SCP

Transportation Planning : Infrastructure Design

Transport Assessment

Proposed Residential Development

Garstang Road, Bilsborrow

Seddon Homes and James & Christine Lowcock

September 2020

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APPENDICES

1.0 INTRODUCTION

Overview

1.1 This Transport Assessment has been prepared by SCP on behalf of Seddon Homes and James & Christine Lowcock to support an outline planning application for up to 105 dwellings off Garstang Road in Bilsborrow.

Scope and Structure of Report

1.2 An outline planning application was submitted to Preston City Council (PCC) in October 2019 for "*access only for up to 105no. dwellings with associated works (all other matters reserved)"* (application ref – 06/2019/1244). A detailed Transport Assessment dated October 2019 was prepared by SCP to support the application.

1.3 Lancashire County Council (LCC) as Highway Authority reviewed the Transport Assessment and provided comments dated 13th January 2020. SCP prepared a Technical Note (dated 17th January 2020) and a Technical Note Addendum (dated 21st January 2020) which addressed the comments raised by LCC Highways and included further information on the following:

- Footway provision and pedestrian crossing facilities;
- Clarification on footpath/cycleway connections shown on site layout;
- Response to request for delay pending assessment by Jacobs of M55 Junction 1;
- Response to query over accessibility of the site; and
- Justification for the visibility splays and the ability to retain the hedge on the site frontage if necessary.

1.4 Further to email discussions with the Highway Officer at LCC, it was agreed that there was no highway objection to the application subject to a contribution to sustainable transport infrastructure. The planning application was refused planning permission on 7th February 2020 for non-highway related reasons.

1.5 This TA has been prepared to support the revised planning application which provides the same highway proposals. The report has been produced in accordance with the now archived Department for Transport's (DfT's) March 2007 "Guidance on Transport Assessment" document (now superseded) and the National Planning Practice Guidance (NPPG) "Transport Evidence in Plan Making" document.

1.6 This report seeks to demonstrate that the proposed development of this site can be accommodated without detriment to the operational capacity or safety of the local highway network, and that it can be readily accessed on foot, by bicycle and by local public transport services.

1.7 The structure of this TA is set out as follows:

- **Chapter 2** – describes in detail the site location, surrounding area, local highway network, existing traffic conditions and road safety record;
- **Chapter 3** – defines the development proposals including the proposed access;
- **Chapter 4** – summarises the national, regional and local transport policies and describes how the proposed development accords with these;
- **Chapter 5** – considers the location of the site with regard to the existing local sustainable transport infrastructure;
- **Chapter 6** – describes the future baseline traffic conditions on the local highway network in relation to background traffic growth;
- **Chapter 7** – estimates the number of vehicular trips generated by the development and distributes and assigns the vehicular trips on the local highway network;
- **Chapter 8** – presents an assessment of the impact of the development on the operational performance of the local highway network; and,
- **Chapter 9** – provides a conclusion to this TA derived from the analysis presented in the above chapters.

2.0 EXISTING SITE CONTEXT

The Site and Surrounding Area

2.1 The application site is located at the east of the A6 Garstang Road and west of the M6 in Bilsborrow. It is currently bounded by the A6 Garstang Road at the west, residential park homes and their access road to the south and east, and a premier inn at the north. Greenfields are also present at the north-east of the site.

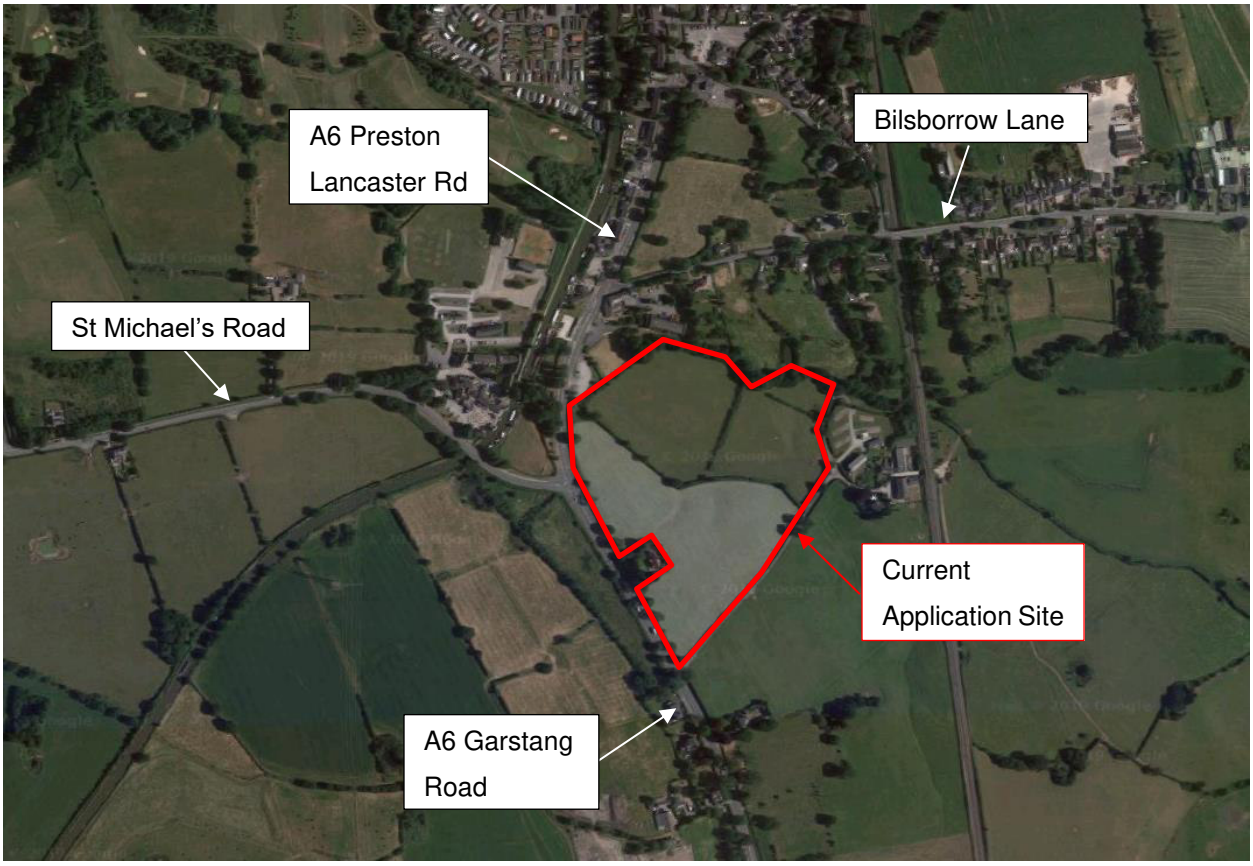
2.2 The application site is shown in relation to the wider highway network in **Figure 2.1** below:

Figure 2.1: Site Location in Relation to the Wider Highway Network

Source: Google Maps

2.3 The site location is shown in a more local context on **Figure 2.2** below.

Figure 2.2: Site Location in Relation to the Local Highway Network



Source: Google Maps

Local Highway Network

2.4 The A6 Garstang Road is a single carriageway road which runs on a generally north to south alignment. Locally, Garstang Road provides vehicle access between Catterall and Barton. The road provides access to a number of residential areas to both sides of the carriageway.

2.5 Continuing south from the site along the A6 Garstang Road through the village of Broughton provides access to the M6 motorway and Preston via the M55 junction 1. To the north of the site, Garstang Road continues to Garstang, Lancaster and beyond, serving numerous towns and villages and effectively running parallel to the M6 which lies to the east of Garstang Road.

2.6 In the vicinity of the site Garstang Road is a single carriageway road of approximately 11m width with 3.5m wide traffic lanes for ahead traffic and on-carriageway cycle lanes in each direction. The carriageway is lit and there is a right turn ghost island of 3m width which provides access to St Michael's Road to the west of the site and which prevents southbound vehicles waiting to turn right from blocking southbound through traffic.

2.7 Garstang Road is lit and is subject to a 30mph speed limit as it passes along the frontage of the site. There is a footway of at least 2m in width along the western side of the carriageway, segregated from vehicular traffic by wide grass verges. There is direct frontage access to the driveways of many of the residential properties which front onto Garstang Road.

2.8 A Public Right of Way (FP 13 / FP 1) runs along the eastern site boundary from the A6 Garstang Road to Bilsborrow Lane to the north, as shown in the site layout at **Appendix 1**.

Accident Records

2.9 The DfT document "Guidance on Transport Assessment" states that, "Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems".

2.10 The latest five years of personal-injury accident data for the local area has been examined for the period between 1st January 2014 and 31st December 2019 and is shown in **Figure 2.3**. A total of two accidents have occurred along the frontage of the site, including one slight and one serious accident.

Figure 2.3: Recorded Road Accident Locations around Site – 2015-2019 (inclusive)

Source: Crash Map website (https://www.crashmap.co.uk)

2.11 Two accidents within a five-year period is not considered to be a significant number of accidents and does not highlight any road safety issues. The adjacent road network can therefore be considered to operate safely.

Wider Consideration for the A6 Corridor

2.12 Lancashire County Council (LCC) has in the past sought to apply a restriction on the level of development on the A6 corridor to the north of the M55. This has been based upon constraints at Broughton Crossroads and the M55 Junction 1.

2.13 The opening of the Broughton bypass has overcome a significant bottleneck within this corridor, but the M55 Junction 1 is still seen to be a constraint. However, as part of the works to support the Enterprise Zone in Warton, and with some funding from the City Deal, a new junction on the M55 is programmed at Higher Bartle along with a new link road to the west of Preston. These works have been seen as providing significant relief to the M55 Junction 1, and the removal of the A6 corridor traffic constraint.

2.14 The new M55 Junction 2 has been granted planning permission and the detailed design work, along with land acquisition is underway. Latest predictions are that the road will be opened by 2022.

3.0 PROPOSED DEVELOPMENT

Overview

3.1 The planning application proposes a total of up to 105 dwellings.

3.2 The principal road network within the site is proposed to be an adopted public highway and will consist of a 5.5m carriageway with 2m footways. Some areas will be retained as private driveways that serve multiple dwellings. The proposed site layout is included at **Appendix 1**.

Proposed Access Arrangements

General

3.3 The residential development will be accessed from the A6 Garstang Road, via a new priority junction at the south of the existing A6 Garstang Road / St Michael's Road junction. The site access arrangement is shown on drawing SCP/190395/SK002 at **Appendix 2** and will include a 2.0m wide footway along the full length of the site frontage to Garstang Road.

3.4 The footway will tie-in to the existing footway at the northern boundary of the site and extend to the bus stop on the south side of Garstang Road, some 100m beyond the site boundary.

3.5 It should be noted that the nearest bus stops to the site access are to the north of the site, but nevertheless, in the event that a pedestrian access is provided from the southern end of the site on to Garstang Road, the southern bus stop may be a little closer for a some residents. Hence, there is no objection to the principle of providing facilities to the southern bus stops.

3.6 For the northbound bus stop, south of the site, it will be necessary for pedestrians to cross the A6 and a pedestrian refuge can be provided to assist with this road crossing.

3.7 The drawing attached at **Appendix 2** shows the above highway improvements in addition to the proposed site access arrangement.

Site Access Visibility

3.8 The proposed site access provides visibility splays of over 215m to the south, which is suitable for approaching speeds of 60mph or more, even though the access is located within a 30mph zone, and close to a 40mph zone. Therefore, there are no issues for visibility to the south.

3.9 To the north, a 70m visibility splay is shown on the planning application drawings as being achievable to the north, without requiring significant hedge removal on the site frontage. This is suitable for speeds of around 30mph within this 30mph speed limit area. Within the site frontage, it is possible to achieve 120m visibility, which would be suitable for speeds of up to 40mph, but this would require much of the hedge on the site frontage to be removed or relocated.

3.10 To add more certainty to the visibility requirement, a vehicle speed survey was undertaken on Friday 17th January 2020. The survey was undertaken using a hand-held radar speed gun and the survey was carried out in accordance with TA22/81 of Design Manual for Roads and Bridges.

3.11 The instantaneous speed of cars was recorded at a point 100m north of the proposed site access in dry conditions. Vehicles turning into St Michaels Road, or those affected by turning vehicles were ignored.

3.12 The Advice Note requires that

- the survey is carried out inconspicuously, without affecting the speed of vehicles
- surveys are undertaken between the hours of 10:00-12:00 and 14:00-16:00
- cars are only recorded in free flow conditions
- a minimum of 200 vehicles should be recorded

3.13 The results of the survey are attached at **Appendix 3**. It can be seen from the results that the 85th percentile wet weather design speed is 30.23mph.

3.14 Using the formula set out in Manual for Streets (at paragraph 7.5.3) for determining stopping sight distance, the required visibility for the proposed junction would be 43m, adjusted for car bonnet length.

3.15 Manual for Streets is generally applicable to any street in a built-up area, where the speed limit is 30mph. The formula for calculating stopping sight distance is also applicable for speeds of up to 37mph.

3.16 Whilst the site frontage is not in a clearly defined built-up area at the present time, with the development in place the characteristics of the local environment would change to be more urban, which supports the use of Manual for Streets. However, using guidance other than Manual for Streets can provide an alternative method of deriving the stopping sight distance. Manual for Streets refers (at para 7.5.6) to the previous guidance set out in Design Bulletin 32. Design Bulletin 32 provided a table which set out stopping sight distances that catered for slow driver reaction times and snow-covered roads. If these more conservative parameters were used then the visibility requirement was 70m where vehicle speeds were known to be 30mph, or 90m in a 30mph zone where speeds are not known. The extract from Design Bulletin 32 is included as **Appendix 4**.

