprises two parcels of land that are currently fields, located to the north and east of the client's manufacturing site. The location and approximate extent of the site is shown in the figure below.

Figure 3.1.1 – Location and approximate extent of site (Imagery ©2019 Google)

3.1.2 The site forms part of area HS160 that is allocated for housing in the Kirklees Local Plan as shown in the figure overleaf. The remainder of the site has already received planning approval for residential development and is under construction.

Figure 3.1.2 – Extract of KMBC Local Plan Policies Map

3.2 Highway Network

3.2.1 Access to the site is to be via adjacent residential developments that take access from Helme Lane. These developments gained permission in October 2014 (ref 2014/90722) and April 2019 (ref 2018/92937) and are currently under construction. Once completed, the access roads within these developments will have carriageway widths of approximately 5.5m and footways of approximately 2.0m throughout.

3.2.2 Helme Lane is a two-way single carriageway at the northern extent of Meltham. It has a carriageway width of approximately 6.8-7.4m and is subject to a speed limit of 30mph. Street lighting is present and footways of approximately 1.6-2.3m are provided on both flanks.

3.2.3 Approximately 100m east of the access point, a central island with dropped kerbs is provided to aid pedestrian movements to the bus stop and lit footpath to Helme School on the northern flank of the road. In the direction of Meltham centre, dropped kerbs are provided to aid pedestrian movements.

3.2.4 To the west, Helme Lane connects to the B6107 Slaithwaite Road which runs through Meltham centre to the southeast, from which the B6108 Huddersfield Road leads to Huddersfield. To the east, Helme Lane connects to Blackmoorfoot Road which also leads towards Huddersfield.

3.2.5 Mean Lane is a street-lit road, predominantly serving residential properties, which becomes a track in the vicinity of the site. To the west it connects to Station Street at a mini-roundabout junction. Footways are present from this junction to the cricket field at which point it becomes a public footpath. Beyond this point, Mean Lane serves just the Sports & Community Centre and the Client's premises.

3.2.6 The extract overleaf shows there are numerous public rights of way (PROW) in the vicinity of the site.

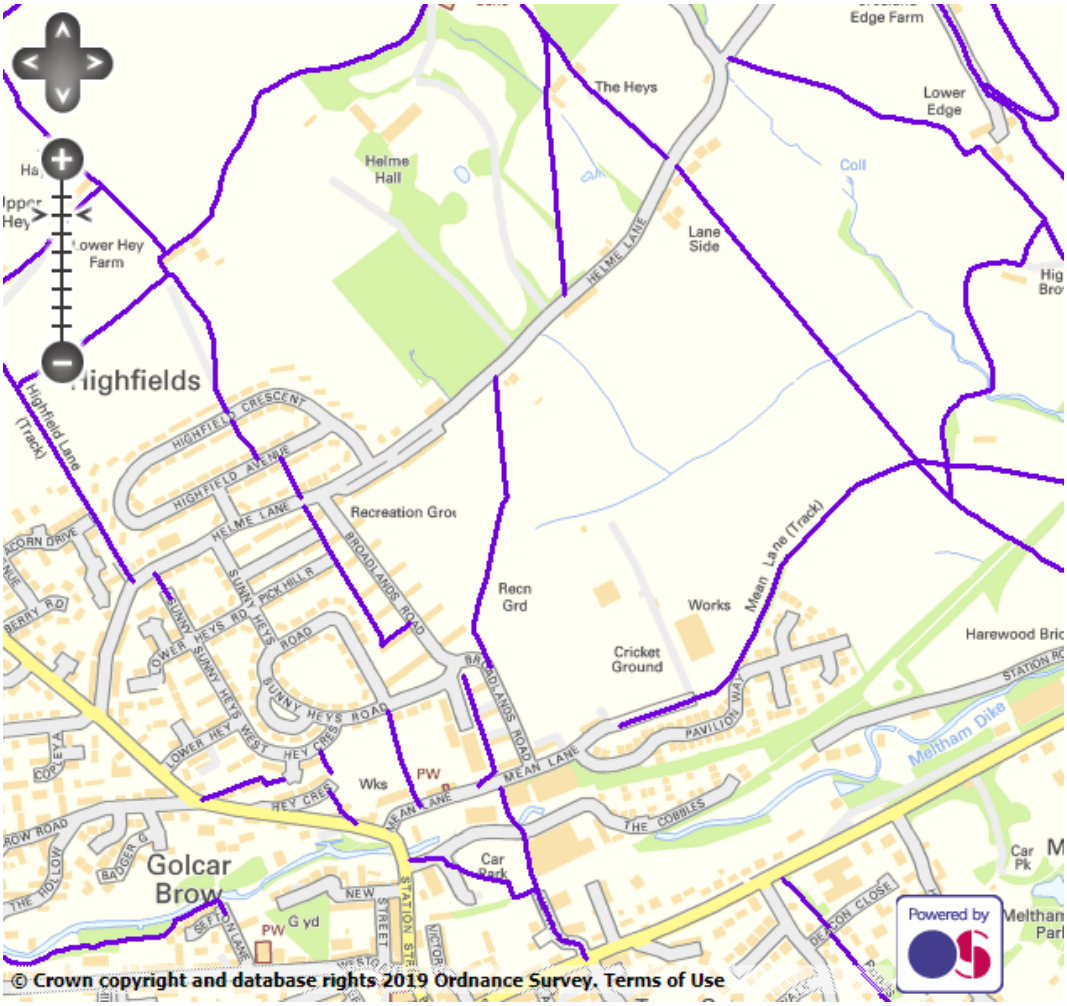


Figure 3.2.6 – Extract of Kirklees Council PROW map

3.3 Personal Injury Accident Data

3.3.1 Details of personal injury accident records in the vicinity of the site have been obtained from the online Crashmap database for the most recent 5 year period.

3.3.2 The extract overleaf shows the incidents that have occurred in the area of interest which includes Helme Lane, Mean Lane and the section of the B6107 between the two. There have been five incidents, three of these incidents were 'slight' in severity with two 'serious' and no 'fatal' incidents. No incidents have occurred within approximately 400m of the site access from Helme Lane.

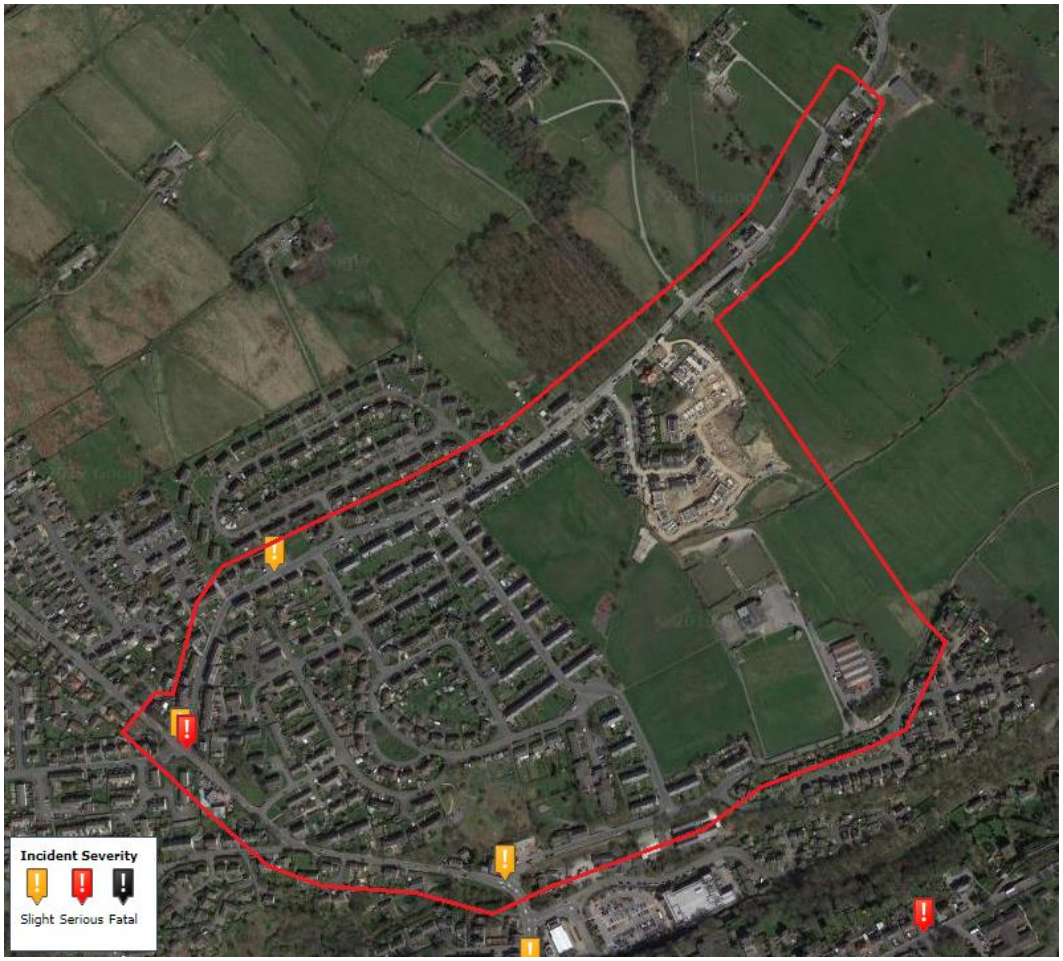


Figure 3.3.2 – Crashmap extract – incidents in the last 5 years

3.3.3 A description of each incident is given below with the full reports included at **Appendix A**.

Accident ref 20161333M1230 occurred on the 22nd March 2016 at 5:57pm in dry and fine conditions. A car that was passing two parked buses collided with a child pedestrian who was masked as they crossed Helme Lane.

