



Land South of The Hill, Littlebourne

Transport Assessment

Client: Gladman Developments Ltd.

i-Transport Ref: VE/JW/MS/ITM16283-006A R

Date: 20 February 2023

Land South of The Hill, Littlebourne Transport Assessment

Client: Gladman Developments Ltd.

i-Transport Ref: VE/JW/MS/ITM16283-006A R

Date: 20 February 2023

i-Transport LLP

Centurion House
129 Deansgate
Manchester
M3 3WR

Tel: 0161 830 2172
Fax: 0161 830 2173

www.i-transport.co.uk

COPYRIGHT

The contents of this document must not be copied or reproduced in whole or in part without the written consent of i-Transport LLP

If this report is to be placed on any approved website for planning purposes, this should comply with data protection principles, please seek our permission and you must ensure that all the private and personal information and data within this report is redacted.

Quality Management

Report No.	Comments	Date	Author	Authorised
16283-006 R	Draft	9 January 2023	Jon Wilkinson / Matt Seabrook	V Eggleston
16283-006A R	Issue	20 February 2023	Jon Wilkinson / Matt Seabrook	V Eggleston

File Ref: Z:\Projects\16283ITM - Land South of The Hill, Littlebourne\Admin\Report and Tech Notes\ITM16283-006A R Transport Assessment (300 Dwellings).docx

Contents

SECTION 1	Introduction	1
SECTION 2	Transport Policy Context	5
SECTION 3	Development Proposals	11
SECTION 4	Accessibility of the Site	17
SECTION 5	Existing Highway Network	23
SECTION 6	Traffic Assessment Methodology	27
SECTION 7	Traffic Impact of Development	44
SECTION 8	Summary and Conclusions	49

Appendices

APPENDIX 1.A	Scoping Note (ITM16283-005)
APPENDIX 2.A	Kent County Council Scoping Response
APPENDIX 3.A	Site Location Plan
APPENDIX 3.B	Illustrative Masterplan
APPENDIX 3.C	Proposed Site access Arrangements
APPENDIX 3.D	Road Safety Audit and Design Team Response
APPENDIX 4.A	Bus Timetables
APPENDIX 4.B	Walking Catchment Plan
APPENDIX 4.C	Public Rights of Way Plan
APPENDIX 4.D	Cycle Catchment Plan
APPENDIX 4.E	Key Facilities Plans
APPENDIX 5.A	2022 Traffic Survey Results
APPENDIX 5.B	2022 Observed Traffic Flows
APPENDIX 5.C	Collision Data
APPENDIX 6.A	TEMPro Growth Factors
APPENDIX 6.B	2045 Background Traffic Flows
APPENDIX 6.C	Committed Development Location Plan
APPENDIX 6.D	Committed Development Traffic Flows
APPENDIX 6.E	Reassignment Traffic Flows
APPENDIX 6.F	2045 Background + Committed Development Traffic Flows
APPENDIX 6.G	Residential TRICs Outputs
APPENDIX 6.H	Journey to Work Analysis

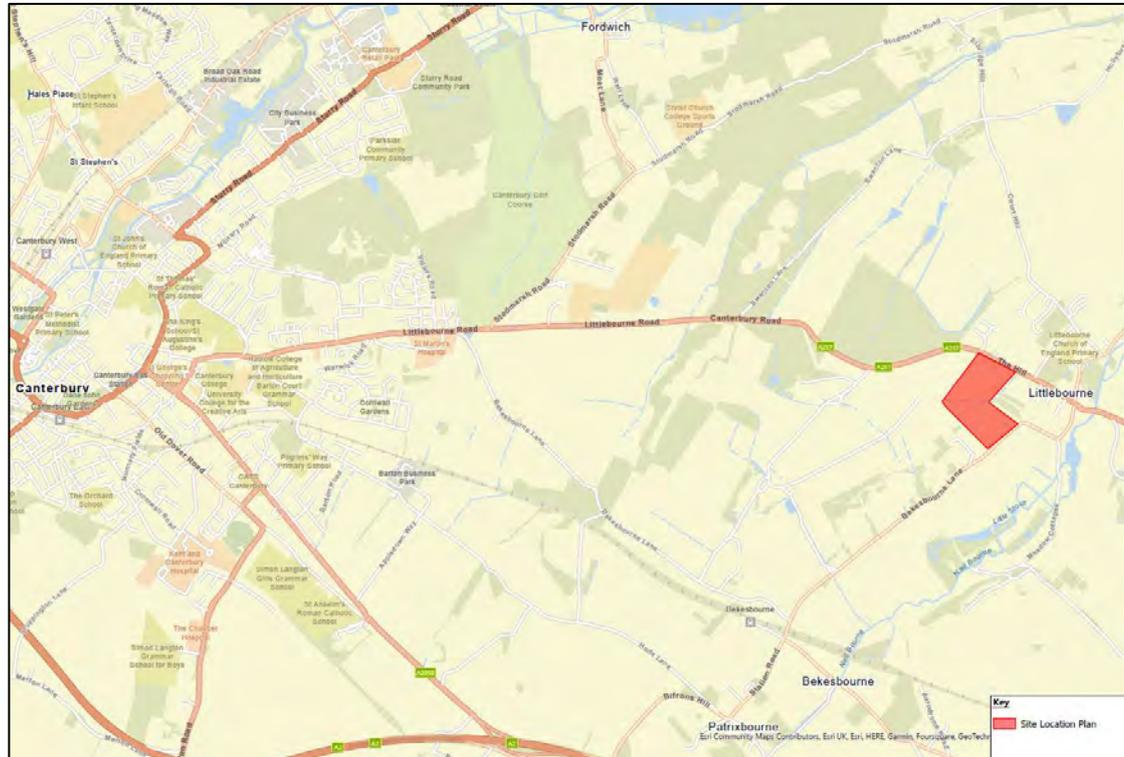
APPENDIX 6.I	Proposed Residential Traffic Flows
APPENDIX 6.J	Proposed Elderly Accommodation Traffic Flows
APPENDIX 6.K	Convenience Store TRICs Outputs
APPENDIX 6.L	Proposed Local Centre Traffic Flows
APPENDIX 6.M	Total Development Traffic Flows
APPENDIX 6.N	2045 Base + Committed + Development Traffic Flows
APPENDIX 7.A	A257 / Buffs Road Capacity Assessment
APPENDIX 7.B	Proposed Site Access Capacity Assessments

SECTION 1 Introduction

1.1 Overview

- 1.1.1 i-Transport LLP has been commissioned by Gladman Developments Ltd to provide transport and highways advice in support of an outline planning application for residential led, mixed-use development, to the south of the A257 The Hill, Littlebourne to the east of the Canterbury. The site location is shown in **Figure 1** below.
- 1.1.2 The development will comprise c.300 dwellings and associated community/retail, open space and landscaping uses and is proposed to be served via A257 The Hill to the north of the site and Bekesbourne Lane to the south-east of the site.
- 1.1.3 The site was subject to a previous planning application submitted by Gladman (Application Reference CA/21/01657) for a smaller quantum of development on the site, c.100 dwellings. The site is currently proposed for allocation within the draft Canterbury Local Plan, further details of which are set out below, with an indicative yield of 300 dwellings.

Figure 1: Site Location



1.2 Scoping

- 1.2.1 Scoping discussions have been undertaken with Kent County Council (KCC), in their capacity as highway authority, to inform the methodology adopted for this Transport Assessment (TA) and to discuss the potential access arrangements for the development.
- 1.2.2 A series of pre-application and post-application discussions were held with KCC in respect of the previous application for the site. The scoping discussions for this current application have therefore taken account of these earlier discussions where appropriate.
- 1.2.3 A pre-application meeting was held with KCC on 15 September 2022 to discuss the potential access arrangement options and to consider the emerging Local Plan requirements. During this meeting it was indicated that an access from both the A257 The Hill and Bekesbourne Lane, with these accesses connected through the site, would be preferred the option. KCC advised that such a vehicle route through the site should be constructed to an appropriate width to accommodate potential future bus provision through the site. KCC also requested that a footway provision be made along the length of the site frontage on Bekesbourne Lane, to facilitate wider connections between the existing public rights of way network and the Howletts Animal Park which is located adjacent to the site on Bekesbourne Lane.
- 1.2.4 A formal Scoping Note was submitted to KCC on 28 October 2022 setting out the proposed traffic assessment methodology, a copy of which is included in **Appendix 1.A**. A formal pre-application response was received on 9 December 2022, included in **Appendix 1.B**. In their response KCC confirmed their request for the main access road through the site to be designed to allow for potential future bus services, stating that the route should be 6.75m in width. This has been reflected within the site proposals, as set out in Section 3 of this report.
- 1.2.5 The other points set out in KCC's scoping response are summarised below:
- Junction turning counts must be undertaken in neutral months.
 - Automatic Traffic Count (ATC) surveys must take place outside of school holidays.
 - A Stage 1 Road Safety Audit (RSA) would be required for the proposed access arrangements and a Designers Response should be included with the RSA.
 - As this site is coming forward as part of Canterbury's emerging Local Plan, the future year assessments should be based on 2045 traffic levels.

- The list of committed developments proposed to be included within the assessment was agreed, subject to the addition of planning application 22/01845 North Hersden (800 dwellings and other mixed uses). It is noted that this development does not yet have the benefit of a planning approval, but is a site that is proposed to be allocated within the current Local Plan 2017.
- The trip rates included in the Scoping Note are agreed.
- The traffic flow diagrams should demonstrate the turning movements at the junctions, including the site access. The traffic flow diagrams should include traffic flows through Bridge to demonstrate movements for vehicles accessing the A2 north and southbound.

1.2.6 The above issues have been addressed in the remainder of this Transport Assessment.

1.3 Structure of the Transport Assessment

1.3.1 Following this introductory section, the remainder of this Transport Assessment is set out as follows:

- Section 2 summarises the transport policy context within which the development proposals have been framed;
- Section 3 outlines the development proposals including an overview of the proposed mix of uses, illustrative masterplan layout and access proposals;
- Section 4 considers the accessibility of the site by a range of sustainable travel modes and access to local key facilities;
- Section 5 sets out the existing highway network conditions surrounding the site and across the wider area;
- Section 6 sets out the traffic assessment methodology used to derive the expected traffic flows generated by the proposed development;
- Sections 7 assesses the impacts of the development proposals;
- Section 8 presents a summary of this TA and its conclusions.

1.3.2 This TA will demonstrate that:

- The proposed development can be accessed safely from A257 The Hill and Bekesbourne Lane via two proposed T-junctions to access the site. These accesses will provide sufficient capacity to accommodate the traffic generated by the proposals.

- The site is sustainably located, offering opportunities for trips to be made to and from the site by sustainable travel modes. Future residents, employees and visitors of the site will have good access to a range of key services and facilities and given the nature of the proposed uses, the site is a suitable location for the development.
- The development will not give rise to any road safety concerns and the traffic generated by the residential and mixed-use proposals will not have a significant impact upon the operation of the surrounding road network.

1.3.3 As set out in the next section of this report, the development proposals are consistent with local and national policy, including the NPPF.

SECTION 2 Transport Policy Context

2.1 Introduction

2.1.1 This section considers the transport policy context within which the application should be determined.

2.2 National Planning Policy Framework (NPPF)

2.2.1 The National Policy Framework (revised in July 2021) sets out the Government's planning policies for England and how these should be applied. At the core of the Plan is a presumption in favour of sustainable development.

2.2.2 The specific transport policies of the NPPF are contained in Section 9 of the NPPF document.

2.2.3 Paragraph 104 of the NPPF notes that transport issues should be considered from the earliest stages of development proposals, so that:

a) the potential impacts of development on transport networks can be addressed;

b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

c) opportunities to promote walking, cycling and public transport are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, addressed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains;

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

2.2.4 Paragraph 110 sets out the key 'tests' for the consideration of transport aspects of development, noting that it should be ensured that:

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

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

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects the current national guidance, including the National Design Guide and the National Model Design Code; and

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

2.2.5 Paragraph 111 confirms that:

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

2.2.6 Paragraph 113 also outlines when a Transport Assessment, Transport Statement or Travel Plan is required:

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

2.2.7 This TA demonstrates that the site benefits from its sustainable location, with good access to a wide range of key facilities by a variety of transport modes. This TA also demonstrates that the proposed dwellings can be safely and satisfactorily accessed and that the traffic generated by the proposals can be accommodated within the surrounding highway network.

2.2.8 The application proposals are supported by a TA and a Travel Plan, which is submitted as a separate document (i-Transport report reference ITM16283-007), and accord with the requirements set out in the NPPF.

2.3 Planning Practice Guidance (PPG)

2.3.1 The PPG provides guidance to support and expand on policies within the NPPF, including guidance on interpretation of policy, and, in that sense, does not provide additional policy but rather more detailed consideration of how policies within the NPPF should be approached and met. The guidance covers all relevant planning policy areas under separate topics and is updated online as and when required.

2.3.2 This TA complies with the PPG in terms of the requirements for Transport Assessments, in particular the following key principles:

“Travel Plans, Transport Assessments and Statements should be:

Proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible;

Established at the earliest practicable possible stage of a development proposal;

Be tailored to particular local circumstances (other locally-determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally);

Be brought forward through collaborative ongoing working between the Local Planning Authority/Transport Authority, transport operators, Rail Network Operators, Highways Agency where there may be implications for the strategic road network and other relevant bodies. Engaging communities and local businesses in Travel Plans, Transport Assessments and Statements can be beneficial in positively supporting higher levels of walking and cycling (which in turn can encourage greater social inclusion, community cohesion and healthier communities).”

... “Travel Plans, Transport Assessments and Statements can positively contribute to:

- encouraging sustainable travel;***
- lessening traffic generation and its detrimental impacts;***
- reducing carbon emissions and climate impacts;***
- creating accessible, connected, inclusive communities;***
- improving health outcomes and quality of life;***
- improving road safety; and***
- reducing the need for new development to increase existing road capacity or provide new roads.***

They support national planning policy which sets out that planning should actively manage patterns of growth in order to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable.”

2.3.3 Again, the preparation of this TA is consistent with the guidance set out within PPG and the principles contained therein, and the early scoping discussions held with KCC reflect the collaborative approach to the development of the scheme proposals.

2.4 Local Policy

Canterbury District Local Plan

2.4.1 The Canterbury District Local Plan was adopted in July 2017. The Local Plan notes that it is important that the distribution of new housing sites in rural settlements reflects the settlement type. Littlebourne is identified as a Local Centre within the rural settlement hierarchy.

2.4.2 Policy SP4 of the Local Plan sets out the strategic approach to the location of developments and states in point 2:

“Provision of new housing that is of a size, design, scale, character and location appropriate to the character and built form of the rural service centres of Sturry and the local centres of Barham, Blean, Bridge, Chartham, Hersden and Littlebourne will be supported provided that such proposals are not in conflict with other local plan policies relating to transport, environmental and flood zone protection and design, and those of the Kent Downs AONB Management Plan, where applicable.”

2.4.3 The Local Plan also notes that larger scale residential developments should encourage the use of more sustainable transport modes such as walking and cycling, with the development located where they can access key facilities such as primary schools, health facilities, local shops and employment sites.

2.4.4 Policy T1 of the Local Plan sets out the transport strategy for considering the location of new developments and states:

“In considering the location of new development, or the relocation of existing activities, the Council will always take account of the following principles of the Transport Strategy:

a. Controlling the level and environmental impact of vehicular traffic including air quality;

b. Providing alternative modes of transport to the car by extending provision for pedestrians, cyclists and the use of public transport;

e. Assessing development proposals in the light of transport demands and the scope for choice between transport modes; and

f. Seeking the construction of new roads and/or junction improvements which will improve environmental conditions and/or contribute towards the economic well-being of the District.”

2.4.5 Policy T17 sets out the need for Transport Assessments and Travel Plans and states that:

“These should show how multi-modal access options will be achieved, and how transport infrastructure arising from the expected demand will be provided.”

Draft Canterbury District Local Plan 2020 to 2045

2.4.6 Canterbury City Council is in the process of preparing its updated Local Plan, covering the period 2020 to 2045. The Draft Local Plan has recently been subject to consultation (in January 2023).

2.4.7 The Draft Local Plan sets out the district settlement hierarchy noting that:

“In line with the council’s vision for growth, this draft plan focuses growth proportionally at the most sustainable settlements within the district and, taking account of the responses to previous consultations.

Reflecting the outcomes of previous consultations, this plan proposes designated settlement boundaries at the most sustainable rural settlements – the rural service centres and the local service centres. Areas of the district outside of the urban areas and the rural settlement boundaries are designated as countryside where development will generally be restricted.

Within these settlement boundaries new development will be supported on suitable sites and existing community facilities and services will be protected and enhanced to support the vitality of these important rural settlements.”

2.4.8 Littlebourne is identified as a rural service centre within the Draft Local Plan and therefore is now determined to be one of the most sustainable rural settlements within the district.

2.4.9 The proposed development site is included within the Draft Local Plan as Policy R15, which is included as a mixed-use development. The development mix included in the policy is:

“(a) Approximately 300 new dwellings across circa 8.63 ha:

(i) 30% affordable housing in line with Policy DS1;

(ii) 10% bungalows;

(iii) 15% of new homes to be built to M4 (2) standards, and 5% to be built to M4 (3) standards;

(iv) An appropriate housing mix, in line with Policy DS2; and

(v) Self and custom built plots in line with Policy DS2.

(b) A minimum of 30 units of older person accommodation, to be located adjacent to community facilities and services, taking account of any specific identified needs;

(c) Non-residential development:

(i) Provision of new local shopping and community facilities, including a shop/cafe, to serve new and existing residents;

(ii) Provision of a new high quality waste water treatment works at an appropriate location within the site; and

(iii) Proportionate land and build contributions towards early years, primary, secondary and SEND education plus proportionate contributions for primary healthcare and other necessary off-site”

2.4.10 In terms of the ‘access and transportation’ aspects of the policy, it is noted that the site should:

“(a) Provide safe and convenient pedestrian and cycle connectivity including:

(i) New and improved walking and cycling connections to Littlebourne Church of England Primary School, Littlebourne Surgery and Bekesbourne Rail Station, including improvements to the access track from Bekesbourne Hill and step free access to the London bound platform;

(ii) Improvements to A257 for pedestrian and cycle accessibility and safety, including the junction of Nargate Street and the A257;

(iii) New and improved walking and cycling connections to Wickhambreaux, Bekesbourne, Patrixbourne and wider countryside to the east and west; and

(iv) Improvements to the PRow network crossing and around the site as required.

(b) Provide a link road through the site connecting The Hill with Bekesbourne Lane; and

(c) Provide a transport assessment to demonstrate the connectivity of the site with the existing highway network, any necessary mitigation and measures to minimise the need for use of private cars”

2.4.11 The following section of this Transport Assessment describes the development proposals, including details of the proposed link road through the site. The details of proposed dwelling mix will be determined as part of subsequent Reserved Matters applications.

2.4.12 Details on how the development provides safe and convenient pedestrian and cycle connectivity are set out in Section 4.

2.5 Summary

2.5.1 The policy requirements outlined above, including those within the Draft Local Plan, are addressed throughout this TA, demonstrating that the proposed residential development accords with national and local policy and guidance.

SECTION 3 Development Proposals

3.1 Site Location

3.1.1 The proposed development is located to the south of A257 The Hill to the south-west of Littlebourne village. The site is bounded by A257 The Hill to the north, agricultural land to the south and residential dwellings to the east and west. The site location is illustrated in **Appendix 3.A**.

3.1.2 The site is currently in agricultural use and extends to an area of 15.76ha and lies within Canterbury City Council's administrative boundary, with the city centre being c.5.8km west of the site.

3.2 Development Masterplan

3.2.1 As outlined in the Introduction, the site is proposed for allocation as a residential-led, mixed-use development within the emerging Canterbury Local Plan. The Local Plan identifies an indicative yield of c.300 dwellings on the site, plus 30 older person accommodation and community uses as outlined in Section 2 above.

3.2.2 As also outlined in the Introduction, the application proposals are submitted in outline form at this stage. An illustrative masterplan has been prepared to demonstrate how the site could be developed to achieve the expected development quantum. The draft masterplan is presented in **Appendix 3.B**.

3.2.3 The illustrative masterplan shows the potential for up to 300 residential dwellings spread across the site, with the proposed community uses positioned at the northern end of the site, close to A257 The Hill. The mix of residential dwellings will be determined through subsequent Reserved Matters planning application(s). The site will be accessed via two vehicular access points onto A257 The Hill and Bekesbourne Lane, as described below, with an internal road link between the two.

3.2.4 The internal road network will be developed such that priority is given to pedestrian and cycle movements across the site, with vehicle speeds kept low. Networks of footpaths and bicycle routes are shown across the development, offering residents, employees and visitors the opportunity to use formal footways alongside the carriageway provision or off-road paths as they navigate through the development site.

- 3.2.5 The masterplan shows pedestrian / cycle paths along the site's frontages onto A257 The Hill and Bekesbourne Lane, consistent with the aspirations set out within the emerging Local Plan, with these routes connecting into the existing wider pedestrian networks at the corners of the site. Further details of the sustainable transport provision are set out within Section 4 below.
- 3.2.6 An illustrative link road through the site is incorporated within the masterplan, with the route of this to be determined as part of subsequent detailed Reserved Matters submissions. However, the alignment of the route has been designed to be reflective of this hierarchy and to keep vehicle speeds low.
- 3.2.7 The development will be flanked by landscaping along its boundaries with a larger area of open space shown centrally within the development with the potential for this to include an area of play provision. The proposals also include provision for allotments and community orchards within the site.
- 3.2.8 The masterplan proposals show that the site could accommodate an estimated 300 residential dwellings. The mix of residential dwellings will be determined through the planning application and the Reserved Matters application, with provision for affordable housing units and elderly person accommodation to be incorporated within the site.
- 3.2.9 The local centre is expected to comprise a small shop and the potential for work hub/meeting spaces with associated parking provision.
- 3.2.10 The final site layout including the proposed quantum, mix of dwellings and local centre provision will be determined as part of future Reserved Matters applications.

3.3 **Proposed Vehicular Access Arrangements**

- 3.3.1 The site will be accessed directly from the A257 The Hill in the form of a new, simple priority-controlled T-junction access, located towards the eastern end of the northern site frontage, with a second access located on Bekesbourne Lane to the south-east of the site, also in the form of a new simple priority-controlled T-junction access.
- 3.3.2 The two accesses will be connected through the site, allowing development traffic to use either access, depending on its destination and offering an alternative route for existing traffic travelling between A257 The Hill and Bekesbourne Lane, reducing traffic levels passing through the village.

- 3.3.3 The route through the site will be designed with the ability to accommodate a future bus route through the site, with a carriageway width of 6.75m. The alignment of the route through the site will be designed to ensure traffic speeds are kept low to reflect the residential nature of the site – with a 20mph design speed and traffic calming features provided where appropriate.
- 3.3.4 The design of the proposed site access on the A257 The Hill has taken account of the proximity of the recently constructed access to the consented residential development to the north of the A257 The Hill, as well as the existing traffic calming build-outs along the northern side of the A257 The Hill.
- 3.3.5 The proposed accesses have been designed with reference to KCC's 'Design Guide Movement: Step 3 – Designing for Movement'. This document sets out recommended guidance on a range of highway design aspects including street widths, junction spacing criteria and junction visibility requirements, with reference to a hierarchy of street types. During scoping KCC advised that the site access road should be designed to conform to that for a Local Distributor Road/Major Access Road.
- 3.3.6 The guidance on junction spacing states that for a Local Distributor Road left/right stagger junctions should ideally be located 30m apart, with an absolute minimum of 15m. The proposed access onto A257 The Hill has therefore been positioned 32m east of the access to the land to the north of The Hill and therefore meets the required spacing. There are no existing accesses within the vicinity of the proposed access onto Bekesbourne Lane – the existing Howletts Animal Park access is c.100metres south-west of the site boundary – and therefore the proposed access has been positioned centrally along the Bekesbourne Lane frontage.
- 3.3.7 The proposed access road will provide a 2.0m footway to each side, which is appropriate for a Local Distributor Road and exceeds KCC's standards for footway width for a Major Access Road. As there is currently no footway along the southern side of The Hill, the footway on the western side of the proposed site access terminates before the access junction and dropped kerbs / tactile paving are provided to allow pedestrians to cross to the opposite footway and subsequently tie into the wider footway connections along the A257 The Hill. As outlined above, alternative pedestrian / cycle routes will be provided within the site offering alternative routes to the north-west of the site.
- 3.3.8 A section of new footway and an uncontrolled pedestrian crossing point will be provided to the east of the proposed site access, along the site frontage on The Hill, to provide a pedestrian

connection to facilities within Littlebourne for future residents, employees and visitors of the site.

- 3.3.9 Bekesbourne Lane currently has no footways on either side and is a relatively narrow carriageway of c.4.3m. The proposed development will provide an off-carriageway footway along the length of the site frontage with connections onto Bekesbourne Lane at either end of the site frontage. To the north of the site frontage the proposed footway will provide an access in close proximity to the existing School Path lane, which provides a connection to Littlebourne village and to the south, an alternative connection to Bekesbourne Lane for pedestrians / cyclists.
- 3.3.10 The principles of the proposed access strategy have been discussed at length with KCC during the scoping process.
- 3.3.11 The proposed access designs and associated visibility splays are shown in i-Transport drawings ITM16283-GA-013A and ITM16283-GA-017A, included in **Appendix 3.C**.

3.4 **Road Safety Audit**

- 3.4.1 Independent Stage 1 Road Safety Audits have been completed for the proposed two site accesses, a copy of which are presented in **Appendix 3.D**, along with the Design Team Response to the Audits.
- 3.4.2 The Audit for the proposed access onto A257 The Hill makes reference to an earlier safety audit that had been conducted in support of previous access proposals designed to support the earlier application for a smaller quantum of development on the site. The Audit confirms that the current access proposals address all of the issues that had previously been raised and confirms that no further issues are raised in respect of the current access proposals onto A257.
- 3.4.3 The Audit for the proposed Bekesbourne Lane access raises two issues, which are summarised below:

- The location of the proposed access is close to the current speed limit change from 30mph to 40mph on Bekesbourne Lane. The Audit recommends that the existing 30mph limit is extended southwards to include the proposed access arrangements. This recommendation is accepted, subject to agreement with KCC as highway authority and the local police. Notwithstanding this, it is confirmed that the proposed access could achieve the necessary visibility requirements based upon the existing 40mph limit or the reduced requirements for a 30mph limit, should the proposed speed limit change be supported by KCC/the police.
- The Audit team note that the absence of street lighting could increase the risk of collisions, as motorists move between alternative lit and dark sections of road, as well as an attendant risk of trips and collisions involving cyclists and pedestrians on the proposed footway. Street lighting requirements for the proposed access will be considered during the detailed design stage. The proposed footway running parallel to Bekesbourne Lane within the site will be appropriately lit, again with details to be confirmed at detailed design stage.

3.4.4 Overall, it is concluded that there are no issues raised within either Audit that could not be resolved at detailed design stage or would restrict access from being delivered in the proposed locations.

3.5 Parking

3.5.1 Residential parking standards are set out in the 'Kent Design Guide Review: Interim Guidance Note 3 (November 2008)'. The parking standards set out for houses in villages/rural/suburban edges are as follows:

- 1 and 2 bed houses = 1.5 spaces per unit
- 3 bed houses = 2 independently accessible spaces per unit
- 4+ bed houses = 2 independently accessible spaces per unit

3.5.2 The parking standards note that the independently accessible spaces are:

“best provided side by side, or in another independently accessible form. Tandem parking arrangements are often under-utilised.”

3.5.3 The parking standards set out that garages within villages/rural/suburban edges developments are not included in the parking provision and should be counted as additional.

-
- 3.5.4 Additional car parking for visitors is also included within the standards with 0.2 on-street spaces required per unit.
- 3.5.5 KCC has advised that all new developments need to consider electric vehicle (EV) charging provision to future-proof sites for the foreseen increase in EV vehicles. The proposed development will offer charging points within the site, including on residential driveways and at a some of visitor parking spaces.
- 3.5.6 Based on the quantum of development proposed on the site (300 dwellings) a parking provision of up to 600 resident parking spaces will need to be provided for the residential dwellings, based on 2 spaces at each property. An additional 60 visitor car parking spaces will be provided across the development site. Depending upon the final mix of dwellings provided on the site, the number of resident parking spaces could be reduced for those dwellings with 1-2 bedrooms.
- 3.5.7 Minimum cycle parking requirements are set out in the 'Kent and Medway Structure Plan 2006'. One cycle parking space per bedroom should be provided for individual residential dwellings based on these standards. Cycle parking provision at the development site will be provided within the curtilage of the residential dwellings and where a garage is provided it be provided at a suitable size to accommodate the required cycle parking provision.
- 3.5.8 Limited car parking spaces will be provided at the local centre for the local shop and the potential work hub/meeting spaces. Cycle parking will also be provided.
- 3.5.9 The proposed development will also provide 6 electric vehicle (EV) parking spaces which will form part of a dedicated Car Club scheme being promoted on the site.
- 3.5.10 The final car and cycle parking provision will be determined at the Reserved Matters stage, when the mix and type of dwellings and the mix of uses to be included within the local centre is known.

SECTION 4 Accessibility of the Site

4.1 Introduction

4.1.1 This section provides a description of the existing sustainable transport conditions within the vicinity of the proposed development site, including existing public transport provision, walking and cycling networks. The accessibility of the site to key local facilities is also set out in this section.

4.2 Existing Public Transport Provision

Bus Provision

4.2.1 The nearest bus stops to the site are located along the site frontage on the A257 The Hill, c.130m west of the proposed site access. To the east of site, further bus stops are located c.250m away from the site access along the A257 The Hill. These bus stops are served by the same bus routes.

4.2.2 No bus services currently run along Bekesbourne Lane and therefore there are no existing bus stops along this route.

4.2.3 The westbound bus stop located on the A257 site frontage provides a lay-by bus stop, with a bus shelter and associated seated waiting facilities. The corresponding eastbound bus stop is an on-street bus cage bus stop, with a flagpole, but no bus shelter. However, the eastbound bus stop to the east of the site access onto the A257 The Hill does provide a bus shelter and seated waiting facility and an on-street bus cage, whilst its associated westbound bus stop is a simple on-street bus cage bus stop, with a flagpole provision.

4.2.4 The bus timetables of the services along the A257 The Hill are included in **Appendix 4.A**, with a summary of the bus routes set out below in Table 4.1.

Table 4.1: Summary of Bus Services on A257 Adjacent to the Development Site

Service	Route	Frequency				
		Weekdays		Saturday		Sunday
		Daytime	Evening	Daytime	Evening	
11	Broadstairs – Westwood – Minster – Ickham – Littlebourne – Canterbury	2 services	-		-	-
43	Sandwich – Littlebourne – Canterbury	30 mins	2 services	30 mins	1 service	-
43A	Eastry - Canterbury	2 services	-	-	-	-
44	Eastry - Canterbury	1 service	-	-	-	-
544	Walmer – Deal – Eythorne – Elvington – Goodnestone – Staple – Wingham – Canterbury	1 service ¹	-	1 service	-	-

¹ Wednesday service only

Source: Traveline and Stagecoach

4.2.5 Bus service 43 provides a half-hourly service to Canterbury with a journey time of approximately 15-minutes, providing the site with excellent access to a high frequency bus service to the range of facilities available within Canterbury. The additional services provide opportunities to access other nearby destinations albeit with lower frequency services available.

4.2.6 The other services are less frequent but still offer connections to other destinations such as Eastry, Broadstairs and elsewhere.

4.2.7 A direct pedestrian link will be provided from the development site to the westbound bus stop on the A257 The Hill. This link will provide a direct and safe connection to the existing bus stop and seated waiting facilities.

4.2.8 With the close proximity of the existing bus stops, high frequency and fast journey time of the bus service to Canterbury, it is considered that the existing provision will ensure residents, employees and visitors of the site will have access to excellent sustainable transport connections to Canterbury, that will help to encourage and foster non-car travel.

Rail Provision

4.2.9 The nearest rail station to the site is Bekesbourne station located c.2.0km to the south-west of the site. This rail line provides hourly services to London Victoria and Dover Priory.

4.2.10 Bekesbourne station provides 20 car parking spaces, with 1 disabled bay, and no cycle parking or storage facilities. At the time of writing parking for a day costs £3.50 or there is an annual charge of £696.90. There are limited facilities on this two platformed station.

- 4.2.11 Bekesbourne station is on the same line as Canterbury East station, located c.5.6km west of the site. Canterbury East station can be accessed by bus from the Canterbury services which stops adjacent to the site, with a short walk, less than 10 minutes, from the bus stop in Canterbury to the railway station.
- 4.2.12 Canterbury West station is located c.6.0km west of the site and provides frequent train services to numerous destinations including London St Pancras, London Charing Cross, London Victoria, Margate, Minster and Ramsgate. This station can also be accessed by bus services from the site, with a change of bus services in Canterbury city centre.
- 4.2.13 Future residents and visitors of the development would therefore be able to access these frequent train services from nearby railway stations.

4.3 Active Travel Provision

Walking

- 4.3.1 The Institution of Highways and Transport guidance on walking 'Providing for Journeys on Foot (2000)' outlines a preferred maximum walking distance for commuting and school trips of 2km. The plan contained within **Appendix 4.B** presents a 2km walking catchment measured from the centre of the development site and shows that all of Littlebourne is within a 2km walking distance of the site. As identified in Section 4.4 below, many local facilities are located within a short walking distance of the site, such as Littlebourne primary school and Four Hill Village Stores.
- 4.3.2 The proposed development will provide a local centre, comprising a small shop and a potential work hub / meeting space, which will be easily accessible by foot from all dwellings within the site.
- 4.3.3 A footway is present along the northern side of the A257 The Hill, along the site frontage, with a general width of c.2.0m. This footway provides a continuous pedestrian link into Littlebourne and a number of key facilities as set out below. To the west of the site access on the A257 The Hill, the footway continues along the A257 The Hill, but generally narrows beyond the extent of the current built area of Littlebourne.
- 4.3.4 As outlined above, the proposed vehicular accesses into the site and the new link road between the access points will be flanked by 2m footways on either side, connecting into the wider networks. The development will also include networks of pedestrian routes across the site, including along the northern frontage, adjacent to A257.

- 4.3.5 Bekesbourne Lane currently has no footways on either side and is a relatively narrow carriageway of c.4.3m. The proposed development will provide an off-carriageway footway along the length of the site frontage with accesses onto Bekesbourne Lane. To the north of the site frontage the proposed footway will provide an access in close proximity to the existing public right of way 'School Path' lane, which provides an existing connection to Littlebourne village from Bekesbourne Lane.
- 4.3.6 There are a number of Public Rights of Way (PRoW) located through Littlebourne, with an extract of KCC's online route map included in **Appendix 4.C**. This plan shows a public footpath opposite the site (Ref. CB143), which 'cuts the corner' of the A257 The Hill / Jubilee Road Junction, reducing the walking distance to Littlebourne School. None of the existing PRoW are affected by the development proposals.
- 4.3.7 A short section of footway and an uncontrolled pedestrian crossing point will be provided to the east of the proposed site access on the A257 The Hill, incorporating dropped kerbs and tactile paving. This crossing will allow residents to access the footway on the northern side of the A257 The Hill and also access the existing PRoW route.
- 4.3.8 As set out in Section 5, the existing traffic survey flow on the A257 The Hill are c.750-950 two-way vehicle trips in the peak hours. An uncontrolled pedestrian crossing is therefore considered to be an appropriate level of provision in this location.

Cycling

- 4.3.9 The Department for Transport's guidance on cycling 'LTN1/20 Cycle Infrastructure Design' states that ***"two out of three personal trips are less than five miles [8km] in length – an achievable distance to cycle for most people. For school children the opportunities are even greater: three quarters of children live within a 15-minute cycle ride of a secondary school, while more than 90% live within a 15-minute walk of a primary school"***. The plan contained within **Appendix 4.D** presents an 8km cycle catchment around the proposed site.
- 4.3.10 As identified above, all of Littlebourne is within 2km of the site and therefore comfortably within cycling distance. A number of nearby villages are within 8km of the site, including Wickhambreaux, Bramling and Bekesbourne, providing access to further facilities including Bekesbourne Railway station. The cycle catchment also shows that the site is within 5km of the eastern edge of Canterbury, with St. Martin's Hospital within 5km, and the centre of Canterbury within 8km of the site, all within cycling distance for many residents.

4.3.11 There are no specific cycle facilities within the vicinity of the site or within Littlebourne. However, given the traffic flows and speed limits within Littlebourne, it is considered that the existing surrounding road network is suitable to accommodate on carriageway cycling.

4.3.12 The site's internal road layout will be designed to accommodate pedestrian and cycle movements throughout the site and additional networks of off-road pedestrian / cycle paths are proposed across the site. The local centre will provide cycle parking facilities.

4.4 Local Key Facilities

4.4.1 To encourage a culture of sustainable travel and to reduce the need to travel by car, particularly for shorter journeys, it is important that a development site is well positioned in terms of access to local facilities. This section reviews the local facilities within Littlebourne and demonstrates how they can be accessed by sustainable modes, whether walking, cycling or by bus.

4.4.2 The plans contained within **Appendix 4.E** illustrate the local key facilities within the vicinity of the site and show that a number of facilities are available locally within Littlebourne – both offering employment opportunities and everyday facilities for residents. This includes Littlebourne Primary School and Ladybirds Pre-School; Four Hill Village Stores; Littlebourne Surgery; Littlebourne War Memorial Hall and Littlebourne Post Office. Further leisure facilities such as playing fields, The Evenhill pub/restaurant and Howletts Wild Animal Park and places of worship are also located within the village. As set out in Section 4.3 above, all of these facilities are within a 2km walking catchment and comfortably within cycling distance of the site. These existing facilities will be complemented by the proposed local store and workplace hub proposed on the site.

4.4.3 Wickhambreaux village to the north of Littlebourne provides further local facilities including Wickhambreaux Primary School and a bakery. The village is located beyond the preferred 2km walking catchment, but is an easy cycle ride away and bus service 11 provides a service between the bus stops along the site frontage to Wickhambreaux.

4.4.4 Numerous key facilities, such as secondary schools, supermarkets, a wide range of other retail, hospital, and employment opportunities are available in Canterbury as shown on the wider area facilities plan contained within **Appendix 4.E**. The eastern part of Canterbury is within 5km of the site, including St Martin's Hospital, with the centre of Canterbury located within an 8km cycle distance.

4.4.5 As noted above, bus service 43 provides a half-hourly frequency to Canterbury with a timetabled journey time of c.15 minutes.

4.4.6 It is therefore concluded that residents of the proposed development will have access to a good range of facilities locally within Littlebourne and a more extensive range of facilities within Canterbury which is within cycling distance and accessible by bus.

4.4.7 As outlined above, the railway services provided at Bekesbourne and Canterbury provide onward connections to a wide range of destinations across the county and to London beyond. Overall it is concluded that the site is a sustainable location for development and there are opportunities for travel by sustainable modes to be taken up by future residents, employees and visitors of the site.

4.5 **Travel Plan**

4.5.1 As requested by KCC during scoping discussions, a Travel Plan for the proposed development has also been prepared to accompany the planning application (report ITM16283-007A R). The implementation of the Travel Plan is consistent with national policy and will encourage sustainable travel behaviour at the site.

SECTION 5 Existing Highway Network

5.1 Introduction

5.1.1 This section provides a description of the existing highway network within the vicinity of the site and existing traffic flows and conditions.

5.2 Highway Network Description

5.2.1 A257 The Hill runs along the site's northern frontage and through Littlebourne, changing to A257 Canterbury Road to the west of the site. The A257 Canterbury Road is typically a 7.0m wide carriageway road and is subject to a 50mph speed limit. The speed limit changes to a 30mph c.350m west of the site on the approach to Littlebourne, where the road becomes A257 The Hill. Footway build outs are provided on the northern side of A257 The Hill along much of the site frontage, reducing the effective carriageway width in these areas to c4.5-5.2m and keeping vehicle speeds low along the site frontage and the approach to the village.

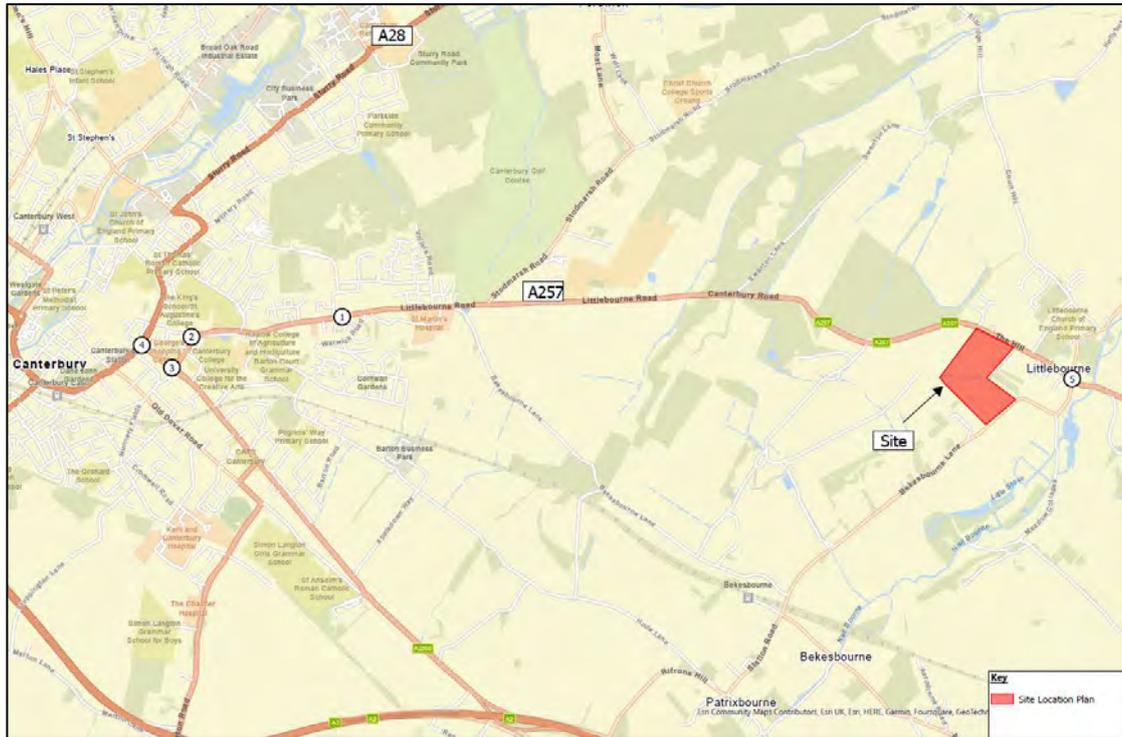
5.2.2 A new access junction has recently been constructed on A257 The Hill associated with the residential development which is currently under construction to the north of The Hill, as detailed in Section 6.4 below.