3.17 Overall, it can be concluded that with measured wet weather design speeds of 30mph, the proposed visibility of 70m can be fully supported from a highway and traffic point of view.

Footpath and Cycleway Provision

3.18 The illustrative site plan that accompanies the planning application shows indicative footpath and cycleway connections through the site, separate from the main vehicular access. Indeed, the ultimate layout may include additional connections, towards the southern end of the site, for example.

3.19 There is an indicative footpath/cycleway shown at the northern end of the site that would emerge onto Garstang Road. This would emerge on to the footway that is to be provided on the site frontage and connect to the existing footway network within Bilsborrow. The indicative location is also shown in an area where there are in-carriageway cycle lanes on the A6. If appropriate, a further crossing point for cyclists could be provided in this location, but the exact location will need to be determined as part of the reserved matters application, when the site layout is confirmed.

3.20 There is an arrow on the illustrative layout indicating a potential pedestrian/cycle connection on to FP13 in the north east corner of the site. The intention is only for a pedestrian link at this point since FP13 is not suitable for cycle use.

Highway Improvements

3.21 As shown on the drawing attached at **Appendix 2,** the development will provide the following improvements for sustainable modes of travel:

- Provision of a footway along the site frontage and a link to the southern bus stop where no footway provision currently exists

- Provision of 3 refuges in the A6; 1 to the south of the site access junction, one to the north of the site access junction and one to be determined in connection with the footpath/cycle link at the northern edge of the site.

3.22 In addition to these specified measures, it is noted that LCC has identified a number of measures to improve the A6 corridor in terms of traffic management, along with cycle and pedestrian infrastructure. Some of these measures include traffic islands similar to the 3 proposed around this site. Additional corridor improvements may be difficult to justify as part of this development although it is noted that there are in-carriageway cycle lanes to the south of the site and to the north of the site. If the Council is satisfied that an extension of these in-carriageway cycle lanes can be achieved along the site frontage then this can be incorporated into the site access works. At the present time, it is understood that the cycle lanes were deliberately stopped by the Council on the approach to the St Michaels Road junction where the ghost island road markings narrow the carriageway. This is similar to other ghost island and cycle lane locations along the A6 corridor.

Servicing

3.23 The internal road network will be designed to ensure the movements of service and refuse vehicles can be accommodated without allowing their requirements to dominate the layout, whilst at the same time ensuring reversing distances are kept to a minimum.

Parking

3.24 Preston parking standards can be found at Appendix B of the Preston Local Plan (2012-2026) adopted in July 2015. The standards state that one-bedroom dwelling should provide one car parking space, 2/3 bedrooms dwelling houses should provide two car parking spaces while 4+ bedrooms dwelling houses should provide three car parking spaces.

3.25 According to the Preston parking standards, cycle parking should be provided as one allocated and one communal bicycle space for one-bedroom dwelling, two allocated and one communal bicycle spaces for 2/3-bedrooms dwellings and four allocated and two communal bicycle spaces for 4+ bedrooms dwellings.

3.26 The level of disabled car parking provision will be negotiated on a case-by-case basis.

4.0 TRANSPORT POLICY

National Policy – National Planning Policy Framework (NPPF)

4.1 NPPF is published by the Ministry for Communities and Local Government, along with thematic Planning Practice Guidance (PPG) to set the framework under which local transport, parking and accessibility plans and policies are set. The NPPF was revised in July 2018 and February 2019.

4.2 Paragraph 108 of the NPPF states that when promoting developments "*it should be ensured that:*

- *appropriate opportunities to promote sustainable transport modes are taken up, given the type of development and its location;*
- *safe and suitable access to the site can be achieved for all users; and*
- *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".*

4.3 Paragraph 109 goes on to say 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."*

4.4 In the same chapter (paragraph 110) it is advocated that "*within this context, planning applications for development should: -*

- *give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport,*
- *address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
- *create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
- *allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
- *be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations".*

4.5 In reference to supporting documentation with planning applications, paragraph 111 of the NPPF 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". The trigger levels for the above are set locally but must be in line with the above.

Central Lancashire Core Strategy (July 2012)

4.6 The Core Strategy was prepared jointly by Preston City Council, Chorley Council and South Ribble Council and was adopted in July 2012. The Core Strategy coordinates development in the area covered by the aforementioned three councils. Central Lancashire Adopted Core Strategy sets a Vision for Central Lancashire in 2026 as follows (p.33):

'By 2026 Central Lancashire will be recognised as a highly sought after place to live and work in the North West. It offers excellent quality of life to all its residents. It will play a leading role in Lancashire's world class economy and have sustainable economic growth based on the area's unique assets. Its central location at the hub of the transport network, its green spaces and access to open countryside make it a place with 'room to breathe"

Central Lancashire's wider role will be as a driver of sustainable economic growth for the region, marrying opportunity and need and providing a transport hub to improve connections for the region'.

There will be improved transport connections within Central Lancashire and to wider regional, national and international destinations. The character of rural villages will have been maintained, with access to services to sustain the local communities and overcome rural poverty.'

4.7 Central Lancashire Adopted Core Strategy sets the locally distinctive Strategic Objectives, designed to set out the key issues to be addressed in each policy area. The following Strategic Objectives are relevant to the proposed residential development:

- SO 3 - To reduce the need to travel, manage car use, promote more sustainable modes of transport and improve the road network to the north and south of Preston.
- SO 4 - To enable easier journeys into and out of Preston City Centre and east/west trips across South Ribble, improve movement around Chorley, as well as safeguard rural accessibility, especially for mobility impaired people.

Lancashire County Council (LCC) Local Transport Plan (2011-2021): A Strategy for Lancashire

4.8 Lancashire Local Transport Plan 3 (LTP3) was adopted in May 2011 and provides the statutory framework for the policies and plans that will guide the future transport provision in Lancashire.

4.9 LTP3 contains seven transport goals which are summarised below:

- To help to secure a strong economic future by making transport and travel into and between our major economic centres more effective and efficient and by improving links to neighbouring major economic areas and beyond;
- To provide all sections of the community with safe and convenient access to the services, jobs, health, leisure and educational opportunities that they need;
- To improve the accessibility, availability and affordability of transport as a contribution to the development of strong and cohesive communities;
- To create more attractive neighbourhoods by reducing the impact of transport on our quality of life and by improving our public realm;
- To reduce the carbon impact of Lancashire's transport requirements, whilst delivering sustainable value for money transport options to those who need them;
- To make walking and cycling more safe, convenient and attractive, particularly in the more disadvantaged areas of Lancashire, bringing improvements in the health of Lancashire's residents;
- In all that we do, to provide value for money by prioritising the maintenance and improvement of Lancashire's existing transport infrastructure where it can help to deliver our transport goals.

4.10 From the aforementioned transport goals LCC has drawn up seven transport priorities which will deliver tangible improvements over the life of the strategy, including:

- Improving access into areas of economic growth and regeneration.
- Providing better access to education and employment.
- Improving people's quality of life and wellbeing.
- Improving safety of our streets for our most vulnerable residents.
- Providing safe, reliable, convenient and affordable transport alternatives to the car.

Summary

4.11 Given the above, it is considered that the proposals are compliant with relevant national and local transport policies.

5.0 ACCESSIBILITY

General

5.1 Access between the site and local areas by non-motorised modes has been assessed by comparison with the following typical threshold distances:

Table 5.1: Typical Threshold Distances, (Not Upper Limits)

Threshold Distance	Significance
800m	Motorised modes are rarely used for trips of around 800m or less
2km	Walking offers the greatest potential to replace short car trips particularly those under 2km.
5km	Cycling also has potential to substitute for short car trips, particularly those under 5km and form part of a longer journey by public transport

Source: MfS para 4.4 and PPS13

Pedestrian Accessibility

5.2 As stated in **Table 5.1**, walking is the most important mode of travel at local level and offers the greatest potential to replace short car trips, particularly those under 2km.

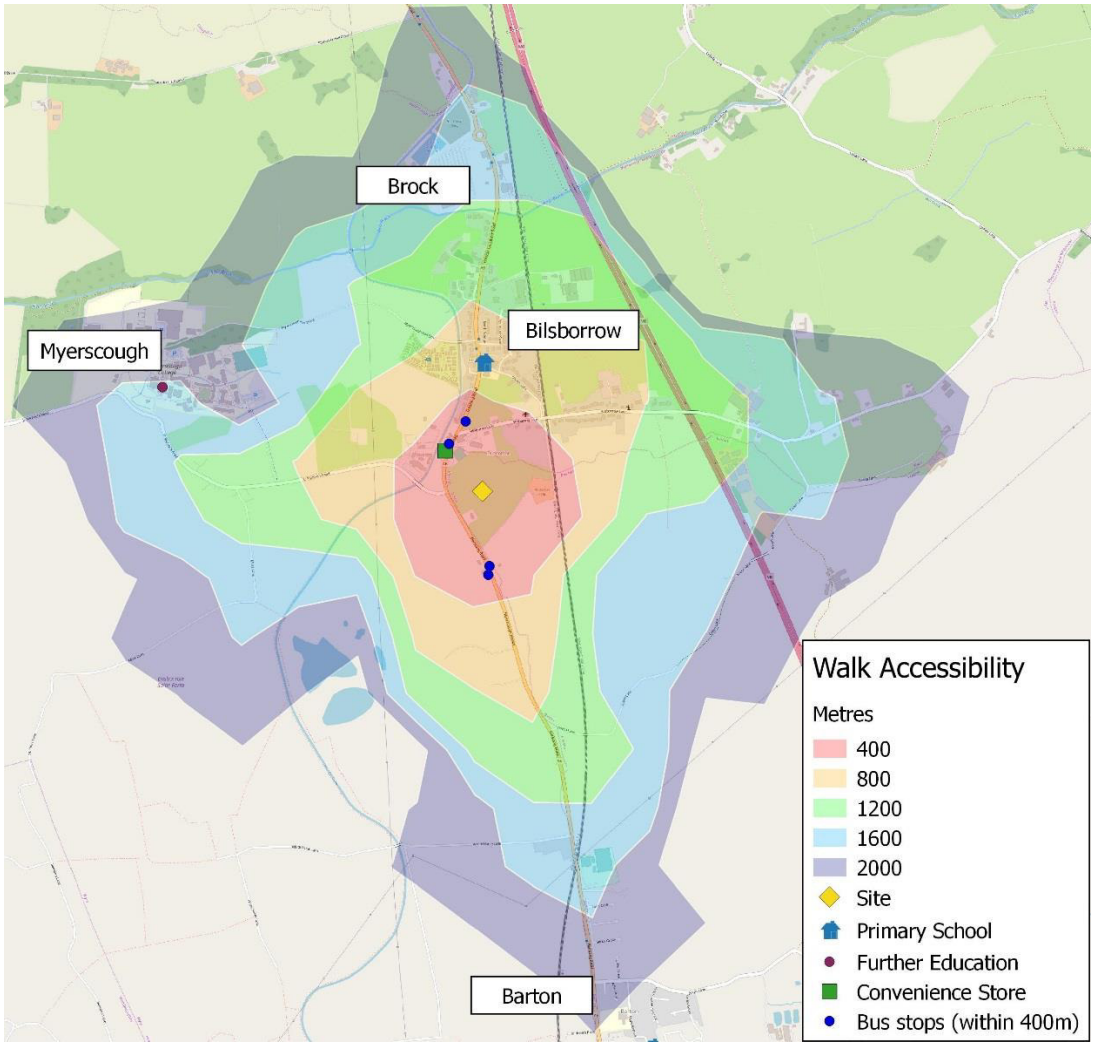
5.3 Pedestrian accesses will be created off the A6 Garstang Road and to the east of the site, linking the development with the existing Public Right of Way (FP 13 / FP 1). A new priority junction will also be created off the A6 Garstang Road, at the south of the existing A6 Garstang Road / St Michael's Road junction, with 2m wide footways on each side of the road.

5.4 A footpath and cycle path will be located to the north of the site along with a public open space to link the two proposed pedestrian and cycle accesses, as show in the site layout at **Appendix 1**.

5.5 Generally, the topography of the area is conducive to walking.

5.6 TRACC software has been used to assess the accessibility of the development on foot for a 2km walk distance from the site, as shown in **Figure 5.1**. The plan shows the areas reachable on foot from the centre of the site for a journey up to a maximum of 2km.

Figure 5.1: 2km Walk Accessibility



5.7 In terms of the areas within the 2km walk distance threshold, the site is located within walking distance of neighbourhoods such as Bilsborrow, Myerscough, Brock and Barton.