Accident ref 2017134251045 occurred on the 5th February 2018 at 3:47pm in dry and fine conditions. A car collided with a child pedestrian who was not using the available pedestrian crossing to cross the B6107. The pedestrian sustained serious injuries.

Accident ref 20141311U0502 occurred on the 30th January 2014 at 11:37am in dry and fine conditions. A car collided with a minibus at the B6107/Helme Lane/Red Lane junction however it is not possible to discern why this may have occurred.

Accident ref 20141317R0788 occurred on the 27th July 2014 at 12:00pm in fine and dry conditions. A car collided with a ridden horse at the B6107/Helme Lane/Red Lane junction and the rider sustained serious injuries.

Accident ref 2014131611258 occurred on the 1st June 2014 at 4:35pm in dry and fine conditions. A car that was moving off collided with a pedal cycle that was turning right at the Mean Lane/Station Street mini-roundabout junction.

3.3.4 Although three incidents have occurred at the B6107/Helme Lane/Red Lane junction there does not appear to be a common cause or casualty and the other two recorded incidents are isolated. Therefore, from this assessment, it is not considered that there is an existing accident trend or history in the vicinity of the site that would be cause for concern with regards the development proposals.

4 Proposed Development

4.1 Overview

4.1.1 The proposals comprise the development of 21 dwellings within two parcels of land that are currently fields. The proposed layout plan is included at **Appendix B** and the schedule of accommodation is as follows:

Accommodation type	Number
4-bed	9
3-bed	12
Total	21

Table 4.1.1 – Schedule of accommodation

4.1.2 Access is to be taken via adjacent sites that have planning approval for residential development (refs 2014/90722 & 2018/92937).

4.1.3 An 18m long 2.0m wide link that, although unsegregated, can be used by pedestrians and cycles is to be provided between the southern parcel and Mean Lane. This will benefit residents of the approved developments as well as this development by providing a shorter route to Meltham centre. In addition, it will provide a connection to cycle route 68 for southbound travel and the public footpath that runs along Mean Lane.

4.2 Parking

4.2.1 The following extract is taken from Kirklees Highway Design Guide, dated October 2018.

Figure 4.2.1 – Extract from Kirklees Highway Design Guide

4.2.2 Each of the 4-bed dwellings is to be provided with the space to park three vehicles and each 3-bed dwelling is to have two parking spaces. This is in line with the guidance shown in figure 4.2.1. In addition, seven visitor parking spaces are to be provided.

4.3 Servicing

4.3.1 Kirklees Local Plan Policy LP21 'Highways and access' states that new development shall *"take into account access for emergency, service and refuse collection vehicles"*. To this end, swept path analysis of a refuse vehicle and fire tender has been undertaken and this is shown on **Drawing 11140-001B** included at **Appendix C**.

5 Sustainable Travel and Accessibility

5.1 Overview

5.1.1 The latest National Planning Policy Framework (NPPF) was published by the Government in June 2019 and sets out development transport objectives which includes the need to rebalance the transport system in favour of sustainable transport modes.

5.1.2 It is acknowledged by Chelmsford City Council that the site is in a "fairly remote" location. It is considered that this limits the accessibility of the site by non-car modes, nevertheless this section of the report details its accessibility by the following modes.

- Foot;
- Cycle;
- Bus; and
- Rail

5.2 Accessibility on Foot

5.2.1 Walking is the most common form of travel in Britain and has the greatest potential to replace short car trips, particularly those under 2km.

5.2.2 It is important to consider the routes that would be taken to get to these locations as well as the distance. Department for Transport guidance 'Building Sustainable Transport into New Developments' (2008) gives the following advice.

"Walkable neighbourhoods are typically characterised as having a range of facilities within 10 minutes walking distance (around 800m). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating."

5.2.3 Figure 5.2.3 identifies 800m and 2km walking radii from the site. It is noted that walking routes will not follow the simple radius of this plan and the plan is provided as an indication of where destinations lie and the general extent to which the local area can be accessed on foot.

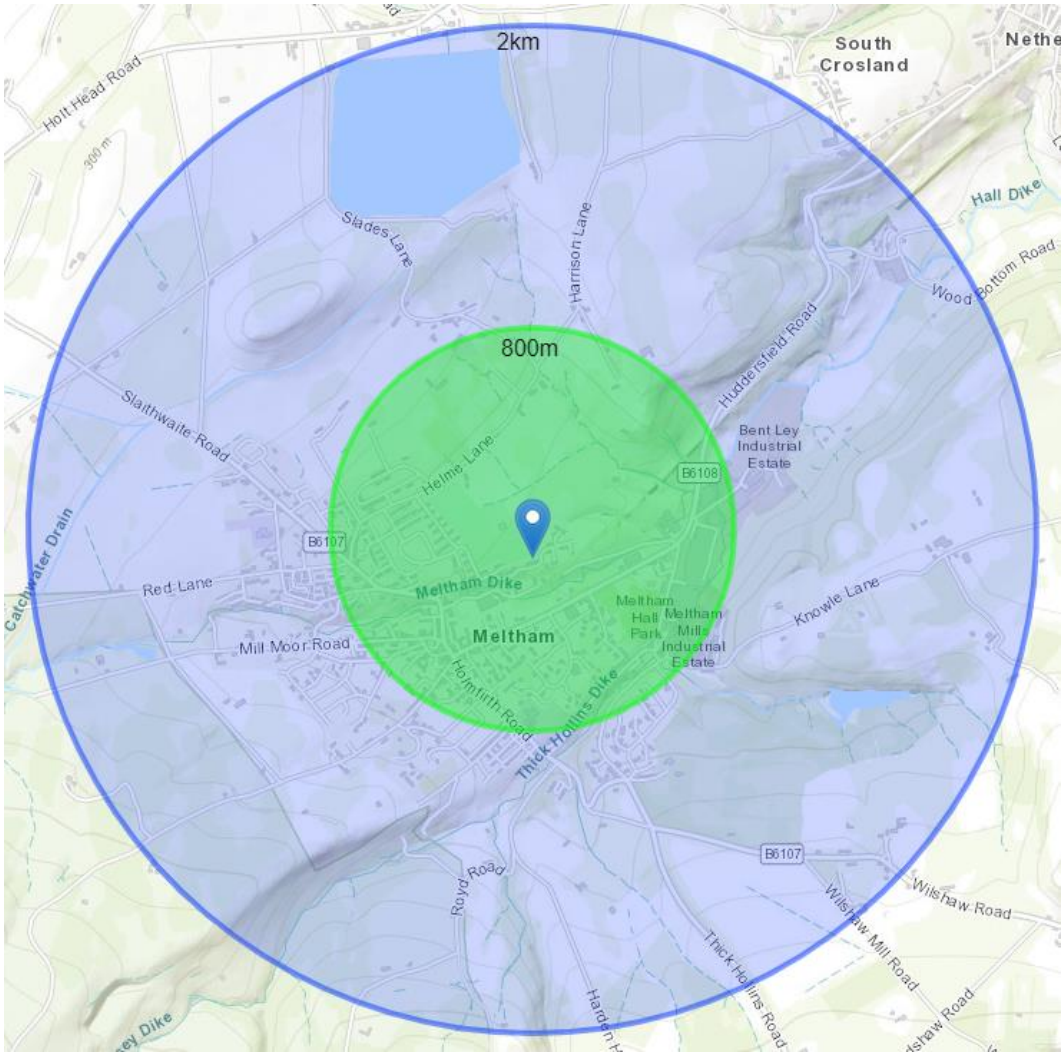


Figure 5.2.3 - Indicative walking radii (National Geographic Society MapMaker)

5.2.4 However, it is also important to consider the quality of the pedestrian infrastructure when determining accessibility. To this end a street lit footways are present on both flanks of Helme Lane.