5.3 Existing Traffic Flows

5.3.1 Manual Classified Count (MCC) and queue surveys were conducted by Streetwise on Thursday 30th June 2022 to establish the baseline traffic flows on the existing highway network surrounding the site. June is considered to be a 'neutral' traffic month, within the context of establishing baseline traffic levels and there were no roadworks on the network within the vicinity of the study area that would have affected the surveys. The junctions included within the surveyed study area are listed below and shown in **Figure 5.1** below:

- A257 High Street / Bekesbourne Lane (within Littlebourne)
- A257 Littlebourne Road / Wemyss Way
- A257 Longport / Lower Chantry Lane roundabout
- A257 St. George's Place / A2050 New Dover Road / Upper Chantry Lane / Lower Chantry Lane
- A257 St. George's Place / A28 Upper Bridge Street / A28 Lower Bridge Street (St. George's Roundabout)

Figure 5.1: Location of Traffic Surveys



5.3.2 The full survey outputs are presented in **Appendix 5.A**.

5.3.3 The surveys were conducted over the period 07:00-10:00 and 16:00-19:00. The peak hours for the morning and evening peak periods have been derived from the surveys for use in impact analysis. The resultant peak hours are as follows:

- AM Peak Hour = 07:45-08:45
- PM Peak Hour = 16:00-17:00

5.3.4 The observed peak hour traffic flows are presented in **Appendix 5.B**.

5.3.5 The total observed traffic inflows at each of the junctions is summarised in Table 5.1 below.

Table 5.1 Observed Traffic Flows – 2022 Surveys

Junction	AM Peak Hour	PM Peak Hour
A257 / Bekesbourne Lane	1,163	1,011
A257 Littlebourne Road / Wemyss Way	1,134	1,051
Longport / Lower Chantry Lane Roundabout	1,511	1,471
A257 / A2050 / Upper Chanty Lane	2,405	2,261
A257 / A28 (St George's Roundabout)	3,055	2,937

(Flows in passenger car units – PCU)

5.4 Road Traffic Casualty Data

5.4.1 Accident data has been obtained from KCC, covering the dates of 01/10/2017-30/09/2022, for the local road network within Littlebourne and within the vicinity of the proposed development. The full set of collision data and collision location plan, as supplied, are included in **Appendix 5.C**.

5.4.2 Table 5.2 provides a summary of the collisions at individual junctions and links within Littlebourne recorded during this five-year period.

Table 5.2: Local Collision Data 2017 - 2022 - Littlebourne

Location	Severity of Collision			Total
	Slight	Serious	Fatal	
High Street (West of Bekesbourne Lane)	1	0	0	1
A257/Jubilee Road Junction	1	0	0	1
Nargate Street	1	0	0	1
A257 / Evenhill Road	0	1	0	1
High Street (East of Bekesbourne Lane)	1	0	0	1
A257 The Hill	1	0	0	1
A257 Junction with Bekesbourne Lane	1	0	0	1
Total	6	1	0	7

5.4.3 A total of 7 collisions were recorded within Littlebourne during the five-year period, with no fatal accidents and only one collision recorded as serious in nature. The remaining six collisions were recorded as slight in nature.

5.4.4 The collision recorded as serious in nature occurred at the A257 / Evenhill Road Junction. The collision was the result of a rear end shunt with a vehicle colliding with the rear of a vehicle which was noted as being either stationary or just setting off.

5.4.5 The remaining collisions were all recorded as being slight in nature. One of the accidents involved a pedestrian who was knocked by a car travelling at low speed and a second accident involved a pedal cyclist who collided with a vehicle travelling in the opposite direction within a traffic calmed area. A further accident involved a collision between a vehicle turning right colliding with a motor cyclist who was attempting to overtake the vehicle at the time.

5.4.6 Overall, it can be concluded that there has been a low occurrence of collisions within the vicinity of the development site and that no trends in collision occurrence or causation are evident. It is therefore considered that there are no underlying safety concerns in the surrounding network that would be exacerbated by the introduction of the development proposals.

SECTION 6 Traffic Assessment Methodology

6.1 Overview

6.1.1 This section sets out the calculation of the traffic flows on the local highway network used in the assessment of the development impacts, including details of:

- Future background traffic growth;
- Committed development traffic flows;
- Proposed development trip generation; and
- Distribution and assignment of the proposed development-generated trips.

6.2 Traffic Growth

6.2.1 It has been requested by KCC, through scoping, that a future year assessment of the proposed site accesses and the wider off-site traffic impacts should be carried out based on the network operation at 2045, which represents the end of the emerging Local Plan Period.

6.2.2 As noted above, the baseline traffic survey data was collected in June 2022. To determine background traffic growth rates to 2045, traffic growth forecasts have been obtained from TEMPro for the Canterbury Local Authority area. The growth factors to be applied to the 2022 base traffic levels are as follows:

- 2022-2045 AM Peak = 1.2092
- 2022-2045 PM Peak = 1.2122

6.2.3 However, these traffic growth factors represent growth associated with proposed developments, taken from the relevant Local Plans, and background traffic growth associated with changes in car ownership levels, demographics and wider travel patterns. As set out in the next section, the assessments have also taken account of traffic flows associated with an extensive list of committed and planned developments within the wider Canterbury area – totalling over 7,000 new dwellings. The application of c.21% background traffic growth in addition to the traffic associated these developments would therefore represent a significant level of double counting.

6.2.4 Furthermore, travel patterns are changing in response to changing behaviours following the Covid-19 pandemic and the emerging decarbonisation agenda. Increased levels of home-working and online shopping have resulted in significant reductions in overall travel and it is

forecast that travel will further reduce in favour of sustainable travel modes going forward. It is therefore not clear what effect these changes will have on the forecasts predicted within TEMPRo and therefore it is considered likely that overall traffic levels in the future will be lower than those forecast.

- 6.2.5 Reference has been made to TEMPRo to determine the proportion of the traffic growth forecasts that relate to development-related growth within Canterbury and that which is attributable to wider changes in car use. TEMPRo assumes a total of 19,479 additional households and 5,612 jobs within Canterbury over the period 2022-2045. If the growth associated with this development is removed from the traffic growth forecasts (presented at paragraph 6.2.2 above), this would result in background traffic growth rates of 1.0473 in the morning peak and 1.0407 in the evening peak. This clearly shows that the vast majority of growth within Canterbury is expected to be associated with new development.
- 6.2.6 The following section considers the traffic levels associated with a number of committed and planned developments, for use within the assessments presented later in this report. However, it is difficult to predict where the elements of double counting would be likely to occur on the network and to determine any wider re-assignment effects that would result from the addition of this significant level of background traffic growth (>20%) plus the development-generated traffic.
- 6.2.7 The application of the full 2022-2045 growth factors to the 2022 surveyed peak hour traffic flows is therefore not considered to present a realistic level of traffic that would occur on the network and will almost certainly represent a significant worst case scenario.
- 6.2.8 Notwithstanding this, the resultant TEMPro outputs are presented in **Appendix 6.A**, with the 2045 Background traffic flows presented in **Appendix 6.B**.

6.3 Committed Development

- 6.3.1 In addition, to the application of background traffic growth, the traffic associated with a series of committed developments has been considered within the context of the likely future year traffic levels across the surrounding highway network. These developments have been agreed with KCC during pre-application scoping discussions.
- 6.3.2 Within Littlebourne, a Reserved Matters application has been submitted for a residential scheme on the opposite side of The Hill (Application Ref. 19/01665). This residential development

comprises 85 dwellings, with the access to the site recently constructed. Traffic flows associated with this development are taken from the supporting TA and have been incorporated within the impact assessments.

6.3.3 KCC has also requested that the impact assessment consider a number of additional committed developments within Canterbury, including:

- Howe Barracks (CA/14/01230/FUL) – 500 dwellings
- South Canterbury (CA/16/00600) – 4,000 dwellings plus other mixed uses
- Canterbury Riverside (CA/17/02092/FUL) – 189 dwellings and 484 student rooms plus multiplex cinema and other retail/leisure uses
- Hoplands Farm (CA/16/00404) – 250 dwellings plus commercial uses
- Former Chislet Colliery (CA/16/00673/OUT) – 370 dwellings

6.3.4 In addition, KCC has also requested that the following Local Plan sites also be considered in the assessment, namely:

- Sturry (CA/17/01383/OUT) – 650 dwellings
- Broad Oak (CA/18/00868/FOS) – 456 dwellings
- Land North of Hersden (CA/22/01845) – 800 dwellings plus 1 ha commercial uses

6.3.5 The locations of these committed and Local Plan sites are presented in **Appendix 6.C**.

6.3.6 A review of the traffic flows associated with these committed schemes and Local Plan sites has been carried out, with reference to the applications submitted alongside each site where appropriate, with a summary of the findings presented below:

- The Hill (Application Ref. 19/01665) – A TA was produced in November 2014 to support the outline planning application for 87 dwellings and a doctors' surgery. The development traffic flows are presented in Appendix J of the supporting TA and these flows have been included within the link capacity and site access junction assessment. All flows heading west on the A257 from this site are assumed to continue to the A28 at Canterbury.

- Howe Barracks (CA/14/01230/FUL) - A TA was produced in June 2014 to support the outline planning application for 500 dwellings. Traffic flow diagrams setting out the development trips are included in the supporting TA. A summary of the traffic flows on the A257 is presented in Table 6.1 below.

Table 6.1: Howe Barracks Development Trips on A257

Link	AM Peak		PM Peak	
	Eastbound	Westbound	Eastbound	Westbound
East of Howe Barracks on A257	28	8	17	26
West of Howe Barracks on A257	31	56	97	33

The traffic flows have been included in the link capacity and site access junction assessment. All flows heading west on the A257 from this site are assumed to continue to the A28 at Canterbury, with all development traffic flows to the east of the site assumed to travel into Littlebourne. However, in practice it is likely that some of these trips will turn off the A257 onto Bekesbourne Lane or Stodmarsh Road and therefore it is considered this assumption will form a robust assessment.

- South Canterbury (CA/16/00600) - A TA was produced in March 2016 to support the application for 4,000 dwellings, 70,000sqm commercial floorspace and a 1,000 space Park & Ride scheme. Traffic flow diagrams, detailing the development trips, are included in Appendix HH of the TA. A summary of the traffic flows on the A257 is presented in Table 6.2 below.

Table 6.2: South Canterbury Development Trips on A257

Link	AM Peak		PM Peak	
	Eastbound	Westbound	Eastbound	Westbound
A257 North of A2050	1	5	3	1
A257 St. George's Place	129	195	265	196

The above traffic flows have been included within the link capacity and site access junction assessment. All development traffic flows north of the A2050 have been assumed to travel into Littlebourne.

- Canterbury Riverside (CA/17/02092/FUL) - A TA was produced in September 2017 to support the application for 189 dwellings and 484 bed student accommodation plus 900 seat multiplex cinema and other retail/leisure uses. The site is located north of Canterbury city centre and c.7km from the proposed development site. The supporting TA does not consider traffic flows on the A257, with the nearest junction included being the Military Road roundabout north-east of Canterbury city centre. A review of the traffic flows shows c.110-130 two-way trips on the A28 south of this roundabout. The majority of these trips are likely to be associated with trips to the city centre and elsewhere within Canterbury. The significant levels of background growth applied (as above) are therefore considered sufficient to account for the small number of trips that may use the A257. Therefore, no specific trips relating to this development are included in the assessment of the impacts of the proposals upon the A257.
- Hoplands Farm (CA/16/00404) – This site is located c.13km from the proposed development site, to the north-east of Sturry, in Hersden. The TA produced in January 2016 to support the application for the mixed-use site only considers development trips within Hersden and to the north-east on the A28. A review of the traffic flows shows c.140-150 two-way trips on the A28 to the south-west. The majority of these trips are likely to be associated with trips to/from Sturry and Canterbury. Again, the significant background growth applied is considered sufficient to account for the small number of trips that may use the A257. Therefore, no specific trips relating to this development are included in the assessment.
- Former Chislet Colliery (CA/16/00673/OUT) - This site is also located c.13km from the proposed development site, to the north-east of Sturry, in Hersden. The TA produced in February 2016 to support the outline application for the 370 dwelling only considers development trips within Hersden, to the south-east to Sturry and to the north-east on the A28. A review of the traffic flows in Appendix P of the TA shows no trips on the A28 between Sturry and Canterbury. Therefore, no trips relating to this development are included in the assessment of the A257.

- Sturry (CA/17/01383/OUT) – This site is located c.10km from the proposed development site, in Sturry, to the north-east Canterbury. This application was refused in November 2020. The supporting TA does not consider traffic flows on the A257, with the nearest junction being A28 / Vauxhall Road. The majority of trips on the A28 to/from the south-west are likely to be associated with trips to/from Canterbury. As above, the significant levels of background traffic growth applied to the baseline traffic flows are therefore assumed to include an allowance for this site. Therefore, no specific additional trips relating to this development are included in the assessment of the A257.
- Broad Oak (CA/18/00868/FOS) - This site is located c.11km from the proposed development site, in Sturry, to the north-east Canterbury. The supporting TA was produced in March 2019, but does not consider traffic flows on the A257, with the nearest junction being A28 / Vauxhall Road. The majority of trips on the A28 to/from the south-west are likely to be associated with trips to/from Canterbury. As above, the significant levels of background traffic growth applied to the baseline traffic flows are therefore assumed to include an allowance for this site. Therefore, no additional specific trips relating to this development are included in the assessment of the A257.
- Land North of Hersden – This site is c.13km from the proposed development site, to the north-east of Sturry, in Hersden. Through scoping KCC requested that this site, while not currently permitted be included as a committed development.

The majority of the trips to/from the Hersden site are likely to remain on the A28 or travel to/from Canterbury. Where appropriate trips have also been included on the A257 with all trips shown to travel through Littlebourne to form a robust assessment.

The number of additional trips at the junctions being assessed are summarised in Table 6.3 below.

Table 6.3: Land North of Hersden – Development Trips

Junction	AM Peak Two-Way Flows	PM Peak Two-Way Flows
St George's Roundabout	156	131
A2050 / Upper Chantry Lane / A257	58	49
Junctions along the A257	47	40

6.3.7 The committed development traffic flows identified above are presented in **Appendix 6.D** and have been included within the impact assessment of the proposed development across the network and the assessment of the operation of the proposed site access as set out below.

6.4 Background Traffic Re-Routing

6.4.1 Following discussions with KCC regarding the proposed access strategy and the connection of the accesses through the site, it is expected there will be some element of reassignment of background traffic flows between the A257 The Hill and Bekesbourne Lane onto the new link being delivered through the site.

6.4.2 This reassignment is expected to largely be associated with the proportion of existing traffic which will turn right into and left out of Bekesbourne Lane at the A257 High Street / Bekesbourne Lane priority-controlled T-junction.

6.4.3 The total levels of traffic (in pcu/hour) turning right into Bekesbourne Lane and left out of Bekesbourne Lane are as follows (as shown on the traffic flow diagram contained within Appendix 6.B):

Table 6.4: Background Traffic Flows at A257 / Bekesbourne Lane Junction

Movement	2045 Background	
	AM Peak Hour	PM Peak Hour
Right Turn into Bekesbourne Lane from A257 The Hill	135	127
Left Turn out of Bekesbourne Lane into A257 The Hill	98	137

6.4.4 A proportion of these trips will be associated with movements to and from the existing dwellings at the northern end of Bekesbourne Lane and therefore it is assumed that these trips would be less likely to transfer to the new link road. There are c.50 existing residential dwellings on Bekesbourne Lane and using the residential trip rates set out below, this equates to 23 two-way trips in each peak hour, split between trips to/from the east and west on the A257.

6.4.5 Based on the existing split in turning movements at the A257 / Bekesbourne Lane junction it has been determined that the following trips are assumed to be associated with the existing residential dwellings and would not divert to the new route:

Table 6.5: Existing Bekesbourne Lane Residential Traffic Estimates

Movement	2045 Background Traffic Flows	
	AM Peak Hour	PM Peak Hour
Right Turn into Bekesbourne Lane	3	8
Left Turn out of Bekesbourne Lane	7	3

6.4.6 The remaining traffic on The Hill / Bekesbourne Lane is therefore assumed to have the option to transfer to the new route.

6.4.7 The proposed new connection through the development site is c.1.1km long, measured from the proposed site access on A257 The Hill to the access on Bekesbourne Lane. The corresponding existing route via The Hill / Bekesbourne Lane is c.0.8km. On this basis it is assumed that 90% of the relevant background trips (as above) would transfer to the new route. Table 6.6 below shows the potential re-assignment of trips through the proposed development site, based on this level of transfer:

Table 6.6: Potential Re-Assignment of Background Trips

Movement	2045 Reassigned Traffic	
	AM Peak Hour	PM Peak Hour
Right Turn into Bekesbourne Lane	120	103
Left Turn out of Bekesbourne Lane	80	122

6.4.8 These trips have been reassigned from the A257 and Bekesbourne Lane within Littlebourne and routed via the proposed development site. The reassigned traffic flows are presented in **Appendix 6.E**.

6.4.9 The resulting 2045 Background + Committed + Reassignment traffic flows are presented in **Appendix 6.F**.

6.5 Development Trip Generation and Distribution

6.5.1 This section presents the expected levels of traffic generation associated with the proposed development of up to 300 dwellings and the proposed local centre. For each development use, the expected distribution of the generated trips around the network is also set out.

6.5.2 This Transport Assessment has been carried out for a higher quantum of development than is now proposed based upon the concept masterplan prepared to support the application. The assessment considers an earlier assumed quantum of development as set out in the Draft Local Plan for Canterbury, which assumed a development yield of 330 residential dwellings, including 300 standard dwellings plus 30 elderly person accommodation units. The proposed development, which forms this application is proposed to comprise c.300 residential dwellings, including a mix of housing types, with the resultant mix to be determined at Reserved Matters stage. Allowance has also been made within the assessment for the traffic generated by the uses proposed within the local centre.

6.5.3 As the assessment considers a higher quantum of development than that which is now sought, it is considered the following assessment presents a robust and worst-case assessment of the potential development impacts across the surrounding network.

Residential Dwellings – Trip Generation

6.5.4 The trip rates for the residential dwellings have been derived from sites within the 'Houses Privately Owned' category from the TRICS trip generation database.

6.5.5 The TRICS database has been reviewed to identify comparable residential sites in similar locations to that of the proposed development. The resulting sites were then filtered down as follows:

- All sites in London and Ireland were removed;
- Sites of between 100-500 dwellings were selected;
- Sites within Edge of Town and Neighbourhood Centre locations were selected;
- Surveys carried out on Tuesdays-Thursdays were selected (i.e. excluding Mondays, Fridays and weekends);
- Surveys carried out during the COVID-19 pandemic lockdown restrictions were excluded; and
- Sites with high proportions of flats and/or bungalows were also excluded.

6.5.6 The resulting sites and associated trip rates derived from TRICS are presented in **Appendix 6.G**. These trip rates have been agreed by KCC during scoping discussions.

6.5.7 The peak hour trip rates and resultant trip generation based upon the assumed quantum of 300 dwellings are presented in **Table 6.7**.

Table 6.7: Trip Rates Per Dwelling and Trip Generation – 300 Dwellings

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip Rates / Dwelling	0.129	0.340	0.469	0.322	0.137	0.459
Trip Generation	39	102	141	97	41	138

6.5.8 The table shows that c.140 two-way trips are expected to be generated by the residential units at the proposed development site in the morning and evening peak hours. It is noted that the peak hour for the development trips in the evening peak hour is 17:00-18:00 whereas the network evening peak hour (as described above) is 16:00-17:00. The addition of development and network peak hour traffic flows together therefore represents a worst-case basis for the assessment and further evidence of the robustness of the assessment.

Residential Dwellings – Trip Distribution

6.5.9 The vehicular trips associated with the proposed development are distributed across the surrounding road network according to the expected range of journey purposes likely to be made by future residents of the site.

6.5.10 Details of the likely split of journey purposes are based upon proportions derived from TEMPro (with non-home based trips excluded) for car drivers using the Canterbury 010 Middle Super Output Area (MSOA) which encompasses the Littlebourne area. The disaggregation of vehicle trips by journey purpose and the numbers of two-way trips generated by the proposed dwellings, split by each purpose, are set out in **Table 6.8** below:

Table 6.8: Residential Trips (Car Driver) - Journey Purpose Breakdown

Journey Purpose	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Proportion	No. Trips	Proportion	No. Trips
Work	61.4%	86	46.5%	64
Employer's business	8.2%	12	7.2%	10
Education	9.4%	13	4.4%	6
Shopping	9.2%	13	13.9%	19
Personal business	5.6%	8	7.7%	11
Recreation / Social	2.7%	4	7.7%	11
Visiting friends / relatives	1.3%	2	9.3%	13
Holiday / day trip	2.1%	3	3.3%	5
Total	100.0%	141	100.0%	138

Source: TEMPro

6.5.11 The following describes how the trips associated with each journey purpose have been distributed onto the surrounding network.

Journeys to Work

6.5.12 The work and employer’s business-related trips have been distributed to the local highway network based on the existing car driver proportions taken from the Census Journey to Work data (Canterbury 010 MSOA).

6.5.13 The analysis of the Journey to Work data is presented in **Appendix 6.H** and the resultant assignment onto key routes is summarised, based on the local highway network, in **Table 6.9**.

Table 6.9: Journey to Work Trip Distribution and Assignment

Route	Proportion of Trips
A257 (West) between the site and St. Martins Hospital	3.7%
New Bypass (Bufs Road) via A257 (West)	5.2%
New Dover Road via A257 (West)	3.7%
Canterbury City Centre via A257 (West)	10.6%
A28 (South)	34.3%
A28 (North)	12.3%
Jubilee Road	2.2%
Nargate Street	7.1%
A257 East	13.4%
Bekesbourne Lane – Including trips to/from A2 (South)	7.5%
Total	100.0%

Source: 2011 Census – Journey to Work

Education-Related Trips

6.5.14 All school-related car trips will be made off-site and would generally be made to nearby schools. Trips to primary and secondary schools have been split in the ratio 60/40 (based on NTS) and distributed to schools as follows, with reference to the locations of each school in relation to the site.

Table 6.10: Primary School Trip Distribution

School	Proportion	60% Split
Littlebourne CoE	50%	30%
Wickhambreaux CoE	20%	12%
Pilgrims Way Primary	10%	6%

School	Proportion	60% Split
Parkside Community	10%	6%
Bridge & Patricbourne CoE	10%	6%
Total	100%	60%

Table 6.11: Secondary School Trip Distribution

School	Proportion	40% Split
Canterbury Academy	50%	20%
St Anselm's Catholic	30%	12%
Barton Court Grammar	10%	4%
Simon Langton Girls' Grammar	10%	4%
Total	100%	40%

Retail Trips

6.5.15 Shopping trips have been disaggregated into food and non-food in the ratio 50/50 (based on NTS) with the following trip distribution patterns assumed:

Table 6.12: Food Shopping Trip Distribution

Shop	Proportion	50% Split
Sainsbury's Canterbury	30%	15%
Morrisons Canterbury	30%	15%
Four Villages Store, Littlebourne	20%	10%
Canterbury City Centre	10%	5%
Co-op Aylesham	10%	5%
Total	100%	50%

Table 6.13: Non-Food Shopping Trip Distribution

Destination	Proportion	50% Split
Canterbury City Centre	50%	25%
Marshwood Close Retail Park	30%	15%
Ashford	10%	5%
Westwood Cross	10%	5%
Total	100%	50%

6.5.16 The proposed development will provide a local centre, which is expected to include a local convenience shop. However, given its location, trips to the local shop from the site are expected

to be made largely on foot and therefore are not included in the above which relates solely to trips made by car.

Other Trips

6.5.17 Other trips include those associated with a range of leisure, social and personal business journey purposes. These have been distributed to surrounding centres based on the following proportions.

Table 6.14: Other Trips Distribution

Destination	Proportion
Littlebourne	30%
Canterbury	50%
Margate/Ramsgate	10%
Ashford	10%
Total	100.0%

Residential Traffic Flows

6.5.18 The total residential traffic flows for all journey purposes are presented in **Appendix 6.I**.

Elderly Person Accommodation – Trip Generation

6.5.19 As noted above, the separate inclusion of the traffic associated with 30 elderly-person accommodation units is based on an earlier assumed development quantum consistent with the site’s yield assumed in the draft Local Plan. As the proposed development quantum has now reduced, the inclusion of these additional trips provides a robust and worst-case assessment.

6.5.20 The elderly accommodation is expected to be in the form of standard housing which will be restricted for sale to residents over the age of 55. The trip rates for these units are therefore likely to be similar to those for the standard housing and as such the same trip rates have been applied to form a robust assessment. The trip rates and resultant trip generation assuming there will be 30 elderly accommodation units are presented in **Table 6.16**.

Table 6.16: Trip Rates Per Dwelling and Trip Generation – 30 Elderly Accommodation Units

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip Rates / Dwelling	0.129	0.340	0.469	0.322	0.137	0.459
Trip Generation	4	10	14	10	4	14

Elderly Accommodation – Trip Distribution

- 6.5.21 The distribution of the elderly accommodation is also assumed to be the same as for the residential dwellings, as set out above.
- 6.5.22 The elderly accommodation traffic flows are presented in **Appendix 6.J**.

Local Centre – Trip Generation

- 6.5.23 The Local Centre is expected to comprise a small shop and the potential for work hub/meeting spaces. The Local Centre is planned to be located close to the A257 The Hill access, with all externally-generated trips to and from the Local Centre expected to use this access. The following trip generation assumptions have been agreed with KCC during pre-application scoping discussions.
- 6.5.24 The trip rates for the small shop have been derived using the ‘Convenience Store’ category from the TRICS trip generation database. The resulting sites and associated trip rates from TRICS are presented in **Appendix 6.K**. The resultant trip generation for the local shop, assuming a 350sqm floor area, is presented in **Table 6.17**.

Table 6.17: Trip Rates (Per 100sqm) and Trip Generation – Local Shop

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip Rate / 100sqm	8.425	8.645	17.070	9.141	9.416	18.557
Trip Generation	29	30	59	32	33	65

- 6.5.25 A proportion of the trips associated with the local shop are expected to be linked with the proposed residential scheme (50% of all trips assumed). A small number of the trips are also expected to be pass-by trips (30% of all trips), already travelling on the A257 The Hill. As a result, only 20% of vehicle trips from the local shop are likely to be new trips on the network.
- 6.5.26 The work hub/meeting space units are expected to be rooms available to rent on a temporary basis to providing quiet workspace areas and / or meeting space. These facilities are expected to be predominantly for future residents of the site and local residents within Littlebourne, who are anticipated to typically walk / cycle to the units given their convenient location. The work hub/meeting space units will provide limited or no dedicated parking spaces. This is a fairly bespoke type of land use and as such is not typical of other employment-related sites within the

various current TRICs categories. It is assumed that this element of the proposals will generate very few vehicular trips, particularly in the peak hours, but for robustness a nominal vehicle generation is proposed to be included, as set out in **Table 6.18**.

Table 6.18: Assumed Vehicle Trips – Work Hub/Meeting Space

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip Generation	5	3	8	3	5	8

6.5.27 The resulting total trips for the Local Centre, by trip type, that will access the local road network are summarised in **Table 6.19** below.

Table 6.19: Local Centre Trip Generation

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Local Shop – New Trips (20%)	6	6	12	6	7	13
Local Shop – Pass-By (30%)	9	9	18	9	9	18
Work Hub/Meeting Space	5	3	8	3	5	8

Local Centre – Trip Distribution

6.5.28 The pass-by trips associated with the Local Centre have been distributed based on the existing traffic flow proportions on the A257 The Hill, determined from the traffic flow surveys described above.

6.5.29 The Local Centre land uses are largely intended to provide facilities for the new residents of the site and existing local residents within Littlebourne. As such the new trips generated by the Local Centre will be distributed across the local road network within Littlebourne as set out in **Table 6.20**.

Table 6.20: Local Centre Distribution – New Trips

Destination	Proportion
West of the A257 The Hill Site Access	20%
Jubilee Road	20%
Nargate Street	20%

Destination	Proportion
Littlebourne, between Jubilee Road and Nargate Street	20%
A257 East of Littlebourne	10%
Bekesbourne Lane	10%
Total	100.0%

6.5.30 The local centre traffic flows are presented in **Appendix 6.L**.

Total Development Trip Assignment

6.5.31 The total development traffic flows described above, for all land uses have been added together and are presented in **Appendix 6.M**. The local traffic flows within Littlebourne are presented in **Figure 6.1**, with the development traffic flows in the vicinity of Canterbury shown in **Figure 6.2 below**. As noted above, the total development trip generation adopted for the assessment provides a worst-case basis for the assessment as the proposed quantum of development on the site has now reduced to c.300 dwellings (from the previously assumed 330 dwellings).

Figure 6.1: Total Development Traffic Flows – Littlebourne Network

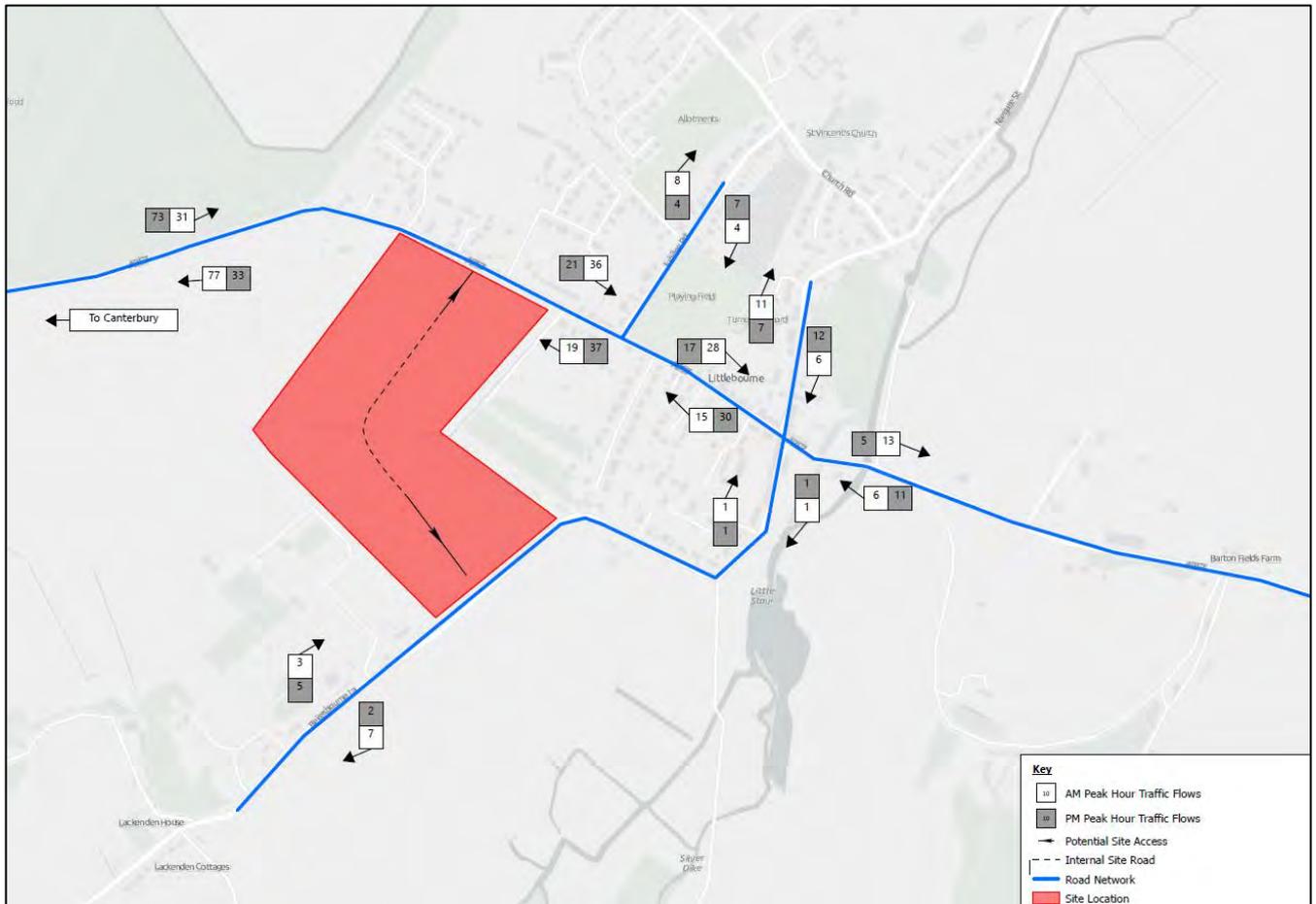
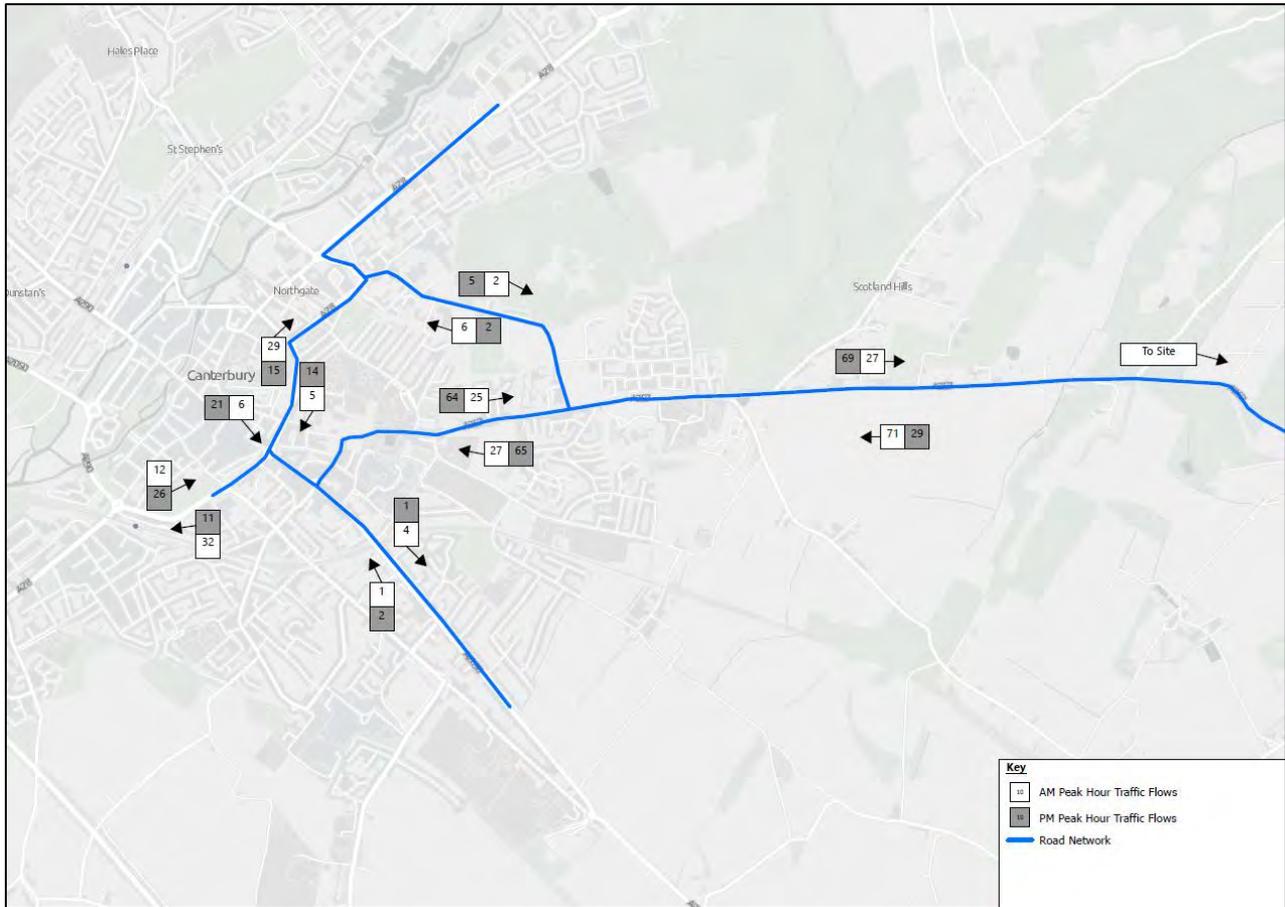


Figure 6.2: Development Traffic Flows – Canterbury Network



6.5.32 The 2045 Base + Committed + Proposed Development traffic flows, including the background reassignment, using the traffic flows set out above, are presented in **Appendix 6.N**.

SECTION 7 Traffic Impact of Development

7.1 Introduction

7.1.1 This section assesses the traffic impacts associated with the proposed development, including the proportional junction impacts, operational assessment of junctions where necessary and the assessment of the proposed site accesses.

7.2 Impacts at Junctions

7.2.1 The total development traffic flows are presented in **Appendix 6.M**. These development traffic flows have been compared with the 2045 Base + Committed / Planned Development + Re-Assignment traffic flows, included in **Appendix 6.F** described in the previous section.

7.2.2 Tables 7.1 and 7.2 below presents the proportional increase that the development-generated traffic flows will have on each of the following junctions which represent the area of assessment agreed with KCC during scoping discussions.

Table 7.1: AM Peak Hour Proportional Impacts of Development Generated Traffic (Two-Way)

Junction	AM Peak Hour					
	June 2022 Survey	Background Growth to 2045	Total Committed Development Traffic	2045 Baseline Traffic Flows (2045 Background + Committed Development)	Development Traffic Flow	Proportional Impact of Development Traffic Flow to 2045 Baseline
St George's Roundabout	3,055	+639	+684	4,378	+82	+1.9%
A257 /A2050 Upper Chantry Lane	2,405	+504	+610	3,518	+90	+2.6%
Longport Roundabout	1,511	+316	+124	1,951	+90	+4.6%
A257 / Wemyss Way	1,130	+236	+237	1,603	+98	+6.1%
A257 / Bekesbourne Lane / Nargate Street	1,163	+243	+146	1,552	-164	-10.6%

Table 7.2: PM Peak Hour Proportional Impacts of Development Generated Traffic (Two-Way)

Junction	PM Peak Hour					
	June 2022 Survey	Background Growth to 2045	Total Committed Development Traffic	2045 Baseline Traffic Flows (2045 Background + Committed Development)	Development Traffic Flow	Proportional Impact of Development Traffic Flow to 2045 Baseline
St George's Roundabout	2,937	+623	+824	4,384	+87	+2.0%
A257 /A2050 Upper Chantry Lane	2,259	+479	+772	3,510	+91	+2.6%
Longport Roundabout	1,471	+312	+154	1,937	+91	+4.7%
A257 / Wemyss Way	1,051	+223	+277	1,551	+98	+6.3%
A257 / Bekesbourne Lane / Nargate Street	1,011	+214	+151	1,377	-186	-13.5%

7.2.3 During the scoping discussions with KCC, it was agreed that detailed junction analysis would only need to be conducted for those junctions where the development traffic's proportional impact is less than 5%, as below this, the impacts are not deemed to be significant.

7.2.4 The above table(s) show that the vast majority of growth across the study area network is attributable to background traffic growth forecasts and traffic associated with committed and other Local Plan development sites, notwithstanding the comments made in Section 6.2 above, regarding the levels of double counting assumed by separately applying background growth and committed/planned development traffic.

7.2.5 The impact assessment presented in Table 7.1 above identifies that the only off-site junction which would need to be subject to detailed capacity assessment will be the A257 / Wemyss Way, along with the two proposed site accesses. These assessments are presented in the following section and again it is noted that these are based upon a higher assumed development quantum than is now being sought for the site.

7.2.6 It is also noted from the above table that the development has a positive impact upon the operation of the A257 / Bekesbourne Lane / Nargate Street junction as a result of traffic levels

reducing at the junction following the introduction of the new link through the site and the consequential re-routing of existing traffic using the junction.

7.3 Junction Capacity and Impact Assessment

A257 / Buffs Road

7.3.1 The impact of the traffic associated with the proposed mixed-use development upon the operation of the proposed A257 / Buffs Road signal-controlled junction (being implemented as part of the Howe Barracks committed development) has been assessed using the LinSig software. The junction layout is set out in Section 3.8 of the support Transport Assessment (PBA report 29329-05) and this has been used as the basis for determining the geometric parameters for the assessment.

7.3.2 The development impacts have been determined by comparing the operation of the junction without and with the development traffic, based upon the future year 2045 base + committed development traffic assumptions outlined above. The results of the impact assessment are contained in full within **Appendix 7.A** and a summary is presented below.