5.8 A number of local amenities are within a 2km walk of the proposed development (up to 10 minutes' walk) as shown in **Table 5.1** below:

Table 5.1: Accessibility to Local Facilities from the Development Site

Service	Detail	Distance (straight line)
Convenience Store	Bilsborrow Post Office and Village Store	450m
Post Office	Bilsborrow Post Office and Village Store	450m
Primary School	Bilsborrow John Cross Church of England Primary School	630m
Further Education	Myerscough College	1380m
Primary School	Barton St Lawrence Church of England Primary School	1840m

5.9 As detailed previously, the proposed development will provide the following:

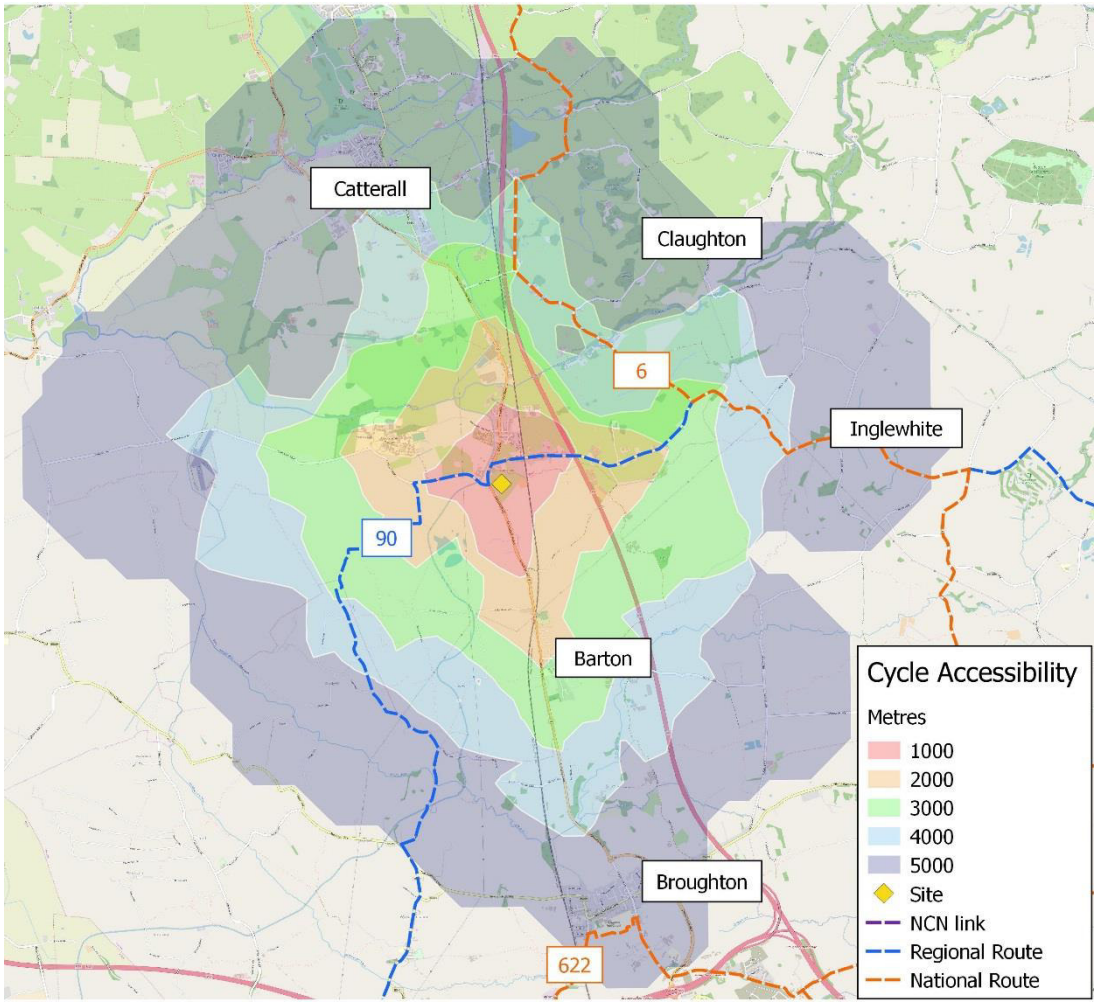
- a footway along the site frontage and a link to the southern bus stop where no footway provision currently exists.
- Provision of 3 refuges in the A6; one to the south of the site access junction, one to the north of the site access junction and one to be determined in connection with the footpath/cycle link at the northern edge of the site.

Cycling

5.10 As stated in **Table 5.1**, transport policy identifies that cycling represents a realistic and healthy alternative to the private car when making journeys up to 5km as a whole journey or as part of a longer journey by public transport.

5.11 TRACC software has been used to assess the accessibility of the development by bike for a 5km distance from the site, as shown in **Figure 5.2**. The plan shows the areas that may be reached within 1000m coloured bands from the site up to the maximum 5km journey distance.

Figure 5.2: 5km Cycle Accessibility



5.12 Catterall, Barton, Broughton, Inglewhite and Claughton are within a 5km cycle distance from the site. The topography of the area is generally flat and conducive to cycling.

5.13 Cycle accesses will be created off the A6 Garstang Road and to the east of the site, linking the development with the existing Public Right of Way (FP 13 / FP 1). A new priority junction will also be created off the A6 Garstang Road, at the south of the existing A6 Garstang Road / St Michael's Road junction, as show in the site layout at **Appendix 1**.

5.14 A footpath and cycle path will be located to the north of the site along with a public open space to link the two proposed pedestrian and cycle accesses.

5.15 Regional Cycle Network Route 90 is located approximately 70m north of the proposed vehicular access and connects the north of Preston with Blackpool, the Ribble Valley and the Forest of Bowland, Arnside and Silverdale AONB.

5.16 National Cycle Network Route 6 is located approximately 2.75km east of the site and connects to Regional Cycle Network Route 90. National Route 6 links Lancashire to Manchester and Windermere as well as destinations further south, such as Milton Keynes.

5.17 National Cycle Network Route 622 is located approximately 4.8km south of the site on Garstang Road. It is a 21-mile cycle route encircling Preston and is known locally as the 'Preston Guild Wheel'. Route 622 links with numerous other cycle routes such as National Cycle Network Routes 6, 55 and 62.

Public Transport

5.18 In terms of bus services, the Chartered Institute of Highways & Transportation's (CIHT's) "Guidelines for Planning for Public Transport in Developments" document identifies, at section 6.20, that "Bus stops are located to minimise passengers' walking distance to their final destination. The maximum walking distance to a bus stop should not exceed 400m and preferably be no more than 300m."

5.19 Four bus stops are located within 400m of the proposed vehicular access on the A6 Garstang Road. The bus services available are listed in **Table 5.2** below.

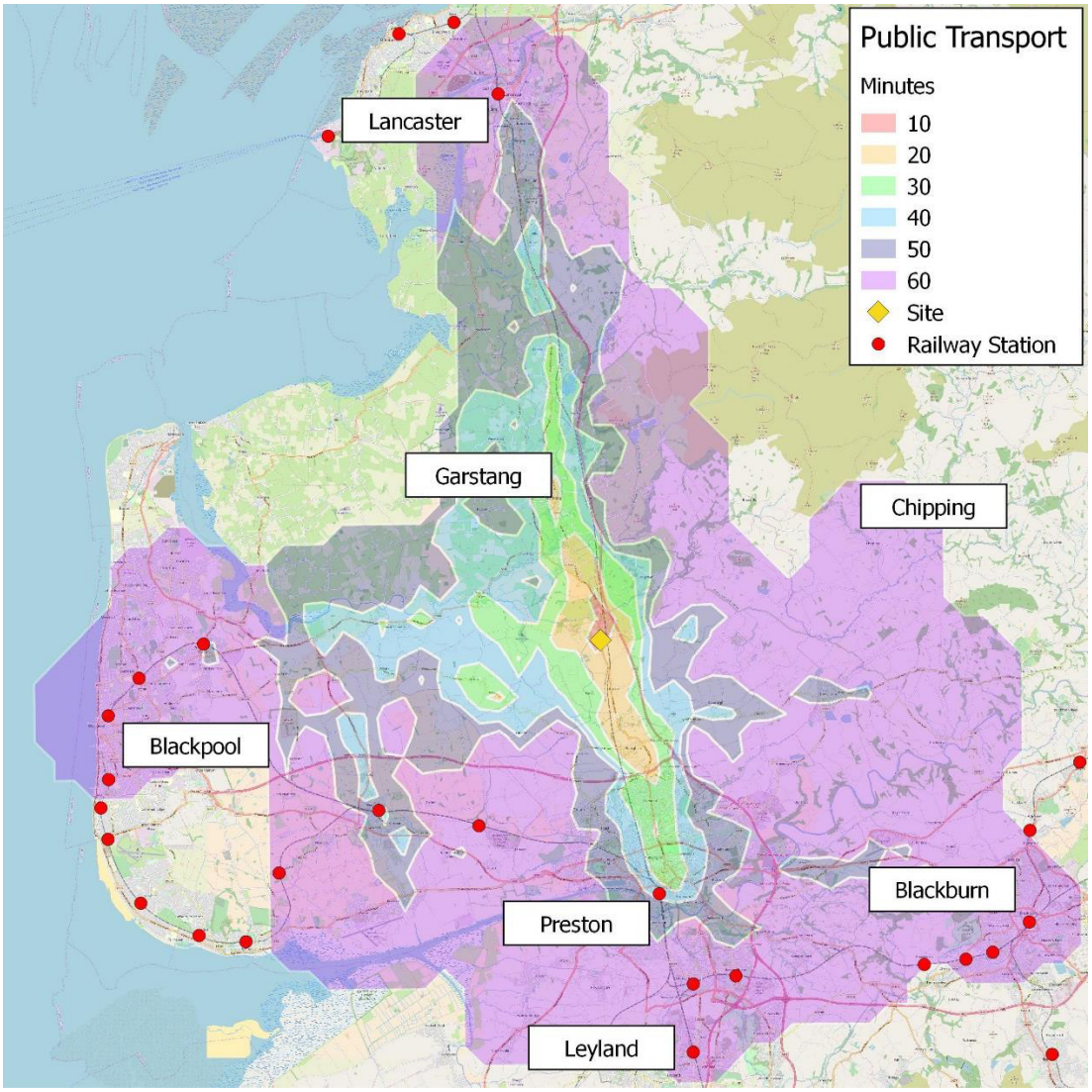
Table 5.2: Local Bus Services

Number	Route Description	Maximum Frequency (minutes)		
		Monday to Friday	Saturday	Sunday
40 / 41	Preston - Lancaster - Morecambe	30	30	60
940 / 941 / 942	Preston - Lancaster - Morecambe	10 services	-	-
401 / 437A / 437B	Hall Lane by College	26	-	-
433	School Bus – Myerscough College			
560	School Bus – Garstang High School			
651	School Bus – Our Lady's Catholic High School			

5.20 A number of bus services provide regular service to destinations such as Morecambe, Lancaster and Preston as well as smaller villages such as Catterall and Garstang.

5.21 TRACC software has been used to assess the accessibility of the development within a 60-minute public transport (bus and rail) commute, as shown in **Figure 5.3**. The map shows the areas that may be reached within 10-minute coloured bands from the site for the maximum hour-long journey, including the walk to the bus stops / railway station. **Figure 5.3** demonstrates that key areas of Lancaster, Blackpool, Blackburn, Preston, and Garstang, amongst others, are within an acceptable 60-minute public transport commute.

Figure 5.3: 60-Minute Public Transport Accessibility



5.22 As detailed previously, the proposed development will provide bus stop improvements to provide shelters, seating, lighting and timetable information for the existing bus stops to the south of the site.

Accessibility Summary

5.23 Having regard to the above, it is considered that the site already possesses adequate levels of accessibility by the main non-car modes of transport. Notwithstanding this, the combination of existing facilities and the proposed accessibility improvements that can be provided as part of this development will enable the development to be supported from a transport point of view.

5.24 In addition, measures will be incorporated into the Travel Plan to include a car sharing database, a commitment to car charging points and other measures set out in the Framework Travel Plan which currently supports the application. LCC mention the provision of travel passes and cycle purchase discounts as part of the full Travel Plan and this is fully supported by our client.

6.0 HIGHWAYS IMPACT

Traffic Growth

6.1 It is proposed that detailed capacity assessments in the TA will be undertaken in the year of the planning application (2020). DfT's "Guidance on Transport Assessment" states "for the local transport network, a development should be assessed with regard to the LDF, and for a period of no less than five years after the date of registration of a planning application". The future year assessment has been taken to be 2025.

6.2 In order to quantify the level of background traffic growth that could occur on the local network, National Traffic Model (NTM) growth factors, modified by TEMPRO v7.2 local growth factors, have been used for Preston 002 (E02005254).

6.3 The growth factors are summarised in **Table 6.1** below.

Table 6.1: TEMPro Growth Factors

Period	2019-2020	2020-2025
Weekday AM Peak	1.0121	1.0674
Weekday PM Peak	1.0117	1.0655

6.4 The 2020 and 2025 future baseline traffic flows are shown in the Traffic Flow Figures within **Appendix 5**.

Committed Developments

6.5 A number of planning applications have been lodged for development on sites off the A6 Garstang Road in Bilsborrow. However, the above TEMPro factors should already take into account the amount of development in the region, therefore to avoid double-counting the future development schemes, only the TEMPro factors have been used.

7.0 TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Peak Hours

7.1 The peak hours were calculated based on the highest base flow from the traffic surveys. The highest traffic flows shown for the Base 2019 were 07:30 to 08:30 for the Weekday AM peak and 16:00 to 17:00 for the Weekday PM peak.

Proposed Residential Development Trip Generation

7.2 To estimate the trip generating potential of the residential use of the site, the TRICS 7.6.2 Database has been interrogated for surveys of residential developments similar to that proposed. The selection criteria for the TRICS-based trip rates is as follows:

- Land Use Residential / Houses Privately Owned;
- London sites, Scotland, Northern Ireland and Ireland excluded; and
- Developments between 75 and 150 dwellings.

7.3 **Table 7.1** below provides the peak hour trip rates for the proposed residential use for the weekday AM and PM peak periods. The full TRICS outputs are included in **Appendix 6**.

Table 7.1: Estimated Weekday AM and PM Peak Hour Trip Generation (Trip Rate per Dwelling)

Mode	Weekday AM Peak (0800 – 0900)		Weekday PM Peak (1600 – 1700)	
	Arrivals	Departures	Arrivals	Departures
Trip Rate	0.137	0.352	0.264	0.165
Trip Generation	14	37	28	17

7.4 The development is predicted to generate 51 two-way vehicle trips in the Weekday AM peak and 45 two-way vehicle trips in the Weekday PM peak. This equates to an average of approximately one vehicle trip every minute on the surrounding highway network in the peak hours.