5.2.5 Approximately 100m east of the access point, a central island with dropped kerbs is provided to aid pedestrian movements to the bus stop and lit footpath to Helme School on the northern flank of the road. In the direction of Meltham centre, dropped kerbs are provided to aid pedestrian movements.

5.2.6 As shown in figure 3.2.6 there are a number of public rights of way (PROW) in the vicinity of the site. This includes the section of Mean Lane that runs to the south of the southern parcel of land. From Mean Lane a stepped PROW provides a shortcut to The Cobbles and Morrison's supermarket. From the southern side of Morrison's car park stepped access is available to Near Lane which leads to Huddersfield Road.

5.2.7 Destinations within 800m walking distance of the site include those listed below with distances given from the centre of the northern (N) and southern (S) parcels of land:

Destination	Distance from N parcel (m)	Distance from S parcel (m)
Meltham Sports and Community Centre	420	275
Meltham Community Pre-School	515	370
Bus stops on Mean Lane	585	445
Meltham Group Practice & Rowlands Pharmacy	620	480
Morrison's supermarket	635	490
Bus stop at Morrison's supermarket	640	495
Bus stops on Helme Lane	595-605	690-700
Bus stops on Station Street	760-810	615-665
Meltham Dental Care	790	655
Allegro Opticians	835	690
Post Office	845	700
Co-op food store	885	735
Go Local Extra convenience store	795	885

Table 5.2.7 – Destinations within 800m walking distance

5.2.8 The following destinations are located within 2km walking distance of the site:

Destination	Distance from N parcel (m)	Distance from S parcel (m)
Meltham centre inc cafes, restaurants, public houses, takeaways, hair dressers	975	820
Valli Opticians	965	825
Butterflies Day Nursery	1050	925
Helme C of E Academy	1005	1150
Meltham C of E Primary School	1300	1150
Meltham Moor Primary School	1500	1350

Table 5.2.8 – Destinations within 2km walking distance

5.3 Accessibility by Cycle

5.3.1 Guidance suggests that cycling has the potential to substitute for short car trips, particularly those under 5km and to form part of a longer journey by public transport. However, 'Building Sustainable Transport into New Developments' (2008) identifies that "people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating". Furthermore, the National Travel Survey identifies longer cycle journeys than 5km with an average distance of 5.3km and an 85th percentile distance of 7.4km.

5.3.2 Figure 5.3.2, overleaf, indicates destinations that lie within 5km and 7.5km radii of the application site. Again it is noted that cycling will not follow the simple radius shown on this plan and it is provided to give an indication of where destinations lie and the general extent to which the site is accessible by cycle.

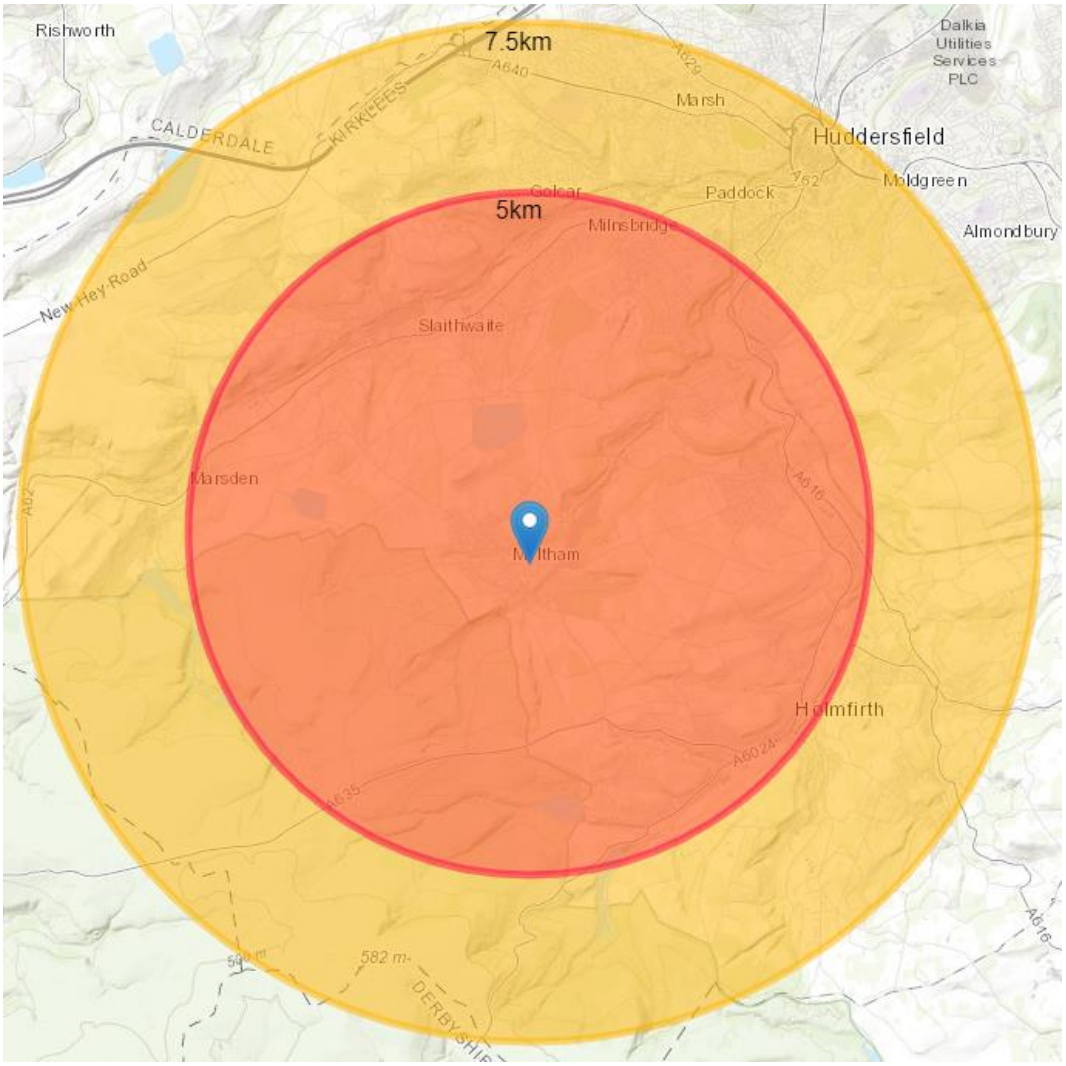


Figure 5.3.2 - Indicative cycling radii (National Geographic Society MapMaker)

5.3.3 Figure 5.3.2 indicates that various areas that provide amenities and employment possibilities are located within cycling distance of the site. However, as with walking, it is considered that the quality of the available cycle infrastructure is an important factor when it comes to accessibility. The extract of West Yorkshire Interactive Cycle Map overleaf shows the cycle routes in and around Meltham. As can be seen, there are a number of available signed and advisory routes in the area including National Cycle Network Route 68, the Pennine Cycleway, which passes along Helme Lane and Mean Lane.

Figure 5.3.3 – Extract of West Yorkshire Interactive Cycle Map

5.4 Accessibility by Bus

5.4.1 The closest bus stops to the site are located on Mean Lane, at Morrison's supermarket, on Helme Lane and Station Street at distances varying from approximately 445-810m from the site. The stops are indicated in figure 5.4.1.