Table 7.3: Capacity of A257 / Buffs Road Junction

Arm	Movement	2045 Base + Committed				2045 Base + Committed + Development			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		DoS (%)	MMQ (PCUs)	DoS (%)	MMQ (PCUs)	DoS (%)	MMQ (PCUs)	DoS (%)	MMQ (PCUs)
Littlebourne Road (West)	All	59.0%	10	71.8%	20	61.6%	11	77.1%	23
Buffs Road	Left	31.7%	2	28.3%	2	31.8%	2	28.4%	2
	Right	31.7%		28.3%		31.8%		28.4%	
Littlebourne Road (East)	Ahead	74.7%	17	43.1%	7	80.6%	20	45.3%	8
	Right	74.7%		43.1%		80.6%		45.3%	
Practical Reserve Capacity		20.5%		25.4%		11.6%		16.7%	

DoS = Degree of Saturation

MMQ = Mean Maximum Queue

PCUs = Passenger Car Units

7.3.3 The above table demonstrates that the proposed junction is expected to operate within its capacity at 2045 with the addition of the development traffic flows with a maximum capacity (DoS) increase from 71.8% to 77.1% with an associated increase in queuing of 3 pcu – from a queue of 20 vehicles to a queue of 23 pcu.

Proposed Site Access Operation

- 7.3.4 The capacity of the proposed site access junctions with the A257 The Hill and Bekesbourne Lane have been assessed to confirm that the access proposals offer suitable capacity to accommodate the forecast development trips and the background traffic levels along each of these routes.
- 7.3.5 The capacity assessments of both site accesses, have been conducted using the Junctions 10 software and taking account of the worst case 2045 traffic flows described earlier in the report. A full copy of the junction capacity analysis outputs is presented in **Appendix 7.B**.
- 7.3.6 The A257 The Hill site access has been assessed with the 2045 Base + Committed + Reassignment + Development traffic flows, with the results of the capacity assessment summarised in Table 7.4.

Table 7.4: A257 The Hill / Site Access – Junction Capacity Summary Results

Arm/Movement	AM Peak Hour		PM Peak Hour	
	Max. RFC	Max. Queue	Max. RFC	Max. Queue
Site Access	0.57	1	0.41	1
A257 The Hill	0.48	2	0.49	2

Max RFC = Maximum Ratio of Flow to Capacity / Max. Queue = Maximum Average Queue

- 7.3.7 As can be seen from the table above the proposed access junction on the A257 The Hill is expected to operate well within capacity with limited queuing, even taking account of the higher assumed residential quantum on the site.
- 7.3.8 The Bekesbourne Lane site access has also been assessed with the 2045 Base + Committed + Reassignment + Development traffic flows, with the results of the capacity assessment summarised in Table 7.5.

Table 7.5: Bekesbourne Lane / Site Access – Junction Capacity Summary Results

Arm/Movement	AM Peak Hour		PM Peak Hour	
	Max. RFC	Max. Queue	Max. RFC	Max. Queue
Site Access	0.32	1	0.28	0
Bekesbourne Lane	0.00	0	0.00	0

Max RFC = Maximum Ratio of Flow to Capacity / Max. Queue = Maximum Average Queue

- 7.3.9 As can be seen from the table above the proposed access junction is expected to operate with ample spare capacity.

7.4 Summary

- 7.4.1 The impacts of the development-generated traffic have been considered across a study area which has been agreed with KCC as part of pre-application scoping discussions.
- 7.4.2 A proportional impact assessment of the forecast development traffic upon junctions within Littlebourne and along the A257 corridor towards Canterbury have been carried out, based upon the worst-case future year traffic forecasts at 2045, taking account of committed and planned developments, as requested by KCC. This proportional impact assessment concluded that the impacts of the development-generated traffic across much of the wider network are forecast to be negligible, with the exception of the A257 / Buffs Road junction where impacts of greater than 5% are forecast and thus a detailed junction assessment was required. This detailed assessment concluded that the proposed signal-controlled junction would have the capacity to accommodate both future year background and committed/planned development traffic and that generated by the proposed mixed-use development.
- 7.4.3 The impact assessment also shows that the proposed link road through the site will result in reductions in traffic within the centre of Littlebourne itself and therefore will result in a positive impact at the junction of A257 The Hill / Bekesbourne Lane / Nargate Street.
- 7.4.4 The proposed site accesses have been shown to operate with ample spare capacity in the future assessment even taking account of the previously assumed higher development quantum on the site. The proposed accesses are therefore both assumed to have sufficient capacity to accommodate the c.300 dwellings and local centre now assumed for the site.
- 7.4.5 Overall, it can be concluded that the impacts of the development upon the surrounding highway network will not be significant and would not give rise to any impacts which would be deemed 'severe' within the NPPF context.

SECTION 8 Summary and Conclusions

8.1 Summary

- 8.1.1 i-Transport LLP has been commissioned by Gladman Developments Ltd to provide transport and highways advice in respect of a proposed residential development to the south of the A257 The Hill, Littlebourne.
- 8.1.2 The proposed development will comprise c.300 residential dwellings, including a mix of housing types, as well as a small shop and local centre. This Transport Assessment has been carried out based on the indicative development yield set out in the Draft Local Plan for Canterbury, which identified the potential for a total of 330 residential dwellings, including 30 elderly person accommodation units on the site. The assessment of this higher quantum of development than that now proposed therefore presents a worst-case and therefore robust assessment of the potential development impacts.
- 8.1.3 The site will have two vehicular access points, both being new simple priority-controlled T-junctions. One will be located onto A257 The Hill and the other onto Bekesbourne Lane. The capacity of these two accesses has been shown to be sufficient to accommodate the development traffic and background flows up to 2045 and beyond.
- 8.1.4 With the location of the existing bus stops, frequency and journey time of the bus service to Canterbury, it is considered that the existing provision will ensure residents of the site have access to good quality sustainable transport connections to Canterbury, that will help encourage and foster non-car travel.
- 8.1.5 All of Littlebourne is within walking/cycling distance of the proposed site, with many key local facilities, such as the Littlebourne Primary School and Four Hill village stores and post office, within easy walking/cycling distance. A number of nearby villages are within cycling distance of the site, providing access to further key facilities including Bekesbourne railway station. The eastern side of Canterbury and the city centre, including, St. Martin's Hospital could also be accessed by cycling as well as by bus.
- 8.1.6 A review of the personal injury accident data associated with collisions that have occurred on the local road network over the last five years has identified a total of seven accidents across the Littlebourne road network.

8.1.7 One of these accidents was serious in nature, with the remaining six accidents recorded as slight in nature. There were no trends identified within the accidents that have occurred and it is therefore considered that there are no underlying safety concerns associated with the surrounding network that would be exacerbated by the introduction of the development proposals.

8.1.8 Assessment of junctions within Littlebourne and along the A257 to Canterbury has concluded that the impacts of the development-generated traffic will not be significant and certainly not 'severe' within the NPPF context.

8.2 Conclusions

8.2.1 This Transport Assessment has considered in detail the transport implications of the mixed-use development proposals and concludes that:

- There will be opportunities for sustainable travel to/from the site and, given the nature of the proposed uses, the site is a suitable location for the proposed development.
- The site access will provide sufficient capacity to accommodate the traffic generated by the proposals. The safety of the accesses has been considered with no notable risks raised. Accordingly, satisfactory access can be provided to the site.
- The development will not give rise to unacceptable highway safety impacts or result in any severe traffic impacts across the surrounding network.

8.2.2 The development proposals are therefore consistent with local and national policy, including the NPPF. It is therefore concluded that there should be no highways or transport reasons that will preclude the granting of planning consent for the development proposals.

APPENDIX 1.A Scoping Note (ITM16283-005)

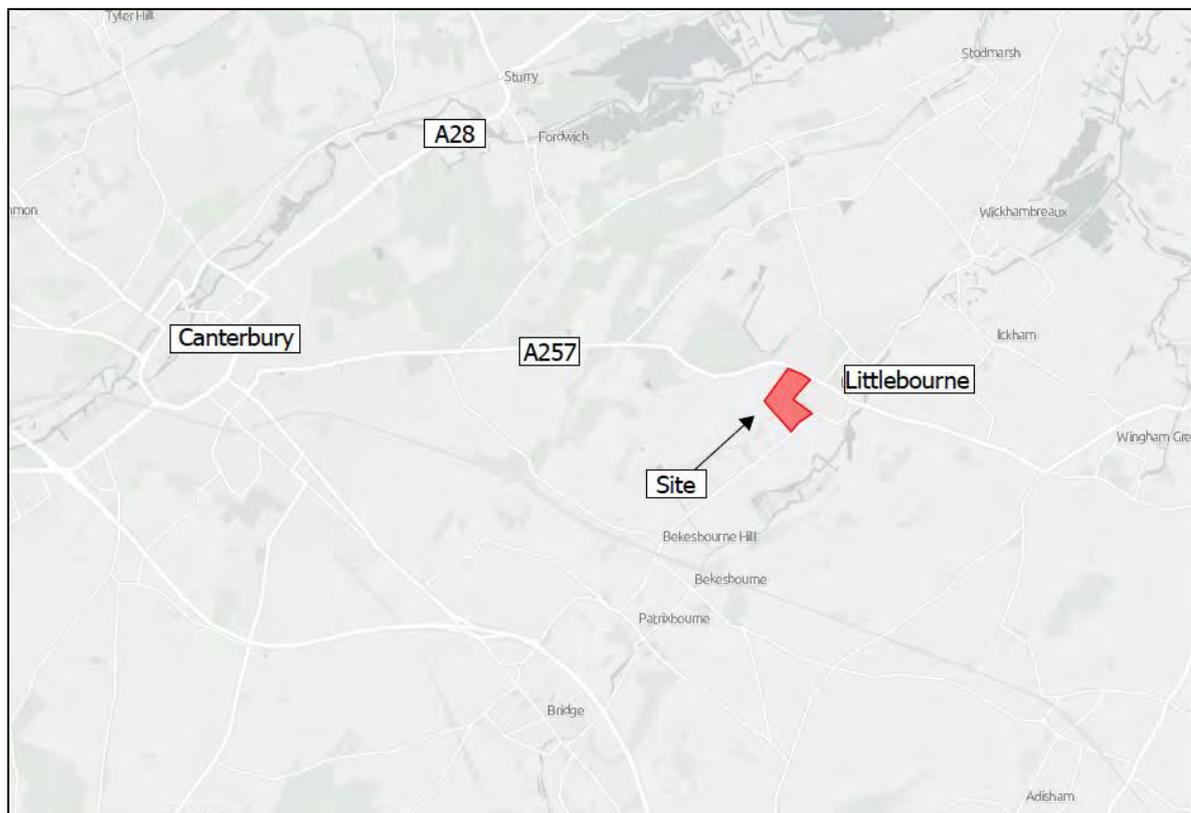
Technical Note

Project No: ITM16283
Project Title: Land South of the Hill, Littlebourne
Title: Scoping Note
Ref: VACE/JW/MS/ITM16283-005
Date: 28 October 2022

SECTION 1 Introduction

- 1.1 i-Transport has been commissioned by Gladman Developments Ltd to provide transport and highways advice in support of an outline planning application for a residential development on Land South of the Hill in Littlebourne, near Canterbury in Kent. **Figure 1** shows the location of the site.

Figure 1: Site Location



- 1.2 The site is located to the south-west of Littlebourne village, with frontage to the A257 The Hill to the north and Bekesbourne Lane to the south-east of the site. The site is currently in agricultural use and extends to an area of 15.99ha (39.5 acres) and lies within Canterbury City Council's administrative boundary, with the city centre being c.5.8km west of the site.
- 1.3 The site is currently bounded by existing dwellings to the north and east, Howlett's Wild Animal Park to the south-west and agricultural land to the south-east and west.
- 1.4 The purpose of this Scoping Note is to set out and agree a series of parameters for the preparation of the Transport Assessment that will be submitted in support of the application. Initial scoping discussions have already been held with Kent County Council (KCC), focussing on the proposed access strategy for the site.

SECTION 2 Development Proposals and Proposed Access Arrangements

- 2.1 Masterplanning work is underway for the site, but it is envisaged that the site could be developed to accommodate c.300 dwellings, in line with the emerging Canterbury Local Plan. Of these 300 dwellings, 30% will form affordable housing units and a further 30 units are planned to provide elderly person accommodation. A local centre, which is expected to comprise a small shop and the potential for work hub/meeting spaces is also proposed to the north of the site, adjacent to A257 The Hill.
- 2.2 The site will be accessed directly from the A257 The Hill in the form of a new simple priority controlled T-junction access, located towards the eastern end of the northern site frontage, with a second access located on Bekesbourne Lane to the south-east of the site, also in the form of a new simple priority controlled T-junction access. The proposed accesses will be designed to reflect current design guidance set out in the Manual for Streets and Kent County Council's Design Guide.
- 2.3 The two accesses will be connected through the site, allowing development traffic to use either access, depending on its destination and offering an alternative route for existing traffic travelling between A257 The Hill and Bekesbourne Lane, reducing traffic levels passing through the village. The route through the site will be designed with the ability to accommodate a bus route through the site, with a carriageway width of 6.2m. The alignment of the route through the site will be designed to ensure traffic speeds are kept low to reflect the residential nature of the site – with a 20mph design speed and traffic calming features provided where appropriate.
- 2.4 The principles of the proposed access strategy have been discussed with Kent County Council.

- 2.5 A draft masterplan has been produced, which shows slightly reduced housing numbers with a total of 317 residential dwellings, including the elderly person accommodation. However, this scoping note considers the higher original estimated quantum of 330 residential dwellings, and thus provides a robust analysis. The draft masterplan is presented in **Appendix A**.

SECTION 3 Sustainable Transport Modes

- 3.1 In accordance with the NPPF, an appraisal of the site's accessibility to key facilities by sustainable modes of travel will be undertaken. This will include access by both active travel (walking and cycling) and public transport and the appraisal will identify any gaps in existing provision and whether there is scope for the development proposals to enhance the existing provision within the vicinity of the site, for both new and existing residents.
- 3.2 A site-wide Framework Travel Plan will be submitted with the planning application. This document will be drafted in accordance with current industry best practice. The Framework Travel Plan will primarily focus on the residential element of the development proposal. The local centre uses will be considered as part of the Framework, however, supplemental Travel Plan Statements will ultimately be prepared by the end users (if needed).

SECTION 4 Traffic Assessment Methodology

4.1 Introduction

- 4.1.1 The Transport Assessment will consider the impacts of the development-generated traffic across the surrounding highway network.
- 4.1.2 The extent of the assessment study area is proposed to be agreed as part of this scoping exercise.
- 4.1.3 It is expected that the impacts of the proposals will need to be considered at a number of junctions along the A257 corridor between the site and Canterbury, as well as junctions within Littlebourne itself.
- 4.1.4 The extent of the study area is based on knowledge of the surrounding network, previous discussions with KCC and the expected development trip generation and distribution, as set out later in this section.
- 4.1.5 Where required, junction turning counts will be undertaken during the morning (07:00 – 10:00) and evening (15:00 – 19:00) peak periods, with queue length surveys also carried out where necessary.
- 4.1.6 Additionally, Automatic Traffic Count (ATC) surveys will be carried out for a continuous 7-day period, on the A257 The Hill and Bekesbourne Lane in the vicinity of the proposed accesses and will record vehicle flows and speeds for consideration in determining appropriate visibility splays at the accesses.

Road Safety

4.1.7 Collision data will be obtained from KCC for the latest 5-year period within Littlebourne village, for the key junctions and links within the study area.

4.1.8 Stage 1 Road Safety Audits (RSAs) will be conducted of the two proposed site accesses, with the final access drawings produced taking account of any comments raised in the RSAs.

4.2 **Assessment Year/Traffic Growth**

4.2.1 A future year assessment of the site access and the wider off-site traffic impacts will be carried out based on the network operation at 2029 (five years after the expected year of opening of the first units at the development).

4.2.2 Background traffic growth factors have been obtained from TEMPro for the Canterbury Local Authority area. The growth factors to be applied to the 2022 surveyed traffic flow levels are:

- 2022-2029 AM Peak = 1.0630
- 2022-2029 PM Peak = 1.0663

4.2.3 The TEMPro outputs are presented in **Appendix B**.

4.3 **Committed Development**

4.3.1 In addition to the application of background traffic growth, the traffic associated with a series of committed developments will be considered within the derivation of the likely future year baseline traffic levels across the surrounding highway network, including:

- The Hill (CA/19/01665/RM) – 85 dwellings
- Howe Barracks (CA/14/01230/FUL) – 500 dwellings
- South Canterbury (CA/16/00600) – 4,000 dwellings plus other mixed uses
- Canterbury Riverside (CA/17/02092/FUL) – 189 dwellings and 484 student rooms plus multiplex cinema and other retail/leisure uses
- Hoplands Farm (CA/16/00404) – 250 dwellings plus commercial uses
- Former Chislet Colliery (CA/16/00673/OUT) – 370 dwellings

4.3.2 The locations of the committed development sites set out above are presented in **Appendix C**.

4.3.3 Clarification is sought from KCC as to whether there are any other committed developments within the vicinity of the site, whose traffic would need to be considered within the assessment.

4.4 **Background Traffic Re-Routing**

4.4.1 Following initial discussions with KCC regarding the proposed access strategy and creation of a through-route between A257 The Hill and Bekesbourne Lane, it is expected there will be some element of reassignment of background traffic flows (both existing and committed development traffic flows), between these two roads. This reassignment is expected to largely be associated with the proportion of the traffic flows which will turn right into Bekesbourne Lane and left out of Bekesbourne Lane at the A257 High Street / Bekebourne Lane priority controlled junction.

4.4.2 The effects of this re-assignment will take account of predicted journey times along the existing route / through the site, and will be based upon surveys of existing traffic movements and the forecast committed development traffic movements as outlined above.

4.5 **Trip Generation and Distribution**

Residential Dwellings – Trip Generation

4.5.1 The trip rates for the residential dwellings have been derived from sites within the 'Houses Privately Owned' category from the TRICS trip generation database.

4.5.2 The TRICS database has been reviewed to identify comparable residential sites in similar locations to that of the proposed development. The resulting sites were then filtered down as follows:

- Multi-modal trip rates were selected;
- All sites in London and Ireland were removed;
- Sites of between 100-500 dwellings were selected;
- Sites within Edge of Town and Neighbourhood Centre locations were selected;
- Surveys carried out on Tuesdays-Thursdays were selected (i.e. excluding Mondays, Fridays and weekends);
- Surveys carried out during the COVID-19 pandemic lockdown restrictions were excluded; and
- Sites with high proportions of flats and/or bungalows were also excluded.

4.5.3 The resulting sites and associated trip rates derived from TRICS are presented in **Appendix D**.

4.5.4 The peak hour trip rates and resultant trip generation based upon the assumed quantum of 300 dwellings are presented in **Table 4.1**.

Table 4.1: Trip Rates Per Dwelling and Trip Generation

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip Rates / Dwelling	0.129	0.340	0.469	0.322	0.137	0.459
Trip Generation	39	102	141	97	41	138

4.5.5 The table shows that c.140 two-way trips are expected to be generated by the residential units at the proposed development site in the morning and evening peak hours.

Residential Dwellings – Trip Distribution

4.5.6 The vehicular trips associated with the proposed development will be distributed across the surrounding road network according to the expected range of journey purposes, based on proportions derived from TEMPro (with non-home based trips excluded) for car drivers using the Canterbury 010 MSOA. The disaggregation of vehicle trips by journey purpose and the numbers of two-way trips generated by the proposed dwellings, split by each purpose, are set out in **Table 4.2** below:

Table 4.2: Residential Trips (Car Driver) - Journey Purpose Breakdown

Journey Purpose	AM Peak (08:00-09:00)		PM Peak (17:00-18:00)	
	Proportion	No. Trips	Proportion	No. Trips
Work	61.4%	86	46.5%	64
Employer’s business	8.2%	12	7.2%	10
Education	9.4%	13	4.4%	6
Shopping	9.2%	13	13.9%	19
Personal business	5.6%	8	7.7%	11
Recreation / Social	2.7%	4	7.7%	11
Visiting friends / relatives	1.3%	2	9.3%	13
Holiday / day trip	2.1%	3	3.3%	5
Total	100.0%	141	100.0%	138

Source: TEMPro

4.5.7 The following describes how the trips associated with each journey purpose have been distributed onto the surrounding network.

Journeys to Work

- 4.5.8 The work and employer’s business-related trips have been distributed to the local highway network based on the existing car driver proportions taken from the Census Journey to Work data (Canterbury 010 MSOA).
- 4.5.9 The analysis of the Journey to Work data is presented in **Appendix E** and the resultant assignment onto key routes is summarised, based on the local highway network, in **Table 4.3**.

Table 4.3: Journey to Work Trip Distribution and Assignment

Route	Proportion of Trips
A257 (West) between the site and St. Martins Hospital	3.7%
New Bypass via A257 (West)	5.2%
New Dover Road via A257 (West)	3.7%
Canterbury City Centre via A257 (West)	10.6%
A28 (South)	34.3%
A28 (North)	12.3%
Jubilee Road	2.2%
Nargate Street	7.1%
A257 East	13.4%
Bekesbourne Lane	7.5%
Total	100.0%

Source: 2011 Census – Journey to Work

Education-Related Trips

- 4.5.10 All school-related car trips will be made off-site and would generally be made to nearby schools. Trips to primary and secondary schools have been split in the ratio 60/40 (based on NTS) and distributed to schools as follows, with reference to the locations of each school in relation to the site:

Table 4.4: Primary School Trip Distribution

School	Proportion	60% Split
Littlebourne CoE	50%	30%
Wickhambreaux CoE	20%	12%
Pilgrims Way Primary	10%	6%
Parkside Community	10%	6%
Bridge & Patricxbourne CoE	10%	6%
Total	100%	60%

Table 4.5: Secondary School Trip Distribution

School	Proportion	40% Split
Canterbury Academy	50%	20%
St Anselm's Catholic	30%	12%
Barton Court Grammar	10%	4%
Simon Langton Girls' Grammar	10%	4%
Total	100%	40%

Retail Trips

4.5.11 Shopping trips have been disaggregated into food and non-food in the ratio 50/50 (based on NTS) with the following trip distribution patterns assumed:

Table 4.6: Food Shopping Trip Distribution

Shop	Proportion	50% Split
Sainsbury's Canterbury	30%	15%
Morrisons Canterbury	30%	15%
Four Villages Store, Littlebourne	20%	10%
Canterbury City Centre	10%	5%
Co-op Aylesham	10%	5%
Total	100%	50%

Table 4.7: Non-Food Shopping Trip Distribution

Destination	Proportion	50% Split
Canterbury City Centre	50%	25%
Marshwood Close Retail Park	30%	15%
Ashford	10%	5%
Westwood Cross	10%	5%
Total	100%	50%

4.5.12 The proposed development will provide a local centre, which is expected to include a local convenience shop. However given its location, trips to the local shop from the site are expected to be made largely on foot and therefore are not included in the above.

Other Trips

4.5.13 Other trips include those associated with a range of leisure, social and personal business journey purposes. These have been distributed to surrounding centres based on the following proportions:-

Table 4.8: Other Trips Distribution

Destination	Proportion
Littlebourne	30%
Canterbury	50%
Margate/Ramsgate	10%
Ashford	10%
Total	100.0%

Elderly Accommodation – Trip Generation

4.5.14 The elderly accommodation is expected to be in the form of standard housing which will be restricted for sale to residents over the age of 55. The trip rates for these units are therefore likely to be similar to those for the standard housing and as such the same trip rates have been applied to form a robust assessment. The trip rates and resultant trip generation assuming there will be 30 elderly accommodation units are presented in **Table 4.9**.

Table 4.9 Trip Rates Per Dwelling and Trip Generation

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip Rates / Dwelling	0.129	0.340	0.469	0.322	0.137	0.459
Trip Generation	4	10	14	10	4	14

Elderly Accommodation – Trip Distribution

4.5.15 The distribution of the elderly accommodation is also assumed to be the same as for the residential dwellings, as set out above.

Local Centre – Trip Generation

4.5.16 The Local Centre is expected to comprise a small shop and the potential for work hub/meeting spaces. The Local Centre is planned to be located close to the A257 The Hill access, with all externally-generated trips to and from the Local Centre expected to use this access.

4.5.17 The trip rates for the small shop have been derived using the 'Convenience Store' category from the TRICS trip generation database. The resulting sites and associated trip rates from TRICS are presented in **Appendix D**. The resultant trip generation for the local shop, assuming a 350sqm floor area, is presented in **Table 4.10**.

Table 4.10: Trip Rates (Per 100sqm) and Trip Generation – Local Shop

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip Rate / 100sqm	8.425	8.645	17.070	9.141	9.416	18.557
Trip Generation	29	30	59	32	33	65

4.5.18 A proportion of the trips associated with the local shop are expected to be linked with the proposed residential scheme (50% of all trips assumed). A small number of the trips are also expected to be pass-by trips (30% of all trips), already travelling on the A257 The Hill. As a result, only 20% of vehicle trips from the local shop are likely to be new trips on the network.

4.5.19 The work hub/meeting space units are expected to be rooms available to rent on temporary basis to providing quiet workspace areas and / or meeting space. These facilities are expected to be predominantly for future residents of the site and local residents within Littlebourne, who will typically walk to the units. The work hub/meeting space units will provide limited or no dedicated parking spaces. This is a fairly specific / fluid land use and as such is not typical of other employment-related sites within the various current TRICs categories. It is assumed that this element of the proposals will generate very few vehicular trips, particularly in the peak hours, but for robustness a nominal vehicle generation is proposed to be included, as set out in **Table 4.11**.

Table 4.11: Assumed Vehicle Trips – Work Hub/Meeting Space

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Trip Generation	5	3	8	3	5	8

4.5.20 The resulting total trips for the Local Centre, by trip type, that will access the local road network are summarised in **Table 4.12** below.

Table 4.12: Local Centre Trip Generation

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Local Shop – New Trips (20%)	6	6	12	6	7	13

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
Local Shop – Pass-By (30%)	9	9	18	9	9	18
Work Hub/Meeting Space	5	3	8	3	5	8

Local Centre – Trip Distribution

- 4.5.21 The pass-by trips associated with the Local Centre will be distributed based on the existing traffic flow proportions on the A257 The Hill, which will be determined using the traffic flow surveys to be carried out on the local road network.
- 4.5.22 The Local Centre land uses are intended to be largely facilities for the new residents of the site and existing local residents within Littlebourne. As such the new trips generated by the Local Centre will be distributed across the local road network within Littlebourne as set out in **Table 4.13**.

Table 4.13: Local Centre Distribution – New Trips

Destination	Proportion
West of the A257 The Hill Site Access	20%
Jubilee Road	20%
Nargate Street	20%
Littlebourne, between Jubilee Road and Nargate Street	20%
A257 East of Littlebourne	10%
Bekesbourne Lane	10%
Total	100.0%

Trip Assignment

- 4.5.23 Using the methodology outlined above, the resultant trips generated by the development are expected to be distributed across the network as shown in **Table 4.14**:

Table 4.14: Total Development Trip Assignment (No. Two-Way Trips)

Location	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
A257 (West) between the site and St. Martins Hospital	5	3
New Bypass via A257 (West)	8	7
New Dover Road via A257 (West)	5	3
Canterbury City Centre via A257 (West)	19	27
A28 (South)	43	36
A28 (North)	17	18

Location	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
Jubilee Road	11	9
Nargate Street	15	17
A257 East	17	15
Bekesbourne Lane (South of A257)	1	1
Bekesbourne Lane (South of Site Access)	10	7
A257 between Jubilee Road and Nargate Street	6	9

4.5.24 These total peak hour development traffic flows are summarised in **Figure 2** for the local traffic within Littlebourne, with the development traffic flow in the vicinity of Canterbury shown in **Figure 3**.

Figure 2: Development Traffic Flows – Littlebourne

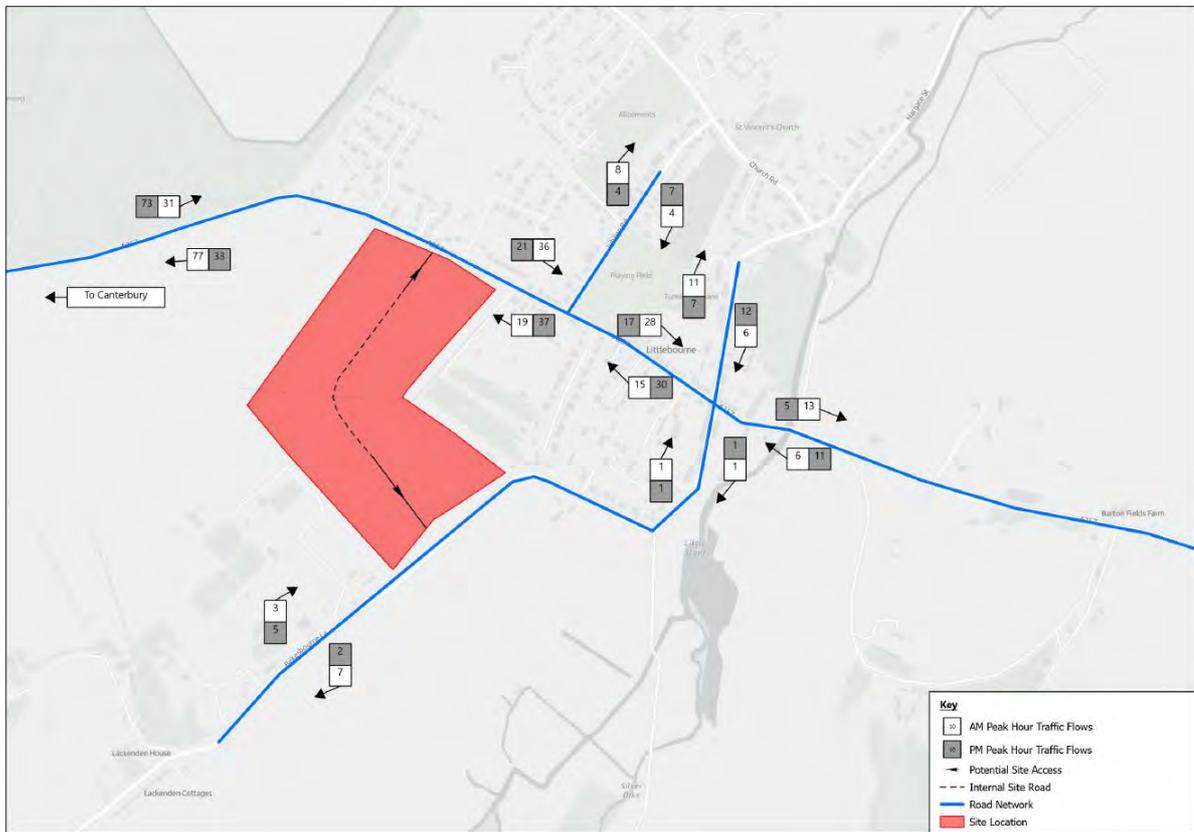
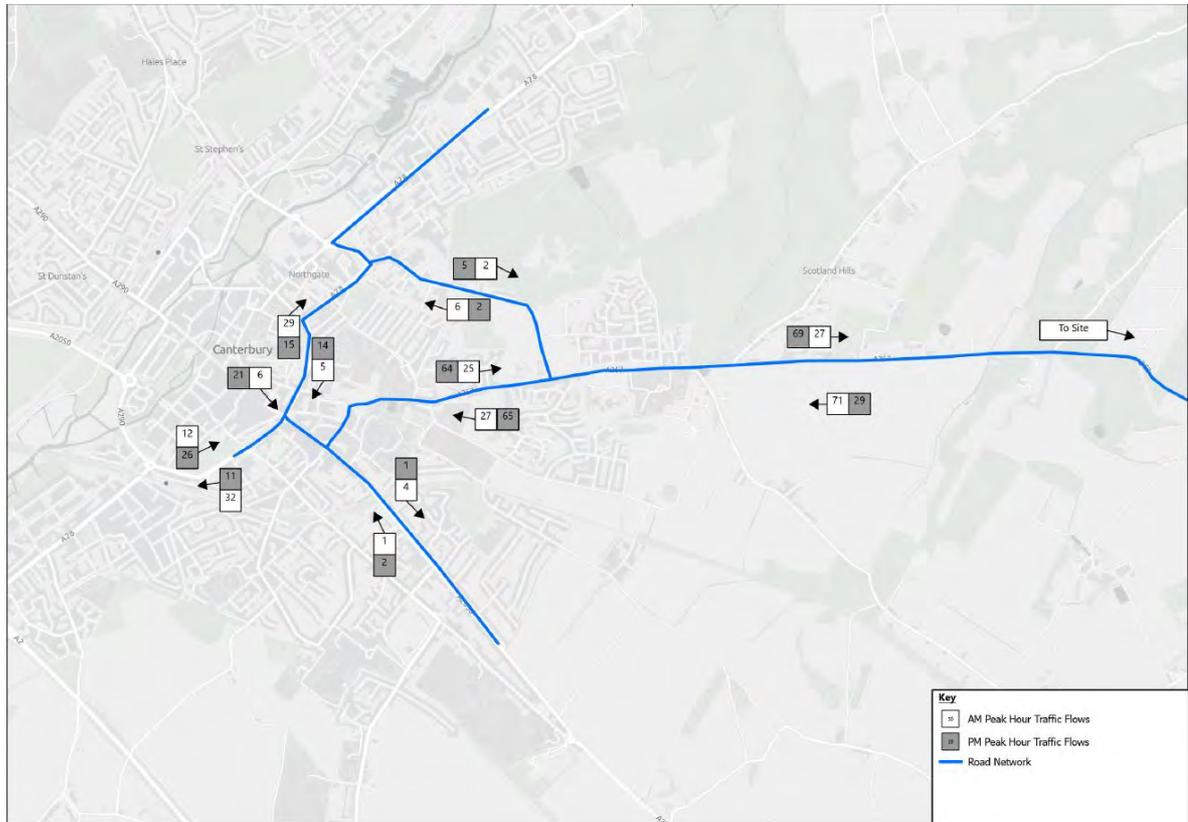


Figure 3: Development Traffic Flows – Canterbury Network



4.6 Development Impact and Operational Assessments

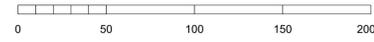
4.6.1 Based on the analysis above it is proposed that detailed traffic counts are conducted at the following junctions, the locations of which are presented in **Figure 4**:

- 1 A257 Littlebourne Road / Wemyss Way – currently priority T-junction, but proposed to become signal controlled T-junction as part of a committed highway scheme
- 2 A257 Longport / A257 Lower Chantry Lane / Longport - roundabout
- 3 A257 Saint Georges Place / A257 Lower Chantry Lane / A2050 New Dover Road / Upper Chantry Lane – signal controlled crossroads
- 4 A257 Saint Georges Place / A28 Upper Bridge Street / A28 Lower Bridge Street / Saint Georges Street – roundabout
- 5 A257 The Hill / A257 High Street / Jubilee Road – priority controlled T-junction
- 6 A257 High Street / Bokesbourne Lane / Nargate Street – staggered crossroads

Figure 4: Traffic Survey Count Locations

- 4.6.2 Where the development traffic impact proportion is greater than 5%, operational assessments using industry standard software (e.g. Junctions 10/LINSIG) will be conducted.
- 4.6.3 The operational assessment of the two proposed site accesses will also be assessed and presented within the Transport Assessment.