Trip Distribution and Assignment

7.5 We have assumed that the development traffic will be distributed on the local road network according to the current split of traffic observed at the junction of the A6 Garstang Road / St Michael's Road, as shown in the Traffic Flow Figures at **Appendix 5**.

8.0 ANTICIPATED HIGHWAY IMPACTS

Assessment Methodology

8.1 An assessment of the proposed site access priority junction with the A6 Garstang Road and St Michael's Road, as shown in Appendix 1, has been undertaken using Junctions 9 (PICADY) software.

8.2 With the Junctions 9 models the results generated provide a Ratio of Flow to capacity (RFC) along with an estimate of the likely traffic queues. RFC values between 0.00 and 0.85 are generally accepted as representing stable and acceptable operating conditions. Values between 0.85 and 1 represent variable operation (i.e. possible queues building up at the junction during the period under consideration and increases in vehicular delay moving through the junction). RFC values in excess of 1 represent overloaded conditions (i.e. congestion).

A6 Garstang Road / Site Access / St Michael's Road

8.3 The PICADY results are presented in **Appendix 7** with the results summarised in **Table 8.1** below.

Table 8.1: PICADY Outputs for Site Access / A6 Garstang Road

Arm	Weekday AM Peak			Weekday PM Peak		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
Base 2025 + Proposed Development						
Site Access – Turn Left	0.0	6.99	0.04	0.0	7.00	0.02
Site Access – Turn Right	0.1	12.45	0.06	0.0	14.80	0.04
A6 Garstang Rd (North) – Turn Right	0.3	10.05	0.24	0.3	9.87	0.25
St Michael's Rd – Turn Left	0.2	8.46	0.15	0.9	17.04	0.48
St Michael's Rd – Turn Right	0.5	18.57	0.32	2.0	39.67	0.68
A6 Garstang Rd (South) – Turn Right	0.0	6.91	0.02	0.0	7.71	0.03

8.4 The results in **Table 8.1** above show that the site access / A6 Garstang Road / St Michael's Road junction will operate well within its practical capacity in the future assessment year of 2025 with the proposed development in place.

Cumulative Traffic Impact at M55 Jnc 1

8.5 As detailed previously, there are proposals in the pipeline to improve the highway infrastructure as part of the North West Preston housing proposals. The approved works include a new junction on the M55 (Junction 2), the Preston North West Distributor and other works to M55 Junction 1 and an east west link road. The combination of these works will provide significant additional highway capacity, which has been demonstrated by a traffic model prepared on behalf of the Council by Jacobs. The Consultation Response acknowledges that Jacobs were to add the application site to their model in December, although this has been delayed until January 2020.

8.6 Whilst it is appreciated that LCC wish to review the cumulative impacts of various developments at the M55 Jnc1 intersection, the impact of this development is not significant. For example, the heaviest traffic flow associated with the development is 14 vehicles southbound along the A6 in the AM peak hour. Not all of this traffic will reach the M55 intersection, which is some 4 miles to the south, with some traffic travelling to Broughton, Barton, Whittingham, Goosnargh, Woodplumpton etc. However, even if all of the traffic travelled to the M55, the committed southbound traffic flows on the Broughton By-pass are projected to be over 1,800 vehicles in the AM peak hour by 2024 and the development related traffic would represent less than a 1% increase in traffic. This is outside of the daily fluctuations in traffic and would not be noticeable.

8.7 Should the Jacobs model subsequently show the need for a further improvement to M55 Jnc 1 then our client would be happy to consider a contribution to an improvement scheme which reflects the scale and impact of the development related traffic.

9.0 SUMMARY AND CONCLUSIONS

Summary

9.1 This Transport Assessment has been prepared by SCP on behalf of Seddon Homes and James & Christine Lowcock to produce a Transport Assessment (TA) to support an outline planning application for up to 105 dwellings off Garstang Road in Bilsborrow.

9.2 The application site is located at the east of the A6 Garstang Road and west of the M6 in Bilsborrow. It is currently bounded by the A6 Garstang Road at the west, residential park homes and their access road to the south and east, and a premier inn at the north. Greenfields are also present at the north-east of the site.

9.3 The principal road network within the site is proposed to be an adopted public highway and will consist of a 5.5m carriageway with 2m footways. Some areas will be retained as private driveways that serve multiple dwellings.

9.4 The residential development will be accessed from the A6 Garstang Road, via a new priority junction at the south of the existing A6 Garstang Road / St Michael's Road junction.

9.5 The proposed development will provide cycleway connections through the site, separate from the main vehicular access. Indeed, the ultimate layout may include additional connections, towards the southern end of the site, for example. There is an indicative footpath/cycleway shown at the northern end of the site that would emerge onto Garstang Road. This would emerge on to the footway that is to be provided on the site frontage and connect to the existing footway network within Bilsborrow. The indicative location is also shown in an area where there are in-carriageway cycle lanes on the A6. If appropriate, a further crossing point for cyclists could be provided in this location, but the exact location will need to be determined as part of the reserved matters application, when the site layout is confirmed. There is potential for a pedestrian/cycle connection on to FP13 in the north east corner of the site. The intention is only for a pedestrian link at this point since FP13 is not suitable for cycle use.

9.6 The proposed development will provide the following improvements for sustainable modes of travel:

- Provision of a footway along the site frontage and a link to the southern bus stop where no footway provision currently exists

- Provision of 3 refuges in the A6; 1 to the south of the site access junction, one to the north of the site access junction and one to be determined in connection with the footpath/cycle link at the northern edge of the site.

- In addition to these specified measures, it is noted that LCC has identified a number of measures to improve the A6 corridor in terms of traffic management, along with cycle and pedestrian infrastructure. Some of these measures include traffic islands similar to the 3 proposed around this site. Additional corridor improvements may be difficult to justify as part of this development although it is noted that there are in-carriageway cycle lanes to the south of the site and to the north of the site. If the Council is satisfied that an extension of these in-carriageway cycle lanes can be achieved along the site frontage then this can be incorporated into the site access works. At the present time, it is understood that the cycle lanes were deliberately stopped by the Council on the approach to the St Michaels Road junction where the ghost island road markings narrow the carriageway. This is similar to other ghost island and cycle lane locations along the A6 corridor.

9.7 The personal injury accident data for the most recently available five-year period has been reviewed and does not represent a material concern in the context of the proposed development.

9.8 The opening of the Broughton bypass has overcome a significant bottleneck on the A6 corridor, however the M55 Junction 1 is still seen to be a constraint. A new junction on the M55 (Junction 2) at Higher Bartle has been granted planning permission and the detailed design work and land acquisition are underway. A new link road is also programmed to the west of Preston. These works have been seen as providing significant relief to the M55 Junction 1, and the removal of the A6 corridor traffic constraint.

9.9 The development is compliant with local, regional and national policy as it will promote sustainable modes of travel and reduce the number of car trips to local facilities. The site benefits from good levels of accessibility by sustainable transport modes, such as walking, cycling and public transport.

9.10 The development is predicted to generate 51 two-way vehicle trips in the Weekday AM peak and 45 two-way vehicle trips in the Weekday PM peak. This equates to an average of approximately one vehicle trip every minute on the surrounding highway network in the peak hours.

9.11 The capacity assessment for the site access / A6 Garstang Road / St Michael's Road shows that the junction will operate well within its practical capacity in the future assessment year of 2025 with the proposed development in place.

Conclusion

9.12 The results of this appraisal show that there is no highways or transportation barrier to residential development coming forward, off the A6 Garstang Road in Bilsborrow.

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APPENDIX 1

BILSBORROW LANE
LANCASTER CANAL
PUB
HOTEL
BOWLING GREEN
PUB / HOTEL
ST MICHAEL'S ROAD
BACCHUS FOLD RESIDENTIAL PARK HOMES
ANDERTON FOLD FARM
GARSTANG ROAD
TRAINLINE
POWERLINES

- Site boundary 6.88ha
- Residential development 3.07ha
- Public open space
- Woodland screening
- Proposed trees and hedgerows
- Single storey dwellings / 15m buffer from site boundary
- Proposed play feature
- Easement
- Proposed vehicle access
- Proposed roads
- Proposed foot and cycleway access
- Proposed foot and cycleway
- Existing settlement
- Existing vegetation
- Existing Public Right of Way
- Land with approved planning permission for two dwellings - ref:14/00874/FUL

Scale: 1:2500 @ A3

0 50 100m

N

K:\8900\8992\LANDS\Plans\8992-L-03 Illustrative Masterplan C.indd

Seddon Homes Ltd
Garstang Road
Bilsborrow

ILLUSTRATIVE MASTERPLAN

1:2500@A3
23/10/2019 JPF / MGH
8992-L-03 C

masterplanning
environmental assessment
landscape design
urban design
ecology
architecture
arboriculture

FPCR Environment and Design Ltd
Lockington Hall
Lockington
Derby DE74 2RH

t: 01509 672772
f: 01509 674565
e: mail@fpcr.co.uk
w: www.fpcr.co.uk

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APPENDIX 2

NOTES

REVISIONS

REV	DESCRIPTION	DATE	BY
-	-	-	-

S|C|P
Transportation Planning : Infrastructure Design
Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400,
www.scptransport.co.uk, Email Info@scptransport.co.uk

Client Name:
SEDDON HOMES

Project Title:
LAND AT GARSTANG ROAD,
BILSBORROW

Drawing Title:
HIGHWAY PROPOSALS

Date: 17.01.2020	Drawn By: BH
Scale: 1:1000 @ A2	Checked: DR
Status: PLANNING	Approved/ Unapproved: UNAPPROVED
Drawing No. SCP/190395/SK002	Rev. -

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APPENDIX 3

APPENDIX 1

Calculation of 85th%ile Speeds

Location: Garstang Road, Bilsborrow - Southbound

Date: 17/01/2020

Weather Dry

Speed (mph) x	Frequency f	f*x
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	1	19
20	0	0
21	0	0
22	1	22
23	0	0
24	1	24
25	2	50
26	12	312
27	17	459
28	25	700
29	43	1247
30	36	1080
31	24	744
32	12	384
33	8	264
34	6	204
35	4	140
36	1	36
37	2	74
38	1	38
39	2	78
40	0	0
41	1	41
42	1	42
43	0	0
44	0	0
45	0	0
46	0	0
47	0	0
48	0	0
49	0	0
50	0	0
51	0	0
52	0	0
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54	0	0
55	0	0
56	0	0
57	0	0
58	0	0
59	0	0
60	0	0
61	0	0
62	0	0
63	0	0
64	0	0
65	0	0
66	0	0
67	0	0
68	0	0
69	0	0
70	0	0
71	0	0
72	0	0
Total	200	5958

Table 1

Speed (mph) Band	Frequency f	Class Mark x	x - mean e	e*f
6.5-7.4	0	7	519.38	0.00
7.5-8.4	0	8	474.80	0.00
8.5-9.4	0	9	432.22	0.00
9.5-10.4	0	10	391.64	0.00
10.5-11.4	0	11	353.06	0.00
11.5-12.4	0	12	316.48	0.00
12.5-13.4	0	13	281.90	0.00
13.5-14.4	0	14	249.32	0.00
14.5-15.4	0	15	218.74	0.00
15.5-16.4	0	16	190.16	0.00
16.5-17.4	0	17	163.58	0.00
17.5-18.4	0	18	139.00	0.00
18.5-19.4	1	19	116.42	116.42
19.5-20.4	0	20	95.84	0.00
20.5-21.4	0	21	77.26	0.00
21.5-22.4	1	22	60.68	60.68
22.5-23.4	0	23	46.10	0.00
23.5-24.4	1	24	33.52	33.52
24.5-25.4	2	25	22.94	45.89
25.5-26.4	12	26	14.36	172.37
26.5-27.4	17	27	7.78	132.33
27.5-28.4	25	28	3.20	80.10
28.5-29.4	43	29	0.62	26.84
29.5-30.4	36	30	0.04	1.59
30.5-31.4	24	31	1.46	35.14
31.5-32.4	12	32	4.88	58.61
32.5-33.4	8	33	10.30	82.43
33.5-34.4	6	34	17.72	106.34
34.5-35.4	4	35	27.14	108.58
35.5-36.4	1	36	38.56	38.56
36.5-37.4	2	37	51.98	103.97
37.5-38.4	1	38	67.40	67.40
38.5-39.4	2	39	84.82	169.65
39.5-40.4	0	40	104.24	0.00
40.5-41.4	1	41	125.66	125.66
41.5-42.4	1	42	149.08	149.08
42.5-43.4	0	43	174.50	0.00
43.5-44.4	0	44	201.92	0.00
44.5-45.4	0	45	231.34	0.00
45.5-46.4	0	46	262.76	0.00
46.5-47.4	0	47	296.18	0.00
47.5-48.4	0	48	331.60	0.00
48.5-49.4	0	49	369.02	0.00
49.5-50.4	0	50	408.44	0.00
50.5-51.4	0	51	449.86	0.00
51.5-52.4	0	52	493.28	0.00
52.5-53.4	0	53	538.70	0.00
53.5-54.4	0	54	586.12	0.00
54.5-55.4	0	55	635.54	0.00
55.5-56.4	0	56	686.96	0.00
56.5-57.4	0	57	740.38	0.00
57.5-58.4	0	58	795.80	0.00
58.5-59.4	0	59	853.22	0.00
59.5-60.4	0	60	912.64	0.00
60.5-61.4	0	61	974.06	0.00
61.5-62.4	0	62	1037.48	0.00
62.5-63.4	0	63	1102.90	0.00
63.5-64.4	0	64	1170.32	0.00
64.5-65.4	0	65	1239.74	0.00
65.5-66.4	0	66	1311.16	0.00
66.5-67.4	0	67	1384.58	0.00
67.5-68.4	0	68	1460.00	0.00
68.5-69.4	0	69	1537.42	0.00
69.5-70.4	0	70	1616.84	0.00
70.5-71.4	0	71	1698.26	0.00
71.5-72.4	0	72	1781.68	0.00
Total	200			1715.18

Table 2

Therefore:

Mean Speed = sum (f*x)/x 29.79 mph

SD = SQRT(sum(e*f))/sum(f) 2.936 mph

85th%ile = Mean Speed + Standard Deviation

85th%ile Wet Condition **30.23 mph**

or

48.63 kph

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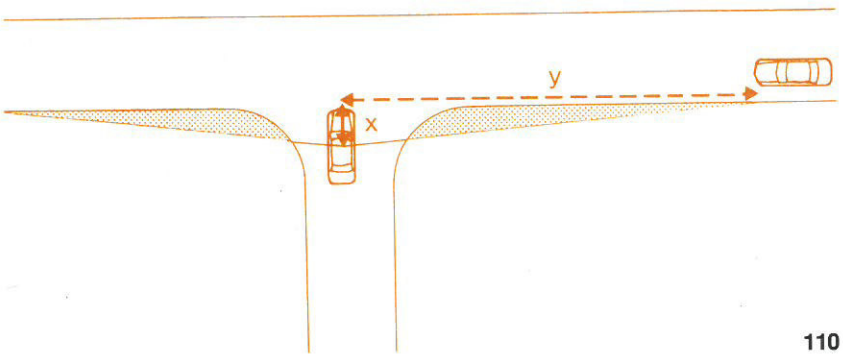
APPENDIX 4

to the junction point; thus allowing two or more vehicles to exit in a stream. The extent of this increase will depend largely upon the number of vehicles likely to be waiting to emerge from the junction and the extent to which delay has to be avoided. In most cases a distance of 4.5m should be sufficient for traffic volumes on the non-priority road of 300vph or less.