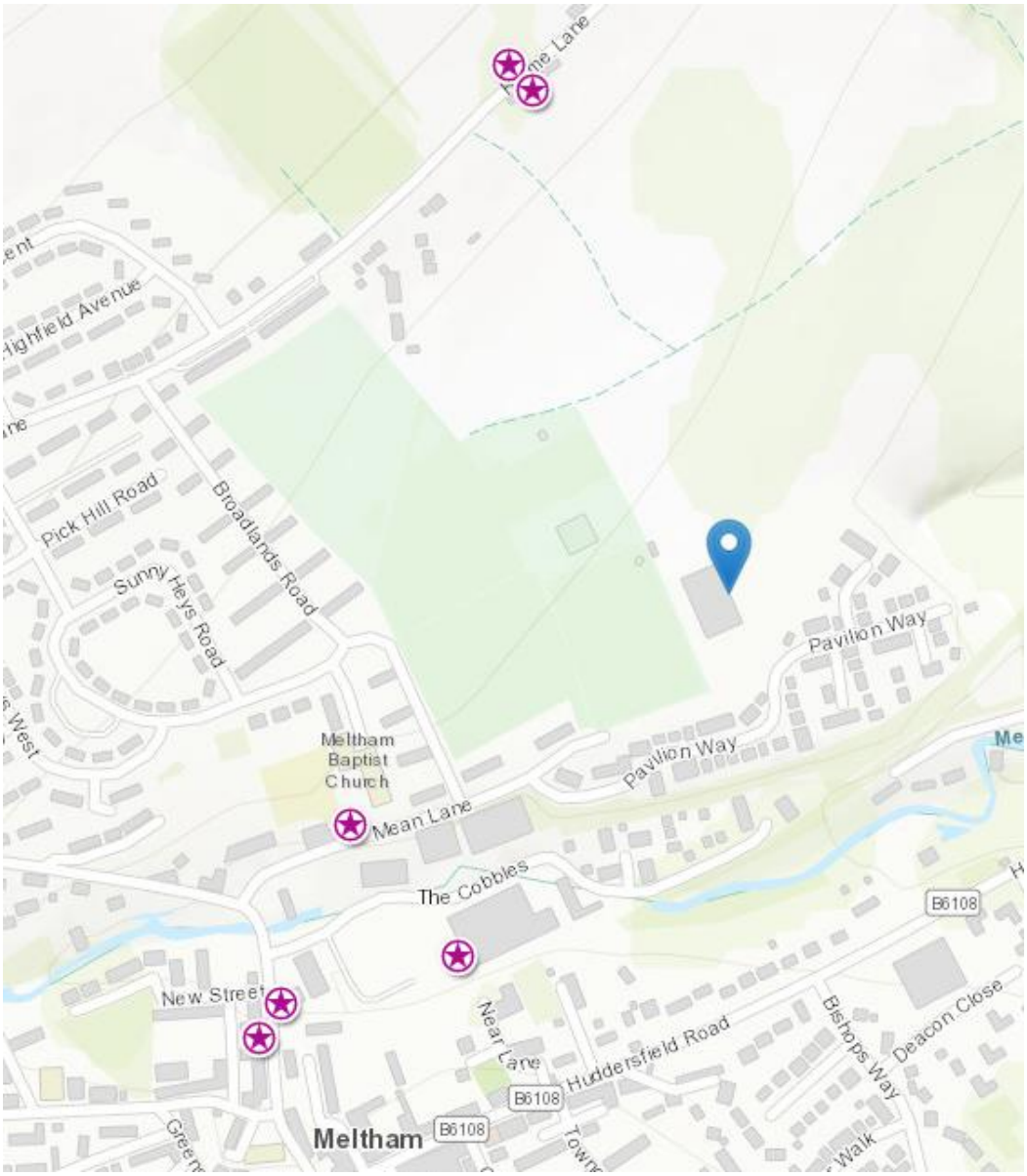


Figure 5.4.1 – Location of bus stops (National Geographic Society MapMaker)

5.4.2 Details of the stops and the services they provide are given below with distances measured from a central point in each parcel of land.

Mean Lane

Stop reference:	45029093
Distance from site:	Approx 445m (N parcel) & 585m (S parcel)
Facilities:	Pole with flag and timetable information
Services:	321, 324, 933

Morrison's supermarket

Stop reference:	45023851
Distance from site:	Approx 640m (N parcel) & 495m (S parcel)
Facilities:	Pole with flag and timetable information
Services:	335, 388, 389, 911, 933, 937

Helme Lane

Stop reference:	45050792
Distance from site:	Approx 595m (N parcel) & 690m (S parcel)
Facilities:	Unmarked
Services:	388, 389

Stop reference:	45019277
Distance from site:	Approx 605m (N parcel) & 700m (S parcel)
Facilities:	Pole with flag and timetable information
Services:	388, 389

Station Street

Stop reference:	45019232
Distance from site:	Approx 760m (N parcel) & 615m (S parcel)
Facilities:	Pole with flag and timetable information, road markings within layby
Services:	321, 324, 335, 388, 389, 933, 937

Stop reference:	45023852
Distance from site:	Approx 810m (N parcel) & 665m (S parcel)
Facilities:	Pole with flag and timetable information, road markings
Services:	321, 324, 335, 388, 389, 933, 937

5.4.3 Details of the services available from these stops are given in table 5.4.3 overleaf.

No	Route	Mon-Sat Daytime	Mon-Sat Evening	Sunday
321	Huddersfield – Meltham	No service	2 late services to Meltham 1 late service to Huddersfield	2 late services to Meltham 2 late services to Huddersfield
324	Huddersfield – Meltham	10 mins	60 mins	30 mins
335	Holmfirth - Slaithwaite	60 mins	No service	No service
388	Huddersfield Royal Infirmary – Meltham	60 mins	No service	No service
389	Meltham – Slaithwaite/ Wilberlee/Blackmoorfoot	1 am service to Slaithwaite/Wilberlee 1 pm service to Blackmoorfoot 1 pm service to Meltham	1 pm service to Blackmoorfoot 1 pm service to Meltham	No service
911	Meltham – Honley Station	60 mins	No service	No service
933	Meltham circular	60 mins	No service	No service
937	Marsden - Honley	1 service AM to Marsden 1 service PM to Honley 2 additional services each way Saturday	No service	No service

Table 5.4.3 - Summary of bus services

5.4.4 These services offer links to Huddersfield bus station and Slaithwaite and Honley rail stations where opportunities for onward travel by public transport are available.

5.5 Accessibility by Rail

5.5.1 The closest station to the site is Slaithwaite Train Station located approximately 5.4km from the site. The station provides hourly services on the Huddersfield Line which runs between Huddersfield and Manchester. CCTV-covered, sheltered storage space for 10 bicycles is available.

5.5.2 At a greater distance of approximately 7km is Honley Train Station. The station provides hourly services on the Penistone Line which runs between Huddersfield and Sheffield.

5.5.3 Both of these stations are accessible by bus as noted in section 5.4.

5.5.4 The location of the stations is indicated in figure 5.5.4 below.

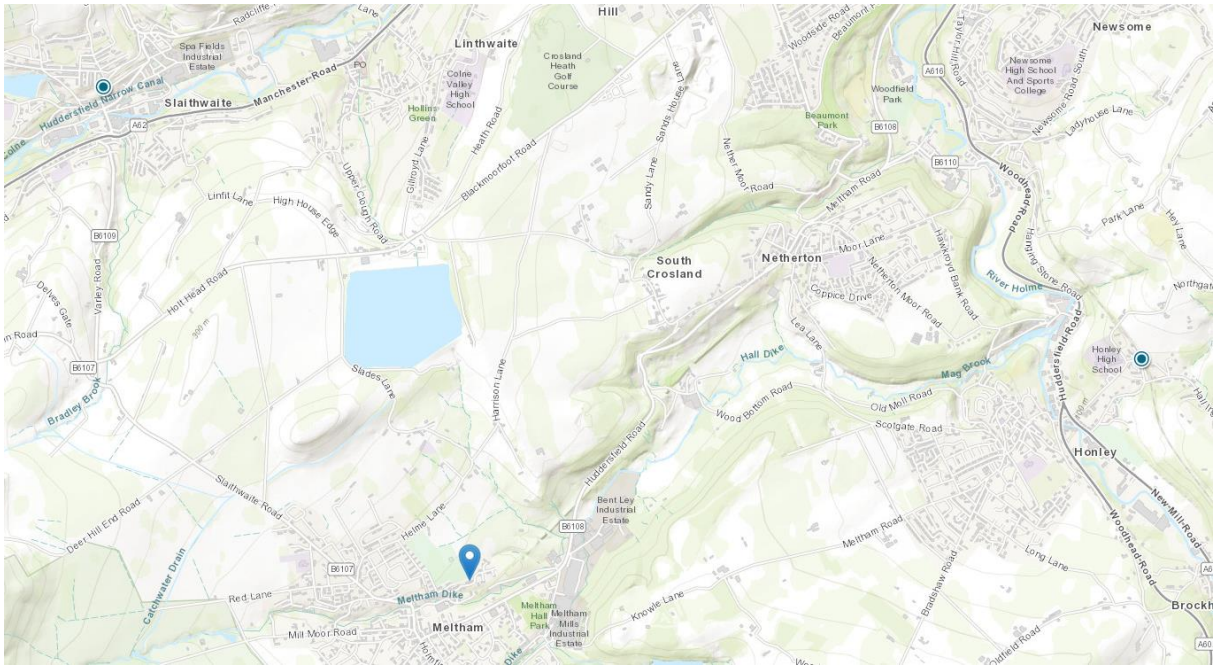


Figure 5.5.4 – Location of train stations (National Geographic Society MapMaker)

5.6 Accessibility Summary

5.6.1 The site is accessible by both active and public passenger transport arrangements. As such, residents will have a choice of sustainable travel options which will reduce the need to travel by car.

6 Multimodal Traffic Generations

6.1 To predict the multimodal trips the development could generate, the TRICS v7.6.2 database has been used to derive average multimodal trip rates using the following search parameters and the full output is included at **Appendix D**:

Land Use: 03 – Residential

Category: A – Houses privately owned

Selected Regions and Areas: Greater London and Ireland excluded

Parameter: Number of dwellings

Actual Range: 6-98

Date Range: 01/01/11 – 09/05/19

Selected Survey Days: Monday – Friday

Selected Locations: Suburban Area

6.2 The table below provides details of the multimodal two-way trip rates along with the corresponding modal percentage split and generated trips for 21 dwellings. The data has been split between weekday AM and PM peaks.