APPENDIX A. INDICATIVE MASTERPLAN



KEY

- Site Boundary 15.77ha
- Residential Development (up to 311 dwellings at 35dph) 8.9ha
- Pumping Station 0.023ha
- Waste Water Treatment Works 0.15ha
- Potential Location of Allotments (provision for 11 allotments at 0.025ha per plot in line with Draft Canterbury District Local Plan 2022 Policy DS24) 0.275ha
- Community Facilities (shop etc.)
- Main Road with Avenue Tree Planting and Footpath / Bicycle Route
- Secondary Road
- Vehicular Access Locations
- Pedestrian and Cyclist Access Locations
- Surfaced Footpath / Bicycle Route
- Informal Mown Footpath Route
- Proposed Individual Tree Planting / Avenue Trees
- Proposed Native Tree Groups and Hedgerows
- Proposed Native Tree Belts
- Existing Trees, Tree Groups and Hedgerows
- Play Provision
- Community Orchard
- Variety of Species Rich Grass Mixes
- Bulb Planting
- Proposed Attenuation Basins
- Wetland Area 0.46ha



Littleb

Play Area
 Recreation Ground
 Littlebourne W. Memorial Hal
 P O
 Car Park
 School Path
 ROSE ACRE ROAD
 HIGH
 Verra Hou
 Dawn Chorus
 Wits End
 Gas Gov

DRAFT

masterplanning
 environmental assessment
 landscape design
 urban design
 ecology
 architecture
 arboriculture

FPCR Environment and Design Ltd
 Lockington Hall
 Lockington
 Derby
 DE74 2RH
 t: 01509 672772
 e: mail@fpcr.co.uk
 w: www.fpcr.co.uk

File: L:\109001\0930\LANDS\Drawings\09538-FPCR-XX-XX-DR-L-0001-P03-Development Framework Plan.vwx

APPENDIX B. BACKGROUND TRAFFIC GROWTH

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2029
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	1.0579	1.0508

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	2,341	1,973

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	40,394	38,860

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	42,734	40,834

Level	Area	Local Growth Figure
Authority	Canterbury	1.063003

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2029
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	1.0548	1.0604

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	2,294	2,533

Base Year

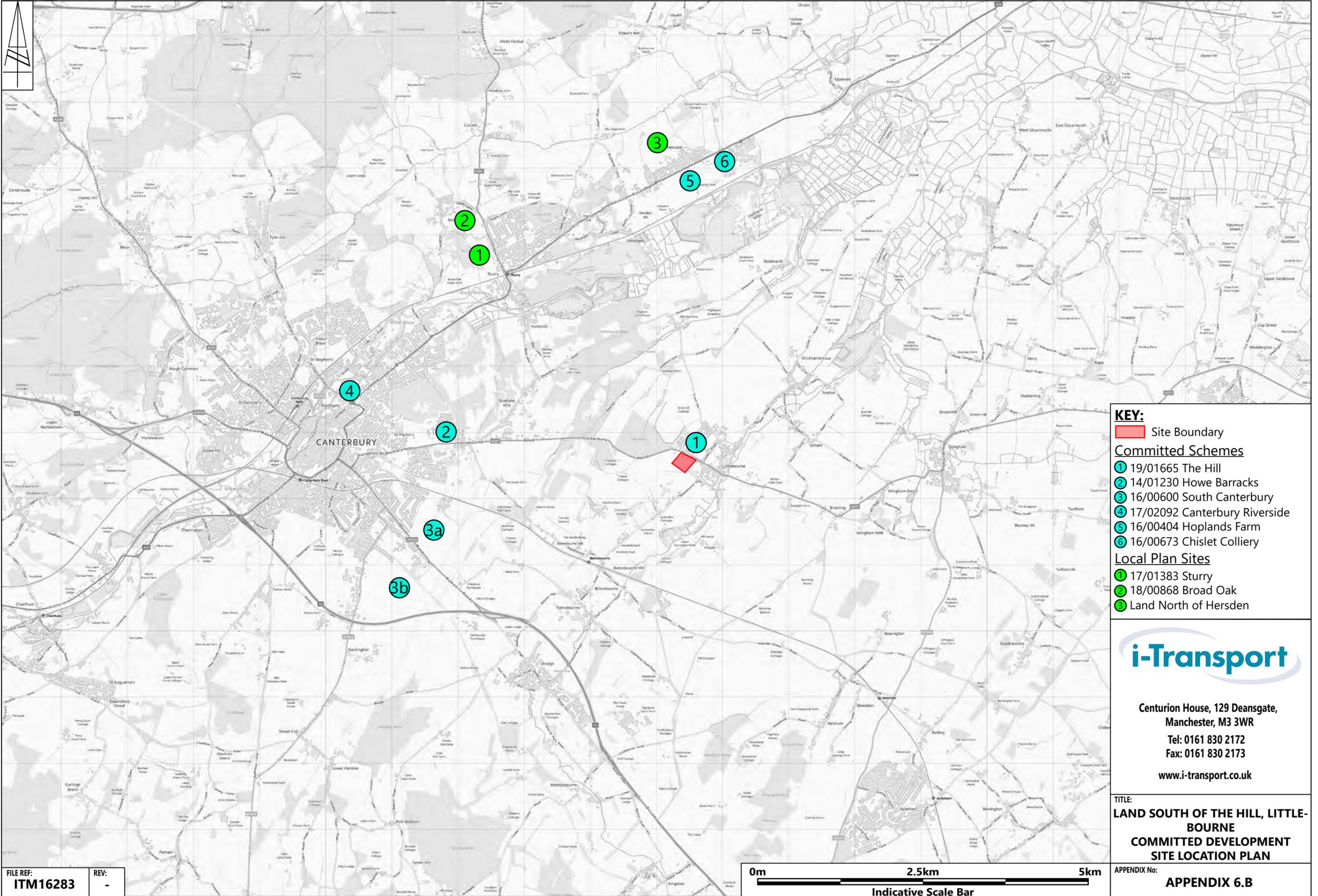
Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	41,868	41,934

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	44,161	44,466

Level	Area	Local Growth Figure
Authority	Canterbury	1.06628

**APPENDIX C. COMMITTED DEVELOPMENT
LOCATION PLAN**



- KEY:**
- Site Boundary
 - Committed Schemes**
 - ① 19/01665 The Hill
 - ② 14/01230 Howe Barracks
 - ③ 16/00600 South Canterbury
 - ④ 17/02092 Canterbury Riverside
 - ⑤ 16/00404 Hoplands Farm
 - ⑥ 16/00673 Chislet Colliery
 - Local Plan Sites**
 - ① 17/01383 Sturry
 - ② 18/00868 Broad Oak
 - ③ Land North of Hersden



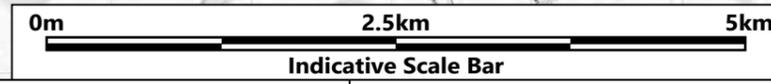
Centurion House, 129 Deansgate,
 Manchester, M3 3WR
 Tel: 0161 830 2172
 Fax: 0161 830 2173
 www.i-transport.co.uk

TITLE:
**LAND SOUTH OF THE HILL, LITTLE-
 BOURNE
 COMMITTED DEVELOPMENT
 SITE LOCATION PLAN**

APPENDIX No:
APPENDIX 6.B

FILE REF:
ITM16283

REV:
 -



Reproduced from ordnance survey by the permission of the controller of her majestys
 stationery office. Crown copyright. All rights reserved. Licence number 100022432

APPENDIX D. TRICS OUTPUTS

Calculation Reference: AUDIT-236602-220926-0908

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	KC KENT	1 days
	WS WEST SUSSEX	4 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 117 to 371 (units:)
 Range Selected by User: 100 to 500 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 23/11/21

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:

Tuesday	3 days
Wednesday	4 days
Thursday	2 days

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

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Edge of Town	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	8
Village	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,

Secondary Filtering selection:

Use Class:

C3 9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	4 days
125,001 to 250,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	6 days
1.6 to 2.0	1 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	4 days
No	5 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	9 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	DS-03-A-02 RADBOURNE LANE DERBY	MIXED HOUSES		DERBYSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		371	
	<i>Survey date: TUESDAY</i>		<i>10/07/18</i>	<i>Survey Type: MANUAL</i>
2	KC-03-A-07 RECVLVER ROAD HERNE BAY	MIXED HOUSES		KENT
	Edge of Town Residential Zone Total No of Dwellings:		288	
	<i>Survey date: WEDNESDAY</i>		<i>27/09/17</i>	<i>Survey Type: MANUAL</i>
3	NE-03-A-03 STATION ROAD SCUNTHORPE	PRIVATE HOUSES		NORTH EAST LINCOLNSHIRE
	Edge of Town Centre Residential Zone Total No of Dwellings:		180	
	<i>Survey date: TUESDAY</i>		<i>20/05/14</i>	<i>Survey Type: MANUAL</i>
4	SF-03-A-10 LOVETOFTS DRIVE IPSWICH WHITEHOUSE	TERRACED & SEMI-DETACHED		SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings:		149	
	<i>Survey date: TUESDAY</i>		<i>22/06/21</i>	<i>Survey Type: MANUAL</i>
5	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE	DETACHED & SEMI-DETACHED		STAFFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		248	
	<i>Survey date: WEDNESDAY</i>		<i>22/11/17</i>	<i>Survey Type: MANUAL</i>
6	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		151	
	<i>Survey date: THURSDAY</i>		<i>11/12/14</i>	<i>Survey Type: MANUAL</i>
7	WS-03-A-08 ROUNDSTONE LANE ANGMERING	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		180	
	<i>Survey date: THURSDAY</i>		<i>19/04/18</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

8	WS-03-A-12	MIXED HOUSES	WEST SUSSEX
	MADGWICK LANE CHICHESTER WESTHAMPNETT Edge of Town Village		
	Total No of Dwellings:	152	
	Survey date: WEDNESDAY	16/06/21	Survey Type: MANUAL
9	WS-03-A-14	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE LITTLEHAMPTON WICK Edge of Town Residential Zone		
	Total No of Dwellings:	117	
	Survey date: WEDNESDAY	20/10/21	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
HC-03-A-24	Flats
HC-03-A-25	Flats
HC-03-A-26	Flats
NF-03-A-24	Flats
NF-03-A-28	Bungalows
NF-03-A-29	Bungalows
NF-03-A-30	Bungalows
WS-03-A-13	Flats

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.074	9	204	0.323	9	204	0.397
08:00 - 09:00	9	204	0.129	9	204	0.340	9	204	0.469
09:00 - 10:00	9	204	0.126	9	204	0.145	9	204	0.271
10:00 - 11:00	9	204	0.124	9	204	0.136	9	204	0.260
11:00 - 12:00	9	204	0.130	9	204	0.148	9	204	0.278
12:00 - 13:00	9	204	0.142	9	204	0.129	9	204	0.271
13:00 - 14:00	9	204	0.148	9	204	0.131	9	204	0.279
14:00 - 15:00	9	204	0.155	9	204	0.161	9	204	0.316
15:00 - 16:00	9	204	0.246	9	204	0.163	9	204	0.409
16:00 - 17:00	9	204	0.240	9	204	0.148	9	204	0.388
17:00 - 18:00	9	204	0.322	9	204	0.137	9	204	0.459
18:00 - 19:00	9	204	0.241	9	204	0.151	9	204	0.392
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.077			2.112			4.189

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	117 - 371 (units:)
Survey date range:	01/01/14 - 23/11/21
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	8
Surveys manually removed from selection:	8

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

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

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.001	9	204	0.002	9	204	0.003
08:00 - 09:00	9	204	0.005	9	204	0.004	9	204	0.009
09:00 - 10:00	9	204	0.001	9	204	0.001	9	204	0.002
10:00 - 11:00	9	204	0.002	9	204	0.002	9	204	0.004
11:00 - 12:00	9	204	0.002	9	204	0.002	9	204	0.004
12:00 - 13:00	9	204	0.002	9	204	0.002	9	204	0.004
13:00 - 14:00	9	204	0.002	9	204	0.001	9	204	0.003
14:00 - 15:00	9	204	0.001	9	204	0.002	9	204	0.003
15:00 - 16:00	9	204	0.007	9	204	0.005	9	204	0.012
16:00 - 17:00	9	204	0.002	9	204	0.002	9	204	0.004
17:00 - 18:00	9	204	0.001	9	204	0.001	9	204	0.002
18:00 - 19:00	9	204	0.001	9	204	0.001	9	204	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.025			0.052

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

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.001	9	204	0.001	9	204	0.002
08:00 - 09:00	9	204	0.002	9	204	0.002	9	204	0.004
09:00 - 10:00	9	204	0.004	9	204	0.002	9	204	0.006
10:00 - 11:00	9	204	0.002	9	204	0.001	9	204	0.003
11:00 - 12:00	9	204	0.002	9	204	0.003	9	204	0.005
12:00 - 13:00	9	204	0.002	9	204	0.003	9	204	0.005
13:00 - 14:00	9	204	0.004	9	204	0.001	9	204	0.005
14:00 - 15:00	9	204	0.002	9	204	0.004	9	204	0.006
15:00 - 16:00	9	204	0.002	9	204	0.003	9	204	0.005
16:00 - 17:00	9	204	0.002	9	204	0.003	9	204	0.005
17:00 - 18:00	9	204	0.001	9	204	0.001	9	204	0.002
18:00 - 19:00	9	204	0.000	9	204	0.000	9	204	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.000	9	204	0.000	9	204	0.000
08:00 - 09:00	9	204	0.001	9	204	0.001	9	204	0.002
09:00 - 10:00	9	204	0.000	9	204	0.000	9	204	0.000
10:00 - 11:00	9	204	0.000	9	204	0.000	9	204	0.000
11:00 - 12:00	9	204	0.000	9	204	0.000	9	204	0.000
12:00 - 13:00	9	204	0.000	9	204	0.000	9	204	0.000
13:00 - 14:00	9	204	0.000	9	204	0.000	9	204	0.000
14:00 - 15:00	9	204	0.000	9	204	0.000	9	204	0.000
15:00 - 16:00	9	204	0.001	9	204	0.001	9	204	0.002
16:00 - 17:00	9	204	0.000	9	204	0.000	9	204	0.000
17:00 - 18:00	9	204	0.000	9	204	0.000	9	204	0.000
18:00 - 19:00	9	204	0.000	9	204	0.000	9	204	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

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

CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.002	9	204	0.010	9	204	0.012
08:00 - 09:00	9	204	0.001	9	204	0.008	9	204	0.009
09:00 - 10:00	9	204	0.001	9	204	0.000	9	204	0.001
10:00 - 11:00	9	204	0.005	9	204	0.003	9	204	0.008
11:00 - 12:00	9	204	0.002	9	204	0.007	9	204	0.009
12:00 - 13:00	9	204	0.004	9	204	0.002	9	204	0.006
13:00 - 14:00	9	204	0.002	9	204	0.004	9	204	0.006
14:00 - 15:00	9	204	0.002	9	204	0.003	9	204	0.005
15:00 - 16:00	9	204	0.010	9	204	0.005	9	204	0.015
16:00 - 17:00	9	204	0.009	9	204	0.004	9	204	0.013
17:00 - 18:00	9	204	0.008	9	204	0.004	9	204	0.012
18:00 - 19:00	9	204	0.006	9	204	0.006	9	204	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.052			0.056			0.108

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

CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.055	9	204	0.300	9	204	0.355
08:00 - 09:00	9	204	0.110	9	204	0.316	9	204	0.426
09:00 - 10:00	9	204	0.097	9	204	0.123	9	204	0.220
10:00 - 11:00	9	204	0.100	9	204	0.118	9	204	0.218
11:00 - 12:00	9	204	0.109	9	204	0.117	9	204	0.226
12:00 - 13:00	9	204	0.114	9	204	0.106	9	204	0.220
13:00 - 14:00	9	204	0.120	9	204	0.103	9	204	0.223
14:00 - 15:00	9	204	0.137	9	204	0.138	9	204	0.275
15:00 - 16:00	9	204	0.219	9	204	0.131	9	204	0.350
16:00 - 17:00	9	204	0.223	9	204	0.127	9	204	0.350
17:00 - 18:00	9	204	0.299	9	204	0.126	9	204	0.425
18:00 - 19:00	9	204	0.228	9	204	0.142	9	204	0.370
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.811			1.847			3.658

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

LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.016	9	204	0.020	9	204	0.036
08:00 - 09:00	9	204	0.011	9	204	0.017	9	204	0.028
09:00 - 10:00	9	204	0.023	9	204	0.020	9	204	0.043
10:00 - 11:00	9	204	0.020	9	204	0.015	9	204	0.035
11:00 - 12:00	9	204	0.017	9	204	0.025	9	204	0.042
12:00 - 13:00	9	204	0.025	9	204	0.018	9	204	0.043
13:00 - 14:00	9	204	0.021	9	204	0.026	9	204	0.047
14:00 - 15:00	9	204	0.015	9	204	0.017	9	204	0.032
15:00 - 16:00	9	204	0.017	9	204	0.023	9	204	0.040
16:00 - 17:00	9	204	0.013	9	204	0.015	9	204	0.028
17:00 - 18:00	9	204	0.021	9	204	0.009	9	204	0.030
18:00 - 19:00	9	204	0.011	9	204	0.008	9	204	0.019
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.210			0.213			0.423

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

MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.001	9	204	0.001	9	204	0.002
08:00 - 09:00	9	204	0.000	9	204	0.001	9	204	0.001
09:00 - 10:00	9	204	0.000	9	204	0.001	9	204	0.001
10:00 - 11:00	9	204	0.000	9	204	0.000	9	204	0.000
11:00 - 12:00	9	204	0.000	9	204	0.002	9	204	0.002
12:00 - 13:00	9	204	0.000	9	204	0.000	9	204	0.000
13:00 - 14:00	9	204	0.001	9	204	0.000	9	204	0.001
14:00 - 15:00	9	204	0.001	9	204	0.001	9	204	0.002
15:00 - 16:00	9	204	0.000	9	204	0.000	9	204	0.000
16:00 - 17:00	9	204	0.000	9	204	0.001	9	204	0.001
17:00 - 18:00	9	204	0.000	9	204	0.001	9	204	0.001
18:00 - 19:00	9	204	0.001	9	204	0.001	9	204	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.009			0.013

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.

Calculation Reference: AUDIT-236602-220927-0945

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST	
	WL WILTSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 292 to 539 (units: sqm)
 Range Selected by User: 70 to 1500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 25/09/19

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

Selected survey days:

Monday	2 days
Friday	3 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Neighbourhood Centre (PPS6 Local Centre)	2

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	5
------------------	---

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:

E(a) 5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000 1 days
10,001 to 15,000 2 days
25,001 to 50,000 2 days

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

Population within 5 miles:

5,001 to 25,000 1 days
25,001 to 50,000 1 days
125,001 to 250,000 2 days
250,001 to 500,000 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 4 days
1.1 to 1.5 1 days

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

Petrol filling station:

Included in the survey count 0 days
Excluded from count or no filling station 5 days

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

Travel Plan:

No 5 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 5 days

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

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	3.099	3	398	3.099	3	398	6.198
07:00 - 08:00	5	363	6.883	5	363	6.663	5	363	13.546
08:00 - 09:00	5	363	8.425	5	363	8.645	5	363	17.070
09:00 - 10:00	5	363	6.443	5	363	6.112	5	363	12.555
10:00 - 11:00	5	363	5.892	5	363	5.837	5	363	11.729
11:00 - 12:00	5	363	5.892	5	363	6.222	5	363	12.114
12:00 - 13:00	5	363	7.048	5	363	6.718	5	363	13.766
13:00 - 14:00	5	363	5.782	5	363	5.782	5	363	11.564
14:00 - 15:00	5	363	7.159	5	363	7.104	5	363	14.263
15:00 - 16:00	5	363	7.379	5	363	7.048	5	363	14.427
16:00 - 17:00	5	363	7.654	5	363	7.654	5	363	15.308
17:00 - 18:00	5	363	9.141	5	363	9.416	5	363	18.557
18:00 - 19:00	5	363	10.297	5	363	9.967	5	363	20.264
19:00 - 20:00	5	363	8.205	5	363	7.985	5	363	16.190
20:00 - 21:00	4	381	3.937	4	381	4.331	4	381	8.268
21:00 - 22:00	4	381	2.822	4	381	3.084	4	381	5.906
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			106.058			105.667			211.725

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	292 - 539 (units: sqm)
Survey date range:	01/01/14 - 25/09/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

APPENDIX E. JOURNEY TO WORK DISTRIBUTION

Canterbury 010 MSOA Distribution

Local Authority	Car Driver
Canterbury	1,011 <i>See Canterbury MSOA</i>
Dover	136 <i>See Dover MSOA</i>
Thanet	150 <i>See Thanet MSOA</i>
Swale	81 E
Ashford	66 E
Shepway	45 E
Maidstone	42 E
Medway	28 E
Tonbridge and Malling	20 E
Dartford	10 E
Reigate and Banstead	6 E
Gravesham	5 E
Sevenoaks	5 E
Others	74 E
Total	1,679

Canterbury MSOA	Car Driver
Canterbury 001	31 33% 33% 33%
Canterbury 002	11 33% 33% 33%
Canterbury 003	10 33% 33% 33%
Canterbury 004	11 33% 33% 33%
Canterbury 005	54 50% 50%
Canterbury 006	16 25% 25% 25% 25%
Canterbury 007	1 E
Canterbury 008	25 E
Canterbury 009	15 E
Canterbury 010	125 30% 30% 30% 10%
Canterbury 011	70 50% 50%
Canterbury 012	68 40% 40% 20%
Canterbury 013	36 F
Canterbury 014	114 50% 50%
Canterbury 016	184 33% 33% 33%
Canterbury 017	21 50% 50%
Canterbury 018	44 50% 50%
Canterbury 019	55 E
Canterbury 020	120 50% 50%
Total	1,011

Dover MSOA	Car Driver
Dover 001	24 67% 33%
Dover 002	44 D
Dover 003	3 D
Dover 004	2 D
Dover 005	0 D
Dover 006	14 67% 33%
Dover 007	1 D
Dover 008	2 67% 33%
Dover 009	3 67% 33%
Dover 010	8 D
Dover 011	7 D
Dover 012	10 D
Dover 013	18 D
Dover 014	0 D
Total	136

Thanet MSOA	Car Driver
Thanet 001	10 50% 50%
Thanet 002	0 50% 50%
Thanet 003	9 67% 33%
Thanet 004	31 67% 33%
Thanet 005	5 67% 33%
Thanet 006	5 50% 50%
Thanet 007	6 67% 33%
Thanet 008	5 C
Thanet 009	2 50% 50%
Thanet 010	8 50% 50%
Thanet 011	20 50% 50%
Thanet 012	0 33% 67%
Thanet 013	7 50% 50%
Thanet 014	21 67% 33%
Thanet 015	9 33% 67%
Thanet 016	9 33% 67%
Thanet 017	3 33% 67%
Total	150

Ref	Route	Trips	%
A	A257 (W) before ho	63	3.7%
B	Bypass	87	5.2%
C	New Dover Road	61	3.7%
D	City Centre	178	10.6%
E	A28 South	576	34.3%
F	A28 North	207	12.3%
G	Jubilee Road	38	2.2%
H	Nargate Street	119	7.1%
I	A257 East	225	13.4%
J	Bekesbourne Lane	126	7.5%
	Total	1,679	100%

APPENDIX 2.A Kent County Council Scoping Response



Jon Wilkinson
i-Transport LLP

jon.wilkinson@i-transport.co.uk

Highways and Transportation

Ashford Highway Depot
4 Javelin Way
Ashford
TN24 8AD

Tel: 03000 418181

Date: 9 December 2022

Our Ref: FW

Application - PAP/2022/84

Location - LAND SOUTH OF THE HILL, LITTLEBOURNE

**Proposal - RESIDENTIAL DEVELOPMENT FOR APPROXIMATELY 300 DWELLINGS,
WITH ACCESS ONTO A257 THE HILL**

Dear Jon,

Thank you for your e-mail with the Scoping Note and your request for comments. Having reviewed this, I have the following comments to make.

Section 2 - Development proposals and proposed access arrangement

2.2 & 2.3 The access road should be designed to conform to that for a Local Distributor Road/Major Access Road, as per guidance set out within the Kent Design Guide. As it is expected that buses will use this road, it will need to be designed with a 6.75m width to allow for this.

Section 4 - Traffic Assessment Methodology

4.1.5 Junction Turning counts must be undertaken in neutral months

4.1.6 ATC surveys must take place outside of school holidays

4.1.8 A Designers Response should be included with the Stage 1 RSA.

4.2.1 as this site is coming forward as part of Canterbury's Local Plan, Future year assessment should be based on 2045, and not 2029.

4.3.3 please add 22/01845 North Hersden 800 dwellings and other mixed uses - this doesn't have approval but is a site allocated in the current local plan.

4.5.4 Trip rates agreed

4.5.24 For clarity the flow diagrams should demonstrate the turning movements at the junctions, including the site access. The flow diagrams should also include traffic flows through Bridge to demonstrate movements for vehicles accessing the A2 north and southbound.

I trust the above is useful, but if you have any further questions then please do not hesitate to contact either myself or Alun Millard.

Important Notes

Any advice given by Council officers for pre-application enquiries does not indicate a formal decision by the Council as the Highway Authority. Any views or opinions are given in good faith, and to the best of ability, without prejudice to the formal consideration of any planning application.

The final decision on any application that you may then make can only be taken after the Planning Authority has consulted local people, statutory consultees and any other interested parties. The final decision on an application will then be made by senior officers or by the respective Local Planning Authority and will be based on all of the information available at that time.

You should therefore be aware that officers cannot guarantee the final formal decision that will be made on your application(s).

Any pre-application advice that has been provided will be carefully considered in reaching a decision or recommendation on an application; subject to the proviso that circumstances and information may change or come to light that could alter that position.

Kent County Council has now introduced a formal technical approval process for new or altered highway assets, with the aim of improving future maintainability. This process applies to all development works affecting the public highway other than applications for vehicle crossings, which are covered by a separate approval process. To assist developers and designers, KCC offer a free outline technical review of proposals affecting highway assets. This is separate from the planning process but will help ensure that your proposals will be acceptable to the highway authority at the implementation stage. To find out more and request an application form, email: assetmanagement@kent.gov.uk

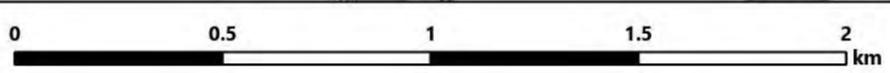
It should be noted that the weight given to pre-application advice will decline over time.

Yours Faithfully

Fiona Wiles

Senior Transport & Development Planner

APPENDIX 3.A Site Location Plan



Key

Site Location Plan

i-Transport

Centurion House, 129 Deansgate
Manchester, M3 3WR

Tel: 0161 830 2172

www.i-transport.co.uk

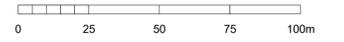
Title: **Site Location Plan**

Project: **Land South of the Hill, Littlebourne**

Project Number: ITM16283	Figure Number: Figure 3.A	Revision: -
------------------------------------	-------------------------------------	-----------------------

APPENDIX 3.B Illustrative Masterplan

NOTES
 This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.
 Ordnance Survey base mapping - supplied by client.

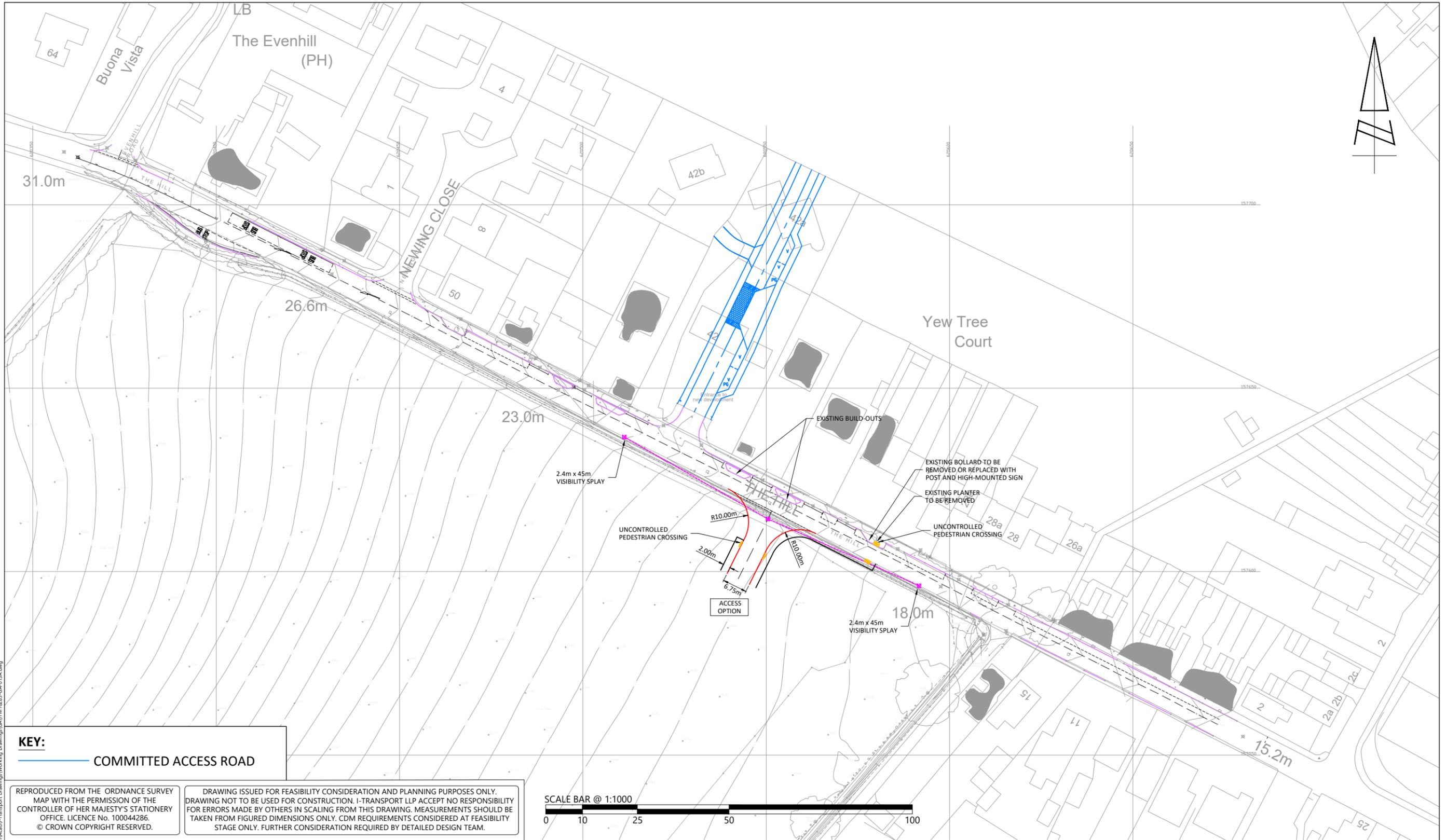


KEY	
	Site Boundary 15.77ha
	Residential Development (up to 300 dwellings at 35dph) 9.17ha
	Pumping Station 0.023ha
	Waste Water Treatment Works 0.15ha
	Potential Location of Allotments 0.028ha
	Community Facilities (shop etc.)
	Main Road with Avenue Tree Planting and Footpath / Bicycle Route
	Secondary Road
	Vehicular Access Locations
	Pedestrian and Cyclist Access Locations
	Surfaced Footpath / Bicycle Route
	Informal Footpath Routes, Mown and through Native Tree Belt
	Proposed Individual Tree Planting / Avenue Trees
	Proposed Native Tree Groups, Scrub and Hedgrows
	Proposed Native Tree Belts
	Existing Trees, Tree Groups and Hedgrows
	Play Provision 0.39ha (LAP/LEAP 0.18ha and 0.21ha NEAP)
	Community Orchard
	Variety of Species Rich Grass Mixes
	Bulb Planting
	Proposed Attenuation Basins
	Wetland Area 0.46ha



File: L:\1130011319\LANDS\Drawings\09538-FPCR-XX-XX-DR-L-0001-P07.vwx

APPENDIX 3.C Proposed Site access Arrangements



KEY:
 COMMITTED ACCESS ROAD

REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE. LICENCE No. 100044286. © CROWN COPYRIGHT RESERVED.

DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.




Centurion House, 129 Deansgate
 Manchester, M3 3WR
 Tel: 0161 830 2172
 www.i-transport.co.uk

REV	DATE	BY	DESCRIPTION	CHK	APD
A	13.12.22	JB	SITE ACCESS AMENDMENTS	JW	JW
STATUS: FOR INFORMATION					

TITLE: POTENTIAL ACCESS ARRANGEMENTS	
PROJECT: LAND SOUTH OF THE HILL, LITTLEBOURNE	CLIENT: GLADMAN DEVELOPMENTS LTD

DRAWN: JB	CHECKED: JW	APPROVED: JW
PROJECT No: ITM16283	SCALE @ A3: 1:1000	DATE: 22.09.22
DRAWING No: ITM16283-GA-013		REV: A

Z:\Projects\16283\ITM - Land South of The Hill, Littlebourne\Tech\Acad\Transport Drawings\Working Drawings\GA\ITM16283-GA-013A.dwg

APPENDIX 3.D Road Safety Audit and Design Team Response

i-Transport

Land South of The Hill, Littlebourne
Proposed Residential Development

Potential Site Access Arrangements on The Hill



Stage 1 Road Safety Audit



REPORT CONTROL			
Document	Stage 1 Road Safety Audit		
Project	Land South of The Hill, Littlebourne Proposed Residential Development Potential Site Access Arrangements on The Hill		
Client	i-Transport		
Report Number	NS23/808A/RSA1		
Primary Author	Kevin Nicholson		
Reviewer	Nancy Sloan		
Revision History			
Issue	Date	Status	Checked for Issue
1	19/01/23	Issued to Client	



CONTENTS

1. INTRODUCTION	1
2. ITEMS RAISED BY PREVIOUS ROAD SAFETY AUDITS.....	3
3. ITEMS RAISED BY THIS STAGE 1 ROAD SAFETY AUDIT.....	5
4. AUDIT TEAM STATEMENT	6
5. DRAWINGS AND DOCUMENTS PROVIDED.....	7



1. INTRODUCTION

- 1.1. This report results from a Stage 1 Road Safety Audit carried out on the site access arrangements and associated highway works for a proposed residential development of approximately 300 dwellings on land to the south of A257 The Hill, Littlebourne, Kent. The access takes the form of a simple priority T-junction, located on the south side of The Hill, some 32m to the east of, and opposite, the junction to The Laurels, a residential development currently under construction. The proposed access road is 6.75m in width with 2m footways on both sides.
- 1.2. In the vicinity of the access, The Hill is an urban 2-lane single carriageway 6.75m wide, with an effective through width for vehicular traffic of about 4.8m due to the presence of traffic calming build-outs on the north side. The Hill is subject to a 30mph speed limit and is street lit, with set-back housing and an existing footway on the north side. The south side of the road is bounded by a grassed embankment with a hedge topping. The carriageway is marked with 2m x 4m centre lines. There are eastbound and westbound bus stops approximately 220m to the east and 160m to the west of the proposed site access.
- 1.3. Briefly, the works subject to audit comprise the following: -
- The proposed access junction, including an uncontrolled pedestrian crossing;
 - A short length of footway on the south side of The Hill between the new access road and a proposed uncontrolled pedestrian crossing to the east;
 - The removal of a planter and bollard on the north side of The Hill.
- 1.4. The Road Safety Audit was requested by Jon Wilkinson of i-Transport and was carried out during January 2023. The Audit Team visited the site together on the morning of Monday 16 January, during which the weather was partially overcast and cold, and the road surfaces were damp. Traffic was steady and free-flowing (other than eastbound traffic ceding priority at the build-outs), and a number of pedestrians were observed.
- 1.5. The detail provided for the audit is shown in Section 5. All comments are referenced to the design drawings and related documents.
- 1.6. The Audit Team membership was as follows: -
- | | |
|-----------------|--|
| Kevin Nicholson | Nicholson Sloan Consultancy Limited (Audit Team Leader); |
| Nancy Sloan | Nicholson Sloan Consultancy Limited (Audit Team Member). |
- 1.7. The collision data submitted with the drawings and documents package shows that there have been 9 recorded collisions on the length of the A257 between points 350m to the west and 500m to the east of the proposed access, in the 5 years from April 2015 to March 2020. Of those, 6 involved



slight personal injury and 3 were serious injury. The closest incidents (2) occurred in 2018 in the vicinities of Jubilee Road to the east, and Newing Close to the west. Both incidents resulted in slight injuries and neither involved turning traffic. An investigation of the Crashmap database has revealed that there have been no collisions recorded in the vicinity of the proposed access in the subsequent period to December 2021.

- 1.8. The terms of reference for this audit are as described in GG 119 (Revision 2) in the Design Manual for Roads and Bridges. The Team has reported only on the road safety implications of the proposals and has not examined or verified the compliance of the design to any other criteria. However, and without being prescriptive, the Audit Team might refer to a design standard or technical guidance where this would help to clarify a safety problem or recommendation. In addition, there may be alternative methods of addressing a problem that would be equally acceptable in achieving the elimination or mitigation of a problem, and these should be considered in the light of the recommendations in this report.
- 1.9. Where relevant within this report traffic signs will be described either by their reference numbers on the drawings or by their diagram number within the Traffic Signs Regulations and General Directions 2016 (as amended).
- 1.10. Within this report the generic term **"pedestrians"** can include walking pedestrians, wheelchair users, mobility scooter users, dismounted cyclists, the blind, partially sighted and mobility impaired. Reference may be made to specific groups where appropriate.

2. ITEMS RAISED BY PREVIOUS ROAD SAFETY AUDITS

- 2.1 A Stage 1 Road Safety Audit was carried out on the site access arrangements from The Hill, and associated highway works, in March 2021. The items raised, the recommendations, the Designer's Responses and Audit Team comments in respect of that Stage 1 Audit are shown below.

PROBLEM 3.1

Location: The build-outs opposite the proposed access road junction.

Summary: The removal of the build-outs could be counter-productive in road safety terms.

The drawings indicate that parking bays are currently present opposite the proposed access, but in fact they have been replaced with build-outs (which appear to have been constructed recently). As the build-outs occupy the same lateral space as the previous parking bays, the following comments are made as if the drawings show them in place.

The swept paths for the refuse collection vehicle show that with the build-outs in place, drivers turning out of the junction encroach within the access road inbound lane to complete the turn. Without the build-outs in place, they can execute a slight forward over-turn, which will allow them to avoid encroachment within the inbound lane and to straighten up on The Hill more quickly than if the build-out was present. In avoiding the inbound lane, the left turn out shows a slight oversail of the build-out immediately to the west of the junction, but the removal of either or both of the build-outs on that basis could encourage parking or result in a queue of eastbound vehicles behind the remaining build-out to the east (to give way to westbound traffic). Site observations suggest that the build-outs appeared to work effectively, with eastbound motorists regularly giving way to uphill oncoming traffic. However, it operates as a 'leapfrog' type of control where only 2 or 3 queued vehicles shelter in each of the gaps at once. An increase in the length of the queue resulting from the removal of one or more build-outs could encourage moving platoons and higher vehicle speeds, with the attendant risk of collisions with oncoming westbound vehicles. On balance, the Audit Team concludes that the infrequent use of the development access road by large vehicles, and the associated minor turning issues involved, are more acceptable in terms of a collision risk than removing the build-outs, which have a continuous traffic calming benefit.

RECOMMENDATIONS

It is recommended that the build-outs are retained. In addition, it is recommended that once the junction is operational, turning movements are observed and any required adjustments to the size and shape of the build-outs made accordingly.

DESIGN TEAM RESPONSE

The audit recommendation is accepted. New build-outs have been added to drawing ITM16283-GA-003 Rev A. Tracking of the site access is presented in drawing ITM16283-GA-004 Rev A and shows a refuse vehicle can enter/exit the site with the build-outs in place. If required the build-outs could be adjusted to the appropriate size and shape once the junction is operational.



AUDIT TEAM COMMENT

The amendments are in place on the current drawing and this problem is closed.

PROBLEM 3.2

Location: The uncontrolled pedestrian crossing to the east of the proposed access road junction.

*Summary: The 'keep **right**' bollard could conceal waiting pedestrians.*

The bollard is wide enough to partially or fully conceal pedestrians waiting to cross (particularly small children and wheelchair users). This could be especially hazardous where pedestrians begin to cross in gaps in traffic, on the assumption that they have been seen by approaching motorists, whose attention could be largely occupied assessing oncoming vehicles.

RECOMMENDATION

It is recommended that the bollard is replaced with a post and high-mounted sign.

DESIGN TEAM RESPONSE

Accepted. Existing bollard could be removed or changed to a post and high-mounted sign. This will be considered at the detailed design stage.

AUDIT TEAM COMMENT

The amendments are in place on the current drawing and this problem is closed.

PROBLEM 3.3

Location: The uncontrolled pedestrian crossing on the development access road.

Summary: The incorrect pattern of tactile paving could result in collisions involving pedestrians.

While perhaps schematic at this stage, the drawings show 2 rows of tactile paving at the pedestrian crossing points, which could be interpreted by visually impaired pedestrians as a crossing remote from a junction rather than inset from it. This could make them unaware of the possibility of encountering turning vehicles and increase the risk of collisions.

RECOMMENDATION

It is recommended that the tactile paving is specified as a depth of 400-450 mm (a single row of paving) – the pattern for that of an inset crossing.

DESIGN TEAM RESPONSE

Accepted. Drawing ITM16283-GA-003 amended to show single row of paving.

AUDIT TEAM COMMENT

The amendments are in place on the current drawing and this problem is closed.



3. ITEMS RAISED BY THIS STAGE 1 ROAD SAFETY AUDIT

- 3.1 There are no additional items to raise at this second Stage 1 Road Safety Audit.



4. AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

ROAD SAFETY AUDIT TEAM LEADER

Kevin Nicholson BSc, CMaths, MCIHT, FSoRSA,
HE Certificate of Competency
Director, Nicholson Sloan Consultancy Limited
Cherry Tree Cottage
Hayton, Brampton, Cumbria, CA8 9HT

Signed:

Date:

19/01/23

ROAD SAFETY AUDIT TEAM MEMBER

Nancy Sloan MCIHT, MSoRSA
Director, Nicholson Sloan Consultancy Limited
Cherry Tree Cottage
Hayton, Brampton, Cumbria, CA8 9HT

Signed:

Date:

19/01/23



5. DRAWINGS AND DOCUMENTS PROVIDED

DRAWING OR DOCUMENT NUMBER	PROJECT AND TITLE	DATE
ITM16283-GA-013 REVISION A	LAND SOUTH OF THE HILL, LITTLEBOURNE POTENTIAL ACCESS ARRANGEMENTS	13.12.22
ITM16283 REVISION A	LAND SOUTH OF THE HILL, LITTLEBOURNE SWEPT PATH ANALYSIS – SINGLE DECKER BUS	13.12.22
ITM16283 (FROM TA)	LAND SOUTH OF THE HILL, LITTLEBOURNE JUNE 2022 TRAFFIC FLOWS	RECEIVED 01.23
ITM16283 (FROM TA)	LAND SOUTH OF THE HILL, LITTLEBOURNE BASE + COMMITTED + DEVELOPMENT TRAFFIC FLOWS	RECEIVED 01.23
ITM16283 (FROM TA)	LAND SOUTH OF THE HILL, LITTLEBOURNE TOTAL DEVELOPMENT TRAFFIC FLOWS	RECEIVED 01.23
09538-FPCR-XX-XX- DR-L-0001 ISSUE 5	LITTLEBOURNE, CANTERBURY DEVELOPMENT FRAMEWORK	18.11.22
M:\PROJECTS\1628 3ITM	A257 THE HILL SITE ACCESS (300 DWELLINGS).J10 PICADY 10 – PRIORITY INTERSECTION MODULE	14.01.23
NS21/622/RSA1 ISSUE 1	LAND SOUTH OF THE HILL, LITTLEBOURNE PROPOSED RESIDENTIAL DEVELOPMENT SITE ACCESS ARRANGEMENTS AND ASSOCIATED HIGHWAY WORKS STAGE 1 ROAD SAFETY AUDIT	19.03.21
ITM16283	LAND SOUTH OF THE HILL, LITTLEBOURNE DESIGN ORGANISATION RESPONSE TO STAGE 1 ROAD SAFETY AUDIT	22.03.21
-	LITTLEBOURNE – 5 YEARS PERSONAL INJURY CRASH DATA 01 APRIL 2015 TO 31 MARCH 2020	04.03.21
EXT/044/21	LITTLEBOURNE – 5 YEARS PERSONAL INJURY CRASH DATA PLOT 01 APRIL 2015 TO 31 MARCH 2020	04.03.21

Design Organisation Response to Stage 1 Road Safety Audit

Project No: ITM16283
Project Title: Land South of The Hill, Littlebourne
Date: 24 January 2023

Proposed Access onto A257 The Hill, Littlebourne

Previous RSA Problem Ref	Location	Previously Raised Problem	Previous Recommendation	Design Team Response
3.1	The build-outs opposite the proposed access road junction.	<p>The drawings indicate that parking bays are currently present opposite the proposed access, but in fact they have been replaced with build-outs (which appear to have been constructed recently).</p> <p>The swept paths for the refuse collection vehicle show that with the build-outs in place, drivers turning out of the junction encroach within the access road inbound lane to complete the turn. Without the build-outs in place, they can execute a slight forward over-turn, which will allow them to avoid encroachment within the inbound lane and to straighten up on The Hill more quickly than if the build-out was present. In avoiding the inbound lane, the left turn out shows a slight oversail of the build-out immediately to the west of the junction, but the removal of either or both of the build-outs on that basis could encourage parking or result in a queue of eastbound vehicles behind the remaining build-out to the east (to give way to westbound traffic).</p>	<p>On balance, the Audit Team concludes that the infrequent use of the development access road by large vehicles, and the associated minor turning issues involved, are more acceptable in terms of a collision risk than removing the build-outs, which have a continuous traffic calming benefit.</p> <p>It is recommended that the build-outs are retained. In addition, it is recommended that once the junction is operational, turning movements are observed and any required adjustments to the size and shape of the build-outs made accordingly.</p>	<p>The audit recommendation is accepted.</p> <p>New build-outs have been added to drawing ITM16283-GA-003 Rev A.</p> <p>Tracking of the site access is presented in drawing ITM16283-GA-007 and shows a refuse vehicle can enter/exit the site with the build-outs in place.</p> <p>Audit Team Response: The amendments are in place on the current drawing and this problem is closed.</p>

Previous RSA Problem Ref	Location	Previously Raised Problem	Previous Recommendation	Design Team Response
3.2	The uncontrolled pedestrian crossing to the east of the proposed access road junction.	The bollards are wide enough to partially or fully conceal pedestrians waiting to cross (particularly small children and wheelchair users). This could be especially hazardous where pedestrians begin to cross in gaps in traffic, on the assumption that they have been seen by approaching motorists, whose attention could be largely occupied assessing oncoming vehicles	It is recommended that the bollard is replaced with a post and high-mounted sign.	<p>Accepted.</p> <p>Existing bollard could be removed or changed to a post and high-mounted sign. This will be considered at the detailed design stage.</p> <p>Change to existing bollard is noted on drawing ITM16283-GA-003 Rev A.</p> <p>Audit Team Response: The amendments are in place on the current drawing and this problem is closed.</p>
3.3	The uncontrolled pedestrian crossing on the development access road	The drawings show 2 rows of tactile paving at the pedestrian crossing points, which could be interpreted by visually impaired pedestrians as a crossing remote from a junction rather than inset from it. This could make them unaware of the possibility of encountering turning vehicles and increase the risk of collisions.	It is recommended that the tactile paving is specified as a depth of 400-450 mm (a single row of paving) – the pattern for that of an inset crossing.	<p>Accepted.</p> <p>Drawing ITM16283-GA-003 amended to show single row of paving.</p> <p>Audit Team Response: The amendments are in place on the current drawing and this problem is closed.</p>

i-Transport

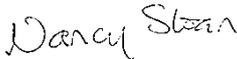
Land South of The Hill, Littlebourne
Proposed Residential Development

Potential Site Access Arrangements on Bekesbourne Lane



Stage 1 Road Safety Audit



REPORT CONTROL			
Document	Stage 1 Road Safety Audit		
Project	Land South of The Hill, Littlebourne Proposed Residential Development Potential Site Access Arrangements on Bekesbourne Lane		
Client	i-Transport		
Report Number	NS23/808B/RSA1		
Primary Author	Kevin Nicholson		
Reviewer	Nancy Sloan		
Revision History			
Issue	Date	Status	Checked for Issue
1	20/01/23	Issued to Client	



CONTENTS

1. INTRODUCTION	1
2. ITEMS RAISED BY PREVIOUS ROAD SAFETY AUDITS.....	3
3. ITEMS RAISED BY THIS STAGE 1 ROAD SAFETY AUDIT.....	4
4. AUDIT TEAM STATEMENT	5
5. DRAWINGS AND DOCUMENTS PROVIDED.....	6
6. LOCATION PLANS OF ITEMS RAISED BY THIS AUDIT	7



1. INTRODUCTION

- 1.1. This report results from a Stage 1 Road Safety Audit carried out on the site access arrangements and associated highway works for a proposed residential development of approximately 300 dwellings on land to the south of A257 The Hill, Littlebourne, Kent. The access takes the form of a simple priority T-junction, located on the northwest side of Bekesbourne Lane, approximately 130m to the southwest of the road bend and the school path. The proposed access road is 6.75m in width with footways on both sides. There is also a proposed 2m wide footway along the site frontage, which extends between the school path and the track bounding the Howletts Wild Animal Park.
- 1.2. In the vicinity of the access, Bekesbourne Lane is a semi-rural single carriageway road with open farmland on both sides. The access lies close to the 30/40mph speed limit boundary.
- 1.3. The Road Safety Audit was requested by Jon Wilkinson of i-Transport and was carried out during January 2023. The Audit Team visited the site together on the morning of Monday 16 January, during which the weather was partially overcast and cold, and the road surfaces were damp with some standing water. Traffic was light and free-flowing, and a no pedestrians or cyclists were observed.
- 1.4. The detail provided for the audit is shown in Section 5. All comments are referenced to the design drawings and related documents and the locations of the items raised by the audit are shown on the plan in Section 6.
- 1.5. The Audit Team membership was as follows: -

Kevin Nicholson	Nicholson Sloan Consultancy Limited (Audit Team Leader);
Nancy Sloan	Nicholson Sloan Consultancy Limited (Audit Team Member).
- 1.6. The collision data submitted with the drawings and documents package shows that have been no recorded collisions in the vicinity of the proposed access, in the 5 years from April 2015 to March 2020. An investigation of the Crashmap database has revealed that there have been no additional collisions recorded in the subsequent period to December 2021.
- 1.7. The terms of reference for this audit are as described in GG 119 (Revision 2) in the Design Manual for Roads and Bridges. The Team has reported only on the road safety implications of the proposals and has not examined or verified the compliance of the design to any other criteria. However, and without being prescriptive, the Audit Team might refer to a design standard or technical guidance where this would help to clarify a safety problem or recommendation. In addition, there may be alternative methods of addressing a problem that would be equally acceptable in achieving the elimination or mitigation of a problem, and these should be considered in the light of the recommendations in this report.