110

3.64 The following advice on visibility is set out in Planning Policy Guidance PPG 13: [52]

(a) the Y dimension (see Figure 110) will depend on the speed of traffic on the priority road: the appropriate distance can be read off Table A or Table B. If the highest traffic speed on the road in wet weather (excluding the fastest 15% of vehicles) is known* then this speed - or the next highest speed which appears on the table - should be used as the priority road speed in Table A to arrive at the appropriate Y distance. Where there is a speed limit and the actual speed of traffic on the priority road is not known it will normally be necessary to provide Y distances as shown in Table B.

Table A

Speed (mph)	75	62	53	44	37.5	30**	30***	25	20
Y (m)	295	215	160	120	90	70	60	45	33

Table B

Speed Limit (mph)	70	60	50	40	30**	30***
Y (m)	295	215	160	120	90	60

(b) the Y distances in Table A will be appropriate for priority roads where restraints have been used to reduce driving speeds to less than 30mph and about 20mph (see Section 2). The highway authority will need to be consulted about their requirements for Y distances in places where vehicle speeds are likely to be well below 20mph;

* Advice on measurements for this purpose is given in DTp Advice Note TA 22/81. [53]

** Where the priority road is not an access road but a higher category road.

*** Where the priority road is an access road with speeds universally below speed limit.

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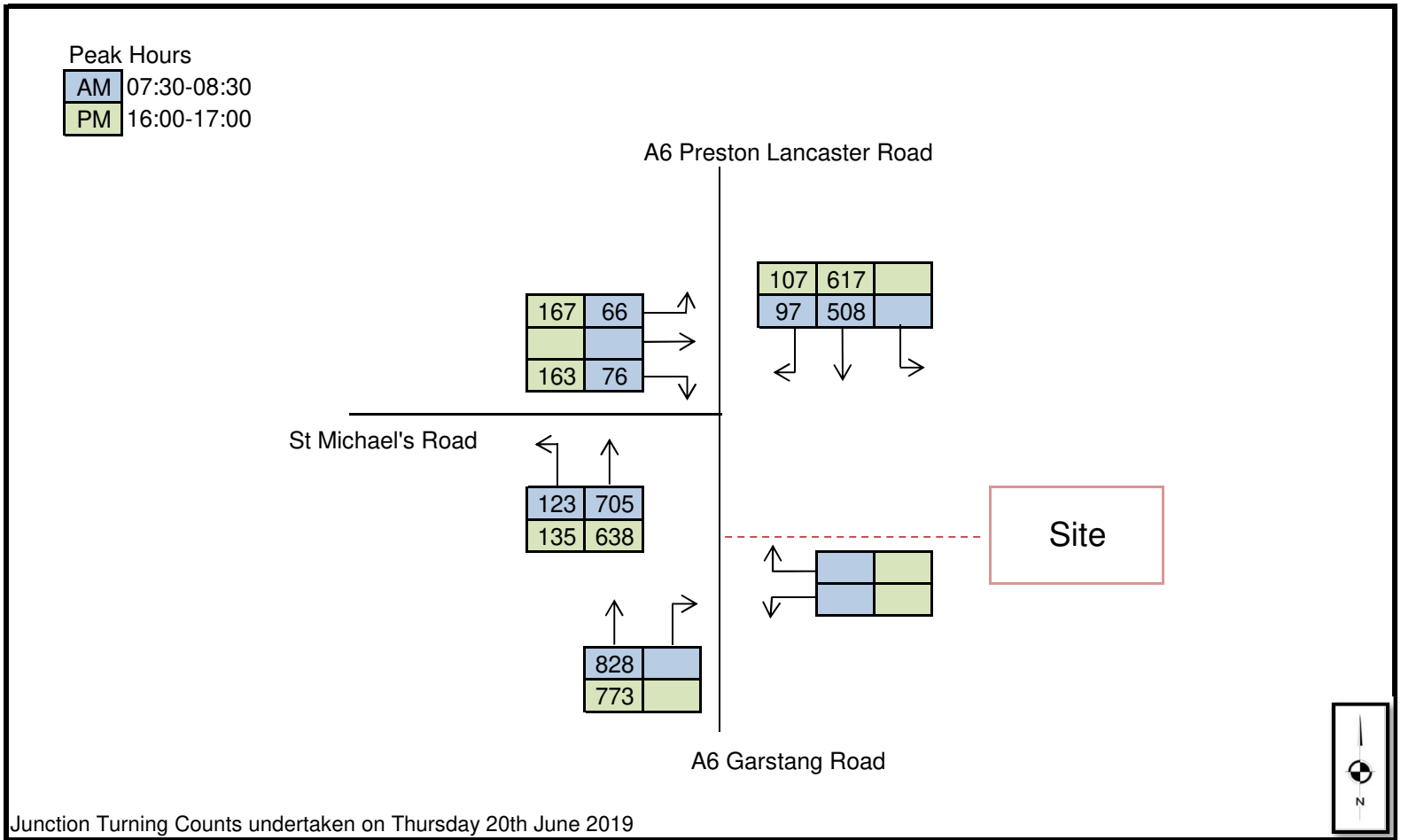
APPENDIX 5