	Mode of Travel	Trip Rate	Modal Split	Generations
AM Peak Period 08:00-09:00	Pedestrians	0.314	27.5%	7
	Cyclists	0.026	2.3%	1
	Public Transport Users	0.038	3.3%	1
	Vehicle Occupants	0.764	66.9%	16
	Total People Trips	1.142	100.0%	25
PM Peak Period 17:00-18:00	Pedestrians	0.200	20.2%	4
	Cyclists	0.031	3.1%	1
	Public Transport Users	0.030	3.0%	1
	Vehicle Occupants	0.728	73.6%	15
	Total People Trips	0.990	100.1%	21

Table 6.2 – Multimodal trip generations

6.3 Based on the TRICS data the development could be expected to generate 33.1% of trips by walking, cycling and public transport modes in the AM peak hour and 26.3% in the PM peak hour.

6.4 The number of trips that could be expected by walking, cycling and public transport are considered to be modest and could be accommodated within the existing infrastructure.

7 Vehicular Traffic Generations

7.1 To give an indication of the potential number of vehicle trips generated by the development, average vehicle trip rates have been extracted from the TRICS data referred to in the previous section of this report. The resulting trip rates and generations for 21 dwellings are shown in the following table.

	Trip Rate per dwelling		Trip Generations		
	Arrivals	**Departures**	**Arrivals**	**Departures**	**Total**
AM 08:00-09:00	0.158	0.412	3	9	12
PM 17:00-18:00	0.358	0.185	8	4	12

Table 7.1 – Vehicular trip generations (TRICS)

7.2 However, as requested in discussions with Kirklees Council over previous projects, a comparison assessment has been undertaken based upon a two-way trip rate of 0.7 per dwelling with a 60/40 split between arrivals and departures. The table below provides details of the trip rates along with the corresponding generated trips for 21 dwellings.

	Trip Rate			Generations		
	Arrivals	**Departures**	**Two-way**	**Arrivals**	**Departures**	**Total**
AM 08:00-09:00	0.28	0.42	0.7	6	9	15
PM 17:00-18:00	0.42	0.28	0.7	9	6	15

Table 7.2 – Vehicular trip generations (Kirklees trip rates)

7.3 Taking the worst case of 15 two-way vehicle movements in each peak hour, for robustness, this equates to an average of one vehicle movement every 4 minutes.

7.4 It is considered that this level of traffic generation is modest and would have no material adverse impact on the operation of the existing highway network.

8 Summary and Conclusions

8.1 Sanderson Associates (Consulting Engineers) Ltd has been appointed by Dathan Tool & Gauge Co Limited to advise on traffic and transport related issues surrounding a proposed residential development on land off Helme Lane, Meltham.

8.2 The development proposes 21 dwellings in two parcels of land that currently comprise fields with access taken from Helme Lane via two sites that gained planning permission for a residential development in October 2014 (ref 2014/90722) and April 2019 (ref 2018/92937). The site forms part of area HS160 that is allocated for housing in the Kirklees Local Plan.

8.3 It is not considered that there is an existing accident trend or history in the vicinity of the site that would be cause for concern with regards the development proposals.

8.4 Parking is to be provided in line with guidance contained within Kirklees Highway Design Guide.

8.5 The site is accessible by both active and public passenger transport arrangements. As such, residents will have a choice of sustainable travel options which will reduce the need to travel by car.

8.6 The number of trips that could be expected by walking, cycling and public transport are considered to be modest and could be accommodated within the existing infrastructure.

8.7 The development could be expected to generate up to 15 two-way vehicle movements in each peak hour, which equates to an average of one vehicle movement every 4 minutes. It is considered that this level of traffic generation is modest and would have no material adverse impact on the operation of the existing highway network.

8.8 It is not considered that the development would have an unacceptable impact on highway safety and the residual cumulative impacts on the road network would not be severe. Therefore, in accordance with NPPF, this development should be supported on highways grounds.

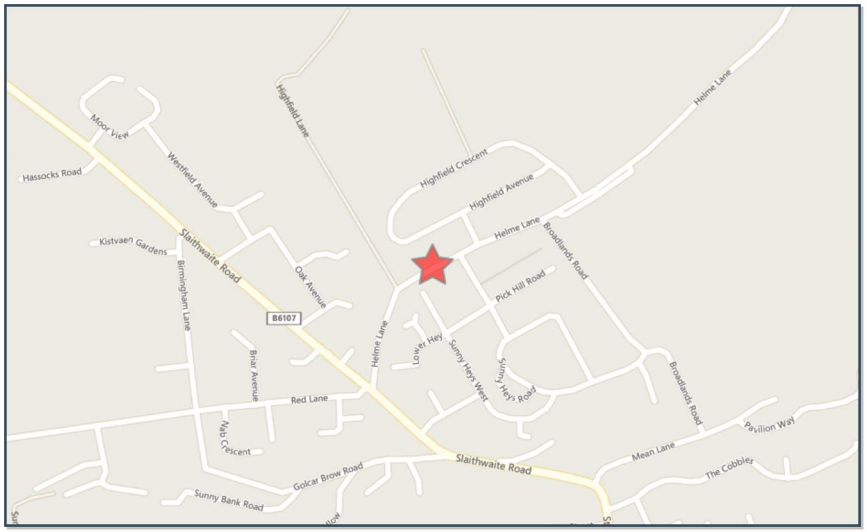
APPENDIX A

Crashmap Reports

crashmap.co.uk

Crash Date:	Tuesday, March 22, 2016	**Time of Crash:**	5:57:00 PM	**Crash Reference:**	**20161333M1230**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Kirklees			**Number of Vehicles:**	3
Local Authority:	Kirklees			**OS Grid Reference:**	409666 411164
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



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

powered by agilysis

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
3	Bus or coach (17+ passenger seats)	-1	Unknown	26 - 35	Vehicle is parked in the carriageway	Did not impact	Other	None	None
1	Car (excluding private hire)	4	Female	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Bus or coach (17+ passenger seats)	-1	Unknown	26 - 35	Vehicle is parked in the carriageway	Did not impact	Other	None	None

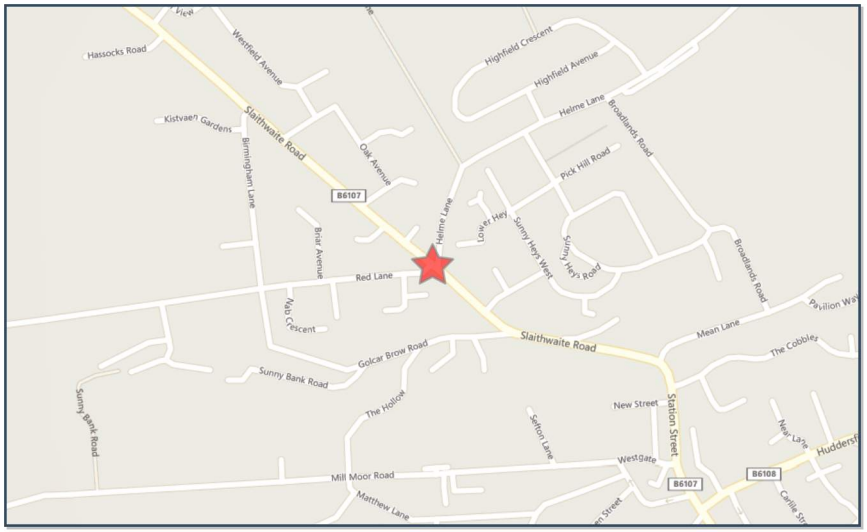
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Pedestrian	Male	11 - 15	In carriageway, crossing elsewhere	Crossing from driver's offside - masked by parked or stationary vehicle

crashmap.co.uk

Crash Date:	Sunday, February 05, 2017	**Time of Crash:**	3:47:00 PM	**Crash Reference:**	**2017134251045**

Highest Injury Severity:	Serious	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Kirklees			**Number of Vehicles:**	1
Local Authority:	Kirklees			**OS Grid Reference:**	409565 410980
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Crossroads				
Junction Pedestrian Crossing:	Pelican, puffin, toucan or similar non-junction pedestrian light crossing				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	3	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