- 1.8. Where relevant within this report traffic signs will be described either by their reference numbers on the drawings or by their diagram number within the Traffic Signs Regulations and General Directions 2016 (as amended).
- 1.9. Within this report the generic term **"pedestrians"** can include walking pedestrians, wheelchair users, mobility scooter users, dismounted cyclists, the blind, partially sighted and mobility impaired. Reference may be made to specific groups where appropriate.



2. ITEMS RAISED BY PREVIOUS ROAD SAFETY AUDITS

- 2.1 The Audit Team are unaware of any previous Road Safety Audits carried out on the proposals.



3. ITEMS RAISED BY THIS STAGE 1 ROAD SAFETY AUDIT

3.1 PROBLEM

Location: Bekesbourne Lane in the vicinity of the site access junction.

Summary: Extending the 30mph speed limit could reduce the risk of collisions.

The junction appears to be located to the southwest of the 30/40 mph speed limit boundary, but this is not fully clear from the site access drawing. However, the y-distances for the visibility splays of 45m and 120m suggest that the limits are 30mph to the northeast and 40mph to the southwest respectively. Including the site access junction within the 30mph limit would be prudent in order to help to reduce the speed of traffic on Bekesbourne Lane in the vicinity of the junction, and to reduce the risk of collisions involving turning vehicles.

RECOMMENDATIONS

It is recommended that the 30mph speed limit is extended to the southwest, to incorporate the proposed site access junction.

3.2 PROBLEM

Location: Bekesbourne Lane.

Summary: The absence of street lighting could increase the risk of a number of collision types.

It is assumed that the internal roads and footways within the development will be lit, but at this stage it is not clear if the existing system of street lighting on Bekesbourne Lane is to be extended to encompass the new access road junction and the proposed footway. The absence of lighting on Bekesbourne Lane could increase the risk of collisions, as motorists move between alternative lit and dark sections of road. In addition, there will be an attendant risk of trips and collisions involving cyclists and pedestrians on the proposed footway.

RECOMMENDATION

It is recommended that the system of lighting is extended to illuminate the access road junction and the footway.



4. AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

ROAD SAFETY AUDIT TEAM LEADER

Kevin Nicholson BSc, CMaths, MCIHT, FSoRSA,
HE Certificate of Competency
Director, Nicholson Sloan Consultancy Limited
Cherry Tree Cottage
Hayton, Brampton, Cumbria, CA8 9HT

Signed:

Date:

20/01/23

ROAD SAFETY AUDIT TEAM MEMBER

Nancy Sloan MCIHT, MSoRSA
Director, Nicholson Sloan Consultancy Limited
Cherry Tree Cottage
Hayton, Brampton, Cumbria, CA8 9HT

Signed:

Date:

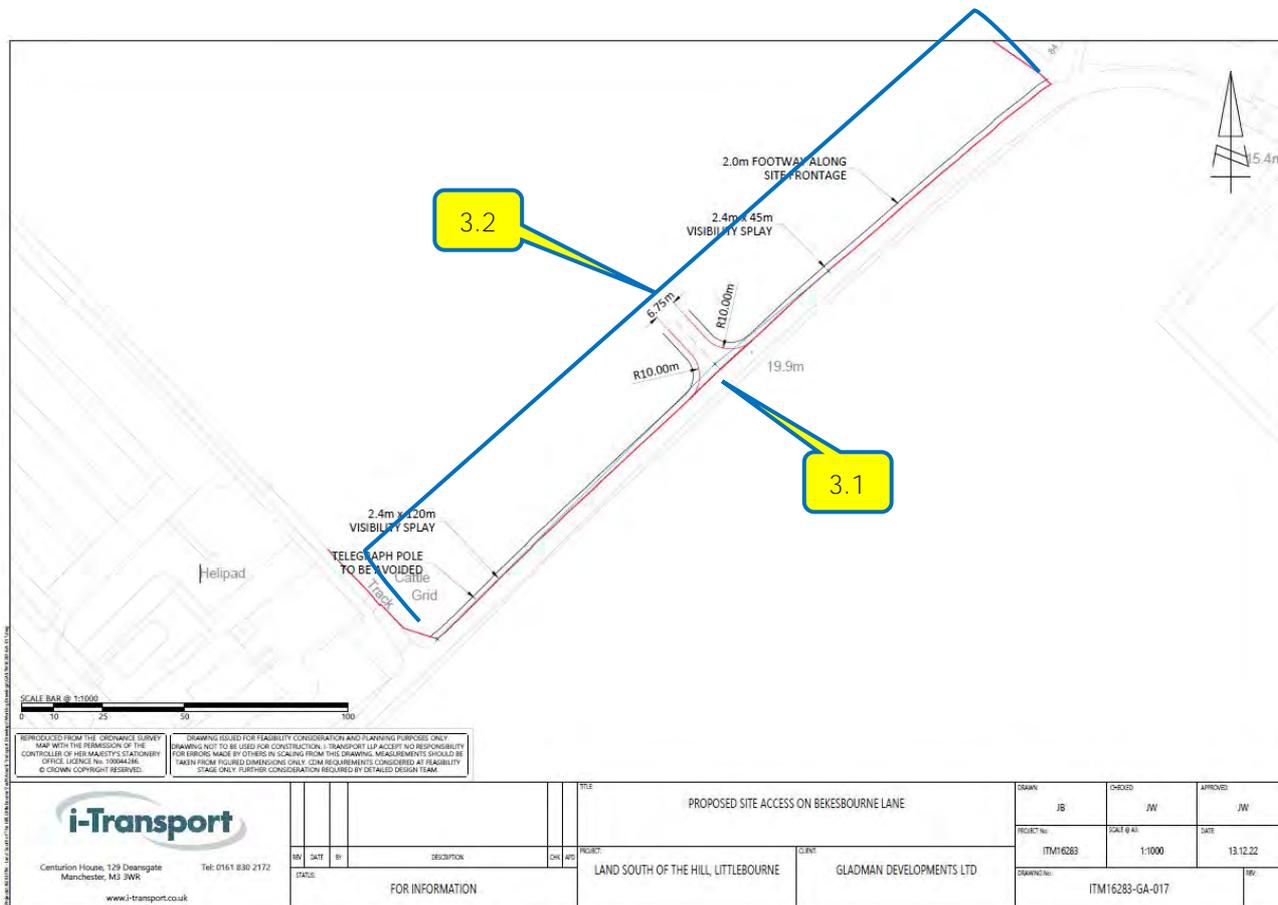
20/01/23



5. DRAWINGS AND DOCUMENTS PROVIDED

DRAWING OR DOCUMENT NUMBER	PROJECT AND TITLE	DATE
ITM16283-GA-017 REVISION -	LAND SOUTH OF THE HILL, LITTLEBOURNE PROPOSED SITE ON ACCESS ON BEKESBOURNE LANE	13.12.22
ITM16283 REVISION A	LAND SOUTH OF THE HILL, LITTLEBOURNE SWEPT PATH ANALYSIS – SINGLE DECKER BUS	13.12.22
ITM16283 (FROM TA)	LAND SOUTH OF THE HILL, LITTLEBOURNE JUNE 2022 TRAFFIC FLOWS	RECEIVED 01.23
ITM16283 (FROM TA)	LAND SOUTH OF THE HILL, LITTLEBOURNE BASE + COMMITTED + DEVELOPMENT TRAFFIC FLOWS	RECEIVED 01.23
ITM16283 (FROM TA)	LAND SOUTH OF THE HILL, LITTLEBOURNE TOTAL DEVELOPMENT TRAFFIC FLOWS	RECEIVED 01.23
09538-FPCR-XX-XX- DR-L-0001 ISSUE 5	LITTLEBOURNE, CANTERBURY DEVELOPMENT FRAMEWORK	18.11.22
M:\PROJECTS\1628 3ITM	BEKESBOURNE LANE SITE ACCESS (300 DWELLINGS).J10 PICADY 10 – PRIORITY INTERSECTION MODULE	14.01.23
-	LITTLEBOURNE – 5 YEARS PERSONAL INJURY CRASH DATA 01 APRIL 2015 TO 31 MARCH 2020	04.03.21
EXT/044/21	LITTLEBOURNE – 5 YEARS PERSONAL INJURY CRASH DATA PLOT 01 APRIL 2015 TO 31 MARCH 2020	04.03.21

6. LOCATION PLAN OF ITEMS RAISED BY THIS AUDIT



Design Organisation Response to Stage 1 Road Safety Audit

Project No: ITM16283
Project Title: Land South of The Hill, Littlebourne
Date: 24 January 2023

Proposed Access onto Bekesbourne Lane, Littlebourne

Problem Ref	Location	Problem	Recommendation	Design Team Response
3.1	Bekesbourne Lane in the vicinity of the site access junction	The junction appears to be located to the southwest of the 30/40 mph speed limit boundary, but this is not fully clear from the site access drawing. However, the y-distances for the visibility splays of 45m and 120m suggest that the limits are 30mph to the northeast and 40mph to the southwest respectively. Including the site access junction within the 30mph limit would be prudent in order to help to reduce the speed of traffic on Bekesbourne Lane in the vicinity of the junction, and to reduce the risk of collisions involving turning vehicles.	It is recommended that the 30mph speed limit is extended to the southwest, to incorporate the proposed site access junction.	<p>The access scheme to Bekesbourne Lane proposes to relocate the speed limit change to south of site, potentially to the south of Howletts Animal Park access. The audit recommendation is therefore accepted.</p> <p>The relocation of the speed limit change will need to be agreed with Kent County Council and the police.</p> <p>It is confirmed that the proposed access could achieve the necessary visibility requirements based upon the existing 40mph limit or the reduced requirements for a 30mph limit, should the proposed speed limit change be supported by KCC/the police.</p>

Problem Ref	Location	Problem	Recommendation	Design Team Response
3.2	Bekesbourne Lane	<p>It is assumed that the internal roads and footways within the development will be lit, but at this stage it is not clear if the existing system of street lighting on Bekesbourne Lane is to be extended to encompass the new access road junction and the proposed footway. The absence of lighting on Bekesbourne Lane could increase the risk of collisions, as motorists move between alternative lit and dark sections of road. In addition, there will be an attendant risk of trips and collisions involving cyclists and pedestrians on the proposed footway.</p>	<p>It is recommended that the system of lighting is extended to illuminate the access road junction and the footway.</p>	<p>The need to extend the street lighting from the existing residential dwellings on Bekesbourne Lane to the site access will be considered during the detailed design stage.</p> <p>The proposed footway along Bekesbourne Lane will be provided off carriageway, through the site .</p> <p>The requirement and provision of internal street lighting, including at the Bekesbourne Lane site access will be considered during the Reserved Matters application for the site.</p>

APPENDIX 4.A Bus Timetables

11 Broadstairs | Westwood | Minster | Ickham | Canterbury

MONDAYS TO FRIDAYS except Bank Holidays

SATURDAYS

		Hols	Sch			Hols	Sch					
9 Broadstairs Pierremont Hall				1149	1349				1149	1349		
Westwood Bus Depot	0655			▼	▼	1552			▼	▼		
Westwood Cross Bus Hub	▼	0906		1206	1406	1554		0729	0906	1206	1406	1554
Sainsbury's New Cross Road	0657	0908		1208	1408	1556		0731	0908	1208	1408	1556
Manston Church	0702	0913		1213	1413	1602		0736	0913	1213	1413	1602
Minster Church	0713	0924	0924	1224	1424	1612	1640	0747	0924	1224	1424	1612
Monkton School	0719	0930	0930	1230	1430	1618	1646	0753	0930	1230	1430	1618
Plucks Gutter The Dog & Duck	0726	0937	0937	1237	1437	1624	1653	0800	0937	1237	1437	1624
Stourmouth The Rising Sun	0728	0939	0939	1239	1439	1626	1655	0802	0939	1239	1439	1626
Preston Bus Shelter	0734	0945	0945	1245	1445	1631	1701	0808	0945	1245	1445	1631
Wingham The Anchor	0742	0953	0953	1253	1453	1640	1709	0816	0953	1253	1453	1640
Wingham opp. Church	0743	0954	0954	1254	1454	1641	1710	0817	0954	1254	1454	1641
Ickham The Duke William	0748	0959	0959	1259	1459	1646	1715	0822	0959	1259	1459	1646
Wickhambreaux The Rose	0753	1004	1004	1304	1504	▼	▼	0827	1004	1304	1504	▼
Littlebourne The Anchor	0759	1010	1010	1310	1510	1652	1722	0833	1010	1310	1510	1652
Canterbury Bus Station	0815	1022	1022	1322	1522	1705	1734	0845	1022	1322	1522	1705

Hols - This bus journey runs on Mondays to Fridays during school holidays only.
Sch - This bus journey runs on schooldays only.

These buses run as route 9 between Broadstairs and Westwood.

There are no Sunday or Bank Holiday buses on route 11.

11 Canterbury | Ickham | Minster | Westwood | Broadstairs

MONDAYS TO FRIDAYS except Bank Holidays

SATURDAYS

Canterbury Bus Station Bay D4	0933	1033	1233	1620	1740	0933	1033	1233	1740
Littlebourne The Anchor	0944	1044	1244	1633	1752	0944	1044	1244	1752
Wickhambreaux The Rose	0950	1050	1250	1639	1758	0950	1050	1250	1758
Ickham The Duke William	0953	1053	1253	1642	1801	0953	1053	1253	1801
Wingham Church	0958	1058	1258	1647	1806	0958	1058	1258	1806
Wingham The Anchor	0959	1059	1259	1648	1807	0959	1059	1259	1807
Preston Bus Shelter	1006	1106	1306	1655	1814	1006	1106	1306	1814
Stourmouth The Rising Sun	1012	1112	1312	1701	1820	1012	1112	1312	1820
Plucks Gutter The Dog & Duck	1014	1114	1314	1703	1822	1014	1114	1314	1822
Monkton School	1021	1121	1321	1710	1829	1021	1121	1321	1829
Minster Church	1029	1129	1329	1718	1837	1029	1129	1329	1837
Manston Church	1039	1139	1339	1728	1847	1039	1139	1339	1847
Sainsbury's New Cross Road	1044	1144	1344	1733	1852	1044	1144	1344	1852
Westwood Cross Bus Hub	1046	1146	1346	▼	▼	1046	1146	1346	▼
9 Westwood opp. Bus Depot	▼	▼	▼	1735	1854	▼	▼	▼	1854
Broadstairs Pierremont Hall	1106	1206	1406			1106	1206	1406	

Special bus timetables may apply during the Christmas period between 24 December and 1 January. Please see our website for details.

This timetable will operate from 31st October 2021



• Discovery Park • Sandwich • Ash
• Wingham • Littlebourne • Canterbury

MONDAYS TO FRIDAYS except Bank Holidays

	43A	43	43	44	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
80/81 leaves from Deal South Street at				Sch	NSch	0705			0833													
Discovery Park	EW			EW																		
Sandwich Guildhall, Stop B arr	0639			0730																		
Sandwich Guildhall, Stop B dep	0640	0654	0725	0730	0734	0759	0821	0841	0841	0901	0921	0941	1001									
Ash The Chequer Inn	0649	0706	0737	0742	0746	0811	0833	0853	0853	0913	0933	0953	1013									
Wingham The Anchor	0655	0714	0745	STT	0755	0820	0842	0901	0901	0921	0941	1001	1021									
Wingham Church	0656	0715	0746	0756	0756	0821	0843	0902	0902	0922	0942	1002	1022									
Littlebourne The Maltings	0701	0721	0752	0802	0802	0827	0850	0908	0908	0928	0948	1008	1028									
Canterbury Bus Station arr	0714	0736	0807	0821	0821	0846	0905	0921	0921	0941	1001	1021	1041									

	43A	43	43	43	43	43	43	43	43
80/81 leaves from Deal South Street at		1633		1653	1733		1753	1938	
Discovery Park									
Sandwich Guildhall, Stop B arr			1708			1808			
Sandwich Guildhall, Stop B dep			1718			1818			E
Ash The Chequer Inn	1641	1701	1721	1741	1801	1821	1841	2013	2204
Wingham The Anchor	1653	1713	1733	1753	1813	1833	1853	2022	2213
Wingham Church	1701	1721	1741	1801	1821	1841	1901	2029	2220
Littlebourne The Maltings	1702	1722	1742	1802	1822	1842	1902	2030	2221
Canterbury Bus Station arr	1708	1728	1748	1808	1828	1848	1908	2036	2227
Canterbury Bus Station arr	1721	1741	1801	1821	1841	1901	1921	2046	2236

SATURDAY mornings

	43	43	43	43	43	43	43
80/81 leaves from Deal South Street at	0648	0728		0753	0833		0853
Discovery Park							
Sandwich Guildhall, Stop B arr							0908
Sandwich Guildhall, Stop B dep							0918
Ash The Chequer Inn	0725	0759	0821	0841	0901	0921	0941
Wingham The Anchor	0727	0811	0833	0853	0913	0933	0953
Wingham Church	0745	0820	0842	0901	0921	0941	1001
Littlebourne The Maltings	0746	0821	0843	0902	0922	0942	1002
Canterbury Bus Station arr	0752	0827	0850	0908	0928	0948	1008
Canterbury Bus Station arr	0807	0846	0905	0921	0941	1001	1021

then at the same times as on Mondays to Fridays

Extra journey on Wednesdays during school term 43 - (1330) departure from Sandwich Technology School via St Barts Road, Woodnesborough, Wingham and arrives at Canterbury Bus Station (1415)

Sch - This bus journey runs on schooldays only.

NSch - This bus journey runs on Mondays to Fridays during school holidays only.

SSH - This bus journey runs on Saturdays and school holidays only.

• - This bus journey runs via St Barts Road and Woodnesborough.

0705 - This bus starts from Deal South Street at 0705 on schooldays and 0728 during school holidays.

EW - This bus starts from Eastry (Old Hospital) 14 minutes before the time shown at Sandwich Guildhall. It serves Woodnesborough (0630, 0721) and St Bart's Road (0635, 0726).

STT - This bus serves Staple (Three Tuns) at 0748.

E - This bus starts from Eastry (Old Hospital) at 2154, and runs directly to Sandwich via the A256.



Special bus timetables may apply during the Christmas period between 24 December and 1 January. Please contact us for details.



@StagecoachSE
stagecoachbus.com

Download the Stagecoach Bus App



This timetable will operate from 31st October 2021



43 • Sandwich • Ash • Wingham • Littlebourne • Canterbury

SUNDAYS & BANK HOLIDAYS

	43	43	43	43	43	43	43	43	43	43	43
80/81 leaves from Deal South Street at	0827	0927	1027	1127	1227	1327	1427	1527	1627	1727	1827
Sandwich Guildhall, Stop B dep	0915	1015	1115	1215	1315	1415	1515	1615	1715	1815	1915
Ash The Chequer Inn	0927	1027	1127	1227	1327	1427	1527	1627	1727	1827	1927
Wingham The Anchor	0935	1035	1135	1235	1335	1435	1535	1635	1735	1835	1935
Wingham Church	0936	1036	1136	1236	1336	1436	1536	1636	1746	1836	1936
Littlebourne The Maltings	0942	1042	1142	1242	1342	1442	1542	1642	1742	1842	1942
Canterbury Bus Station arr	0955	1055	1155	1255	1355	1455	1555	1655	1755	1855	1955

43 • Canterbury • Littlebourne • Wingham • Ash • Sandwich

SUNDAYS & BANK HOLIDAYS

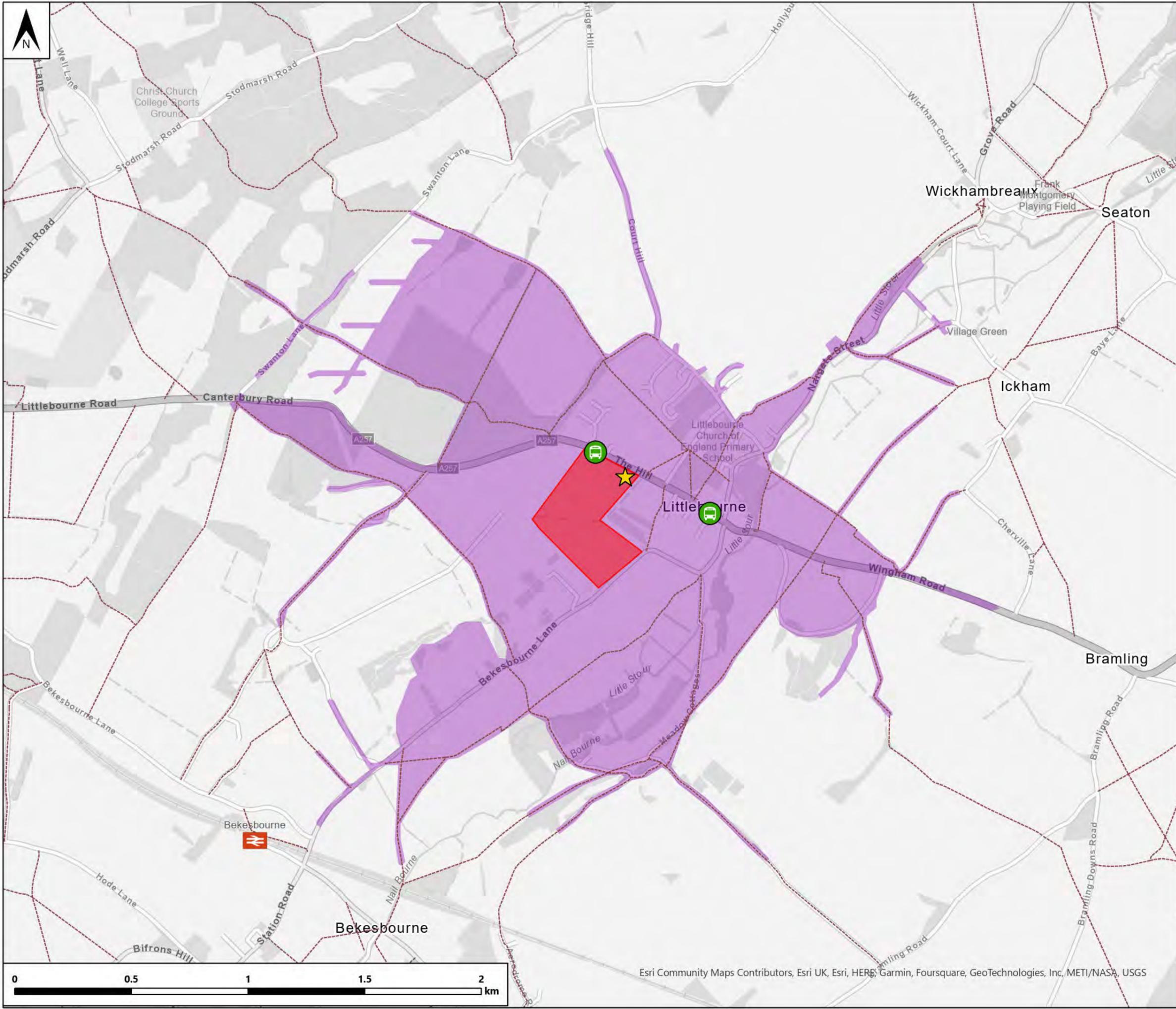
	43	43	43	43	43	43	43	43	43
Canterbury Bus Station D3	0918	1018	1118	1218	1318	1418	1518	1618	1718
Littlebourne The Maltings	0929	1029	1129	1229	1329	1429	1529	1629	1729
Wingham Church	0934	1034	1134	1234	1334	1434	1534	1634	1734
Wingham The Anchor	0935	1035	1135	1235	1335	1435	1535	1635	1735
Ash The Chequer Inn	0942	1042	1142	1242	1342	1442	1542	1642	1742
Sandwich Guildhall, Stop A	0952	1052	1152	1252	1352	1452	1552	1652	1752
80/81 arrives at Deal South Street at	1041	1141	1241	1341	1441	1541	1641	1741	1741

▼ - There's no need to change buses, stay on the bus to continue on to Deal, South Street



Special bus timetables may apply during the Christmas period between 24 December and 1 January. Please contact us for details.

APPENDIX 4.B Walking Catchment Plan



Key

- Site Location
- 2km Walking Catchment
- PROW
- ★ Local Hub / Shop
- 🚏 Bus Stop
- 🚉 Bokesbourne Railway Station

PROW data from Kent

Contains OS data © Crown copyright and database right 2022
 Contains public sector information licensed under the
 Open Government Licence v3.0



Centurion House, 129 Deansgate
 Manchester, M3 3WR

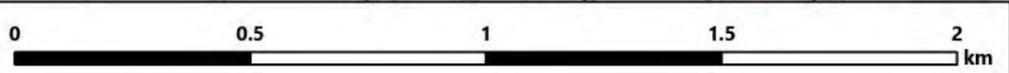
Tel: 0161 830 2172

www.i-transport.co.uk

Title:
2km Walking Catchment

Project:
Land South of the Hill, Littlebourne

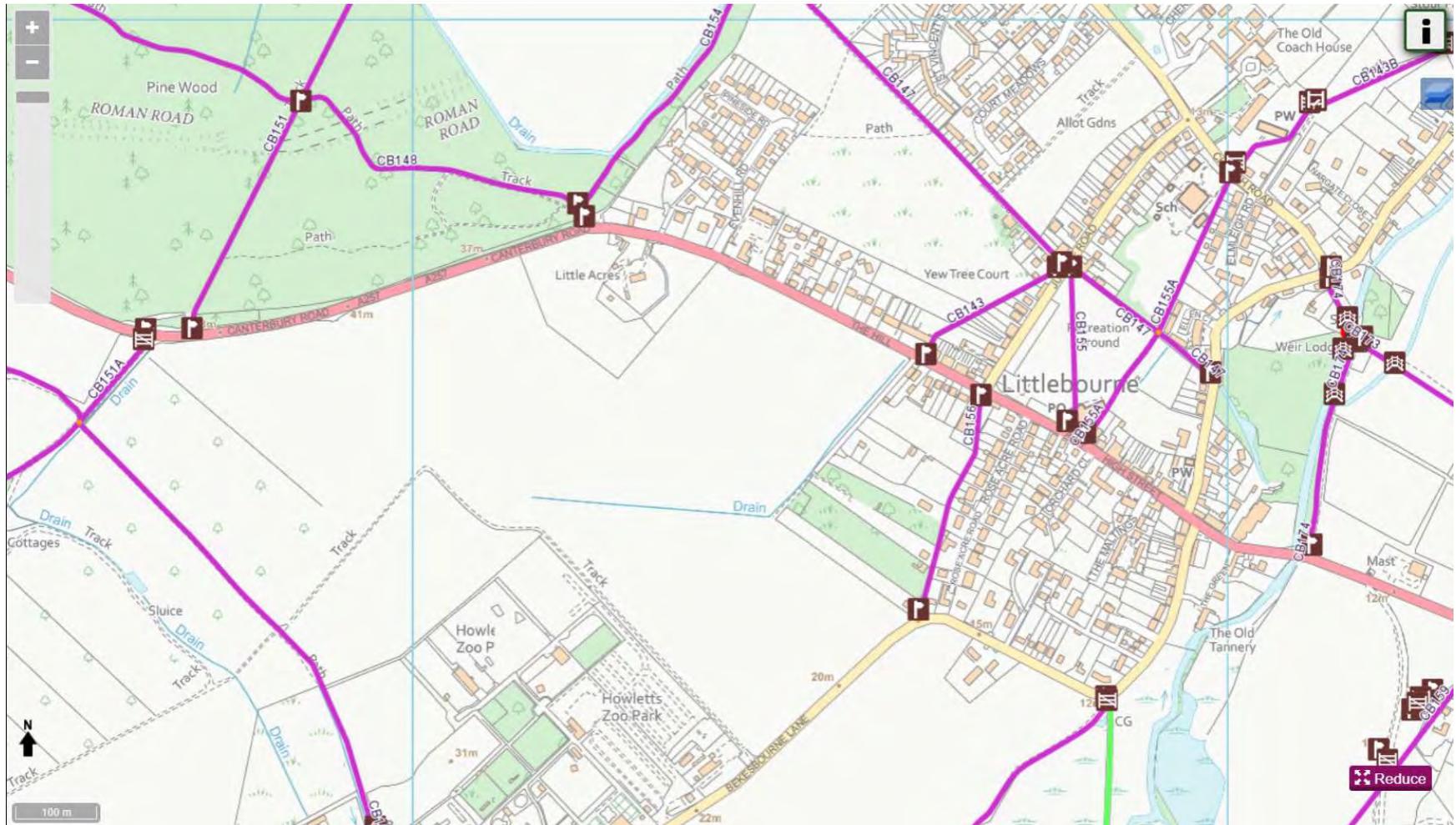
Project Number: ITM16283	Figure Number: APPENDIX 4.B	Revision: -
------------------------------------	---------------------------------------	----------------



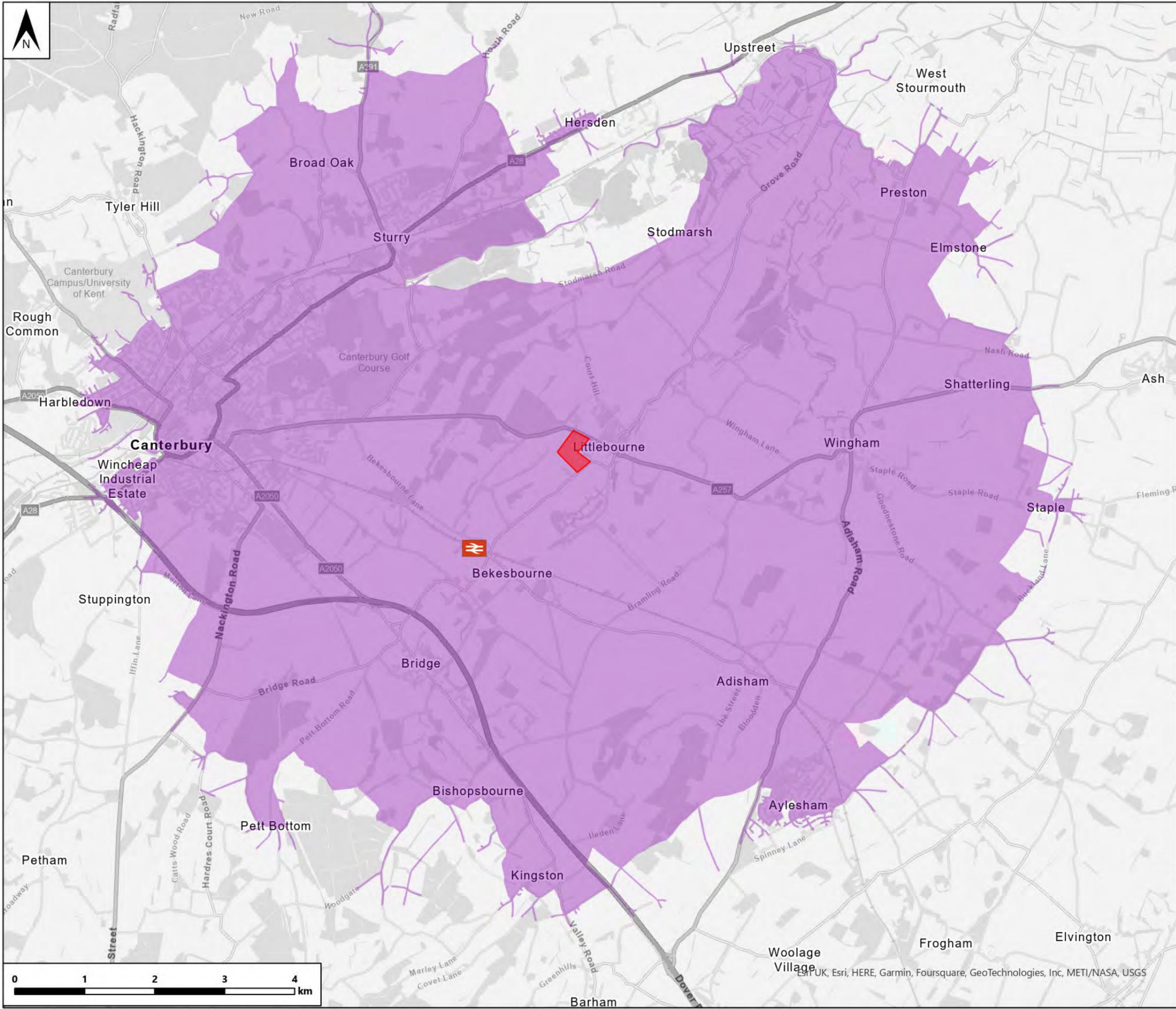
Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

APPENDIX 4.C Public Rights of Way Plan

Kent County Council PROW Map (<https://webapps.kent.gov.uk/countrysideaccesscams/standardmap.aspx>)



APPENDIX 4.D Cycle Catchment Plan



Key

- Site Location
- 8km Cycle Catchment
- Bokesbourne Railway Station

Contains OS data © Crown copyright and database right 2022
Contains public sector information licensed under the
Open Government Licence v3.0



**Centurion House, 129 Deansgate
Manchester, M3 3WR**

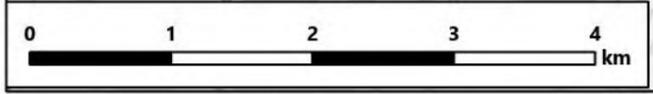
Tel: 0161 830 2172

www.i-transport.co.uk

Title: **8km Cycle Catchment**

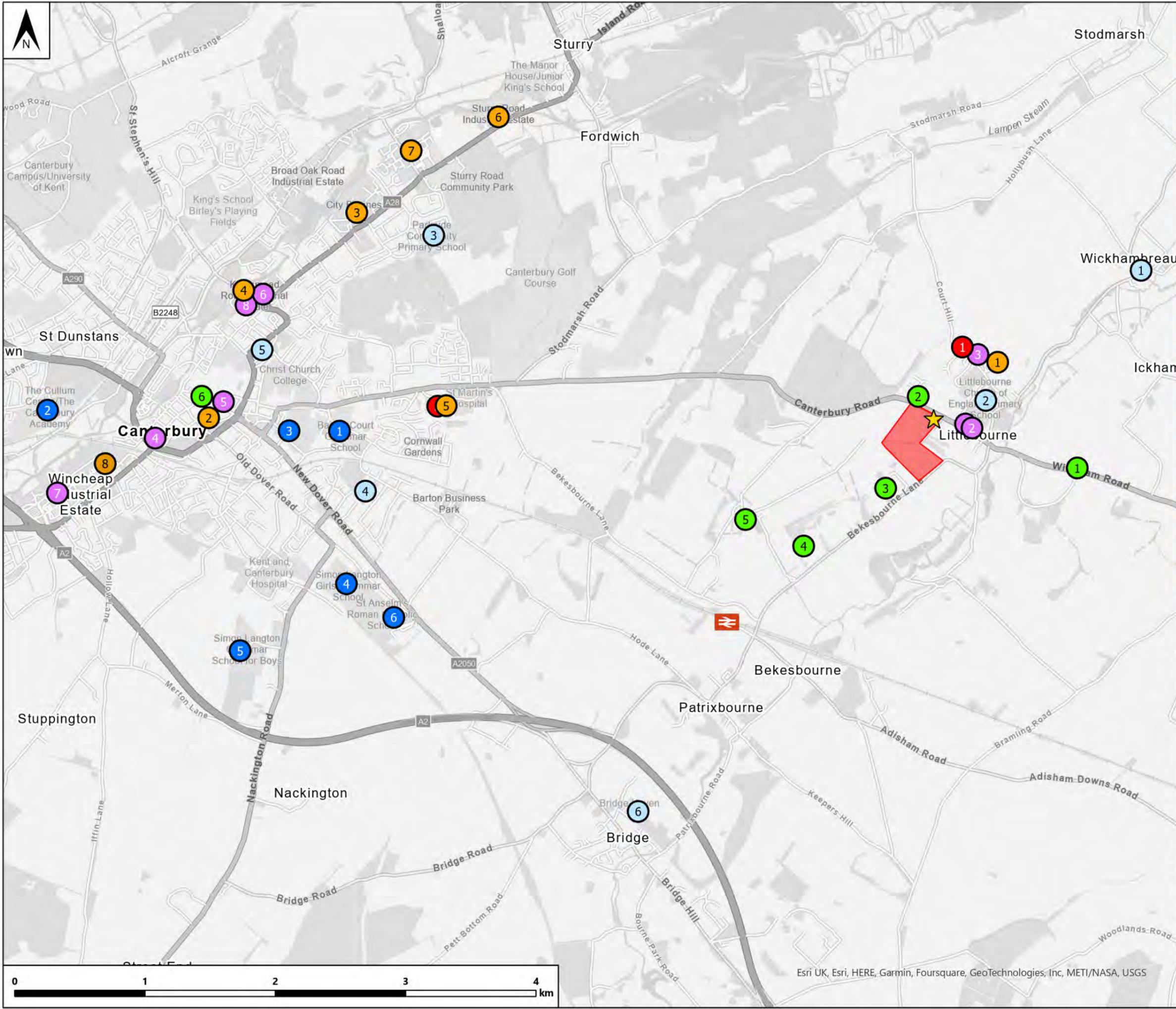
Project: **Land South of The Hill, Littlebourne**

Project Number: ITM16283	Figure Number: APPENDIX 4.D	Revision: -
------------------------------------	---------------------------------------	----------------



ESRI, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

APPENDIX 4.E Key Facilities Plans



- Key**
- Site Location
 - 🚉 Bokesbourne Railway Station
 - ★ Local Hub / Shop
- Primary School**
- 1 Wickhambreaux C of E Primary School
 - 2 Littlebourne C of E Primary School
 - 3 Parkside Community Primary School
 - 4 Pilgrims Way Primary School
 - 5 St Thomas Catholic Primary School
 - 6 Bridge and Patrx C of E Primary School
- Secondary School**
- 1 Barton Court Grammar School
 - 2 Canterbury Academy
 - 3 Canterbury College
 - 4 Simon Langton Girls Grammar
 - 5 Simon Langton Grammar School for Boys
 - 6 St Anselm's Catholic School
- Health**
- 1 Littlebourne Surgery
 - 2 St Martins Hospital
- Retail**
- 1 Four Village Stores
 - 2 Littlebourne Post Office
 - 3 The Ivy Barn
 - 4 Aldi
 - 5 Canterbury City Centre
 - 6 Marshwood Close Retail Park
 - 7 Morrisons Canterbury
 - 8 Sainsbury Canterbury
- Leisure**
- 1 Barton Field Farm Equestrian Centre
 - 2 The Evenhill
 - 3 Howletts Wild Animal Park
 - 4 Pavillion Cafe
 - 5 Woolton Farm
 - 6 Canterbury City Centre
- Employment**
- 1 Builders Square
 - 2 Canterbury City Center
 - 3 City Buisness Park
 - 4 Kingsmead Industrial Estate
 - 5 St Martins Hospital