Junction Turning Counts undertaken on Thursday 20th June 2019

Base 2019 - Observed Turning Counts

Garstang Road, Bilsborrow

SCP
Transportation Planning : Infrastructure Design

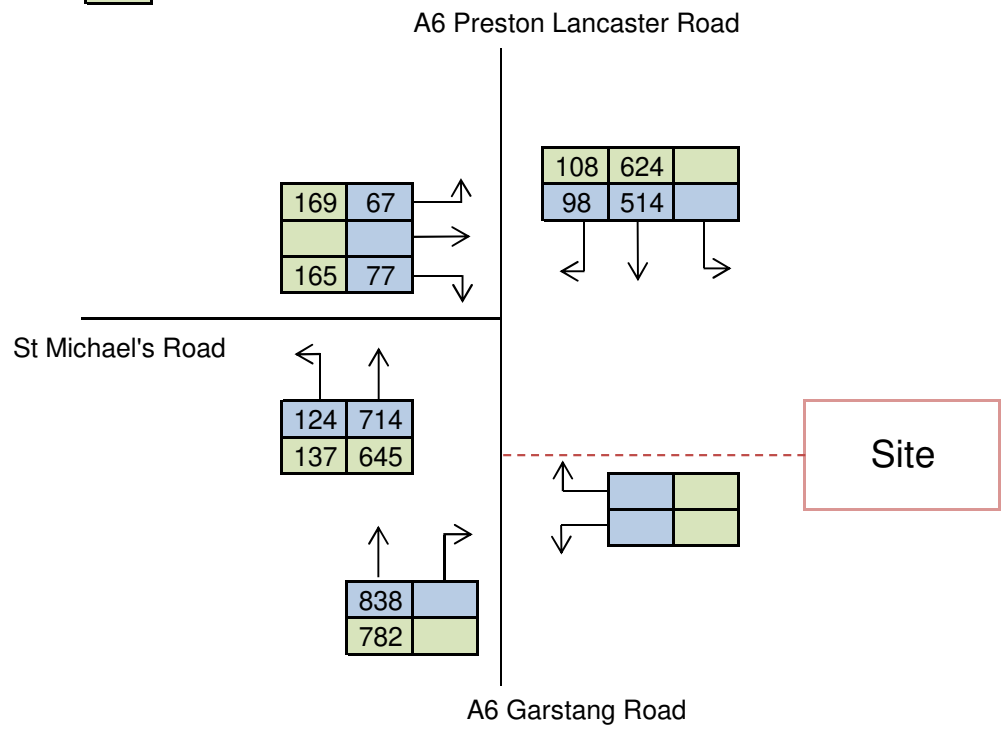
09/10/2019

Job Number - 190395

Traffic Figure 1

Peak Hours	
AM	07:30-08:30
PM	16:00-17:00

TEMPro - 2020	
AM	1.0121
PM	1.0117



Junction Turning Counts undertaken on Thursday 20th June 2019

Base 2020 - Growthed 2019 Observed Turning Counts with TEMPro Factors

Garstang Road, Bilsborrow

S C P
Transportation Planning : Infrastructure Design

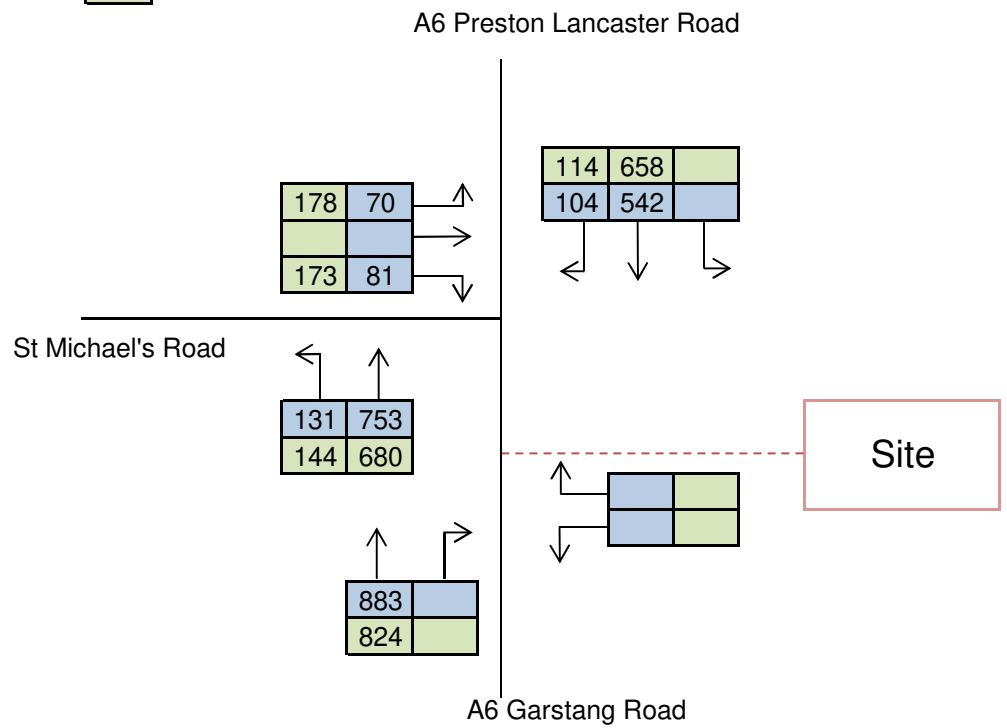
09/10/2019

Job Number - 190395

Traffic Figure 2

Peak Hours	
AM	07:30-08:30
PM	16:00-17:00

TEMPro - 2025	
AM	1.0674
PM	1.0655



Junction Turning Counts undertaken on Thursday 20th June 2019

Base 2025 - Growthed 2019 Observed Turning Counts with TEMPro Factors

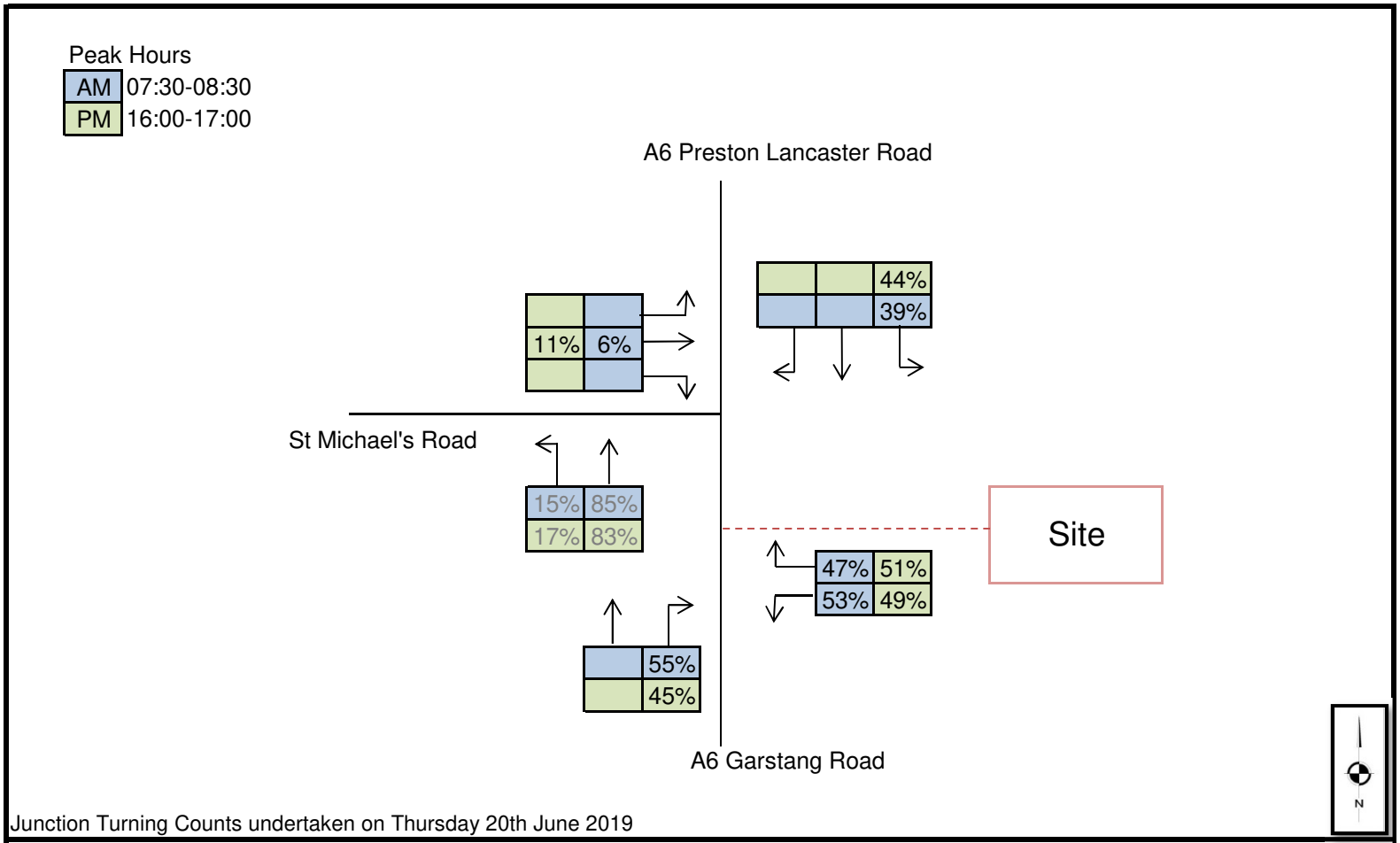
Garstang Road, Bilsborrow

S C P
Transportation Planning : Infrastructure Design

09/10/2019

Job Number - 190395

Traffic Figure 3



Junction Turning Counts undertaken on Thursday 20th June 2019

Distribution based on 2019 Observed Turning Counts

Garstang Road, Bilsborrow

SCP
Transportation Planning : Infrastructure Design

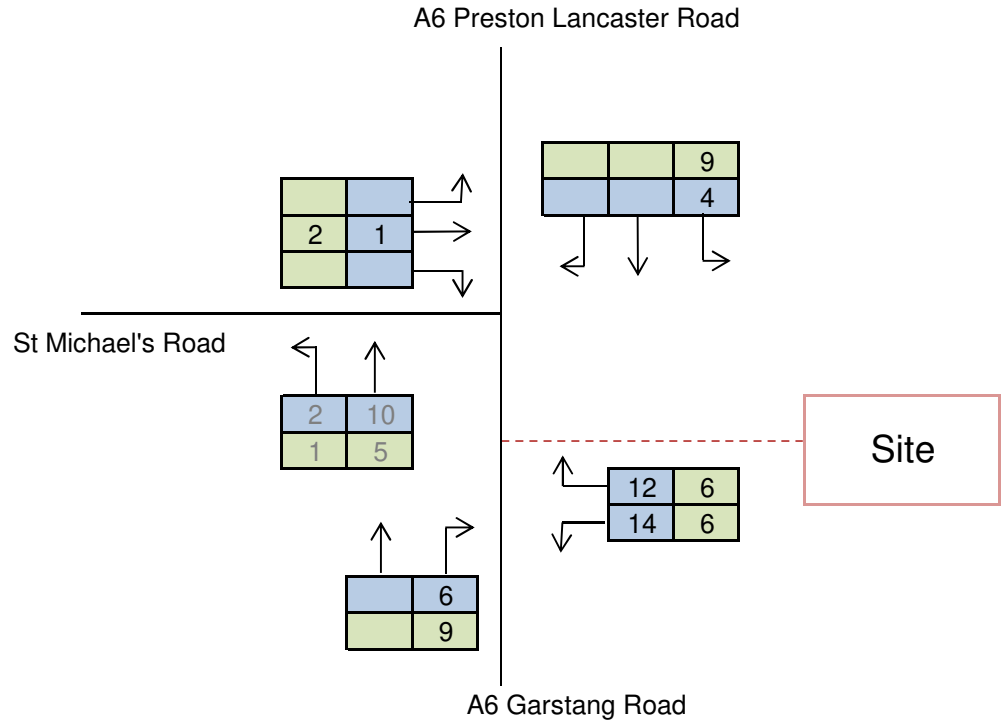
09/10/2019

Job Number - 190395

Traffic Figure 4

Peak Hours	
AM	07:30-08:30
PM	16:00-17:00

	IN	OUT
AM	10	26
PM	20	12



Junction Turning Counts undertaken on Thursday 20th June 2019

Development Traffic Assignement

Garstang Road, Bilsborrow

S C P
Transportation Planning : Infrastructure Design

09/10/2019

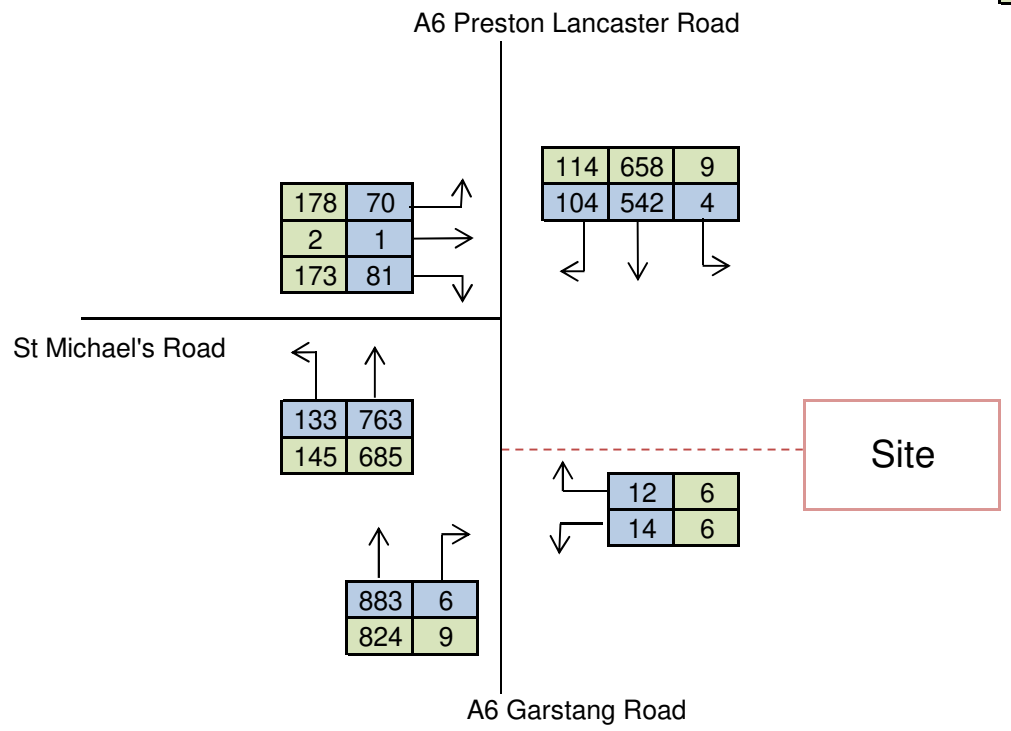
Job Number - 190395

Traffic Figure 5

Peak Hours

AM	07:30-08:30
PM	16:00-17:00

	IN	OUT
AM	10	26
PM	20	12



Junction Turning Counts undertaken on Thursday 20th June 2019

Development Traffic Assignement

Garstang Road, Bilsborrow

SCP
Transportation Planning : Infrastructure Design

09/10/2019

Job Number - 190395

Traffic Figure 6

S|C|P

APPENDIX 6

Singleton Clamp & Partners Mount Street Manchester Licence No: 726001

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-150 DWELLS	
Actual Trip Rate Calculation Parameter Range	6-134 DWELLS	
Date Range	Minimum: 01/01/11	Maximum: 09/05/19
Parking Spaces Range	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Monday	12
	Tuesday	12
	Wednesday	12
	Thursday	11
	Friday	10
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	29
	Edge of Town	20
	Neighbourhood Centre (PPS6 Local Centre)	8
Population <1 Mile ranges selected	1,000 or Less	2
	1,001 to 5,000	10
	5,001 to 10,000	10
	10,001 to 15,000	10
	15,001 to 20,000	14
	20,001 to 25,000	4
	25,001 to 50,000	7
Population <5 Mile ranges selected	5,001 to 25,000	7
	25,001 to 50,000	7
	50,001 to 75,000	6
	75,001 to 100,000	13
	100,001 to 125,000	2
	125,001 to 250,000	15
	250,001 to 500,000	6
	500,001 or More	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	16
	1.1 to 1.5	39
	1.6 to 2.0	2
PTAL Rating	No PTAL Present	57

Calculation Reference: AUDIT-726001-190917-0902

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

MULTI-MODAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	2 days
	HC	HAMPSHIRE	3 days
	KC	KENT	3 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	3 days
03	**SOUTH WEST**		
	DC	DORSET	1 days
	DV	DEVON	3 days
	SM	SOMERSET	3 days
	WL	WILTSHIRE	1 days
04	**EAST ANGLIA**		
	CA	CAMBRIDGESHIRE	2 days
	NF	NORFOLK	3 days
	SF	SUFFOLK	4 days
05	**EAST MIDLANDS**		
	LE	LEICESTERSHIRE	1 days
	LN	LINCOLNSHIRE	1 days
06	**WEST MIDLANDS**		
	SH	SHROPSHIRE	2 days
	WK	WARWICKSHIRE	2 days
	WM	WEST MIDLANDS	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NY	NORTH YORKSHIRE	6 days
	SY	SOUTH YORKSHIRE	1 days
08	**NORTH WEST**		
	CH	CHESHIRE	2 days
	GM	GREATER MANCHESTER	1 days
	MS	MERSEYSIDE	1 days
09	**NORTH**		
	DH	DURHAM	3 days
	TW	TYNE & WEAR	1 days
10	**WALES**		
	PS	POWYS	1 days
	VG	VALE OF GLAMORGAN	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 134 (units:)
Range Selected by User:	6 to 150 (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	12 days
Tuesday	12 days
Wednesday	12 days
Thursday	11 days
Friday	10 days

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

Selected survey types:

Manual count	57 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:

Suburban Area (PPS6 Out of Centre)	29
Edge of Town	20
Neighbourhood Centre (PPS6 Local Centre)	8

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	50
Village	6
No Sub Category	1

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	57 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:

1,000 or Less	2 days
1,001 to 5,000	10 days
5,001 to 10,000	10 days
10,001 to 15,000	10 days
15,001 to 20,000	14 days
20,001 to 25,000	4 days
25,001 to 50,000	7 days

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

Secondary Filtering selection (Cont.):

Population within 5 miles:

5,001 to 25,000	7 days
25,001 to 50,000	7 days
50,001 to 75,000	6 days
75,001 to 100,000	13 days
100,001 to 125,000	2 days
125,001 to 250,000	15 days
250,001 to 500,000	6 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	16 days
1.1 to 1.5	39 days
1.6 to 2.0	2 days

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

Travel Plan:

Yes	7 days
No	50 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	57 days

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

LIST OF SITES relevant to selection parameters

Site(1):	AG-03-A-01	Site area:	0.68 hect
Development Name:	BUNGALOWS/DET.	Number of dwellings:	7
Location:	ARBROATH	Housing density:	13
Postcode:	DD11 2EG	Total Bedrooms:	24
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/05/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	19
Site(2):	CA-03-A-04	Site area:	0.48 hect
Development Name:	DETACHED	Number of dwellings:	9
Location:	PETERBOROUGH	Housing density:	21
Postcode:	PE3 6LQ	Total Bedrooms:	35
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	22
Site(3):	CA-03-A-05	Site area:	1.71 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	28
Location:	PETERBOROUGH	Housing density:	19
Postcode:	PE1 4AW	Total Bedrooms:	94
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	17/10/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	98
Site(4):	CH-03-A-08	Site area:	0.48 hect
Development Name:	DETACHED	Number of dwellings:	11
Location:	CHESTER	Housing density:	37
Postcode:	CH3 5JZ	Total Bedrooms:	44
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/05/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	52
Site(5):	CH-03-A-09	Site area:	0.73 hect
Development Name:	TERRACED HOUSES	Number of dwellings:	24
Location:	MACCLESFIELD	Housing density:	39
Postcode:	SK10 2NS	Total Bedrooms:	72
Main Location Type:	Edge of Town	Survey Date:	24/11/14
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	32
Site(6):	DC-03-A-08	Site area:	1.85 hect
Development Name:	BUNGALOWS	Number of dwellings:	28
Location:	BOURNEMOUTH	Housing density:	17
Postcode:	BH8 0AL	Total Bedrooms:	64
Main Location Type:	Edge of Town	Survey Date:	24/03/14
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	131
Site(7):	DH-03-A-01	Site area:	0.90 hect
Development Name:	SEMI DETACHED	Number of dwellings:	50
Location:	BISHOP AUCKLAND	Housing density:	94
Postcode:	DL14 6RH	Total Bedrooms:	150
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	28/03/17
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	87
Site(8):	DH-03-A-02	Site area:	4.03 hect
Development Name:	MIXED HOUSES	Number of dwellings:	125
Location:	BISHOP AUCKLAND	Housing density:	38
Postcode:	DL14 9UG	Total Bedrooms:	423
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	27/03/17
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	124
Site(9):	DH-03-A-03	Site area:	5.60 hect
Development Name:	SEMI-DETACHED & TERRACED	Number of dwellings:	57
Location:	DURHAM	Housing density:	11
Postcode:	DH1 1HD	Total Bedrooms:	169
Main Location Type:	Edge of Town	Survey Date:	19/10/18
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	190
Site(10):	DV-03-A-01	Site area:	1.25 hect
Development Name:	TERRACED HOUSES	Number of dwellings:	37
Location:	TORQUAY	Housing density:	53
Postcode:	TQ1 3HR	Total Bedrooms:	111
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	30/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	103

LIST OF SITES relevant to selection parameters (Cont.)