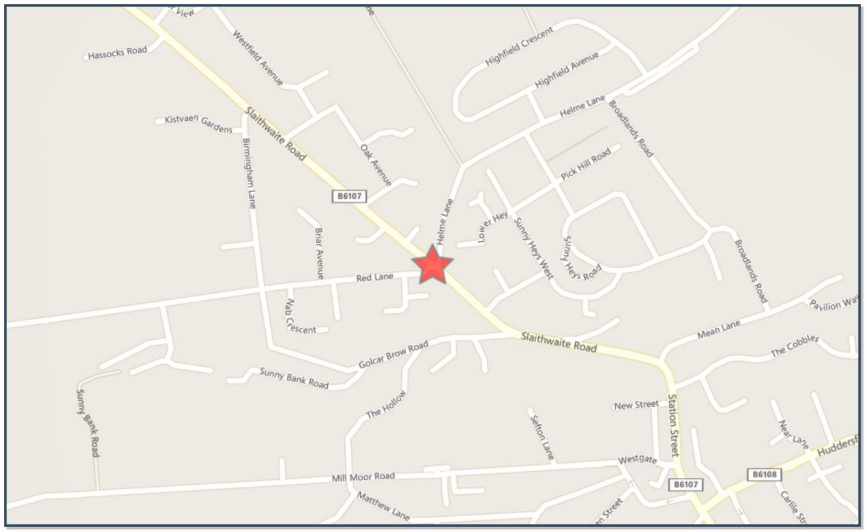
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Pedestrian	Female	11 - 15	In carriageway, crossing elsewhere within 50 metres of pedestrian crossing	Crossing from driver's nearside

crashmap.co.uk

Crash Date:	Thursday, January 30, 2014	**Time of Crash:**	11:37:00 AM	**Crash Reference:**	**20141311U0502**

Highest Injury Severity:	Slight	**Road Number:**	B6107	**Number of Casualties:**	1
Highway Authority:	Kirklees			**Number of Vehicles:**	2
Local Authority:	Kirklees			**OS Grid Reference:**	409565 410980
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	Pelican, puffin, toucan or similar non-junction pedestrian light crossing				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



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

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Car (excluding private hire)	5	Female	36 - 45	Vehicle is moving off	Front	Other	None	None
1	Minibus (8 - 16 passenger seats)	-1	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

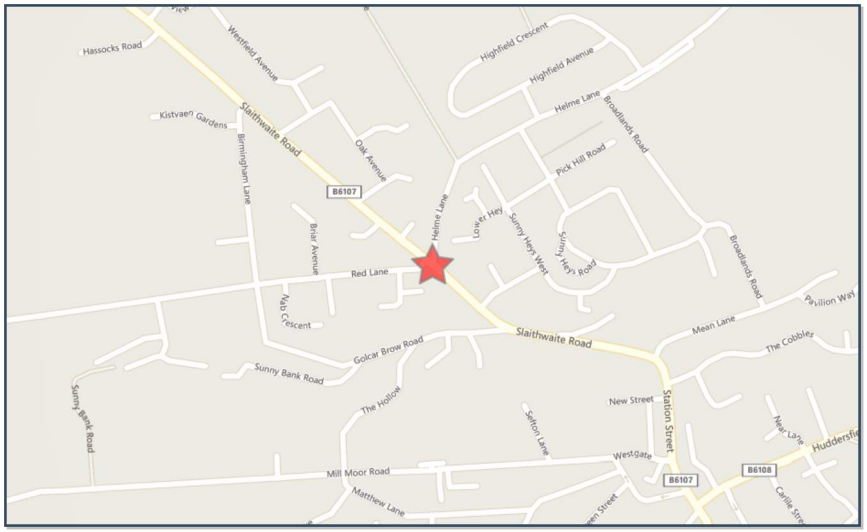
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	36 - 45	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Sunday, July 27, 2014	**Time of Crash:**	12:00:00 PM	**Crash Reference:**	**20141317R0788**

Highest Injury Severity:	Serious	**Road Number:**	B6107	**Number of Casualties:**	1
Highway Authority:	Kirklees			**Number of Vehicles:**	2
Local Authority:	Kirklees			**OS Grid Reference:**	409573 410973
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



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

powered by agilysis

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Ridden horse	-1	Female	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
1	Car (excluding private hire)	16	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Other	None	None

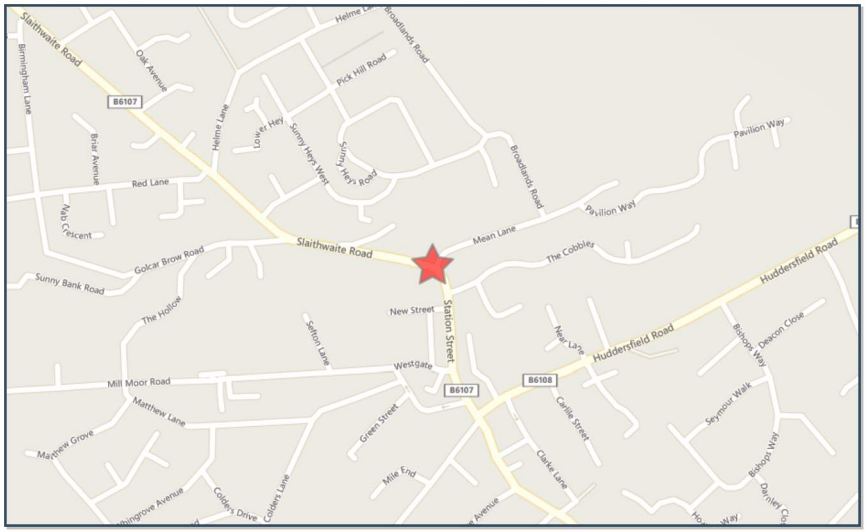
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Serious	Driver or rider	Female	56 - 65	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Sunday, June 01, 2014	**Time of Crash:**	4:35:00 PM	**Crash Reference:**	**2014131611258**

Highest Injury Severity:	Slight	**Road Number:**	B6107	**Number of Casualties:**	1
Highway Authority:	Kirklees			**Number of Vehicles:**	2
Local Authority:	Kirklees			**OS Grid Reference:**	409914 410835
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



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

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Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Pedal cycle	-1	Male	36 - 45	Vehicle is in the act of turning right	Front	Other	None	None
1	Car (excluding private hire)	4	Female	Over 75	Vehicle is moving off	Offside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

APPENDIX B

Proposed Site Layout Plan

Only figured dimensions should be used.

Scaled dimensions should be checked with the Architect.

rev	description	drwn	auth	date
D	Adjacent site levels added, pedestrian link width drawn as 2M.	JF	JC	21/02/2020
C	Separate pedestrian path added to south link.	JF	JC	16/01/2020
B	Spot levels added, rumble strip to west site, KC bollard added.	JF	JC	10/12/19
A	Vehicle restriction note added to pedestrian link	JF	JC	28/10/19

DO NOT SCALE OFF THIS DRAWING

acumen
designers & architects

acumenarchitects.co.uk 01484 546000
Headrow House, Old Leeds Road, Huddersfield, HD1 1SG

Client
DATHAN TOOL & GAUGE CO LTD.

Project
LAND OFF MEAN LANE, MELTHAM

Project No	Drawing No	Rev
2620	03	C

Description
INDICATIVE SITE PLAN

Scale	Date Drawn	Drawn By	Authorised By
1:500 @ A1	OCT '19	JF	JC

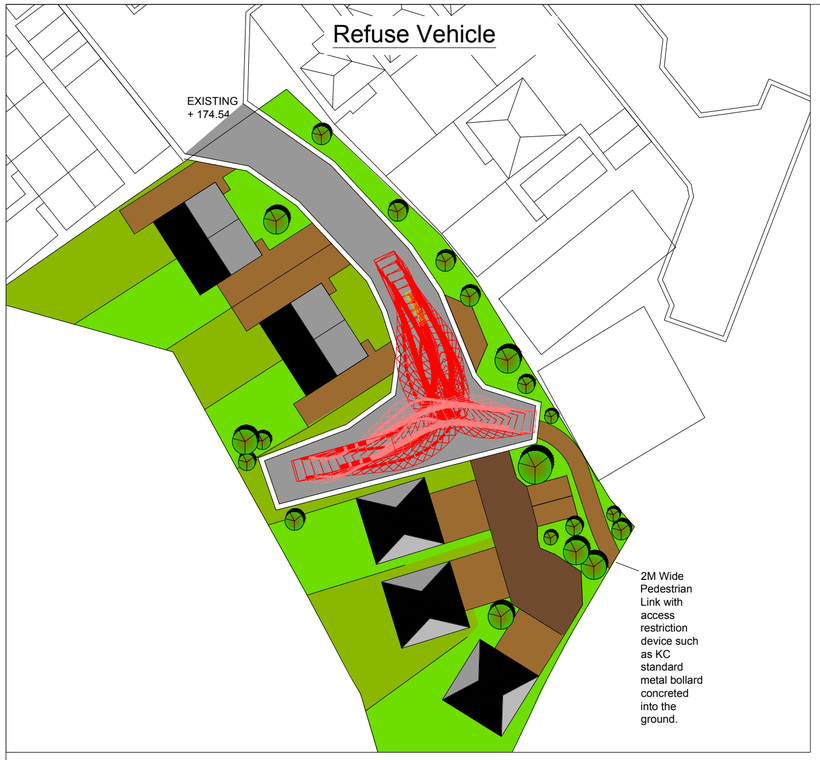
File loc: \\pdcserver\company\Acumen Admin\Office Documents\2620 Mr S Moorhouse Dathan Mean Lane Meltham\DWGS\A - MODELS\2620 Dathan Tool and Gauge Outline Scheme