Contains OS data © Crown copyright and database right 2022
 Contains public sector information licensed under the
 Open Government Licence v3.0



Centurion House, 129 Deansgate
 Manchester, M3 3WR

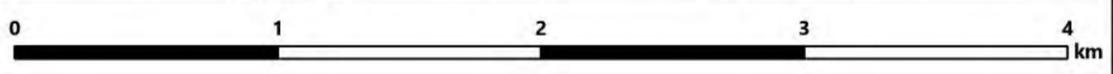
Tel: 0161 830 2172

www.i-transport.co.uk

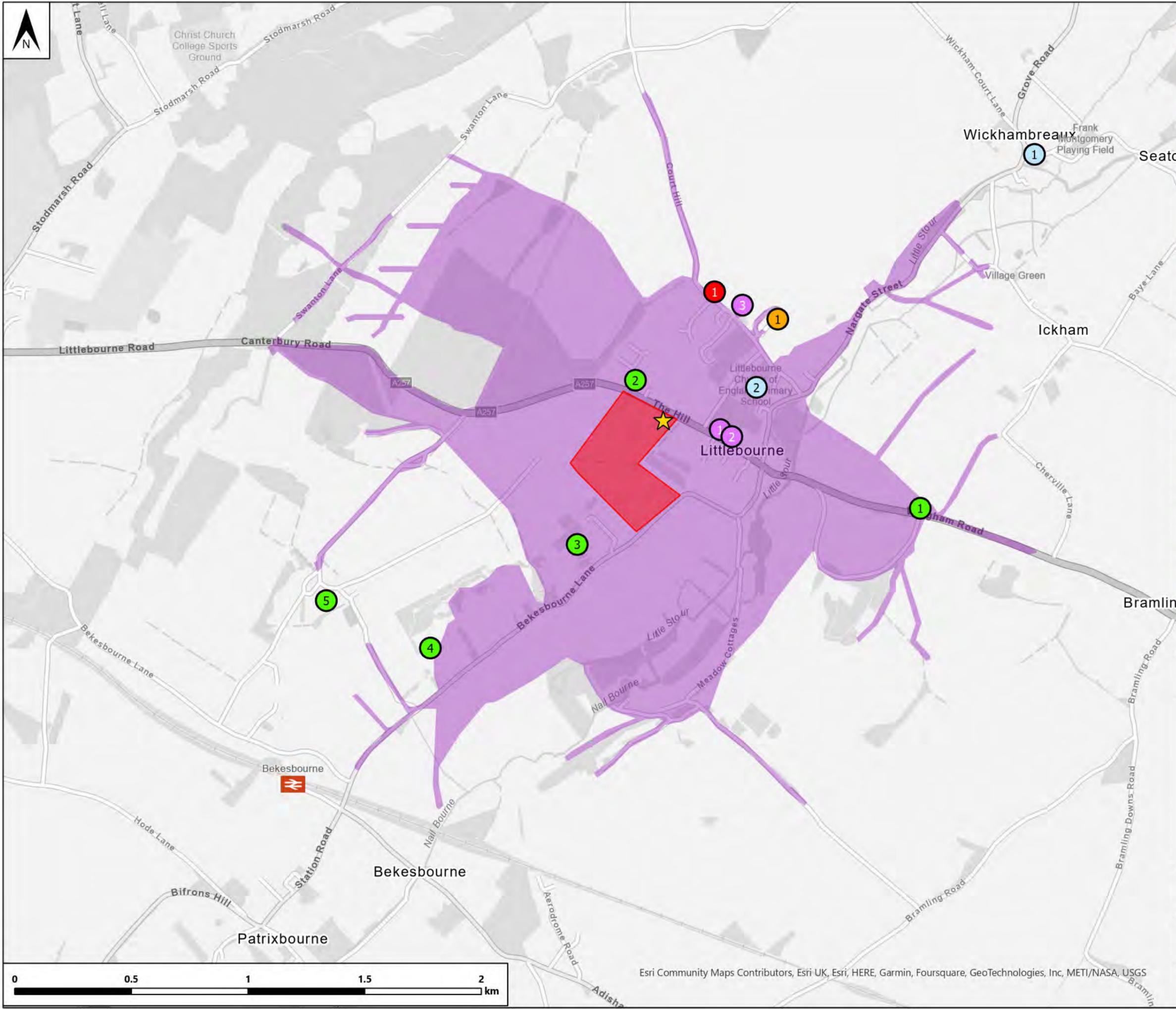
Title:
Key Facilities Plan - Wider Area

Project:
Land South of The Hill, Littlebourne

Project Number: ITM16283	Figure Number: APPENDIX 4.E	Revision: -
------------------------------------	---------------------------------------	----------------



Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



Key

- Site Location
- 2km Walking Catchment
- ★ Local Hub / Shop
- Bokesbourne Railway Station

Primary School

- 1 Wickhambreaux C of E Primary School
- 2 Littlebourne C of E Primary School

Employment

- 1 Builders Square

Health

- 1 Littlebourne Surgery

Retail

- 1 Four Village Stores
- 2 Littlebourne Post Office
- 3 The Ivy Barn

Leisure

- 1 Barton Field Farm Equestrian Centre
- 2 The Evenhill
- 3 Howletts Wild Animal Park
- 4 Pavillion Cafe
- 5 Woolton Farm

Contains OS data © Crown copyright and database right 2022
 Contains public sector information licensed under the
 Open Government Licence v3.0



Centurion House, 129 Deansgate
 Manchester, M3 3WR

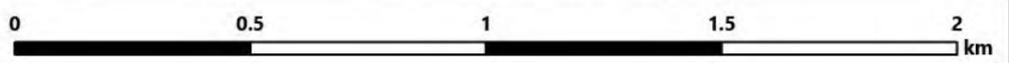
Tel: 0161 830 2172

www.i-transport.co.uk

Title:
Key Facilities Plan - Littlebourne

Project:
Land South of the Hill, Littlebourne

Project Number: ITM16283	Figure Number: Appendix 4.E	Revision: -
------------------------------------	---------------------------------------	----------------



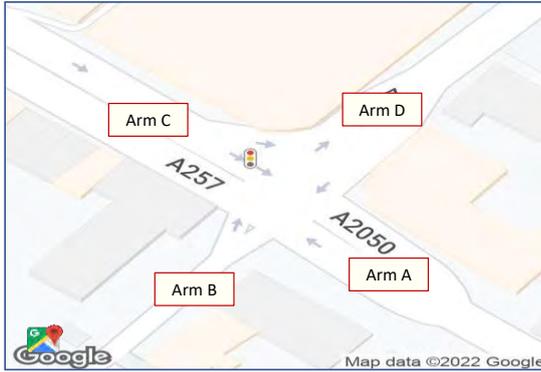
Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

APPENDIX 5.A 2022 Traffic Survey Results

Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - A2050 New Dover Road / B - Upper Chantry Lane / C - A257 Saint Georges Place / D - A257 Lower Chantry Lane



Matrix Totals:

Show single Session:

Custom Start / End:

Show Peak Times:

		Arm Destination					
		A	B	C	D	Total	% Total
Arm Origin	A	0	215	3292	566	4073	100.00%
	B	340	0	518	781	1639	100.00%
	C	2863	206	7	1552	4628	100.00%
	D	819	785	2699	0	4303	100.00%
	Total	4022	1206	6516	2899		
% Total		100.00%	100.00%	100.00%	100.00%		

Classifications	Include
CAR	Yes
LGV	Yes
OGV1	Yes
OGV2	Yes
BUS	Yes
P/CYCLE	Yes
M/CYCLE	Yes



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - A2050 New Dover Road / B - Upper Chantry Lane / C - A257 Saint Georges Place / D - A257 Lower Chantry Lane

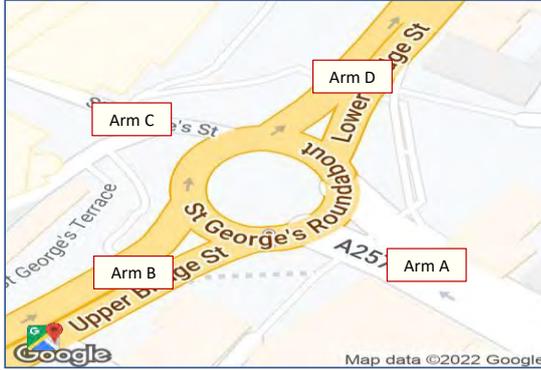
Approach: A - A2050 New Dover Road

Table with columns for TIME, CAR, LDV, ODV1, ODV2, BUS, PCYCLE, MCYCLE, PCU, TOTAL, and sub-sections A10 B, A10 C, A10 D, and A10 A. Rows include hourly intervals and a final Session Total row.

Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - A257 Saint Geores Place / B - A28 Upper Bridge Street / C - Saint Georges Street / D - A28 Lower Bridge Street



Matrix Totals:

Show single Session:

Custom Start / End:

Show Peak Times:

		Arm Destination					
		A	B	C	D	Total	% Total
Arm Origin	A	87	3057	13	3399	6556	100.00%
	B	2178	69	0	2732	4979	100.00%
	C	482	636	0	551	1669	100.00%
	D	2206	3041	0	874	6121	100.00%
	Total	4953	6803	13	7556		
% Total		100.00%	100.00%	100.00%	100.00%		

Classifications	Include
CAR	Yes
LGV	Yes
OGV1	Yes
OGV2	Yes
BUS	Yes
P/CYCLE	Yes
M/CYCLE	Yes



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - A257 Saint Georges Place / B - A28 Upper Bridge Street / C - Saint Georges Street / D - A28 Lower Bridge Street

Approach: A - A257 Saint Georges Place

TIME	A to B										A to C										A to D										A to A									
	CAR	LGV	ODV1	ODV2	BUS	PCYCLE	MCYCLE	PCU	TOTAL	CAR	LGV	ODV1	ODV2	BUS	PCYCLE	MCYCLE	PCU	TOTAL	CAR	LGV	ODV1	ODV2	BUS	PCYCLE	MCYCLE	PCU	TOTAL	CAR	LGV	ODV1	ODV2	BUS	PCYCLE	MCYCLE	PCU	TOTAL				
07:00 - 07:15	63	14	2	0	1	0	0	80	80	0	0	0	0	0	0	0	0	0	73	12	1	2	0	0	0	0	86	88	2	0	0	0	0	0	0	90				
07:15 - 07:30	71	7	3	0	5	0	0	86	86	0	0	0	0	0	0	0	0	0	88	15	1	1	1	0	0	0	106	108	0	0	0	0	0	0	0	108				
07:30 - 07:45	72	16	1	0	3	0	1	93	93	0	0	0	0	0	0	0	0	0	112	19	6	1	0	1	0	0	140	139	0	0	0	0	0	0	0	139				
07:45 - 08:00	86	15	2	0	3	0	1	107	107	0	0	0	0	0	0	0	0	0	116	13	2	2	0	0	0	0	133	136	0	0	0	0	0	0	0	136				
Hourly Total	292	52	8	0	12	0	2	357	356	0	0	0	0	0	0	0	0	0	2	369	99	10	5	1	1	4	489	472	2	0	0	0	0	0	0	474				
08:00 - 08:15	114	7	5	0	4	0	0	140	130	0	0	0	0	0	0	0	0	0	132	8	1	2	0	0	0	3	146	146	2	0	0	0	0	0	0	148				
08:15 - 08:30	124	11	1	1	4	0	0	140	148	0	0	0	0	0	0	0	0	0	161	8	2	2	0	0	0	2	173	166	3	0	0	0	0	0	0	169				
08:30 - 08:45	132	14	0	0	3	0	2	151	151	0	0	0	0	1	0	0	0	0	161	5	3	0	0	1	1	1	173	162	6	0	0	0	0	0	0	168				
08:45 - 09:00	96	15	0	0	4	0	0	115	118	0	0	0	0	0	0	1	0	0	106	10	3	0	1	1	2	1	123	125	9	0	0	0	0	0	0	134				
Hourly Total	446	47	8	1	19	0	2	532	524	0	0	0	0	0	0	0	0	0	2	421	31	6	6	1	4	6	488	477	20	0	0	0	0	0	0	507				
09:00 - 09:15	93	12	2	0	4	1	0	112	112	0	0	0	0	0	0	0	0	0	127	9	1	0	0	0	1	2	139	146	4	1	0	0	0	0	0	151				
09:15 - 09:30	90	16	2	1	5	0	1	115	116	0	0	0	0	0	0	1	0	0	105	9	2	0	0	1	1	1	119	119	4	0	0	0	0	0	0	123				
09:30 - 09:45	88	6	6	0	5	0	0	105	107	0	0	0	0	0	0	0	0	0	107	10	3	1	2	1	2	1	124	116	5	0	0	0	0	0	0	129				
09:45 - 10:00	66	13	3	1	4	1	1	88	89	0	0	0	0	0	0	0	0	0	98	16	4	1	1	0	0	1	120	121	4	0	0	0	0	0	0	124				
Hourly Total	337	49	14	2	16	2	3	405	424	0	0	0	0	0	1	0	0	0	1	427	44	10	2	3	3	6	505	495	17	1	0	0	0	0	0	512				
Session Total	1975	148	31	3	49	2	6	1402	1314	0	0	0	0	0	0	0	0	0	0	5	1237	134	28	14	5	8	16	1486	1442	39	1	0	0	0	0	40	40			
10:00 - 10:15	104	8	1	0	5	1	0	124	119	0	0	0	0	0	0	0	0	0	89	6	1	1	1	0	0	0	98	101	4	0	0	0	0	0	0	105				
10:15 - 10:30	90	19	2	0	5	0	1	124	117	0	0	0	0	0	2	0	0	0	84	11	1	1	0	0	0	4	101	101	7	0	0	0	0	0	0	108				
10:30 - 10:45	80	12	0	0	5	0	0	102	106	0	0	0	0	0	0	0	0	0	103	12	1	1	0	0	1	2	120	126	5	0	0	0	0	0	0	131				
10:45 - 11:00	108	9	0	0	4	0	1	124	120	0	0	0	0	0	1	0	0	0	110	14	1	0	1	0	0	4	129	130	6	0	0	0	0	0	0	136				
Hourly Total	382	48	6	0	19	1	2	456	461	0	0	0	0	0	3	0	1	0	3	386	43	4	3	1	1	14	453	462	22	0	0	0	0	0	0	474				
11:00 - 11:15	191	10	2	0	3	0	1	207	217	0	0	0	0	0	0	0	0	0	117	9	2	1	2	1	3	1	134	139	2	0	0	0	0	0	0	136				
11:15 - 11:30	102	9	0	0	7	1	2	121	121	0	0	0	0	0	0	0	0	0	118	9	2	2	0	0	0	6	130	137	4	0	0	0	0	0	0	134				
11:30 - 11:45	88	8	0	0	5	1	2	104	104	0	0	0	0	0	0	0	0	0	119	11	0	0	0	0	0	1	130	131	3	0	0	0	0	0	0	134				
11:45 - 12:00	85	9	0	1	6	0	1	101	102	0	0	0	0	1	0	0	0	0	103	11	0	0	0	1	6	1	121	121	1	0	0	0	0	0	0	122				
Hourly Total	376	36	2	1	21	2	6	453	444	0	0	0	0	0	1	0	0	0	1	427	40	4	3	2	2	16	523	524	10	0	0	0	0	0	0	534				
12:00 - 12:15	106	10	0	0	2	0	0	126	116	0	0	0	0	0	0	0	0	0	111	9	0	0	1	1	0	1	124	122	2	0	0	0	0	0	0	126				
12:15 - 12:30	90	10	2	0	3	1	5	112	111	0	0	0	0	0	1	0	0	0	123	8	0	1	0	0	2	8	134	142	4	0	0	0	0	0	0	138				
12:30 - 12:45	96	5	1	0	5	1	1	114	112	0	0	0	0	0	0	0	0	0	106	8	0	0	0	0	0	7	116	120	1	0	0	0	0	0	0	117				
12:45 - 13:00	83	3	0	0	4	2	0	94	92	0	0	0	0	0	0	0	0	0	111	8	0	0	0	0	1	11	124	121	1	0	0	0	0	0	0	125				
Hourly Total	375	38	3	0	14	4	6	444	433	0	0	0	0	1	0	0	0	0	1	420	33	6	3	1	3	22	515	525	8	0	0	0	0	0	0	523				
13:00 - 13:15	108	3	0	0	3	0	0	114	117	0	0	0	0	0	0	0	0	0	106	7	0	0	0	0	0	4	114	117	2	0	0	0	0	0	0	119				
13:15 - 13:30	81	8	0	0	4	0	0	97	93	0	0	0	0	1	0	0	0	0	120	5	1	0	0	0	0	5	128	131	2	0	0	0	0	0	0	133				
13:30 - 13:45	94	4	1	0	4	1	3	109	107	0	0	0	0	0	1	0	0	0	100	3	0	0	0	1	3	1	108	107	2	0	0	0	0	0	0	110				
13:45 - 14:00	83	1	0	0	2	1	1	88	88	0	0	0	0	1	0	0	0	0	97	6	0	0	0	0	4	1	108	106	1	0	0	0	0	0	0	107				
Hourly Total	368	16	1	0	13	2	7	413	405	0	0	0	0	0	3	0	0	0	1	3	408	20	1	0	0	1	439	446	7	0	0	0	0	0	0	453				
Session Total	1905	128	12	1	67	9	21	1806	1742	0	0	0	0	0	0	0	0	0	2	8	1721	136	9	7	4	7	73	1935	1937	47	0	0	0	0	0	47	47			



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - A257 Saint Georges Place / B - A28 Upper Bridge Street / C - Saint Georges Street / D - A28 Lower Bridge Street

Approach: B - A28 Upper Bridge Street

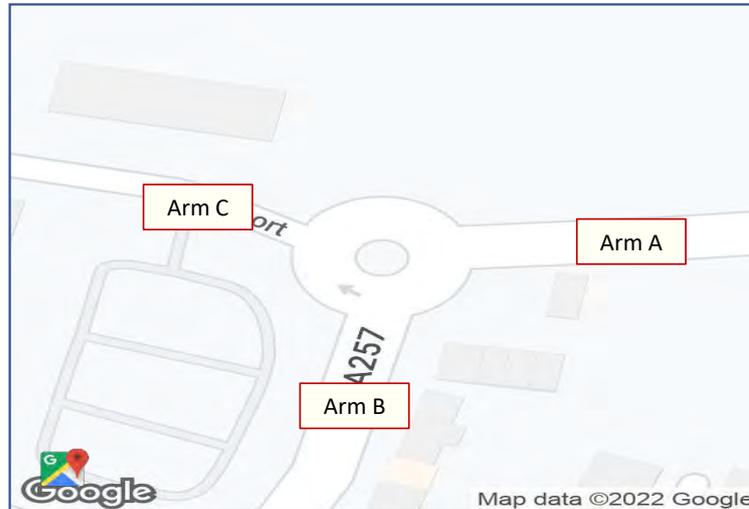
TIME	B to C										B to D										B to A										B to B																
	CAR	LOV	OOV1	OOV2	BUS	PCYCLE	MCYCLE	PCU	TOTAL	CAR	LOV	OOV1	OOV2	BUS	PCYCLE	MCYCLE	PCU	TOTAL	CAR	LOV	OOV1	OOV2	BUS	PCYCLE	MCYCLE	PCU	TOTAL	CAR	LOV	OOV1	OOV2	BUS	PCYCLE	MCYCLE	PCU	TOTAL											
07:00 - 07:15	0	0	0	0	0	0	0.0	0	43	0	5	1	0	1	1	63.4	97	30	43	8	2	1	0	0	0	44.8	41	07	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
07:15 - 07:30	0	0	0	0	0	0	0.0	0	70	17	2	5	0	0	2	103.9	96	46	11	0	0	0	0	0	0	57.6	97	2	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
07:30 - 07:45	0	0	0	0	0	0	0.0	0	58	10	0	0	0	1	4	83.8	79	65	11	2	1	0	1	1	1	83.8	81	1	2	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
07:45 - 08:00	0	0	0	0	0	0	0.0	0	69	14	0	1	0	1	0	84.7	89	37	16	0	0	1	0	0	0	56.9	84	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	0	0	0	0	0	0	0	0	240	47	11	13	0	3	7	346	321	218	46	4	2	1	1	1	1	202	272	3	2	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
08:00 - 08:15	0	0	0	0	0	0	0.0	0	83	11	2	1	0	0	0	86.9	77	80	10	7	1	3	0	0	0	126.4	107	2	1	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
08:15 - 08:30	0	0	0	0	0	0	0.0	0	80	10	1	4	1	0	1	92.9	88	50	15	3	2	1	0	0	0	127.8	120	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
08:30 - 08:45	0	0	0	0	0	0	0.0	0	40	8	0	2	0	1	2	61.6	72	37	9	1	0	2	1	0	0	102.3	106	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
08:45 - 09:00	0	0	0	0	0	0	0.0	0	53	7	4	1	0	0	2	72.3	67	51	5	3	0	0	0	1	0	63.3	60	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	0	0	0	0	0	0	0	0	257	36	12	8	2	1	5	327	302	217	48	14	3	6	1	1	1	413	387	3	1	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
09:00 - 09:15	0	0	0	0	0	0	0.0	0	96	15	0	3	0	0	2	122.9	122	80	13	0	2	0	1	1	0	99.2	97	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
09:15 - 09:30	0	0	0	0	0	0	0.0	0	92	12	0	1	3	1	3	141.4	120	56	13	2	1	1	0	1	0	129.3	124	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
09:30 - 09:45	0	0	0	0	0	0	0.0	0	84	14	7	3	0	1	5	123.2	114	41	9	2	1	1	0	0	0	78.8	97	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
09:45 - 10:00	0	0	0	0	0	0	0.0	0	106	14	2	2	0	0	8	132.4	132	34	5	0	0	0	0	0	0	38.0	39	2	3	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	0	0	0	0	0	0	0	0	352	62	24	9	3	2	18	529	486	221	46	4	4	2	1	2	2	294	284	4	3	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
Season Total	0	0	0	0	0	0	0	0	355	145	47	39	6	6	30	1202	1119	766	131	22	9	9	3	4	0	987	844	10	6	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
10:00 - 10:15	0	0	0	0	0	0	0.0	0	81	7	2	1	1	0	7	99.7	99	73	14	0	0	0	1	1	2	80.0	81	3	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
10:15 - 10:30	0	0	0	0	0	0	0.0	0	79	8	3	2	0	1	4	100.3	97	71	10	0	0	0	0	0	0	81.0	81	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
10:30 - 10:45	0	0	0	0	0	0	0.0	0	97	8	4	2	1	0	5	122.8	87	84	8	1	0	0	0	1	1	74.0	76	3	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
10:45 - 10:00	0	0	0	0	0	0	0.0	0	56	12	2	2	0	1	6	78.8	79	59	5	0	0	0	0	0	2	64.8	66	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	0	0	0	0	0	0	0	0	283	38	11	7	2	2	22	372	362	287	37	1	0	1	2	5	110	313	16	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0	
10:00 - 10:15	0	0	0	0	0	0	0.0	0	11	3	1	0	0	0	7	83.0	82	67	2	0	0	0	0	1	0	89.4	89	2	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
10:15 - 10:30	0	0	0	0	0	0	0.0	0	48	9	2	2	0	1	5	88.4	87	40	6	1	0	0	0	0	0	68.3	67	2	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
10:30 - 10:45	0	0	0	0	0	0	0.0	0	75	9	0	0	0	0	4	99.4	94	71	8	0	0	0	0	0	0	79.0	79	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	0	0	0	0	0	0	0.0	0	106	5	0	2	0	0	7	100.4	122	76	7	0	0	0	0	0	0	88.0	88	6	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
10:45 - 11:00	0	0	0	0	0	0	0.0	0	311	34	11	8	0	1	23	391	389	266	23	1	0	0	0	1	0	291	291	11	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
11:00 - 11:15	0	0	0	0	0	0	0.0	0	43	5	0	1	1	0	7	89.5	101	59	5	0	0	1	0	3	0	87.0	88	4	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
11:15 - 11:30	0	0	0	0	0	0	0.0	0	72	3	1	2	0	0	5	83.8	83	60	2	0	0	1	0	0	0	64.3	63	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
11:30 - 11:45	0	0	0	0	0	0	0.0	0	107	4	2	0	0	0	9	119.2	122	79	10	0	0	0	0	5	0	81.0	84	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	0	0	0	0	0	0	0	0	73	9	2	0	1	0	9	92.2	94	74	4	2	1	0	1	1	0	88.0	83	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
11:45 - 12:00	0	0	0	0	0	0	0.0	0	125	28	0	3	0	0	10	159	160	212	21	2	2	1	1	0	0	109	108	7	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
12:00 - 12:15	0	0	0	0	0	0	0.0	0	95	10	2	1	0	1	12	116.9	121	65	5	0	0	0	1	0	1	92.4	92	1	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
12:15 - 12:30	0	0	0	0	0	0	0.0	0	94	10	1	1	1	0	9	114.2	116	87	4	0	0	1	1	2	0	84.0	85	5	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
12:30 - 12:45	0	0	0	0	0	0	0.0	0	103	8	0	0	0	0	9	114.8	120	73	1	0	0	0	0	0	0	74.0	74	3	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
12:45 - 13:00	0	0	0	0	0	0	0.0	0	41	4	0	1	0	1	9	104.5	109	68	2	0	0	0	0	1	0	86.0	81	4	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	0	0	0	0	0	0	0	0	386	32	5	3	1	2	39	480	466	303	12	0	2	1	4	4	0	321	322	13	0	0	0	0	0	0	0	0.0	0</										



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - A257 Longport / B - A257 Lower Chantry Lane / C - Longport



Matrix Totals:

Show single Session:

Custom Start / End:

Show Peak Times:

Arm Destination

		A	B	C	Total	% Total
Arm Origin	A	28	3305	708	4041	100.00%
	B	2374	388	598	3360	100.00%
	C	1230	675	13	1918	100.00%
Total		3632	4368	1319		
% Total		100.00%	100.00%	100.00%		

Classifications	Include
CAR	Yes
LGV	Yes
OGV1	Yes
OGV2	Yes
BUS	Yes
P/CYCLE	Yes
M/CYCLE	Yes



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - A257 Longport / B - A257 Lower Chantry Lane / C - Longport

Approach: B - A257 Lower Chantry Lane

TIME	B to C									B to A									B to B									
	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	
07:00 - 07:15	1	1	1	0	0	0	3	0	4.8	6	31	11	3	0	1	0	0	51.1	47	1	0	0	0	0	0	0	1.0	1
07:15 - 07:30	3	1	0	0	0	1	0	4.2	5	59	6	0	0	2	0	0	69.0	67	1	3	0	0	0	0	0	4.0	4	
07:30 - 07:45	1	3	0	0	0	0	0	4.8	4	56	11	1	1	2	0	0	75.6	71	2	0	1	0	0	0	0	4.3	3	
07:45 - 08:00	13	1	0	0	0	0	0	14.0	14	56	10	1	0	1	1	0	72.8	71	1	0	0	1	0	0	0	3.0	2	
Hourly Total	18	6	1	0	0	4	0	27	29	204	38	5	1	6	2	0	268	256	5	3	1	0	1	0	0	12	10	
08:00 - 08:15	24	2	0	0	0	0	0	26.0	26	65	9	5	0	1	1	0	87.7	81	1	0	0	0	1	0	0	3.0	2	
08:15 - 08:30	25	2	0	0	0	1	0	27.4	28	82	11	2	2	1	1	0	104.4	98	6	0	0	0	2	0	0	10.0	8	
08:30 - 08:45	20	2	1	0	0	0	1	24.7	24	62	10	1	0	2	0	1	78.7	76	5	1	0	0	0	0	0	6.0	6	
08:45 - 09:00	14	1	0	0	0	2	0	16.4	17	52	4	3	0	2	2	0	67.3	63	7	0	0	0	0	0	0	7.0	7	
Hourly Total	83	7	1	0	0	2	0	93	95	261	34	11	2	6	4	1	338	319	19	1	0	0	3	0	0	26	23	
09:00 - 09:15	24	2	0	0	0	0	0	26.0	26	83	12	2	1	0	1	0	102.1	99	6	0	1	0	0	0	0	8.3	7	
09:15 - 09:30	22	5	0	0	0	0	0	27.0	27	48	17	2	0	3	0	0	76.6	70	12	0	0	0	0	0	0	12.0	12	
09:30 - 09:45	20	4	0	0	0	0	0	24.0	24	39	14	0	1	4	1	0	63.5	59	11	0	0	0	0	0	0	11.0	11	
09:45 - 10:00	21	2	0	0	0	0	0	23.0	23	46	10	0	2	2	0	0	64.6	60	11	0	0	0	0	0	0	11.0	11	
Hourly Total	87	13	0	0	0	0	0	100	100	216	63	4	4	9	2	0	305	288	40	0	1	0	0	0	0	42	41	
Session Total	188	26	2	0	0	6	2	220	224	681	126	20	7	21	8	1	911	863	64	4	2	0	4	0	0	80	74	
15:00 - 15:15	18	1	0	0	0	2	0	19.4	21	81	16	1	1	0	0	2	102.4	101	23	0	0	0	0	0	0	23.0	23	
15:15 - 15:30	28	3	0	0	0	0	0	31.0	31	87	9	0	0	2	2	1	109.8	101	21	1	0	0	0	0	0	22.0	22	
15:30 - 15:45	12	2	0	0	0	0	1	14.4	15	68	9	1	0	2	1	5	85.5	86	22	0	0	0	0	0	0	22.0	22	
15:45 - 16:00	16	2	0	0	0	2	0	18.4	20	63	9	0	0	1	0	3	75.2	76	24	1	0	0	0	0	0	25.0	25	
Hourly Total	74	8	0	0	0	4	1	83	87	299	43	2	1	5	3	11	364	364	90	2	0	0	0	0	0	92	92	
16:00 - 16:15	17	0	0	0	0	1	0	17.2	18	93	8	0	0	2	1	3	106.4	107	16	2	0	0	0	0	0	16.0	16	
16:15 - 16:30	23	0	0	0	0	1	0	23.2	24	101	7	1	0	3	1	0	116.5	113	17	0	0	0	0	0	0	17.0	17	
16:30 - 16:45	23	4	0	0	0	1	2	28.0	30	88	10	0	0	1	0	2	100.8	101	15	1	0	0	0	0	1	16.4	17	
16:45 - 17:00	23	2	0	0	0	2	1	25.5	28	91	7	0	0	2	1	2	101.2	103	18	1	0	0	0	0	0	19.0	19	
Hourly Total	86	6	0	0	0	5	3	94	100	373	32	1	0	7	4	7	425	424	66	4	0	0	0	0	1	70	71	
17:00 - 17:15	18	5	0	0	0	2	0	23.4	25	84	3	0	0	1	1	7	92.9	96	20	0	0	0	0	0	0	20.0	20	
17:15 - 17:30	22	1	0	0	0	3	0	23.6	26	92	4	0	0	1	2	0	103.1	101	20	0	0	0	0	0	0	20.0	20	
17:30 - 17:45	23	3	0	0	0	3	0	26.6	29	83	8	0	0	0	0	6	93.4	97	24	0	0	0	0	0	0	24.0	24	
17:45 - 18:00	17	0	0	0	0	1	0	17.2	18	98	7	2	0	2	1	0	113.8	110	15	1	0	0	0	0	0	16.0	16	
Hourly Total	86	9	0	0	0	9	0	91	96	397	22	2	1	5	2	15	402	404	79	1	0	0	0	0	0	80	80	
18:00 - 18:15	19	2	0	0	0	1	1	21.6	23	89	1	0	0	3	2	2	96.2	96	19	0	0	0	0	0	0	19.0	19	
18:15 - 18:30	22	3	0	0	0	0	0	25.0	25	88	5	0	0	2	0	3	98.2	98	13	1	0	0	0	0	0	14.0	14	
18:30 - 18:45	15	0	0	0	0	0	2	15.8	17	67	1	1	0	1	2	2	73.5	74	22	0	0	0	0	0	1	22.4	23	
18:45 - 19:00	22	2	0	0	0	0	0	24.0	24	45	2	0	0	2	1	1	81.6	81	15	0	0	0	0	0	0	15.0	15	
Hourly Total	78	7	0	0	0	1	3	86	89	288	9	1	0	8	5	8	319	319	69	1	0	0	0	0	1	70	71	
Session Total	318	30	0	0	0	19	7	354	374	1317	106	6	2	25	14	41	1510	1511	304	8	0	0	0	0	2	312	314	



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - A257 Longport / B - A257 Lower Chantry Lane / C - Longport

Approach: C - Longport

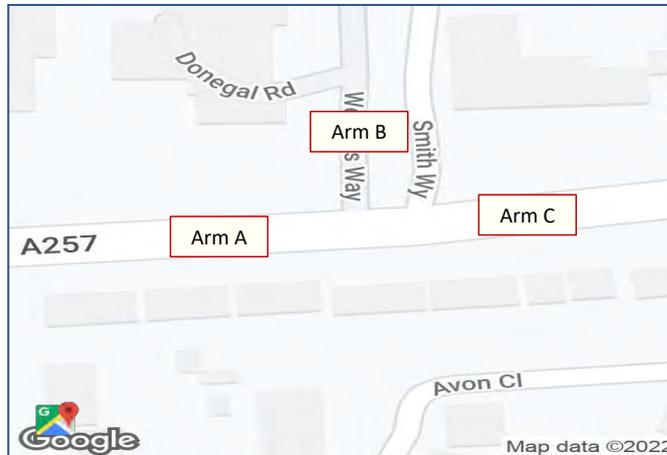
TIME	C to A									C to B									C to C									
	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	
07:00 - 07:15	15	3	0	0	0	0	0	18.8	18	13	2	0	0	0	0	0	15.0	15	0	1	0	0	0	0	0	0	1.0	1
07:15 - 07:30	29	2	0	0	0	0	0	31.0	31	9	2	0	0	0	1	0	11.2	12	0	0	0	0	0	0	0	0.0	0	
07:30 - 07:45	32	5	2	0	0	2	0	42.0	41	17	2	0	0	0	0	0	19.0	19	0	0	0	0	0	0	0	0.0	0	
07:45 - 08:00	41	6	0	0	0	1	1	47.6	49	20	0	0	0	0	3	0	20.6	23	1	0	0	0	0	0	0	1.0	1	
Hourly Total	117	16	2	0	0	3	1	139	139	59	6	0	0	0	4	0	65	69	1	0	0	0	0	0	0	2	2	
08:00 - 08:15	26	5	0	0	0	0	0	31.0	31	28	5	1	0	0	3	0	35.9	37	0	0	0	0	0	0	0	0.0	0	
08:15 - 08:30	27	5	0	0	0	0	0	32.0	32	22	1	0	0	0	1	0	23.2	24	1	0	0	0	0	0	0	1.0	1	
08:30 - 08:45	41	2	0	0	0	0	0	43.0	43	11	0	1	0	0	0	0	13.3	12	0	0	0	0	0	0	0	0.0	0	
08:45 - 09:00	34	3	2	0	0	4	0	42.4	43	20	6	1	0	0	2	0	26.7	29	0	0	0	0	0	0	0	0.0	0	
Hourly Total	128	15	2	0	0	4	0	149	149	81	12	3	0	0	6	0	101	102	1	0	0	0	0	0	0	1	1	
09:00 - 09:15	31	4	1	0	0	1	0	37.4	37	29	2	0	0	0	1	0	31.2	32	1	0	0	0	0	0	0	1.0	1	
09:15 - 09:30	26	8	1	0	0	0	0	36.3	35	16	1	0	0	0	1	0	17.2	18	1	0	0	0	0	0	0	1.0	1	
09:30 - 09:45	25	7	0	0	0	0	0	32.0	32	11	2	0	0	0	0	0	13.0	13	0	0	0	0	0	0	0	0.0	0	
09:45 - 10:00	25	8	1	0	0	1	0	35.5	35	21	4	0	0	0	1	0	25.2	26	0	0	0	0	0	0	0	0.0	0	
Hourly Total	107	27	3	0	0	2	0	141	139	77	9	0	0	0	3	0	87	89	2	0	0	0	0	0	0	2	2	
Session Total	352	58	7	0	0	9	1	429	427	217	27	3	0	0	13	0	254	260	4	1	0	0	0	0	0	5	5	
15:00 - 15:15	49	2	0	0	0	2	0	51.4	53	32	4	0	0	0	0	0	36.0	36	2	0	0	0	0	0	0	2.0	2	
15:15 - 15:30	50	4	1	0	0	1	1	56.9	57	18	2	0	0	0	2	1	20.8	23	0	2	0	0	0	0	0	2.0	2	
15:30 - 15:45	46	7	0	0	0	2	0	53.4	55	19	2	0	0	2	0	0	21.4	23	0	1	0	0	0	0	0	1.0	1	
15:45 - 16:00	46	7	1	0	0	0	1	55.7	55	27	2	0	0	0	1	0	29.2	30	0	1	0	0	0	0	0	1.0	1	
Hourly Total	191	20	2	0	0	5	2	218	220	96	10	0	0	0	5	1	107	112	2	4	0	0	0	0	0	6	6	
16:00 - 16:15	43	4	0	0	0	1	0	47.2	48	16	4	0	0	0	0	1	20.4	21	0	0	0	0	0	0	0	0.0	0	
16:15 - 16:30	47	5	2	0	0	0	0	56.6	54	27	1	0	0	0	1	0	28.2	29	0	0	0	0	0	0	0	0.0	0	
16:30 - 16:45	44	5	1	0	0	0	1	51.7	51	28	1	0	0	0	1	0	29.2	30	0	0	0	0	0	0	0	0.0	0	
16:45 - 17:00	35	3	0	0	0	1	1	38.6	40	28	2	0	0	1	0	0	30.2	31	0	0	0	0	0	0	0	0.0	0	
Hourly Total	169	17	3	0	0	2	2	194	193	99	8	0	0	0	3	1	108	111	0	0	0	0	0	0	0	0	0	
17:00 - 17:15	37	3	0	0	0	0	0	40.0	40	21	5	0	0	0	1	0	26.2	27	0	0	0	0	0	0	0	0.0	0	
17:15 - 17:30	53	2	0	0	0	0	0	55.0	55	31	1	0	0	0	0	0	32.0	32	1	0	0	0	0	0	0	1.0	1	
17:30 - 17:45	62	3	0	0	0	0	1	65.4	66	29	0	0	0	0	1	1	29.6	31	0	0	0	0	0	0	0	0.0	0	
17:45 - 18:00	61	3	1	0	0	3	1	67.3	69	21	0	0	0	0	1	0	21.2	22	0	0	0	0	0	0	0	0.0	0	
Hourly Total	213	11	1	0	0	3	2	228	230	102	6	0	0	0	3	1	109	112	1	0	0	0	0	0	0	1	1	
18:00 - 18:15	36	5	0	0	0	1	0	41.3	42	20	1	0	0	0	4	1	22.2	26	1	0	0	0	0	0	0	1.0	1	
18:15 - 18:30	35	5	0	0	0	1	0	40.2	41	13	3	0	0	0	1	0	16.2	17	0	0	0	0	0	0	0	0.0	0	
18:30 - 18:45	32	2	0	0	0	1	2	35.0	37	23	1	0	0	0	0	0	24.0	24	0	0	0	0	0	0	0	0.0	0	
18:45 - 19:00	37	1	0	0	0	1	1	38.6	40	13	0	0	0	0	0	0	13.0	13	0	0	0	0	0	0	0	0.0	0	
Hourly Total	140	13	0	0	0	4	3	155	160	69	5	0	0	0	5	1	75	80	1	0	0	0	0	0	0	1	1	
Session Total	713	61	6	0	0	14	9	795	803	366	29	0	0	0	16	4	399	415	4	4	0	0	0	0	0	8	8	



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: **A - (West) A257 Littlebourne Road / B - Wemyss Way / C - (East) A257 Littlebourne Road**



Matrix Totals:

Show single Session:

Custom Start / End:

Show Peak Times:

		Arm Destination				
		A	B	C	Total	% Total
Arm Origin	A	11	133	3098	3242	100.00%
	B	93	0	46	139	100.00%
	C	3147	26	4	3177	100.00%
Total		3251	159	3148		
% Total		100.00%	100.00%	100.00%		

Classifications	Include
CAR	Yes
LGV	Yes
OGV1	Yes
OGV2	Yes
BUS	Yes
P/CYCLE	Yes
M/CYCLE	Yes



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: A - (West) A257 Littlebourne Road / B - Wemyss Way / C - (East) A257 Littlebourne Road