Site(11):	DV-03-A-02	Site area:	4.04 hect
Development Name:	HOUSES & BUNGALOWS	Number of dwellings:	116
Location:	HONITON	Housing density:	44
Postcode:	EX14 1JB	Total Bedrooms:	306
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	25/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	261
Site(12):	DV-03-A-03	Site area:	2.02 hect
Development Name:	TERRACED & SEMI DETACHED	Number of dwellings:	70
Location:	HONITON	Housing density:	50
Postcode:	EX14 2DF	Total Bedrooms:	208
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	28/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	116
Site(13):	ES-03-A-02	Site area:	0.50 hect
Development Name:	PRIVATE HOUSING	Number of dwellings:	37
Location:	PEACEHAVEN	Housing density:	74
Postcode:	BN10 8SA	Total Bedrooms:	103
Main Location Type:	Edge of Town	Survey Date:	18/11/11
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	59
Site(14):	ES-03-A-04	Site area:	4.68 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	134
Location:	CAMBER	Housing density:	59
Postcode:	TN31 7SN	Total Bedrooms:	386
Main Location Type:	Edge of Town	Survey Date:	15/07/16
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	256
Site(15):	FA-03-A-01	Site area:	0.84 hect
Development Name:	SEMI-DETACHED/TERRACED	Number of dwellings:	37
Location:	FALKIRK	Housing density:	65
Postcode:	FK2 7FL	Total Bedrooms:	94
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	30/05/13
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	52
Site(16):	GM-03-A-10	Site area:	1.43 hect
Development Name:	DETACHED/SEMI	Number of dwellings:	29
Location:	MANCHESTER	Housing density:	23
Postcode:	M25 9PL	Total Bedrooms:	85
Main Location Type:	Edge of Town	Survey Date:	12/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	81
Site(17):	HC-03-A-20	Site area:	1.40 hect
Development Name:	HOUSES & FLATS	Number of dwellings:	62
Location:	LIPHOOK	Housing density:	46
Postcode:	GU30 7TG	Total Bedrooms:	205
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	20/11/18
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	136
Site(18):	HC-03-A-21	Site area:	1.20 hect
Development Name:	TERRACED & SEMI-DETACHED	Number of dwellings:	39
Location:	BASINGSTOKE	Housing density:	57
Postcode:	RG24 9AF	Total Bedrooms:	134
Main Location Type:	Edge of Town	Survey Date:	13/11/18
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	98
Site(19):	HC-03-A-22	Site area:	1.69 hect
Development Name:	MIXED HOUSES	Number of dwellings:	40
Location:	NEAR EASTLEIGH	Housing density:	32
Postcode:	SO50 6JL	Total Bedrooms:	114
Main Location Type:	Edge of Town	Survey Date:	31/10/18
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	101
Site(20):	HI-03-A-14	Site area:	1.48 hect
Development Name:	SEMI-DETACHED & TERRACED	Number of dwellings:	40
Location:	INVERNESS	Housing density:	36
Postcode:	IV3 8LX	Total Bedrooms:	121
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	23/03/16
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	89

LIST OF SITES relevant to selection parameters (Cont.)

Site(21):	KC-03-A-03	Site area:	1.38 hect
Development Name:	MIXED HOUSES & FLATS	Number of dwellings:	51
Location:	ASHFORD	Housing density:	66
Postcode:	TN24 0FR	Total Bedrooms:	157
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	14/07/16
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	110
Site(22):	KC-03-A-04	Site area:	4.31 hect
Development Name:	SEMI-DETACHED & TERRACED	Number of dwellings:	110
Location:	AYLESFORD	Housing density:	32
Postcode:	ME20 6FN	Total Bedrooms:	330
Main Location Type:	Edge of Town	Survey Date:	22/09/17
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	195
Site(23):	KC-03-A-05	Site area:	0.20 hect
Development Name:	DETACHED & SEMI-DETACHED	Number of dwellings:	8
Location:	NEAR CHATHAM	Housing density:	50
Postcode:	ME1 3FE	Total Bedrooms:	32
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	22/09/17
Sub-Location Type:	Village	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	16
Site(24):	LE-03-A-02	Site area:	3.30 hect
Development Name:	DETACHED & OTHERS	Number of dwellings:	85
Location:	IBSTOCK	Housing density:	40
Postcode:	LE67 6PG	Total Bedrooms:	308
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	28/06/18
Sub-Location Type:	Village	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	363
Site(25):	LN-03-A-03	Site area:	0.77 hect
Development Name:	SEMI DETACHED	Number of dwellings:	22
Location:	LINCOLN	Housing density:	29
Postcode:	LN6 7PL	Total Bedrooms:	58
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/09/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	24
Site(26):	MS-03-A-03	Site area:	0.50 hect
Development Name:	DETACHED	Number of dwellings:	15
Location:	LIVERPOOL	Housing density:	38
Postcode:	L17 5BT	Total Bedrooms:	60
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	21/06/13
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	45
Site(27):	NF-03-A-01	Site area:	1.49 hect
Development Name:	SEMI DET. & BUNGALOWS	Number of dwellings:	27
Location:	CAISTER-ON-SEA	Housing density:	19
Postcode:	NR30 5BX	Total Bedrooms:	66
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/10/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	64
Site(28):	NF-03-A-02	Site area:	2.20 hect
Development Name:	HOUSES & FLATS	Number of dwellings:	98
Location:	NORWICH	Housing density:	52
Postcode:	NR5 8QS	Total Bedrooms:	279
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/10/12
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	220
Site(29):	NF-03-A-03	Site area:	0.63 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	10
Location:	THETFORD	Housing density:	20
Postcode:	IP24 1EY	Total Bedrooms:	40
Main Location Type:	Edge of Town	Survey Date:	16/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	37
Site(30):	NY-03-A-06	Site area:	5.23 hect
Development Name:	BUNGALOWS & SEMI DET.	Number of dwellings:	115
Location:	BOROUGHBRIDGE	Housing density:	28
Postcode:	YO51 9NF	Total Bedrooms:	220
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	14/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	402

LIST OF SITES relevant to selection parameters (Cont.)

Site(31):	NY-03-A-08	Site area:	0.15 hect
Development Name:	TERRACED HOUSES	Number of dwellings:	21
Location:	YORK	Housing density:	175
Postcode:	YO10 3EJ	Total Bedrooms:	54
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	24
Site(32):	NY-03-A-09	Site area:	3.30 hect
Development Name:	MIXED HOUSING	Number of dwellings:	52
Location:	NORTHALLERTON	Housing density:	18
Postcode:	DL6 1BQ	Total Bedrooms:	152
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	135
Site(33):	NY-03-A-10	Site area:	2.21 hect
Development Name:	HOUSES AND FLATS	Number of dwellings:	71
Location:	RIPON	Housing density:	48
Postcode:	HG4 1UH	Total Bedrooms:	138
Main Location Type:	Edge of Town	Survey Date:	17/09/13
Sub-Location Type:	No Sub Category	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	59
Site(34):	NY-03-A-11	Site area:	1.79 hect
Development Name:	PRIVATE HOUSING	Number of dwellings:	23
Location:	BOROUGHBRIDGE	Housing density:	15
Postcode:	YO51 9LQ	Total Bedrooms:	101
Main Location Type:	Edge of Town	Survey Date:	18/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	144
Site(35):	NY-03-A-13	Site area:	0.30 hect
Development Name:	TERRACED HOUSES	Number of dwellings:	10
Location:	CATTERICK GARRISON	Housing density:	33
Postcode:	DL9 4SB	Total Bedrooms:	32
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	10/05/17
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	19
Site(36):	PK-03-A-01	Site area:	3.15 hect
Development Name:	DETAC. & BUNGALOWS	Number of dwellings:	36
Location:	PERTH	Housing density:	13
Postcode:	PH1 1BB	Total Bedrooms:	116
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	11/05/11
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	121
Site(37):	PS-03-A-02	Site area:	0.81 hect
Development Name:	DETACHED/SEMI-DETACHED	Number of dwellings:	28
Location:	WELSHPOOL	Housing density:	42
Postcode:	SY21 7HX	Total Bedrooms:	84
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	11/05/15
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	65
Site(38):	SC-03-A-04	Site area:	3.20 hect
Development Name:	DETACHED & TERRACED	Number of dwellings:	71
Location:	BYFLEET	Housing density:	25
Postcode:	KT14 7BY	Total Bedrooms:	202
Main Location Type:	Edge of Town	Survey Date:	23/01/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	177
Site(39):	SF-03-A-04	Site area:	0.59 hect
Development Name:	DETACHED & BUNGALOWS	Number of dwellings:	7
Location:	LOWESTOFT	Housing density:	15
Postcode:	NR32 2PQ	Total Bedrooms:	7
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	23/10/12
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	31
Site(40):	SF-03-A-05	Site area:	1.15 hect
Development Name:	DETACHED HOUSES	Number of dwellings:	18
Location:	BURY ST EDMUNDS	Housing density:	19
Postcode:	IP33 2SN	Total Bedrooms:	78
Main Location Type:	Edge of Town	Survey Date:	09/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	75

LIST OF SITES relevant to selection parameters (Cont.)

Site(41):	SF-03-A-06	Site area:	2.68 hect
Development Name:	DETACHED & SEMI-DETACHED	Number of dwellings:	38
Location:	KENTFORD	Housing density:	14
Postcode:	CB8 7UU	Total Bedrooms:	129
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	22/09/17
Sub-Location Type:	Village	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	35

Site(42):	SF-03-A-07	Site area:	3.70 hect
Development Name:	MIXED HOUSES	Number of dwellings:	73
Location:	IPSWICH	Housing density:	33
Postcode:	IP3 8XL	Total Bedrooms:	215
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	09/05/19
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	169

Site(43):	SH-03-A-05	Site area:	1.32 hect
Development Name:	SEMI-DETACHED/TERRACED	Number of dwellings:	54
Location:	TELFORD	Housing density:	56
Postcode:	TF7 4JE	Total Bedrooms:	162
Main Location Type:	Edge of Town	Survey Date:	24/10/13
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	63

Site(44):	SH-03-A-06	Site area:	0.80 hect
Development Name:	BUNGALOWS	Number of dwellings:	16
Location:	SHREWSBURY	Housing density:	24
Postcode:	SY1 2RB	Total Bedrooms:	34
Main Location Type:	Edge of Town	Survey Date:	22/05/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	32

Site(45):	SM-03-A-01	Site area:	1.40 hect
Development Name:	DETACHED & SEMI	Number of dwellings:	33
Location:	BRIDGWATER	Housing density:	28
Postcode:	TA6 7PL	Total Bedrooms:	107
Main Location Type:	Edge of Town	Survey Date:	24/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	131

Site(46):	SM-03-A-02	Site area:	2.87 hect
Development Name:	MIXED HOUSES	Number of dwellings:	42
Location:	NEAR TAUNTON	Housing density:	27
Postcode:	TA3 5FG	Total Bedrooms:	160
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	25/09/18
Sub-Location Type:	Village	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	142

Site(47):	SM-03-A-03	Site area:	2.65 hect
Development Name:	MIXED HOUSES	Number of dwellings:	41
Location:	NEAR TAUNTON	Housing density:	42
Postcode:	TA3 5FB	Total Bedrooms:	137
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	25/09/18
Sub-Location Type:	Village	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	118

Site(48):	SY-03-A-01	Site area:	1.73 hect
Development Name:	SEMI DETACHED HOUSES	Number of dwellings:	54
Location:	DONCASTER	Housing density:	34
Postcode:	DN5 9TD	Total Bedrooms:	162
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/09/13
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	61

Site(49):	TW-03-A-02	Site area:	0.55 hect
Development Name:	SEMI-DETACHED	Number of dwellings:	16
Location:	GATESHEAD	Housing density:	34
Postcode:	NE8 4SQ	Total Bedrooms:	52
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	07/10/13
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	38

Site(50):	VG-03-A-01	Site area:	0.21 hect
Development Name:	SEMI-DETACHED & TERRACED	Number of dwellings:	12
Location:	BARRY	Housing density:	86
Postcode:	CF63 2RE	Total Bedrooms:	36
Main Location Type:	Edge of Town	Survey Date:	08/05/17
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	28

LIST OF SITES relevant to selection parameters (Cont.)