Purpose of Issue
Planning ◉ Building Regs ○ Tender ○ Comment ○ Approval ○ Construction ○

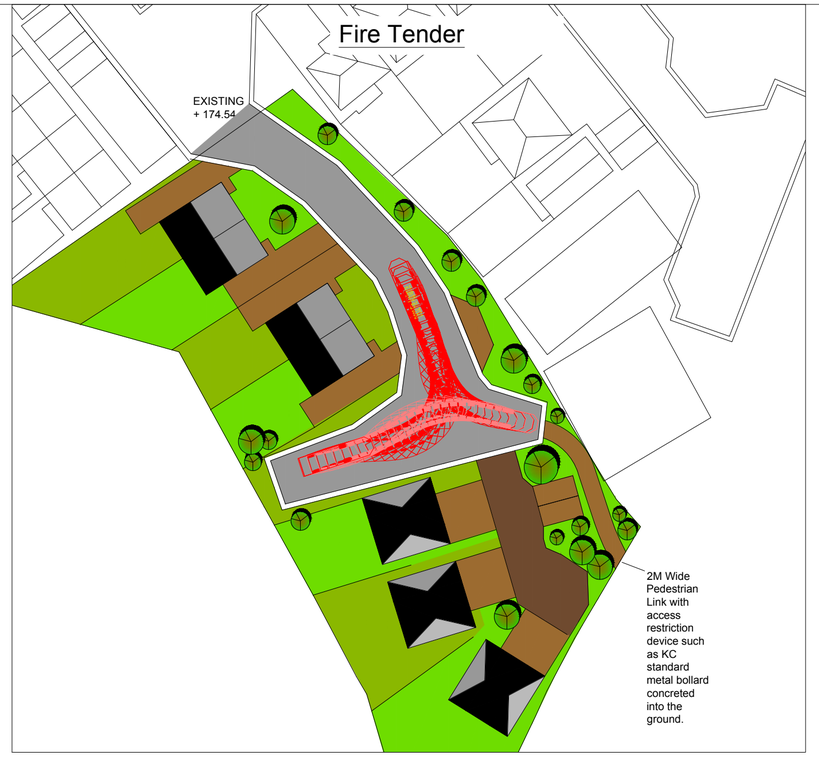
APPENDIX C

Drawing 11140-001A Swept Path Analysis

Refuse Vehicle



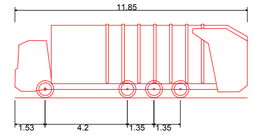
Fire Tender



- Sanderson Associates (Consulting Engineers) Ltd ("the consultant"), has not checked or verified, and shall have no liability whatsoever for any inaccuracies which may be attributable to any data, reports, base plan(s) and drawings provided by the client, or purchased by the consultant on the client's behalf, that may have been utilised within this drawing.
- The consultant shall not be liable for the use by any person of any document for any purpose other than that for which the same were provided by the consultant.
- No liability whatsoever is accepted by the consultant for any error or omissions.
- The consultant accepts no liability for any vehicle specification errors within the vehicle track software used and / or it's vehicle libraries.
- The locations of utilities apparatus, if shown, is reproduced from plans supplied to the consultant, although care has been taken when duplicating this information. These locations are approximate only and no guarantee can be given for their accuracy. It is the client's or it's appointed agent/contractors responsibility to verify the exact locations on site by hand dug trial holes or other appropriate means prior to mechanical excavation.
- Service connections are not shown but their presence should be anticipated.
- Reference to any third party equipment shown on this drawing was only relevant at the time the drawing was prepared.
- It is the client's responsibility to ensure that any equipment ordered meets the design.

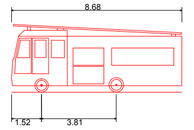
Vehicle Specification

Refuse Vehicle



11.85m Refuse Vehicle	
Overall Length	11.850m
Overall Width	2.500m
Overall Body Height	3.749m
Min Body Ground Clearance	0.302m
Track Width	2.490m
Lock to lock time	6.00s
Wall to Wall Turning Radius	11.000m

Fire Tender



DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

Refuse Vehicle

Fire Tender

Fire Tender

sanderson associates (consulting engineers) ltd
Highways | Traffic | Transportation | Water
T 01924 844080 mail@sandersonassociates.co.uk
F 01924 844081 www.sandersonassociates.co.uk

Client: Dathan Tool & Gauge Co Limited

Project Title: Proposed Residential Development
Land off Helme Lane
Meltham

Drawing Title: Swept Path Analysis

Rev	Amendment	Drawn	Date	Checked
B	Site layout amended	CH	Feb 20	KS
A	Site layout amended	CH	Feb 20	KS

Scale 1:500		Drawn By	CH
Drawing Size	A2	Checked By	KS
Date	October 2019	Approved By	KS
	Drawing Number 11140-001		Rev B

FILE REF:

APPENDIX D

TRICS Data

Calculation Reference: AUDIT-109307-190813-0817

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
	KC	KENT	1 days
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	DV	DEVON	2 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	2 days
	NF	NORFOLK	2 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	3 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	DH	DURHAM	1 days
	TW	TYNE & WEAR	1 days
10	WALES		
	PS	POWYS	1 days
11	SCOTLAND		
	AG	ANGUS	1 days
	FA	FALKIRK	1 days
	HI	HIGHLAND	1 days
	PK	PERTH & KINROSS	1 days

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

Secondary Filtering selection:

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

Parameter: Number of dwellings
Actual Range: 6 to 98 (units:)
Range Selected by User: 6 to 100 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 09/05/19

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

Selected survey days:

Monday	7 days
Tuesday	8 days
Wednesday	6 days
Thursday	4 days
Friday	2 days

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

Selected survey types:

Manual count	27 days
Directional ATC Count	0 days

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

Selected Locations:

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	27

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

Secondary Filtering selection:

Use Class:

C3	27 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
5,001 to 10,000	6 days
10,001 to 15,000	3 days
15,001 to 20,000	8 days
20,001 to 25,000	3 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:

5,001 to 25,000	2 days
25,001 to 50,000	3 days
50,001 to 75,000	3 days
75,001 to 100,000	6 days
100,001 to 125,000	1 days
125,001 to 250,000	9 days
250,001 to 500,000	3 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	10 days
1.1 to 1.5	17 days

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

Travel Plan:

Yes	3 days
No	24 days

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

PTAL Rating:

No PTAL Present	27 days

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

LIST OF SITES relevant to selection parameters

1 AG-03-A-01 BUNGALOWS/DET. ANGUS
KEPTIE ROAD
ARBROATH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 7
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

2 CA-03-A-04 DETACHED CAMBRIDGESHIRE

PETERBOROUGH
THORPE PARK ROAD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

3 CA-03-A-05 DETACHED HOUSES CAMBRIDGESHIRE
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY *17/10/16* *Survey Type: MANUAL*

4 CH-03-A-08 DETACHED CHESHIRE
WHITCHURCH ROAD
CHESTER
BOUGHTON HEATH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY *22/05/12* *Survey Type: MANUAL*

5 DH-03-A-01 SEMI DETACHED DURHAM
GREENFIELDS ROAD
BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 50
Survey date: TUESDAY *28/03/17* *Survey Type: MANUAL*

6 DV-03-A-01 TERRACED HOUSES DEVON
BRONSHILL ROAD
TORQUAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: WEDNESDAY *30/09/15* *Survey Type: MANUAL*

7 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

8 FA-03-A-01 SEMI-DETACHED/TERRACED FALKIRK
MANDELA AVENUE
FALKIRK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 37
Survey date: THURSDAY *30/05/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 HC-03-A-20 HOUSES & FLATS HAMPSHIRE
CANADA WAY
LIPHOOK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 62
Survey date: TUESDAY *20/11/18* *Survey Type: MANUAL*

10 HI-03-A-14 SEMI-DETACHED & TERRACED HIGHLAND
KING BRUDE ROAD
INVERNESS
SCORGUIE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 40
Survey date: WEDNESDAY *23/03/16* *Survey Type: MANUAL*

11 KC-03-A-03 MIXED HOUSES & FLATS KENT
HYTHE ROAD
ASHFORD
WILLESBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 51
Survey date: THURSDAY *14/07/16* *Survey Type: MANUAL*