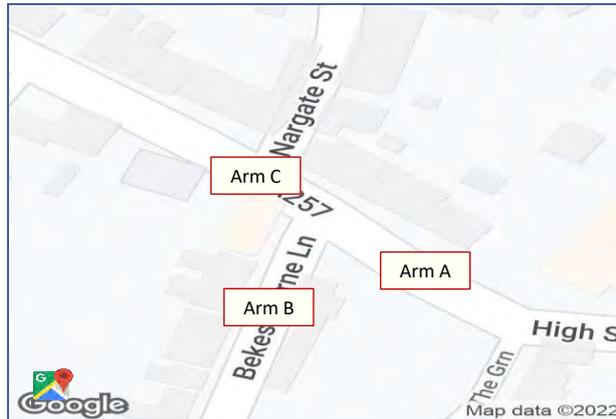
Approach: A - (West) A257 Littlebourne Road

TIME	A to B									A to C									A to A										
	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL		
07:00 - 07:15	2	5	0	0	0	0	0	7.0	7	38	8	3	0	1	0	1	49	53.3	49	0	0	0	0	0	0	0	0	1.0	1
07:15 - 07:30	10	2	1	0	0	0	0	14.3	13	57	6	0	0	2	0	3	68.2	68	0	0	0	0	0	0	0	0	0.0	0	
07:30 - 07:45	3	6	2	0	0	1	0	13.8	12	62	10	1	1	2	0	1	81.0	77	0	1	0	0	0	0	0	0	1.0	1	
07:45 - 08:00	0	3	1	0	0	0	0	5.3	4	74	14	1	0	1	0	1	92.7	91	0	0	0	0	0	0	0	0	0.0	0	
Hourly Total	15	16	4	0	0	1	0	40	36	229	33	5	1	6	0	6	255	255	0	2	0	0	0	0	0	0	2	2	
08:00 - 08:15	1	2	3	0	0	0	0	9.9	6	79	8	1	0	1	2	0	91.7	91	0	0	0	0	0	0	0	0	0.0	0	
08:15 - 08:30	5	4	1	0	0	0	0	11.3	10	80	10	1	2	1	0	0	96.9	94	0	0	0	0	0	0	0	0	0.0	0	
08:30 - 08:45	2	1	0	0	0	0	0	3.0	3	92	11	1	0	2	0	0	109.3	106	0	0	0	0	0	0	0	0	0.0	0	
08:45 - 09:00	1	0	0	0	0	0	0	1.0	1	71	4	5	0	2	0	0	90.5	82	0	0	0	0	0	0	0	0	0.0	0	
Hourly Total	9	7	4	0	0	0	0	25	20	322	33	8	2	6	2	0	350	373	0	0	0	0	0	0	0	0	0	0	
09:00 - 09:15	7	3	2	0	0	0	0	14.6	12	91	11	1	1	1	1	0	108.8	106	0	0	0	0	0	0	0	0	0.0	0	
09:15 - 09:30	3	0	1	0	0	0	0	5.3	4	48	21	2	0	3	0	0	79.6	74	1	0	0	0	0	0	0	0	1.0	1	
09:30 - 09:45	0	1	0	0	0	0	0	1.0	1	56	13	0	1	4	0	0	79.3	74	0	0	0	0	0	0	0	0	0.0	0	
09:45 - 10:00	2	2	1	1	0	0	0	8.6	6	57	13	0	1	1	0	0	74.3	72	1	1	0	0	0	0	0	0	2.0	2	
Hourly Total	12	6	4	1	0	0	0	29	23	282	68	3	3	9	1	0	342	326	2	1	0	0	0	0	0	0	3	3	
Session Total	36	29	12	1	0	1	0	94	79	803	129	16	6	21	3	6	1027	984	2	3	0	0	0	0	0	0	5	5	
15:00 - 15:15	4	3	0	0	0	1	0	7.2	8	133	17	1	1	0	1	1	185.2	164	0	0	0	0	0	0	0	0	0.0	0	
15:15 - 15:30	1	0	0	0	0	3	0	1.6	4	106	12	1	0	2	2	1	125.1	124	1	0	0	0	0	0	0	0	1.0	1	
15:30 - 15:45	4	0	0	0	0	0	0	4.0	4	122	15	1	0	2	1	5	145.5	146	0	0	0	0	0	0	0	0	0.0	0	
15:45 - 16:00	1	0	0	0	0	0	0	1.0	1	107	19	1	0	1	0	5	132.3	133	0	0	0	0	0	0	0	0	0.0	0	
Hourly Total	10	3	0	0	0	4	0	14	17	468	63	4	1	5	4	12	588	567	1	0	0	0	0	0	0	0	1	1	
16:00 - 16:15	0	0	0	0	0	0	0	0.0	0	131	7	0	0	2	1	2	143.0	143	0	0	0	0	0	0	0	0	0.0	0	
16:15 - 16:30	5	1	0	0	0	1	0	6.2	7	134	7	3	0	3	2	2	155.1	151	0	0	0	0	0	0	0	0	0.0	0	
16:30 - 16:45	3	0	0	0	0	1	0	3.2	4	128	17	1	0	1	0	1	149.7	148	0	0	0	0	0	0	0	0	0.0	0	
16:45 - 17:00	1	1	0	0	0	0	0	2.0	2	124	10	0	0	1	0	1	136.4	136	0	0	0	0	0	0	0	0	0.0	0	
Hourly Total	9	2	0	0	0	2	0	11	13	517	41	4	0	7	3	6	584	578	0	0	0	0	0	0	0	0	0	0	
17:00 - 17:15	0	0	0	0	0	0	0	0.0	0	111	8	0	0	1	3	5	123.6	128	0	1	0	0	0	0	0	0	1.0	1	
17:15 - 17:30	4	0	0	0	0	0	0	4.0	4	131	8	0	0	1	2	1	145.9	144	1	0	0	0	0	0	0	0	1.0	1	
17:30 - 17:45	5	1	0	0	0	0	0	6.0	6	116	9	0	0	0	0	4	128.6	131	0	0	0	0	0	0	0	0	0.0	0	
17:45 - 18:00	4	0	0	0	0	1	0	4.2	5	135	6	3	0	2	1	1	152.5	148	0	0	0	0	0	0	0	0	0.0	0	
Hourly Total	13	1	0	0	0	1	0	14	15	495	31	3	1	5	5	11	580	561	1	1	0	0	0	0	0	0	2	2	
18:00 - 18:15	2	0	0	0	0	1	0	2.2	3	115	7	0	0	4	1	1	130.6	128	0	0	0	0	0	1	0	0	0.2	1	
18:15 - 18:30	0	0	0	0	0	2	0	0.4	2	106	12	0	0	2	2	3	123.6	125	0	1	0	0	0	0	0	0	1.0	1	
18:30 - 18:45	2	0	0	0	0	1	0	2.2	3	80	4	1	0	1	1	2	89.3	89	0	0	0	0	0	0	0	0	0.0	0	
18:45 - 19:00	1	0	0	0	0	0	0	1.0	1	80	2	0	0	2	0	2	86.8	86	1	0	0	0	0	0	0	0	1.0	1	
Hourly Total	5	0	0	0	0	4	0	6	9	381	28	1	0	9	4	8	430	428	1	1	0	0	0	1	0	0	2	3	
Session Total	37	6	0	0	0	11	0	45	54	1861	160	12	2	26	16	37	2122	2114	3	2	0	0	0	0	1	0	5	6	

Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

Produced by Streetwise Services Ltd.

Junction: **A - (South East) A257 High Street / B - Bekesbourne Lane / C - (North West) A257 High Street**



Matrix Totals: **Counts**

Show single Session: **No**
07:00 to 10:00

Custom Start / End: **07:00** **19:00**

Show Peak Times: **No**

		Arm Destination				
		A	B	C	Total	% Total
Arm Origin	A	0	692	2017	2709	100.00%
	B	741	0	550	1291	100.00%
	C	1869	510	1	2380	100.00%
Total		2610	1202	2568		
% Total		100.00%	100.00%	100.00%		

Classifications	Include
CAR	Yes
LGV	Yes
OGV1	Yes
OGV2	Yes
BUS	Yes
P/CYCLE	Yes
M/CYCLE	Yes



Canterbury - Manual Traffic Survey: Thursday, 30 June 2022

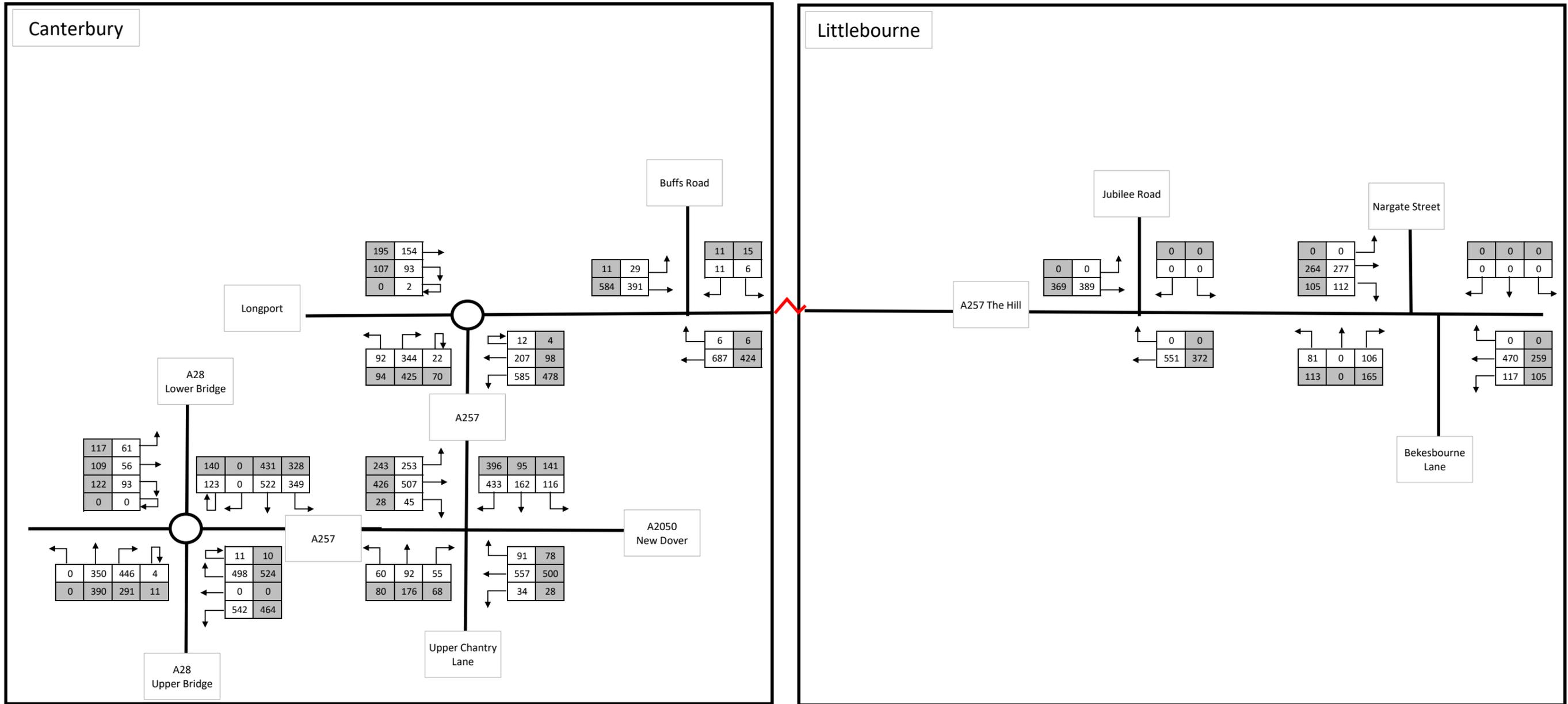
Produced by Streetwise Services Ltd.

Junction: A - (South East) A257 High Street / B - Bekebourne Lane / C - (North West) A257 High Street

Approach: C - (North West) A257 High Street

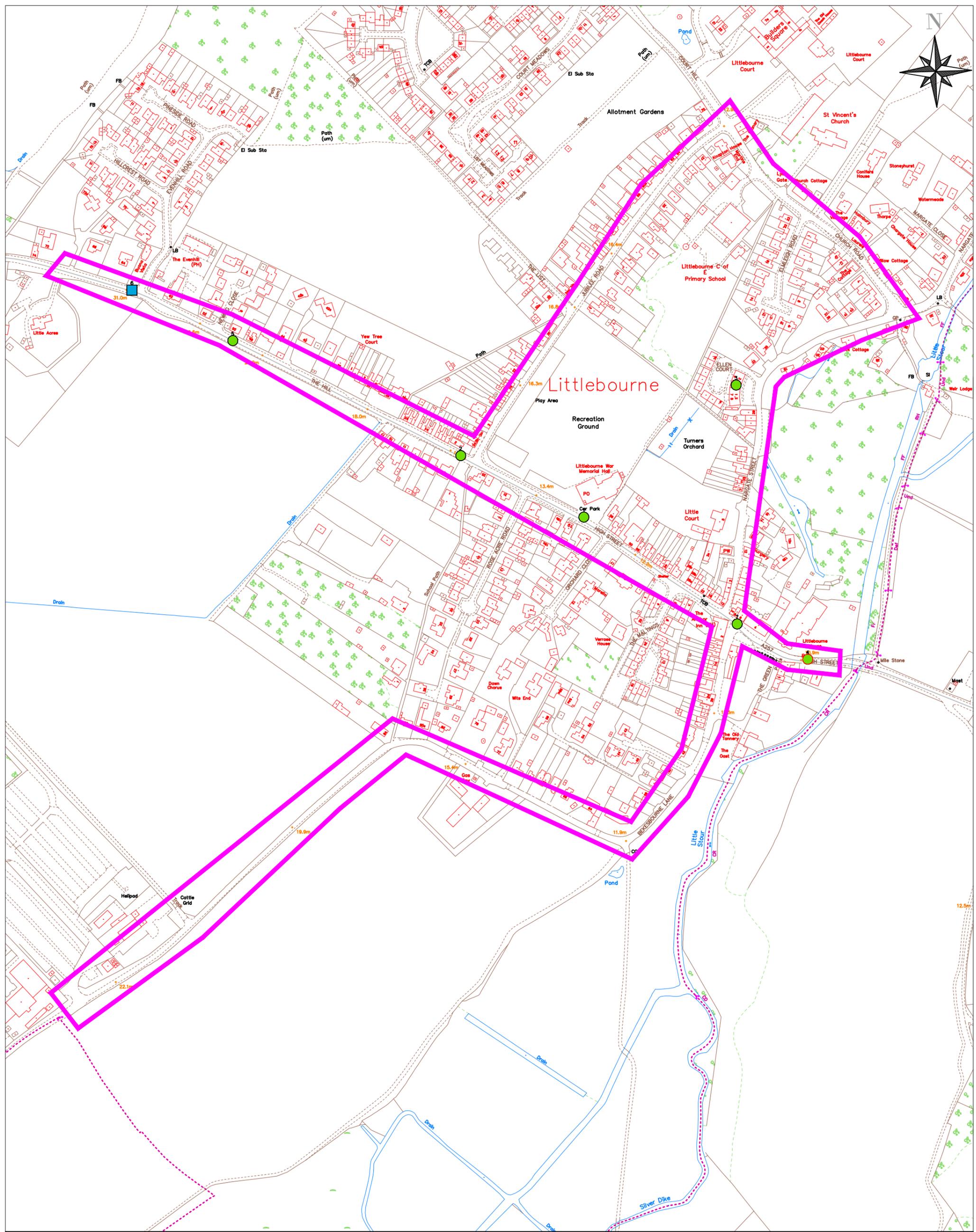
TIME	C to A									C to B									C to C									
	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	CAR	LGV	OGV1	OGV2	BUS	P/CYCLE	M/CYCLE	PCU	TOTAL	
07:00 - 07:15	25	13	2	0	1	0	0	44.6	41	12	2	0	0	0	0	0	14.0	14	0	0	0	0	0	0	0	0	0.0	0
07:15 - 07:30	32	3	1	0	0	0	0	37.3	36	16	2	0	0	0	0	0	16.0	16	0	0	0	0	0	0	0	0	0.0	0
07:30 - 07:45	38	12	1	0	1	0	0	54.3	52	20	3	0	0	0	0	0	23.0	23	0	0	0	0	0	0	0	0	0.0	0
07:45 - 08:00	60	9	2	0	2	0	0	77.6	73	29	6	0	0	0	0	0	35.0	35	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	155	37	6	0	4	0	0	214	202	77	13	0	0	0	0	0	90	90	0	0	0	0	0	0	0	0	0.0	0
08:00 - 08:15	53	6	1	1	0	0	0	64.0	62	20	1	0	0	0	0	0	21.0	21	0	0	0	0	0	0	0	0	0.0	0
08:15 - 08:30	49	4	2	3	0	0	0	64.5	58	30	2	0	0	0	0	0	32.0	32	0	0	0	0	0	0	0	0	0.0	0
08:30 - 08:45	56	5	1	2	1	0	0	69.9	65	21	3	0	0	0	0	0	24.0	24	0	0	0	0	0	0	0	0	0.0	0
08:45 - 09:00	51	10	1	0	1	0	0	65.3	63	22	6	0	0	0	0	1	26.4	29	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	209	26	6	6	2	0	0	264	248	93	12	0	0	0	0	1	105	106	0	0	0	0	0	0	0	0	0.0	0
09:00 - 09:15	39	5	0	2	1	0	0	60.6	47	21	5	0	0	0	0	2	26.8	28	0	0	0	0	0	0	0	0	0.0	0
09:15 - 09:30	32	6	3	0	1	0	0	46.9	42	20	3	0	0	0	0	0	23.0	23	0	0	0	0	0	0	0	0	0.0	0
09:30 - 09:45	34	19	2	3	0	0	0	64.5	58	15	2	0	0	0	0	0	17.0	17	0	0	0	0	0	0	0	0	0.0	0
09:45 - 10:00	29	6	1	4	1	1	0	48.7	42	17	2	0	0	0	1	0	19.2	20	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	134	36	6	9	3	1	0	211	189	73	12	0	0	0	1	2	86	88	0	0	0	0	0	0	0	0	0.0	0
Session Total	498	98	17	15	9	1	1	689	639	243	37	0	0	0	1	3	281	284	0	0	0	0	0	0	0	0	0.0	0
15:00 - 15:15	60	9	0	3	1	0	0	77.9	73	13	1	0	0	0	0	0	14.0	14	0	0	0	0	0	0	0	0	0.0	0
15:15 - 15:30	49	13	2	2	1	0	0	73.2	67	24	0	0	1	0	0	0	26.3	26	0	0	0	0	0	0	0	0	0.0	0
15:30 - 15:45	77	7	2	2	0	0	2	94.0	90	19	4	0	0	0	0	0	23.0	23	0	0	0	0	0	0	0	0	0.0	0
15:45 - 16:00	67	16	1	0	1	0	0	87.3	85	11	2	0	0	0	0	0	13.4	14	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	253	45	5	7	3	0	2	333	315	67	7	0	1	0	0	0	76	76	0	0	0	0	0	0	0	0	0.0	0
16:00 - 16:15	61	12	0	0	1	0	1	75.4	75	12	0	1	0	0	2	0	14.7	15	0	0	0	0	0	0	0	0	0.0	0
16:15 - 16:30	76	8	0	0	0	0	2	84.8	86	15	3	0	0	0	0	0	18.0	18	0	0	0	0	0	0	0	0	0.0	0
16:30 - 16:45	93	10	1	0	1	0	0	107.3	105	25	3	0	0	0	0	0	28.0	28	0	0	0	0	0	0	0	0	0.0	0
16:45 - 17:00	77	10	2	0	2	0	1	96.0	92	14	1	0	0	0	0	1	15.4	16	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	307	40	3	0	4	0	4	364	358	66	7	1	0	0	2	1	76	77	0	0	0	0	0	0	0	0	0.0	0
17:00 - 17:15	80	7	1	1	2	0	3	96.3	94	14	0	0	0	0	0	0	14.0	14	0	0	0	0	0	0	0	0	0.0	0
17:15 - 17:30	73	2	0	0	2	1	1	79.6	79	7	2	0	0	0	0	0	9.0	9	0	0	0	0	0	0	0	0	0.0	0
17:30 - 17:45	69	8	0	1	0	0	0	79.3	78	9	1	0	0	0	0	0	10.0	10	0	0	0	0	0	0	0	0	0.0	0
17:45 - 18:00	88	6	2	0	0	1	1	99.2	98	6	1	0	0	0	1	1	7.6	9	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	310	23	3	2	4	2	5	355	349	36	4	0	0	0	1	1	40	42	0	0	0	0	0	0	0	0	0.0	0
18:00 - 18:15	71	8	0	0	0	0	0	79.0	79	8	0	0	0	0	0	0	8.0	8	0	0	0	0	0	0	0	0	2.3	1
18:15 - 18:30	43	0	0	0	3	0	4	50.6	50	5	1	0	0	0	0	0	6.0	6	0	0	0	0	0	0	0	0	0.0	0
18:30 - 18:45	42	5	1	0	2	0	1	53.7	51	11	1	0	0	0	0	0	12.0	12	0	0	0	0	0	0	0	0	0.0	0
18:45 - 19:00	27	1	0	0	0	0	0	28.0	28	5	0	0	0	0	0	0	5.0	5	0	0	0	0	0	0	0	0	0.0	0
Hourly Total	183	14	1	0	5	0	5	211	208	29	2	0	0	0	0	0	31	31	0	0	1	0	0	0	0	0	2	1
Session Total	1053	122	12	9	16	2	16	1263	1230	198	20	1	1	0	3	3	222	226	0	0	1	0	0	0	0	0	2	1

APPENDIX 5.B 2022 Observed Traffic Flows



<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 5.B	
	2022 Observed Traffic Flows	

APPENDIX 5.C Collision Data



Location: Littlebourne

5 years personal injury crash data up to 30/09/2022

KCC Ref number: EXT/001/23

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100019238 (2015)

Crash Severity	
●	Slight
■	Serious
▲	Fatal

Date: 18-January-2023

Time: 15:53:35

Title: **Littlebourne**

Requested output: **D - Print Crash Report**

Date: 18-January-2023

Accident Date BETWEEN '01-Oct-2017' AND '30-Sep-2022'

There were 7 reported crashes resulting in injury

D-PRINT CRASH REPORT

18-Jan-2023

15:53:35

Littlebourne

Accident Date BETWEEN '01-Oct-2017' AND '30-Sep-2022'

No	Location	Reference/ Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors	Involved
1	Road No A257 Grid 620812E Section 038 Ref 157489N	294411 SLIGHT	07/05/2018	2	08:25	L	Dry	Fine		O/TAKE R.TURN	GV M/C
A257 HIGH STREET O/S 58, LITTLEBOURNE									Canterbury		
FOUR BIKES RIDING FROM WINGHAM TOWARDS CANTERBURY. THREE BIKES OVERTOOK V1 WHICH HAD SLOWED AS IT APPROACHED ORCHARD CLOSE. THE FOURTH BIKE V2 SIGNALLED AND STARTED TO OVERTAKE V1. V1 CONTINUED A FEW YARDS FURTHER AND AS V2 GOT TO ABOUT V1 DRIVERS WINDOW V1 TURNED RIGHT INTO THE POST OFFICE. BOTH VEHICLES COLLIDED AND BOTH THE RIDER AND PILLION PASSENGER OF V2 CAME OFF THE BIKE. THE THREE OTHER BIKES WERE NOT INVOLVED IN THE COLLISION. (AGE FOR V2/C1 NOT KNOWN)							Veh1, goods < 3.5t, SE -> NE Veh2, m/cycle > 500cc, SE -> NW			Casualties 1 Vehicles 2	
2	Road No A257 Grid 620690E Section 036 Ref 157550N	295029 SLIGHT	10/05/2018	5	12:00	L	Dry	Fine			GV
A257 THE HILL J/W JUBILEE RD, LITTLEBOURNE (MAPPED TO DESC. ORIGINAL COORDS - 620705,157542)									Canterbury		
D1 HAS STATED THAT V4, A FOREIGN VEHICLE, HAD NO BRAKE LIGHTS, SO D1 HAD TO STOP SUDDENLY. V4 DROVE OFF. V2 WENT INTO THE REAR OF V1 AND V3 WENT INTO THE REAR OF V2.							Veh1, car, SE -> NW Veh2, goods < 3.5t, SE -> NW Veh3, goods < 3.5t, SE -> NW Veh4, car, SE -> NW			Casualties 3 Vehicles 4	

Key Involved

PED Pedestrian
HGV Heavy Goods Vehicle
GV Goods Vehicle
M/C Motor Cycle
P/C Pedal Cycle
PSV Bus/Coach

Street Lighting

L Daylight

STL Street Lights
USL Street Lights Unlit
NSL No Street Lights
STU Street Lights Unknown

FACTORS

+VE Positive Breath Test
R.TURN Right Turn Manoeuvre
O/TAKE Overtaking Manoeuvre
S.VEH Single Vehicle

Special Conditions

ATS OUT Traffic Lights Not Working
ATS DEF Traffic Lights Defective
SIGNS Road Signs Defective or Obscured
RD WRKS Road Works
Surface Road Surface Defective

D-PRINT CRASH REPORT

18-Jan-2023

15:53:35

Littlebourne

Accident Date BETWEEN '01-Oct-2017' AND '30-Sep-2022'

No	Location	Reference/ Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors	Involved
3	Road No U Section 163 Grid 620963E Ref 157620N	321460 SLIGHT	01/08/2018	4	12:22	L	Dry	Fine			
NARGATE ST, O/S ELLEN COURT, LITTLEBOURNE.									Canterbury		
V1 has approached a right hand bend and was across the broken white centre lines and collided with V2 who was coming from the opposite direction, V1 has admitted fault.							Veh1, car, S -> NE Veh2, car, NE -> S			Casualties	1
									Vehicles	2	
4	Road No A257 Section 041 Grid 621034E Ref 157348N	354544 SLIGHT	15/11/2018	5	10:30	L	Dry	Fine	SE	S.VEH	GV
A257 HIGH ST, LITTLEBOURNE (MAPPED TO COORDS)									Canterbury		PED
C1 WAS WALKING DOWN HIGH ST WHEN V1 WAS TRYING TO EDGE PAST THEM BUT MADE CONTACT. V1 TRAVELLING AT LOW SPEED BUT CAUSED C1 TO FALL OVER. (POSTCODE FOR C1 NOT KNOWN)							Veh1, goods < 3.5t, NW -> SE			Casualties	1
									Vehicles	1	
5	Road No A257 Section 034 Grid 620464E Ref 157664N	348022 SLIGHT	16/11/2018	6	17:10	DRK STL	Wet/Damp	Fog Mist			P/C
A257 THE HILL, LITTLEBOURNE (MAPPED TO COORDS)									Canterbury		
V1 was travelling southeast on The Hill and V2 was travelling in the opposite direction. V1 clipped V2 as they passed each other in the traffic calming area where the road narrows. (NO DETAILS KNOWN OF V2)							Veh1, car, NW -> SE Veh2, pedal cycle, SE -> NW			Casualties	1
									Vehicles	2	
6	Road No A257 Section 033 Grid 620364E Ref 157714N	888832 SERIOUS	10/10/2019	5	09:54	L	Dry	Fine			M/C
A257 THE HILL J/W EVENHILL RD, LITTLEBOURNE									Canterbury		
V1 and V2 were travelling southeast on The Hill. V2 was either stationary or just moving off when V1 collided with its rear.							Veh1, m/cycle > 500cc, NW -> SE Veh2, car, NW -> SE			Casualties	1
									Vehicles	2	

Key Involved

PED Pedestrian
HGV Heavy Goods Vehicle
GV Goods Vehicle
M/C Motor Cycle
P/C Pedal Cycle
PSV Bus/Coach

Street Lighting

L Daylight

STL Street Lights
USL Street Lights Unlit
NSL No Street Lights
STU Street Lights Unknown

FACTORS

+VE Positive Breath Test
R.TURN Right Turn Manoeuvre
O/TAKE Overtaking Manoeuvre
S.VEH Single Vehicle

Special Conditions

ATS OUT Traffic Lights Not Working
ATS DEF Traffic Lights Defective
SIGNS Road Signs Defective or Obscured
RD WRKS Road Works
Surface Road Surface Defective

D-PRINT CRASH REPORT

18-Jan-2023

15:53:35

Littlebourne

Accident Date BETWEEN '01-Oct-2017' AND '30-Sep-2022'

No	Location	Reference/ Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors	Involved
7	Road No A257 Grid 620964E Section Ref 157383N	1144130 SLIGHT	03/02/2022	5	10:09	L	Wet/Damp	Fine			GV
A257 HIGH ST J/W C203 BEKESBOURNE LANE, LITTLEBOURNE									Canterbury		
V2 was travelling west on High St and slowed down due to a vehicle in the carriageway ahead of them. V1, travelling behind V2, tried to stop in time but skidded on the damp road surface and collided with the rear of V2.							Veh1, goods < 3.5t, SE -> NW Veh2, car, SE -> NW			Casualties 1 Vehicles 2	

Key Involved

PED Pedestrian
 HGV Heavy Goods Vehicle
 GV Goods Vehicle
 M/C Motor Cycle
 P/C Pedal Cycle
 PSV Bus/Coach

Street Lighting

L Daylight

 STL Street Lights
 USL Street Lights Unlit
 NSL No Street Lights
 STU Street Lights Unknown

FACTORS

+VE Positive Breath Test
 R.TURN Right Turn Manoeuvre
 O/TAKE Overtaking Manoeuvre
 S.VEH Single Vehicle

Special Conditions

ATS OUT Traffic Lights Not Working
 ATS DEF Traffic Lights Defective
 SIGNS Road Signs Defective or Obscured
 RD WRKS Road Works
 Surface Road Surface Defective

APPENDIX 6.A TEMPro Growth Factors

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2045
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	1.1880	1.1727

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	7,594	6,710

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	40,394	38,860

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	47,988	45,570

Level	Area	Local Growth Figure
Authority	Canterbury	1.209184

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2022
Future Year:	2045
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	1.1774	1.1891

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	7,429	7,932

Base Year

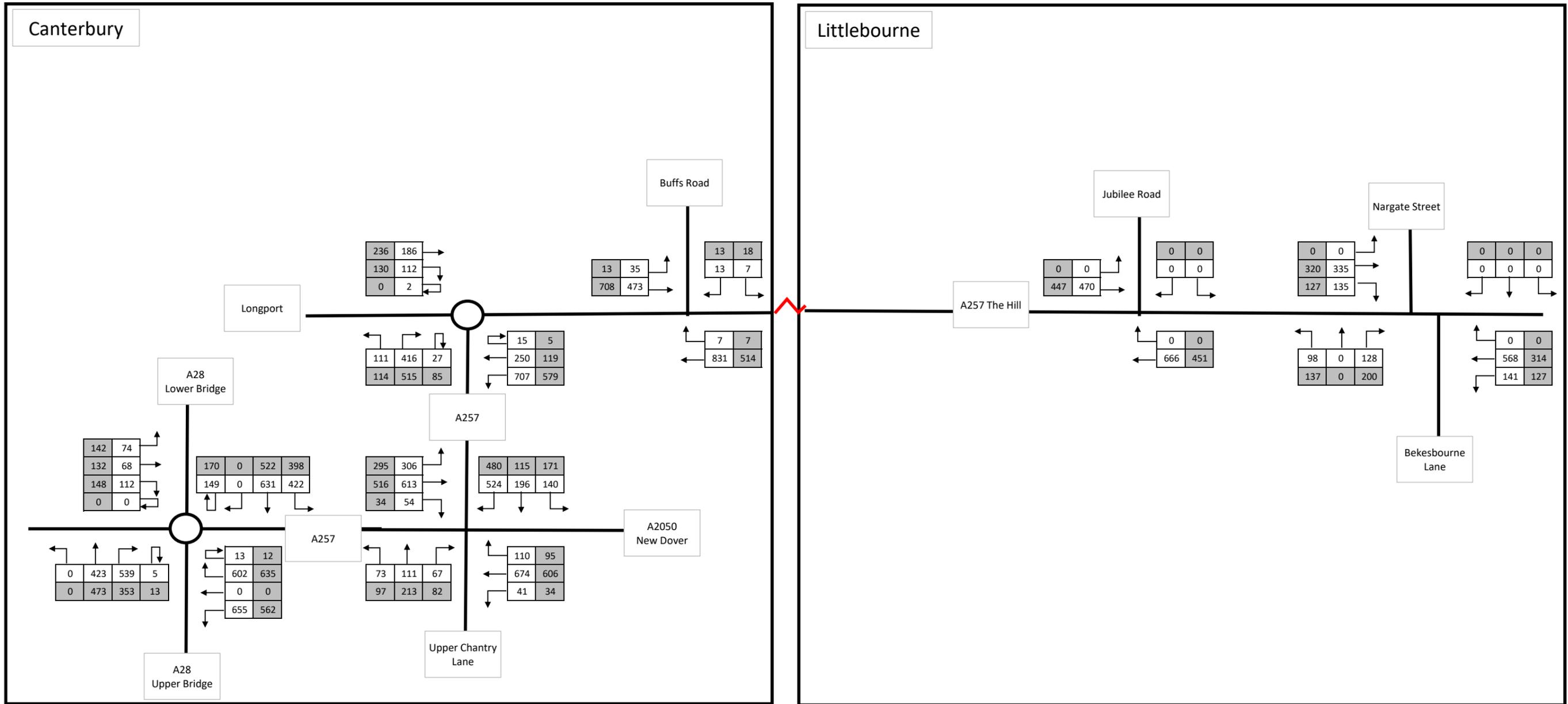
Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	41,868	41,934

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
Authority	Canterbury	49,296	49,866

Level	Area	Local Growth Figure
Authority	Canterbury	1.212155

APPENDIX 6.B 2045 Background Traffic Flows



<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.B	
	2045 Background Traffic Flows	

APPENDIX 6.C Committed Development Location Plan



- Key**
- █ Site Location
- Committed / Local Plan Developments**
- 1 19/01665 The Hill
 - 2 14/01230 Howe Barracks
 - 3 16/00600 South Canterbury
 - 4 17/02092 Canterbury Riverside
 - 5 16/00404 Hoplands Farm
 - 6 16/00673 Chislet Colliery
 - 7 17/01383 Sturry
 - 8 18/00868 Broad Oak
 - 9 22/01845 Land North of Hersden

Contains OS data © Crown copyright and database right 2022
 Contains public sector information licensed under the
 Open Government Licence v3.0



Centurion House, 129 Deansgate
 Manchester, M3 3WR

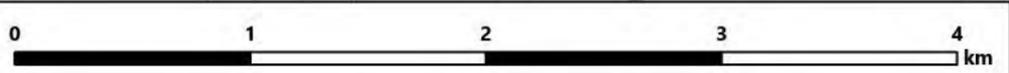
Tel: 0161 830 2172

www.i-transport.co.uk

Title:
Committed and Local Plan Development Locations

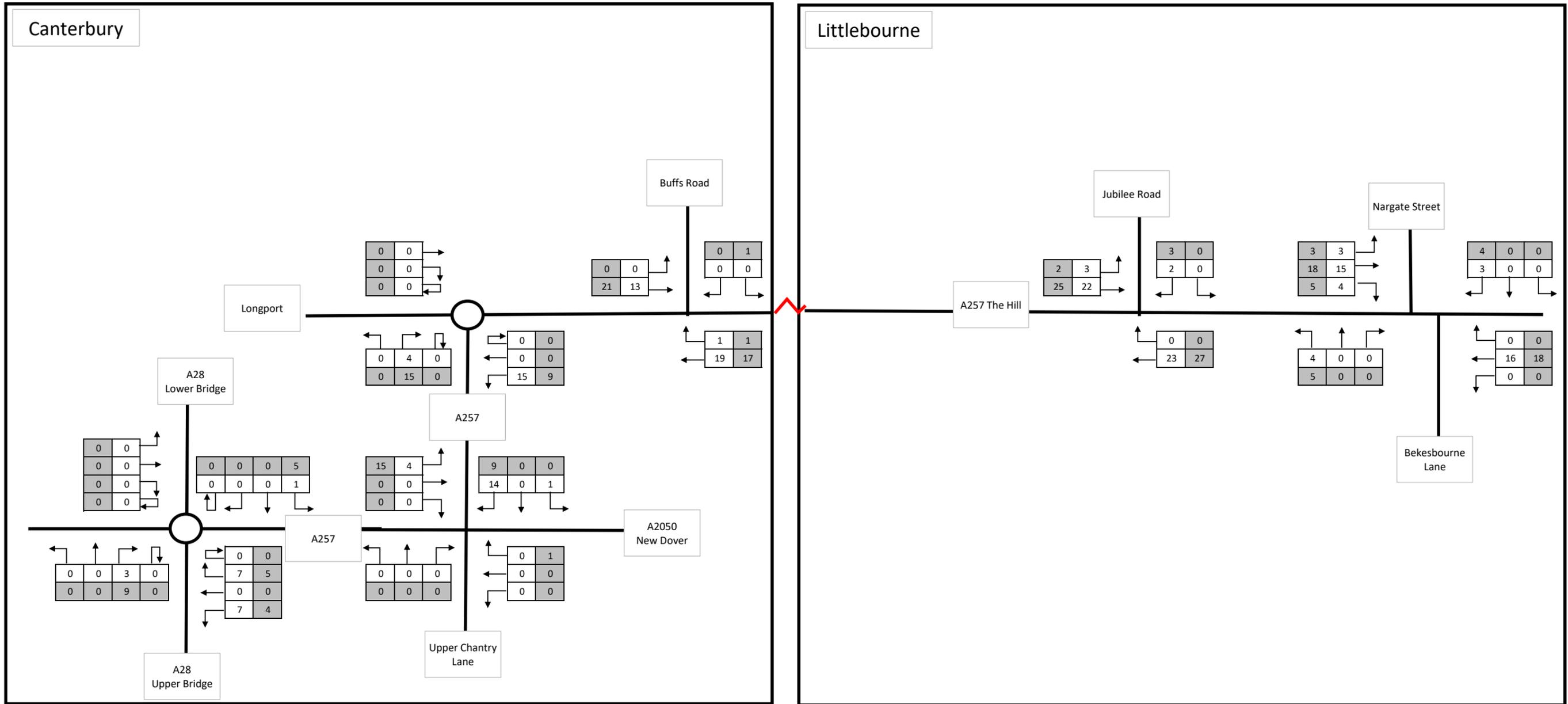
Project:
Land South of the Hill, Littlebourne

Project Number: ITM16283	Figure Number: Figure 6.C	Revision: -
------------------------------------	-------------------------------------	----------------