Site(51):	WK-03-A-01	Site area:	0.10 hect
Development Name:	TERRACED/SEMI/DET.	Number of dwellings:	6
Location:	LEAMINGTON SPA	Housing density:	
Postcode:	CV32 5XJ	Total Bedrooms:	24
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	21/10/11
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	12
Site(52):	WK-03-A-02	Site area:	0.47 hect
Development Name:	BUNGALOWS	Number of dwellings:	17
Location:	COVENTRY	Housing density:	50
Postcode:	CV2 2NT	Total Bedrooms:	29
Main Location Type:	Edge of Town	Survey Date:	17/10/13
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	35
Site(53):	WL-03-A-02	Site area:	1.16 hect
Development Name:	SEMI DETACHED	Number of dwellings:	27
Location:	SWINDON	Housing density:	25
Postcode:	SN2 7HT	Total Bedrooms:	91
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	22/09/16
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	122
Site(54):	WM-03-A-04	Site area:	1.10 hect
Development Name:	TERRACED HOUSES	Number of dwellings:	39
Location:	COVENTRY	Housing density:	43
Postcode:	CV5 6DZ	Total Bedrooms:	111
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	21/11/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	45
Site(55):	WS-03-A-05	Site area:	1.61 hect
Development Name:	TERRACED & FLATS	Number of dwellings:	48
Location:	SHOREHAM BY SEA	Housing density:	50
Postcode:	BN43 6TQ	Total Bedrooms:	129
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/04/12
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	132
Site(56):	WS-03-A-07	Site area:	3.25 hect
Development Name:	BUNGALOWS	Number of dwellings:	57
Location:	NEAR HORSHAM	Housing density:	27
Postcode:	RH13 0TR	Total Bedrooms:	118
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	19/10/17
Sub-Location Type:	Village	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	108
Site(57):	WS-03-A-10	Site area:	2.27 hect
Development Name:	MIXED HOUSES	Number of dwellings:	79
Location:	LITTLEHAMPTON	Housing density:	51
Postcode:	BN17 7PL	Total Bedrooms:	249
Main Location Type:	Edge of Town	Survey Date:	07/11/18
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	190

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	57	44	0.069	57	44	0.266	57	44	0.335
08:00 - 09:00	57	44	0.137	**57**	**44**	**0.352**	**57**	**44**	**0.489**
09:00 - 10:00	57	44	0.139	57	44	0.171	57	44	0.310
10:00 - 11:00	57	44	0.129	57	44	0.156	57	44	0.285
11:00 - 12:00	57	44	0.136	57	44	0.152	57	44	0.288
12:00 - 13:00	57	44	0.152	57	44	0.152	57	44	0.304
13:00 - 14:00	57	44	0.167	57	44	0.163	57	44	0.330
14:00 - 15:00	57	44	0.155	57	44	0.175	57	44	0.330
15:00 - 16:00	57	44	0.233	57	44	0.157	57	44	0.390
16:00 - 17:00	57	44	0.264	57	44	0.165	57	44	0.429
17:00 - 18:00	**57**	**44**	**0.310**	57	44	0.150	57	44	0.460
18:00 - 19:00	57	44	0.223	57	44	0.134	57	44	0.357
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.114			2.193			4.307

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 - 134 (units:)
Survey date date range:	01/01/11 - 09/05/19
Number of weekdays (Monday-Friday):	57
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 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									
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	57	44	0.001	57	44	0.001	57	44	0.002
08:00 - 09:00	57	44	0.002	57	44	0.002	57	44	0.004
09:00 - 10:00	57	44	0.002	**57**	**44**	**0.004**	**57**	**44**	**0.006**
10:00 - 11:00	57	44	0.003	57	44	0.001	57	44	0.004
11:00 - 12:00	**57**	**44**	**0.003**	57	44	0.002	57	44	0.005
12:00 - 13:00	57	44	0.001	57	44	0.002	57	44	0.003
13:00 - 14:00	57	44	0.002	57	44	0.002	57	44	0.004
14:00 - 15:00	57	44	0.001	57	44	0.002	57	44	0.003
15:00 - 16:00	57	44	0.001	57	44	0.001	57	44	0.002
16:00 - 17:00	57	44	0.001	57	44	0.001	57	44	0.002
17:00 - 18:00	57	44	0.001	57	44	0.001	57	44	0.002
18:00 - 19:00	57	44	0.000	57	44	0.000	57	44	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.019			0.037

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 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	57	44	0.007	57	44	0.018	57	44	0.025
08:00 - 09:00	57	44	0.006	**57**	**44**	**0.022**	57	44	0.028
09:00 - 10:00	57	44	0.001	57	44	0.008	57	44	0.009
10:00 - 11:00	57	44	0.004	57	44	0.008	57	44	0.012
11:00 - 12:00	57	44	0.004	57	44	0.005	57	44	0.009
12:00 - 13:00	57	44	0.006	57	44	0.005	57	44	0.011
13:00 - 14:00	57	44	0.006	57	44	0.002	57	44	0.008
14:00 - 15:00	57	44	0.005	57	44	0.004	57	44	0.009
15:00 - 16:00	57	44	0.017	57	44	0.006	57	44	0.023
16:00 - 17:00	57	44	0.015	57	44	0.005	57	44	0.020
17:00 - 18:00	**57**	**44**	**0.019**	57	44	0.010	**57**	**44**	**0.029**
18:00 - 19:00	57	44	0.010	57	44	0.006	57	44	0.016
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:			0.100			0.099			0.199

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	57	44	0.022	57	44	0.061	57	44	0.083
08:00 - 09:00	57	44	0.062	**57**	**44**	**0.185**	57	44	0.247
09:00 - 10:00	57	44	0.067	57	44	0.071	57	44	0.138
10:00 - 11:00	57	44	0.053	57	44	0.069	57	44	0.122
11:00 - 12:00	57	44	0.049	57	44	0.051	57	44	0.100
12:00 - 13:00	57	44	0.063	57	44	0.057	57	44	0.120
13:00 - 14:00	57	44	0.054	57	44	0.049	57	44	0.103
14:00 - 15:00	57	44	0.045	57	44	0.055	57	44	0.100
15:00 - 16:00	**57**	**44**	**0.159**	57	44	0.097	**57**	**44**	**0.256**
16:00 - 17:00	57	44	0.104	57	44	0.069	57	44	0.173
17:00 - 18:00	57	44	0.096	57	44	0.052	57	44	0.148
18:00 - 19:00	57	44	0.063	57	44	0.042	57	44	0.105
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.837			0.858			1.695

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	57	44	0.002	57	44	0.021	57	44	0.023
08:00 - 09:00	57	44	0.001	**57**	**44**	**0.031**	**57**	**44**	**0.032**
09:00 - 10:00	57	44	0.002	57	44	0.010	57	44	0.012
10:00 - 11:00	57	44	0.007	57	44	0.009	57	44	0.016
11:00 - 12:00	57	44	0.005	57	44	0.007	57	44	0.012
12:00 - 13:00	57	44	0.010	57	44	0.010	57	44	0.020
13:00 - 14:00	57	44	0.004	57	44	0.003	57	44	0.007
14:00 - 15:00	57	44	0.011	57	44	0.006	57	44	0.017
15:00 - 16:00	**57**	**44**	**0.020**	57	44	0.008	57	44	0.028
16:00 - 17:00	57	44	0.019	57	44	0.006	57	44	0.025
17:00 - 18:00	57	44	0.018	57	44	0.006	57	44	0.024
18:00 - 19:00	57	44	0.018	57	44	0.002	57	44	0.020
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.117			0.119			0.236

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 Servicing 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	57	44	0.004	57	44	0.003	57	44	0.007
08:00 - 09:00	57	44	0.008	57	44	0.004	57	44	0.012
09:00 - 10:00	57	44	0.005	57	44	0.005	57	44	0.010
10:00 - 11:00	57	44	0.008	**57**	**44**	**0.009**	57	44	0.017
11:00 - 12:00	57	44	0.007	57	44	0.006	57	44	0.013
12:00 - 13:00	57	44	0.006	57	44	0.006	57	44	0.012
13:00 - 14:00	**57**	**44**	**0.009**	57	44	0.009	**57**	**44**	**0.018**
14:00 - 15:00	57	44	0.007	57	44	0.008	57	44	0.015
15:00 - 16:00	57	44	0.005	57	44	0.005	57	44	0.010
16:00 - 17:00	57	44	0.004	57	44	0.007	57	44	0.011
17:00 - 18:00	57	44	0.003	57	44	0.004	57	44	0.007
18:00 - 19:00	57	44	0.001	57	44	0.002	57	44	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.067			0.068			0.135

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.*

S|C|P

APPENDIX 7

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: A6 Garstang Rd_St Michaels Rd_Site Access_PICADY.j9
Path: \\SCP-SERVER\Projects\Job Library\2019\190395 - Garstang Road, Bilsborrow\Traffic Data\PICADY
Report generation date: 09/10/2019 16:07:53

»2025, With Development, AM
»2025, With Development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2025, With Development							
Stream B-C	0.0	6.85	0.03	A	0.0	6.92	0.01	A
Stream B-AD	0.0	12.23	0.04	B	0.0	14.50	0.03	B
Stream A-D	0.3	9.98	0.24	A	0.3	9.83	0.25	A
Stream D-A	0.2	8.40	0.15	A	0.9	16.61	0.47	C
Stream D-BC	0.5	18.33	0.31	C	2.0	38.52	0.67	E
Stream C-B	0.0	6.88	0.01	A	0.0	7.64	0.02	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	
Location	
Site number	
Date	18/09/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP\Jeanne Watrin
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025, With Development	AM	ONE HOUR	07:15	08:45	15
D2	2025, With Development	PM	ONE HOUR	15:45	17:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025, With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A6 Garstang Rd / St Michaels Rd / Site Access	Right-Left Stagger	Two-way		1.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A6 Garstang Rd (North)		Major
B	Site Access		Minor
C	A6 Garstang Rd (South)		Major
D	St Michael's Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A6 Garstang Rd (North)	11.00		✓	3.00	100.0		-
C - A6 Garstang Rd (South)	11.00		✓	3.00	75.0		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	8.00	4.00	2.75	2.75	2.75		1.00	100	75
D - St Michael's Rd	One lane plus flare	10.00	7.50	4.00	3.50	3.50		2.00	70	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	687	-	-	-	0.208	0.208	0.208	-	0.208	-	-
1	B-AD	586	0.083	0.211	-	-	-	0.133	0.302	0.133	0.083	0.211
1	B-C	692	0.083	0.210	-	-	-	-	-	-	0.083	0.210
1	C-B	671	0.203	0.203	-	-	-	-	-	-	0.203	0.203
1	D-A	771	-	-	-	0.234	0.093	0.234	-	0.093	-	-
1	D-BC	606	0.137	0.137	0.312	0.218	0.086	0.218	-	0.086	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025, With Development	AM	ONE HOUR	07:15	08:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A6 Garstang Rd (North)		✓	650	100.000
B - Site Access		✓	26	100.000
C - A6 Garstang Rd (South)		✓	902	100.000
D - St Michael's Rd		✓	152	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A6 Garstang Rd (North)	B - Site Access	C - A6 Garstang Rd (South)	D - St Michael's Rd
From	A - A6 Garstang Rd (North)	0	4	542	104
	B - Site Access	10	0	14	2
	C - A6 Garstang Rd (South)	763	6	0	133
	D - St Michael's Rd	70	1	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A6 Garstang Rd (North)	B - Site Access	C - A6 Garstang Rd (South)	D - St Michael's Rd
From	A - A6 Garstang Rd (North)	0	0	1	1
	B - Site Access	0	0	0	0
	C - A6 Garstang Rd (South)	1	0	0	1
	D - St Michael's Rd	1	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	6.85	0.0	A
B-AD	0.04	12.23	0.0	B
A-B				
A-C				
A-D	0.24	9.98	0.3	A
D-A	0.15	8.40	0.2	A
D-BC	0.31	18.33	0.5	C
C-D				
C-A				
C-B	0.01	6.88	0.0	A

2025, With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A6 Garstang Rd / St Michaels Rd / Site Access	Right-Left Stagger	Two-way		5.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025, With Development	PM	ONE HOUR	15:45	17:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A6 Garstang Rd (North)		✓	781	100.000
B - Site Access		✓	12	100.000
C - A6 Garstang Rd (South)		✓	839	100.000
D - St Michael's Rd		✓	353	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - A6 Garstang Rd (North)	B - Site Access	C - A6 Garstang Rd (South)	D - St Michael's Rd
From	A - A6 Garstang Rd (North)	0	9	658	114
	B - Site Access	5	0	6	1
	C - A6 Garstang Rd (South)	685	9	0	145
	D - St Michael's Rd	178	2	173	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A6 Garstang Rd (North)	B - Site Access	C - A6 Garstang Rd (South)	D - St Michael's Rd
From	A - A6 Garstang Rd (North)	0	0	1	1
	B - Site Access	0	0	0	0
	C - A6 Garstang Rd (South)	1	0	0	1
	D - St Michael's Rd	1	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.92	0.0	A
B-AD	0.03	14.50	0.0	B
A-B				
A-C				
A-D	0.25	9.83	0.3	A
D-A	0.47	16.61	0.9	C
D-BC	0.67	38.52	2.0	E
C-D				
C-A				
C-B	0.02	7.64	0.0	A