12 LN-03-A-03 SEMI DETACHED LINCOLNSHIRE
ROOKERY LANE
LINCOLN
BOULTHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 22
Survey date: TUESDAY *18/09/12* *Survey Type: MANUAL*

13 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
LIVERPOOL
OTTERSPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 15
Survey date: FRIDAY *21/06/13* *Survey Type: MANUAL*

14 NF-03-A-01 SEMI DET. & BUNGALOWS NORFOLK
YARMOUTH ROAD
CAISTER-ON-SEA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: TUESDAY *16/10/12* *Survey Type: MANUAL*

15 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD
NORWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY *22/10/12* *Survey Type: MANUAL*

16 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET
YORK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 21
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

17 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE
GRAMMAR SCHOOL LANE
NORTHALLERTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

18 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY 10/05/17 Survey Type: MANUAL

19 PK-03-A-01 DETAC. & BUNGALOWS PERTH & KINROSS
TULLYLUMB TERRACE
PERTH
CORNHILL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 36
Survey date: WEDNESDAY 11/05/11 Survey Type: MANUAL

20 PS-03-A-02 DETACHED/SEMI-DETACHED POWYS
GUNROG ROAD
WELSHPOOL

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 28
Survey date: MONDAY 11/05/15 Survey Type: MANUAL

21 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

22 SF-03-A-07 MIXED HOUSES SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: THURSDAY 09/05/19 Survey Type: MANUAL

23 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE
A19 BENTLEY ROAD
DONCASTER
BENTLEY RISE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 54
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

24 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

25 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

LIST OF SITES relevant to selection parameters (Cont.)

26 WL-03-A-02 SEMI DETACHED WILTSHIRE
HEADLANDS GROVE
SWINDON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 27
Survey date: THURSDAY *22/09/16* *Survey Type: MANUAL*

27 WS-03-A-05 TERRACED & FLATS WEST SUSSEX
UPPER SHOREHAM ROAD
SHOREHAM BY SEA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 48
Survey date: WEDNESDAY *18/04/12* *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
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	35	0.070	27	35	0.299	27	35	0.369
08:00 - 09:00	27	35	0.158	27	35	0.412	27	35	0.570
09:00 - 10:00	27	35	0.145	27	35	0.179	27	35	0.324
10:00 - 11:00	27	35	0.118	27	35	0.137	27	35	0.255
11:00 - 12:00	27	35	0.148	27	35	0.144	27	35	0.292
12:00 - 13:00	27	35	0.169	27	35	0.158	27	35	0.327
13:00 - 14:00	27	35	0.171	27	35	0.186	27	35	0.357
14:00 - 15:00	27	35	0.156	27	35	0.211	27	35	0.367
15:00 - 16:00	27	35	0.237	27	35	0.171	27	35	0.408
16:00 - 17:00	27	35	0.304	27	35	0.189	27	35	0.493
17:00 - 18:00	27	35	0.358	27	35	0.185	27	35	0.543
18:00 - 19:00	27	35	0.251	27	35	0.163	27	35	0.414
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.285			2.434			4.719

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 - 98 (units:)
Survey date date range:	01/01/11 - 09/05/19
Number of weekdays (Monday-Friday):	27
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	35	0.007	27	35	0.031	27	35	0.038
08:00 - 09:00	27	35	0.001	27	35	0.025	27	35	0.026
09:00 - 10:00	27	35	0.002	27	35	0.012	27	35	0.014
10:00 - 11:00	27	35	0.007	27	35	0.007	27	35	0.014
11:00 - 12:00	27	35	0.005	27	35	0.003	27	35	0.008
12:00 - 13:00	27	35	0.006	27	35	0.006	27	35	0.012
13:00 - 14:00	27	35	0.004	27	35	0.001	27	35	0.005
14:00 - 15:00	27	35	0.002	27	35	0.007	27	35	0.009
15:00 - 16:00	27	35	0.033	27	35	0.005	27	35	0.038
16:00 - 17:00	27	35	0.023	27	35	0.006	27	35	0.029
17:00 - 18:00	27	35	0.025	27	35	0.006	27	35	0.031
18:00 - 19:00	27	35	0.012	27	35	0.008	27	35	0.020
19:00 - 20:00	1	7	0.000	1	7	0.000	1	7	0.000
20:00 - 21:00	1	7	0.000	1	7	0.000	1	7	0.000
21:00 - 22:00	1	7	0.000	1	7	0.000	1	7	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.127			0.117			0.244

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	35	0.089	27	35	0.373	27	35	0.462
08:00 - 09:00	27	35	0.184	27	35	0.580	27	35	0.764
09:00 - 10:00	27	35	0.174	27	35	0.235	27	35	0.409
10:00 - 11:00	27	35	0.154	27	35	0.191	27	35	0.345
11:00 - 12:00	27	35	0.174	27	35	0.170	27	35	0.344
12:00 - 13:00	27	35	0.214	27	35	0.204	27	35	0.418
13:00 - 14:00	27	35	0.212	27	35	0.243	27	35	0.455
14:00 - 15:00	27	35	0.194	27	35	0.261	27	35	0.455
15:00 - 16:00	27	35	0.370	27	35	0.227	27	35	0.597
16:00 - 17:00	27	35	0.436	27	35	0.256	27	35	0.692
17:00 - 18:00	27	35	0.488	27	35	0.240	27	35	0.728
18:00 - 19:00	27	35	0.326	27	35	0.218	27	35	0.544
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.015			3.198			6.213

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	35	0.025	27	35	0.093	27	35	0.118
08:00 - 09:00	27	35	0.068	27	35	0.246	27	35	0.314
09:00 - 10:00	27	35	0.068	27	35	0.071	27	35	0.139
10:00 - 11:00	27	35	0.052	27	35	0.080	27	35	0.132
11:00 - 12:00	27	35	0.066	27	35	0.054	27	35	0.120
12:00 - 13:00	27	35	0.076	27	35	0.056	27	35	0.132
13:00 - 14:00	27	35	0.063	27	35	0.074	27	35	0.137
14:00 - 15:00	27	35	0.062	27	35	0.071	27	35	0.133
15:00 - 16:00	27	35	0.190	27	35	0.098	27	35	0.288
16:00 - 17:00	27	35	0.139	27	35	0.084	27	35	0.223
17:00 - 18:00	27	35	0.136	27	35	0.064	27	35	0.200
18:00 - 19:00	27	35	0.080	27	35	0.057	27	35	0.137
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.025			1.048			2.073

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	35	0.005	27	35	0.031	27	35	0.036
08:00 - 09:00	27	35	0.002	27	35	0.036	27	35	0.038
09:00 - 10:00	27	35	0.003	27	35	0.011	27	35	0.014
10:00 - 11:00	27	35	0.006	27	35	0.011	27	35	0.017
11:00 - 12:00	27	35	0.008	27	35	0.008	27	35	0.016
12:00 - 13:00	27	35	0.012	27	35	0.018	27	35	0.030
13:00 - 14:00	27	35	0.005	27	35	0.003	27	35	0.008
14:00 - 15:00	27	35	0.019	27	35	0.012	27	35	0.031
15:00 - 16:00	27	35	0.018	27	35	0.007	27	35	0.025
16:00 - 17:00	27	35	0.020	27	35	0.006	27	35	0.026
17:00 - 18:00	27	35	0.023	27	35	0.007	27	35	0.030
18:00 - 19:00	27	35	0.021	27	35	0.001	27	35	0.022
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.142			0.151			0.293

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	35	0.127	27	35	0.528	27	35	0.655
08:00 - 09:00	27	35	0.255	27	35	0.887	27	35	1.142
09:00 - 10:00	27	35	0.247	27	35	0.328	27	35	0.575
10:00 - 11:00	27	35	0.220	27	35	0.289	27	35	0.509
11:00 - 12:00	27	35	0.254	27	35	0.236	27	35	0.490
12:00 - 13:00	27	35	0.309	27	35	0.285	27	35	0.594
13:00 - 14:00	27	35	0.285	27	35	0.322	27	35	0.607
14:00 - 15:00	27	35	0.277	27	35	0.351	27	35	0.628
15:00 - 16:00	27	35	0.611	27	35	0.338	27	35	0.949
16:00 - 17:00	27	35	0.619	27	35	0.352	27	35	0.971
17:00 - 18:00	27	35	0.673	27	35	0.317	27	35	0.990
18:00 - 19:00	27	35	0.438	27	35	0.285	27	35	0.723
19:00 - 20:00	1	7	0.000	1	7	0.000	1	7	0.000
20:00 - 21:00	1	7	0.000	1	7	0.000	1	7	0.000
21:00 - 22:00	1	7	0.000	1	7	0.000	1	7	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.315			4.518			8.833

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.*