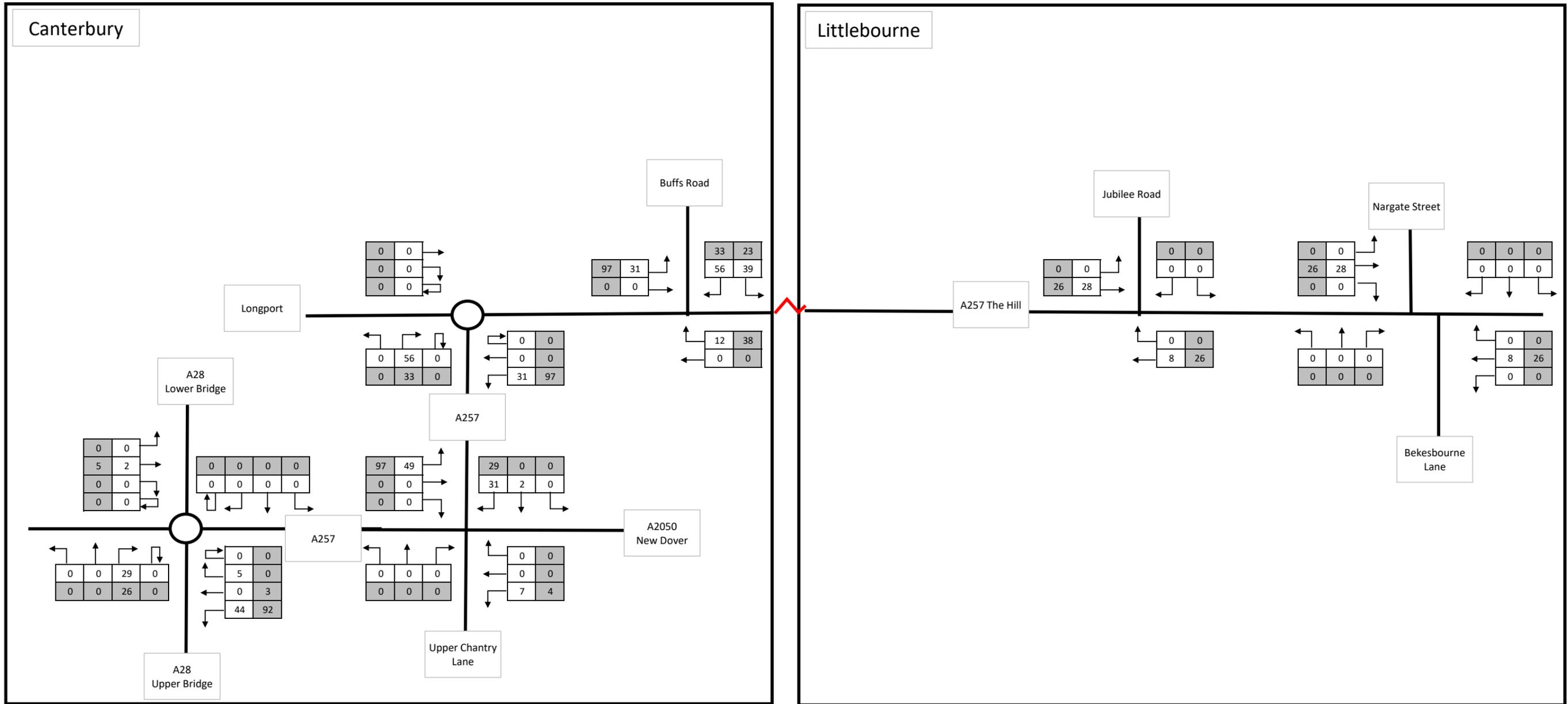


Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

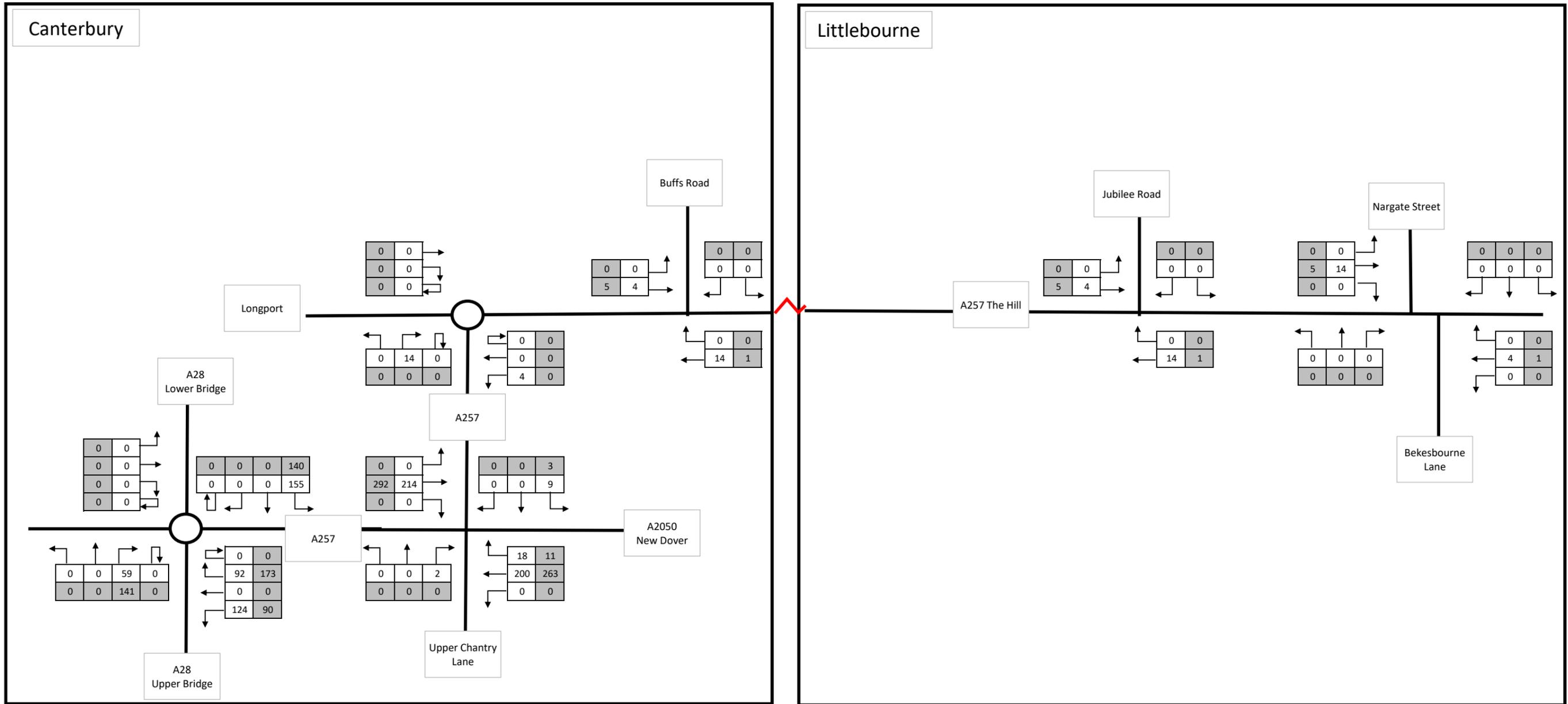
APPENDIX 6.D Committed Development Traffic Flows



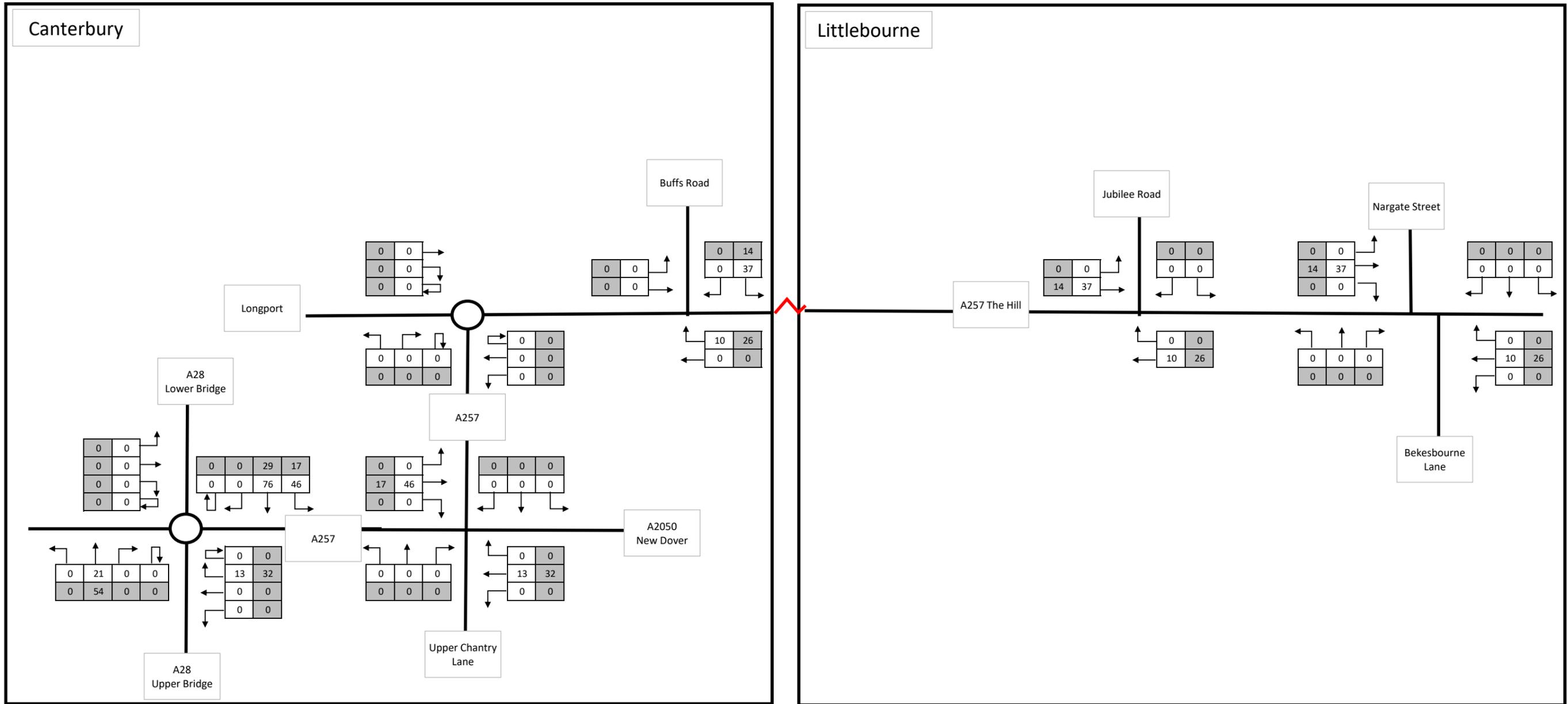
<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.C - 1	
	The Hill Traffic Flows	



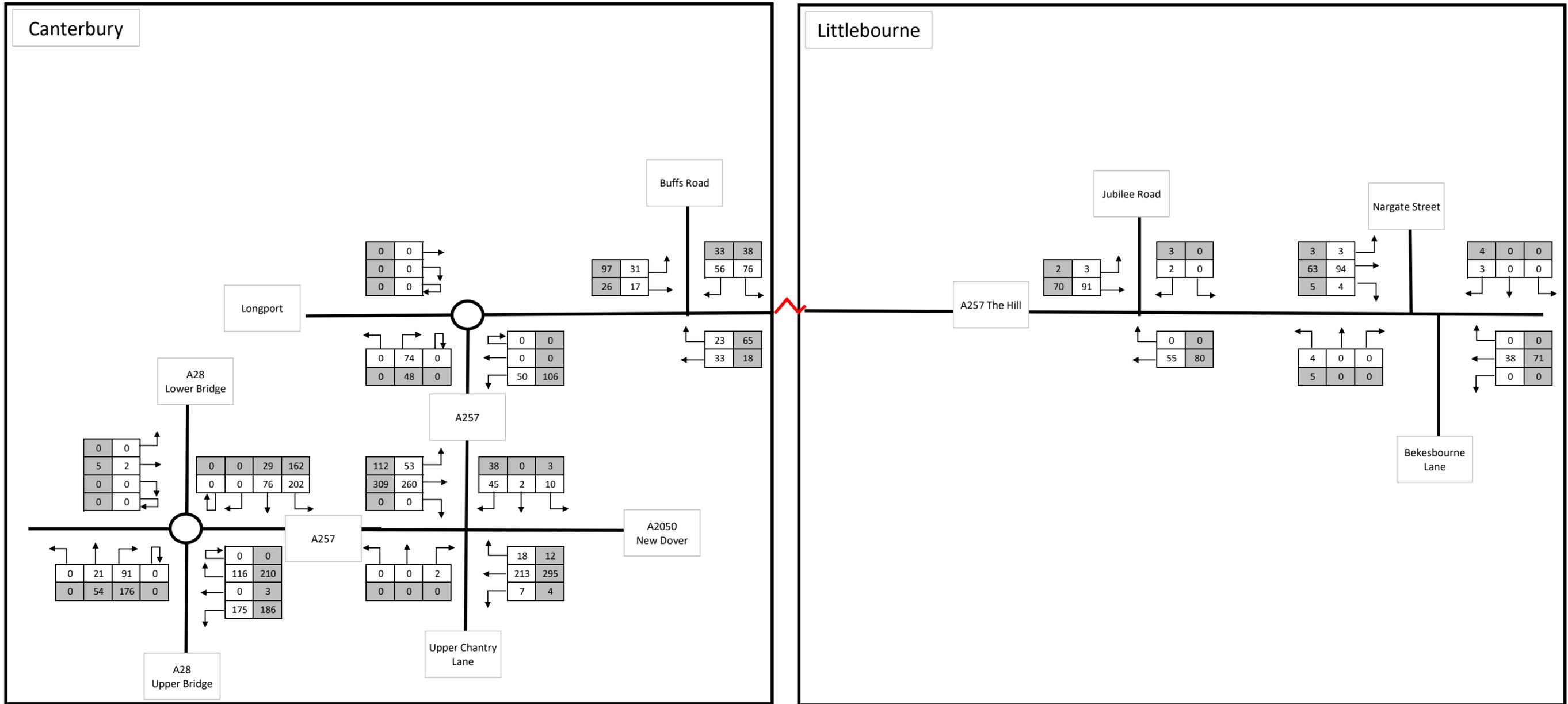
<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.C - 2	
	Howe Barrack Traffic Flows	



<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.C - 3	
	South Canterbury Traffic Flows	

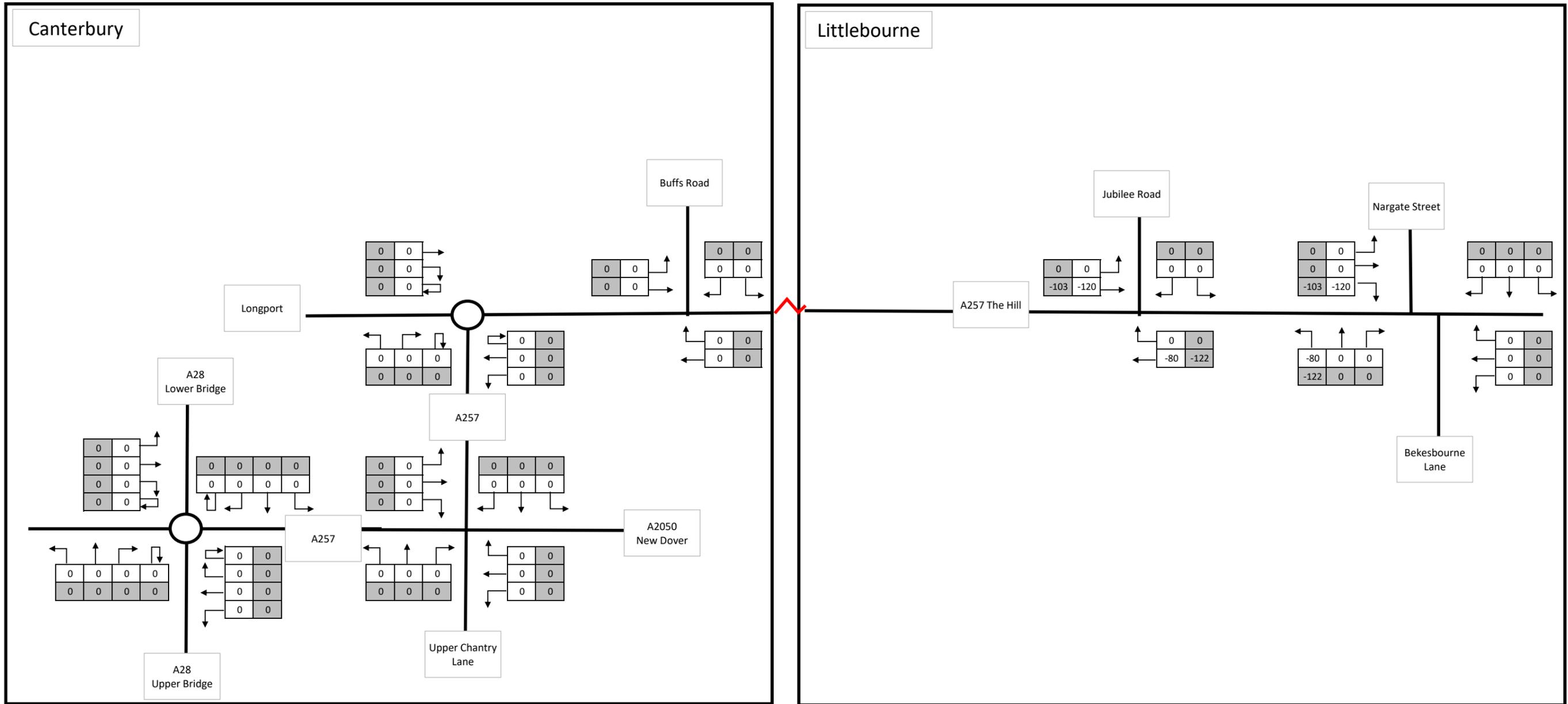


<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.C - 4	
	Land North of Hersden Traffic Flows	



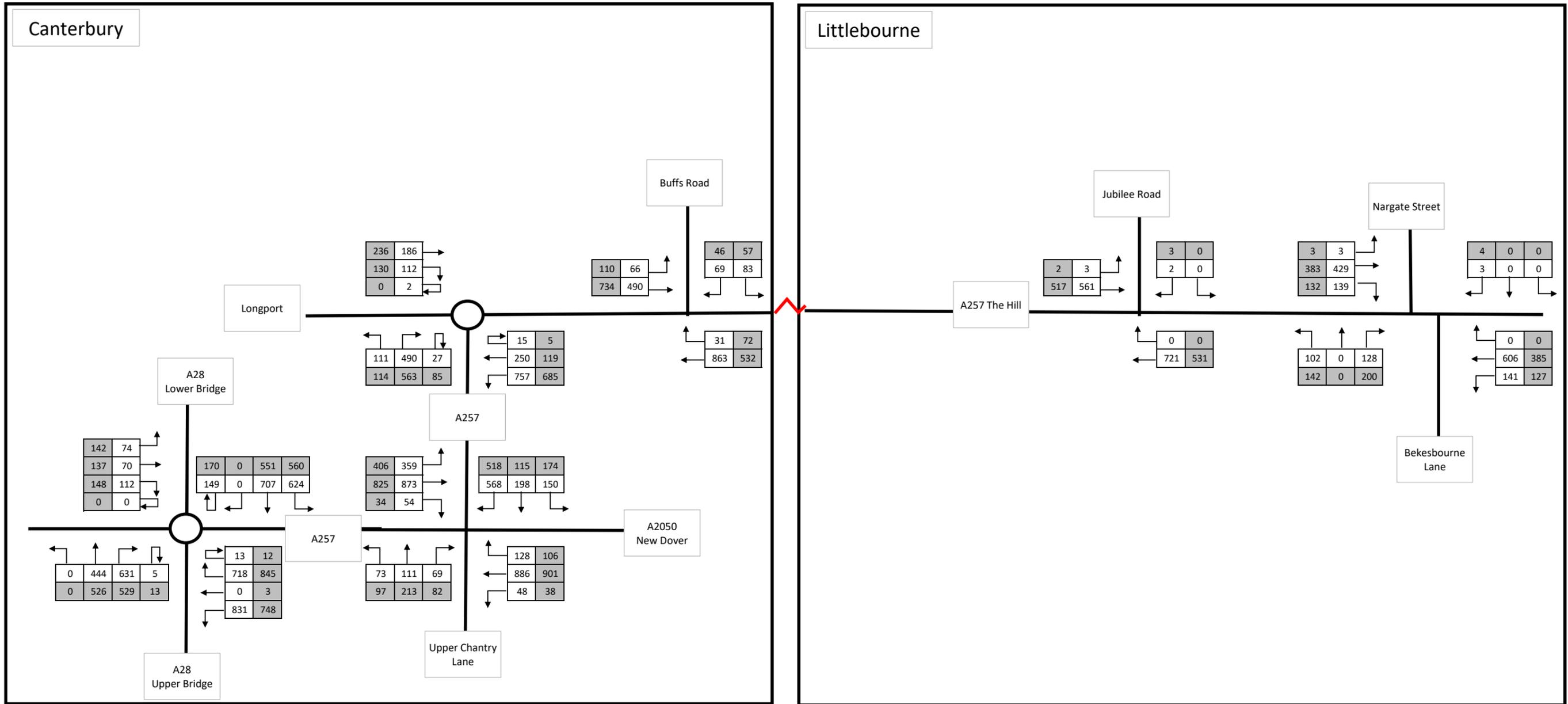
<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.C - 5	
	Total Committed Development Traffic Flows	

APPENDIX 6.E Reassignment Traffic Flows



<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.E	
	2045 Background Traffic Flow Reassignment	

APPENDIX 6.F 2045 Background + Committed Development Traffic Flows



<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.F	
	2045 Base + Committed Traffic Flows	

APPENDIX 6.G Residential TRICs Outputs

Calculation Reference: AUDIT-236602-220926-0908

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	KC KENT	1 days
	WS WEST SUSSEX	4 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 117 to 371 (units:)
 Range Selected by User: 100 to 500 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 23/11/21

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:

Tuesday	3 days
Wednesday	4 days
Thursday	2 days

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

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Edge of Town	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	8
Village	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,

Secondary Filtering selection:

Use Class:

C3 9 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
10,001 to 15,000	5 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	4 days
125,001 to 250,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	6 days
1.6 to 2.0	1 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	4 days
No	5 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	9 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	DS-03-A-02 RADBOURNE LANE DERBY	MIXED HOUSES		DERBYSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		371	
	<i>Survey date: TUESDAY</i>		<i>10/07/18</i>	<i>Survey Type: MANUAL</i>
2	KC-03-A-07 RECVLVER ROAD HERNE BAY	MIXED HOUSES		KENT
	Edge of Town Residential Zone Total No of Dwellings:		288	
	<i>Survey date: WEDNESDAY</i>		<i>27/09/17</i>	<i>Survey Type: MANUAL</i>
3	NE-03-A-03 STATION ROAD SCUNTHORPE	PRIVATE HOUSES		NORTH EAST LINCOLNSHIRE
	Edge of Town Centre Residential Zone Total No of Dwellings:		180	
	<i>Survey date: TUESDAY</i>		<i>20/05/14</i>	<i>Survey Type: MANUAL</i>
4	SF-03-A-10 LOVETOFTS DRIVE IPSWICH WHITEHOUSE	TERRACED & SEMI-DETACHED		SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings:		149	
	<i>Survey date: TUESDAY</i>		<i>22/06/21</i>	<i>Survey Type: MANUAL</i>
5	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE	DETACHED & SEMI-DETACHED		STAFFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		248	
	<i>Survey date: WEDNESDAY</i>		<i>22/11/17</i>	<i>Survey Type: MANUAL</i>
6	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		151	
	<i>Survey date: THURSDAY</i>		<i>11/12/14</i>	<i>Survey Type: MANUAL</i>
7	WS-03-A-08 ROUNDSTONE LANE ANGMERING	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		180	
	<i>Survey date: THURSDAY</i>		<i>19/04/18</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

8	WS-03-A-12	MIXED HOUSES	WEST SUSSEX
	MADGWICK LANE CHICHESTER WESTHAMPNETT Edge of Town Village		
	Total No of Dwellings:	152	
	Survey date: WEDNESDAY	16/06/21	Survey Type: MANUAL
9	WS-03-A-14	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE LITTLEHAMPTON WICK Edge of Town Residential Zone		
	Total No of Dwellings:	117	
	Survey date: WEDNESDAY	20/10/21	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
HC-03-A-24	Flats
HC-03-A-25	Flats
HC-03-A-26	Flats
NF-03-A-24	Flats
NF-03-A-28	Bungalows
NF-03-A-29	Bungalows
NF-03-A-30	Bungalows
WS-03-A-13	Flats

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.074	9	204	0.323	9	204	0.397
08:00 - 09:00	9	204	0.129	9	204	0.340	9	204	0.469
09:00 - 10:00	9	204	0.126	9	204	0.145	9	204	0.271
10:00 - 11:00	9	204	0.124	9	204	0.136	9	204	0.260
11:00 - 12:00	9	204	0.130	9	204	0.148	9	204	0.278
12:00 - 13:00	9	204	0.142	9	204	0.129	9	204	0.271
13:00 - 14:00	9	204	0.148	9	204	0.131	9	204	0.279
14:00 - 15:00	9	204	0.155	9	204	0.161	9	204	0.316
15:00 - 16:00	9	204	0.246	9	204	0.163	9	204	0.409
16:00 - 17:00	9	204	0.240	9	204	0.148	9	204	0.388
17:00 - 18:00	9	204	0.322	9	204	0.137	9	204	0.459
18:00 - 19:00	9	204	0.241	9	204	0.151	9	204	0.392
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.077			2.112			4.189

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	117 - 371 (units:)
Survey date range:	01/01/14 - 23/11/21
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	8
Surveys manually removed from selection:	8

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

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

TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.001	9	204	0.002	9	204	0.003
08:00 - 09:00	9	204	0.005	9	204	0.004	9	204	0.009
09:00 - 10:00	9	204	0.001	9	204	0.001	9	204	0.002
10:00 - 11:00	9	204	0.002	9	204	0.002	9	204	0.004
11:00 - 12:00	9	204	0.002	9	204	0.002	9	204	0.004
12:00 - 13:00	9	204	0.002	9	204	0.002	9	204	0.004
13:00 - 14:00	9	204	0.002	9	204	0.001	9	204	0.003
14:00 - 15:00	9	204	0.001	9	204	0.002	9	204	0.003
15:00 - 16:00	9	204	0.007	9	204	0.005	9	204	0.012
16:00 - 17:00	9	204	0.002	9	204	0.002	9	204	0.004
17:00 - 18:00	9	204	0.001	9	204	0.001	9	204	0.002
18:00 - 19:00	9	204	0.001	9	204	0.001	9	204	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.025			0.052

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

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.001	9	204	0.001	9	204	0.002
08:00 - 09:00	9	204	0.002	9	204	0.002	9	204	0.004
09:00 - 10:00	9	204	0.004	9	204	0.002	9	204	0.006
10:00 - 11:00	9	204	0.002	9	204	0.001	9	204	0.003
11:00 - 12:00	9	204	0.002	9	204	0.003	9	204	0.005
12:00 - 13:00	9	204	0.002	9	204	0.003	9	204	0.005
13:00 - 14:00	9	204	0.004	9	204	0.001	9	204	0.005
14:00 - 15:00	9	204	0.002	9	204	0.004	9	204	0.006
15:00 - 16:00	9	204	0.002	9	204	0.003	9	204	0.005
16:00 - 17:00	9	204	0.002	9	204	0.003	9	204	0.005
17:00 - 18:00	9	204	0.001	9	204	0.001	9	204	0.002
18:00 - 19:00	9	204	0.000	9	204	0.000	9	204	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.000	9	204	0.000	9	204	0.000
08:00 - 09:00	9	204	0.001	9	204	0.001	9	204	0.002
09:00 - 10:00	9	204	0.000	9	204	0.000	9	204	0.000
10:00 - 11:00	9	204	0.000	9	204	0.000	9	204	0.000
11:00 - 12:00	9	204	0.000	9	204	0.000	9	204	0.000
12:00 - 13:00	9	204	0.000	9	204	0.000	9	204	0.000
13:00 - 14:00	9	204	0.000	9	204	0.000	9	204	0.000
14:00 - 15:00	9	204	0.000	9	204	0.000	9	204	0.000
15:00 - 16:00	9	204	0.001	9	204	0.001	9	204	0.002
16:00 - 17:00	9	204	0.000	9	204	0.000	9	204	0.000
17:00 - 18:00	9	204	0.000	9	204	0.000	9	204	0.000
18:00 - 19:00	9	204	0.000	9	204	0.000	9	204	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

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

CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.002	9	204	0.010	9	204	0.012
08:00 - 09:00	9	204	0.001	9	204	0.008	9	204	0.009
09:00 - 10:00	9	204	0.001	9	204	0.000	9	204	0.001
10:00 - 11:00	9	204	0.005	9	204	0.003	9	204	0.008
11:00 - 12:00	9	204	0.002	9	204	0.007	9	204	0.009
12:00 - 13:00	9	204	0.004	9	204	0.002	9	204	0.006
13:00 - 14:00	9	204	0.002	9	204	0.004	9	204	0.006
14:00 - 15:00	9	204	0.002	9	204	0.003	9	204	0.005
15:00 - 16:00	9	204	0.010	9	204	0.005	9	204	0.015
16:00 - 17:00	9	204	0.009	9	204	0.004	9	204	0.013
17:00 - 18:00	9	204	0.008	9	204	0.004	9	204	0.012
18:00 - 19:00	9	204	0.006	9	204	0.006	9	204	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.052			0.056			0.108

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

CARS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.055	9	204	0.300	9	204	0.355
08:00 - 09:00	9	204	0.110	9	204	0.316	9	204	0.426
09:00 - 10:00	9	204	0.097	9	204	0.123	9	204	0.220
10:00 - 11:00	9	204	0.100	9	204	0.118	9	204	0.218
11:00 - 12:00	9	204	0.109	9	204	0.117	9	204	0.226
12:00 - 13:00	9	204	0.114	9	204	0.106	9	204	0.220
13:00 - 14:00	9	204	0.120	9	204	0.103	9	204	0.223
14:00 - 15:00	9	204	0.137	9	204	0.138	9	204	0.275
15:00 - 16:00	9	204	0.219	9	204	0.131	9	204	0.350
16:00 - 17:00	9	204	0.223	9	204	0.127	9	204	0.350
17:00 - 18:00	9	204	0.299	9	204	0.126	9	204	0.425
18:00 - 19:00	9	204	0.228	9	204	0.142	9	204	0.370
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.811			1.847			3.658

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

LGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.016	9	204	0.020	9	204	0.036
08:00 - 09:00	9	204	0.011	9	204	0.017	9	204	0.028
09:00 - 10:00	9	204	0.023	9	204	0.020	9	204	0.043
10:00 - 11:00	9	204	0.020	9	204	0.015	9	204	0.035
11:00 - 12:00	9	204	0.017	9	204	0.025	9	204	0.042
12:00 - 13:00	9	204	0.025	9	204	0.018	9	204	0.043
13:00 - 14:00	9	204	0.021	9	204	0.026	9	204	0.047
14:00 - 15:00	9	204	0.015	9	204	0.017	9	204	0.032
15:00 - 16:00	9	204	0.017	9	204	0.023	9	204	0.040
16:00 - 17:00	9	204	0.013	9	204	0.015	9	204	0.028
17:00 - 18:00	9	204	0.021	9	204	0.009	9	204	0.030
18:00 - 19:00	9	204	0.011	9	204	0.008	9	204	0.019
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.210			0.213			0.423

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

MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	9	204	0.001	9	204	0.001	9	204	0.002
08:00 - 09:00	9	204	0.000	9	204	0.001	9	204	0.001
09:00 - 10:00	9	204	0.000	9	204	0.001	9	204	0.001
10:00 - 11:00	9	204	0.000	9	204	0.000	9	204	0.000
11:00 - 12:00	9	204	0.000	9	204	0.002	9	204	0.002
12:00 - 13:00	9	204	0.000	9	204	0.000	9	204	0.000
13:00 - 14:00	9	204	0.001	9	204	0.000	9	204	0.001
14:00 - 15:00	9	204	0.001	9	204	0.001	9	204	0.002
15:00 - 16:00	9	204	0.000	9	204	0.000	9	204	0.000
16:00 - 17:00	9	204	0.000	9	204	0.001	9	204	0.001
17:00 - 18:00	9	204	0.000	9	204	0.001	9	204	0.001
18:00 - 19:00	9	204	0.001	9	204	0.001	9	204	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.004			0.009			0.013

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.

APPENDIX 6.H Journey to Work Analysis

Canterbury 010 MSOA Distribution

Local Authority	Car Driver
Canterbury	1,011 <i>See Canterbury MSOA</i>
Dover	136 <i>See Dover MSOA</i>
Thanet	150 <i>See Thanet MSOA</i>
Swale	81 E
Ashford	66 E
Shepway	45 E
Maidstone	42 E
Medway	28 E
Tonbridge and Malling	20 E
Dartford	10 E
Reigate and Banstead	6 E
Gravesham	5 E
Sevenoaks	5 E
Others	74 E
Total	1,679

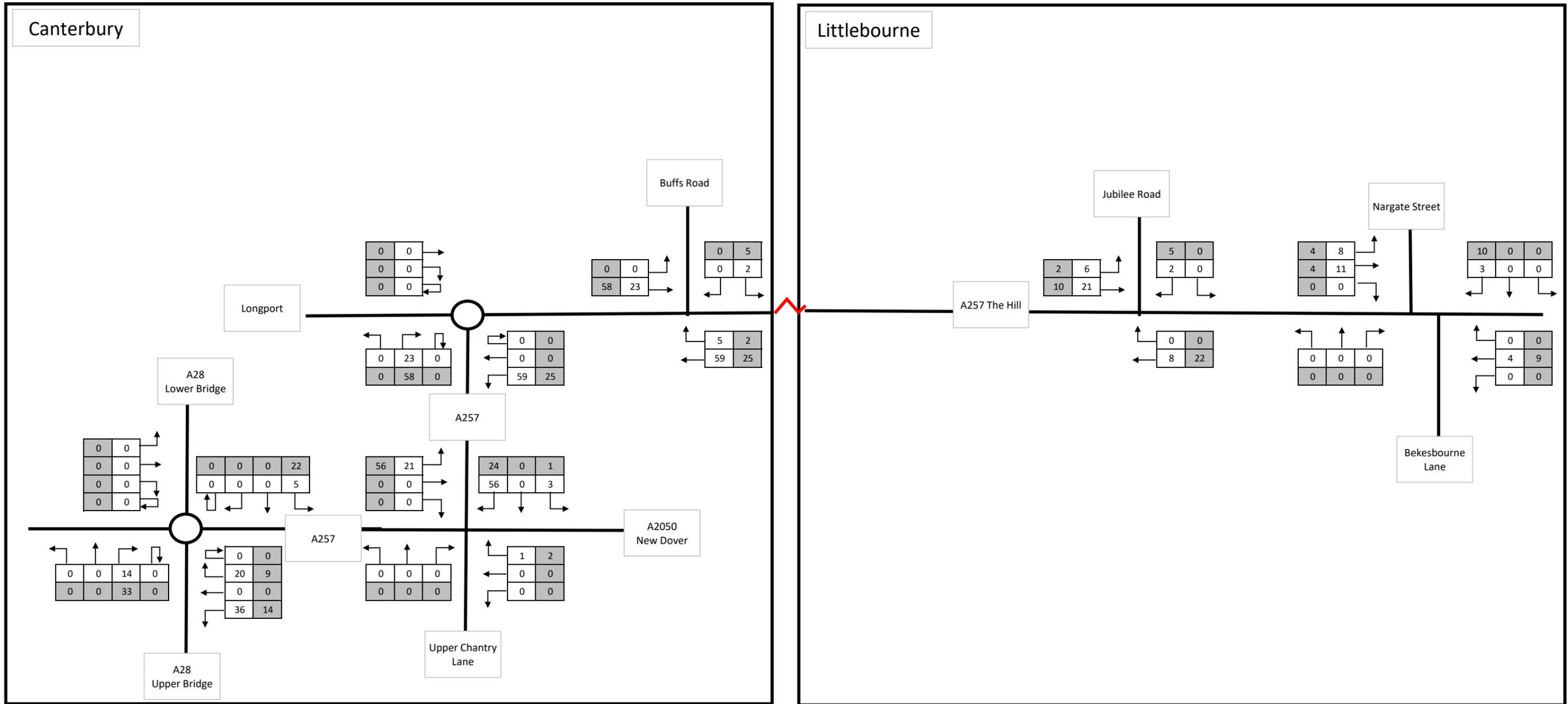
Canterbury MSOA	Car Driver
Canterbury 001	31 33% 33% 33%
Canterbury 002	11 33% 33% 33%
Canterbury 003	10 33% 33% 33%
Canterbury 004	11 33% 33% 33%
Canterbury 005	54 50% 50%
Canterbury 006	16 25% 25% 25% 25%
Canterbury 007	1 E
Canterbury 008	25 E
Canterbury 009	15 E
Canterbury 010	125 30% 30% 30% 10%
Canterbury 011	70 50% 50%
Canterbury 012	68 40% 40% 20%
Canterbury 013	36 F
Canterbury 014	114 50% 50%
Canterbury 016	184 33% 33% 33%
Canterbury 017	21 50% 50%
Canterbury 018	44 50% 50%
Canterbury 019	55 E
Canterbury 020	120 50% 50%
Total	1,011

Dover MSOA	Car Driver
Dover 001	24 67% 33%
Dover 002	44 D
Dover 003	3 D
Dover 004	2 D
Dover 005	0 D
Dover 006	14 67% 33%
Dover 007	1 D
Dover 008	2 67% 33%
Dover 009	3 67% 33%
Dover 010	8 D
Dover 011	7 D
Dover 012	10 D
Dover 013	18 D
Dover 014	0 D
Total	136

Thanet MSOA	Car Driver
Thanet 001	10 50% 50%
Thanet 002	0 50% 50%
Thanet 003	9 67% 33%
Thanet 004	31 67% 33%
Thanet 005	5 67% 33%
Thanet 006	5 50% 50%
Thanet 007	6 67% 33%
Thanet 008	5 C
Thanet 009	2 50% 50%
Thanet 010	8 50% 50%
Thanet 011	20 50% 50%
Thanet 012	0 33% 67%
Thanet 013	7 50% 50%
Thanet 014	21 67% 33%
Thanet 015	9 33% 67%
Thanet 016	9 33% 67%
Thanet 017	3 33% 67%
Total	150

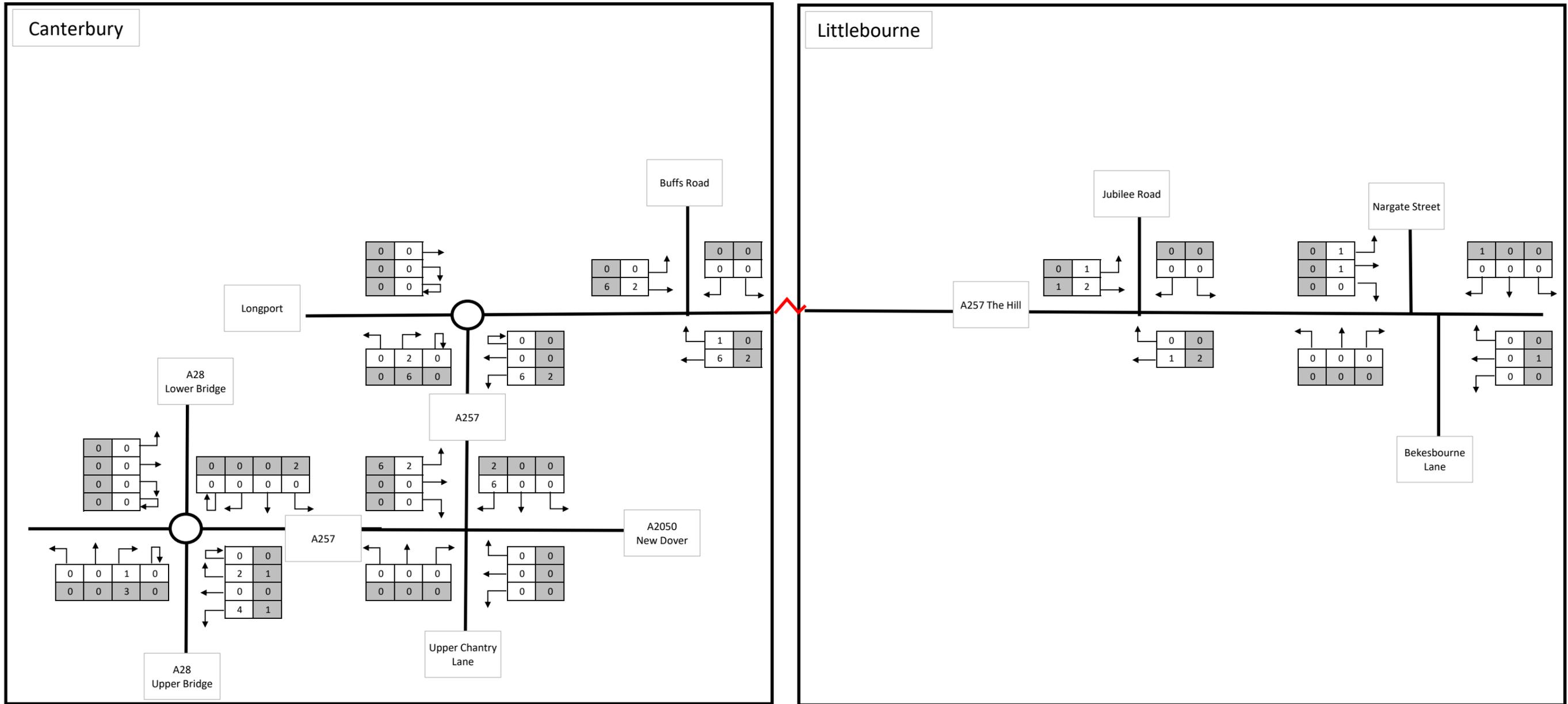
Ref	Route	Trips	%
A	A257 (W) before ho	63	3.7%
B	Bypass	87	5.2%
C	New Dover Road	61	3.7%
D	City Centre	178	10.6%
E	A28 South	576	34.3%
F	A28 North	207	12.3%
G	Jubilee Road	38	2.2%
H	Nargate Street	119	7.1%
I	A257 East	225	13.4%
J	Bekesbourne Lane	126	7.5%
	Total	1,679	100%

APPENDIX 6.I Proposed Residential Traffic Flows



<p>KEY</p> <p>$\begin{bmatrix} 123 \end{bmatrix}$ = AM Peak</p> <p>$\begin{bmatrix} 123 \end{bmatrix}$ = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.1	
	Residential Development Traffic Flows	

APPENDIX 6.J Proposed Elderly Accommodation
Traffic Flows



<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.J	
	Elderly Accommodation Traffic Flows	

APPENDIX 6.K Convenience Store TRICs Outputs

Calculation Reference: AUDIT-236602-220927-0945

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

03	SOUTH WEST	
	WL WILTSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 292 to 539 (units: sqm)
 Range Selected by User: 70 to 1500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 25/09/19

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

Selected survey days:

Monday	2 days
Friday	3 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Neighbourhood Centre (PPS6 Local Centre)	2

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	5
------------------	---

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:

E(a) 5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	2 days
25,001 to 50,000	2 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	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	4 days
1.1 to 1.5	1 days

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

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	5 days

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

Travel Plan:

No 5 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 5 days

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

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	3.099	3	398	3.099	3	398	6.198
07:00 - 08:00	5	363	6.883	5	363	6.663	5	363	13.546
08:00 - 09:00	5	363	8.425	5	363	8.645	5	363	17.070
09:00 - 10:00	5	363	6.443	5	363	6.112	5	363	12.555
10:00 - 11:00	5	363	5.892	5	363	5.837	5	363	11.729
11:00 - 12:00	5	363	5.892	5	363	6.222	5	363	12.114
12:00 - 13:00	5	363	7.048	5	363	6.718	5	363	13.766
13:00 - 14:00	5	363	5.782	5	363	5.782	5	363	11.564
14:00 - 15:00	5	363	7.159	5	363	7.104	5	363	14.263
15:00 - 16:00	5	363	7.379	5	363	7.048	5	363	14.427
16:00 - 17:00	5	363	7.654	5	363	7.654	5	363	15.308
17:00 - 18:00	5	363	9.141	5	363	9.416	5	363	18.557
18:00 - 19:00	5	363	10.297	5	363	9.967	5	363	20.264
19:00 - 20:00	5	363	8.205	5	363	7.985	5	363	16.190
20:00 - 21:00	4	381	3.937	4	381	4.331	4	381	8.268
21:00 - 22:00	4	381	2.822	4	381	3.084	4	381	5.906
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			106.058			105.667			211.725

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

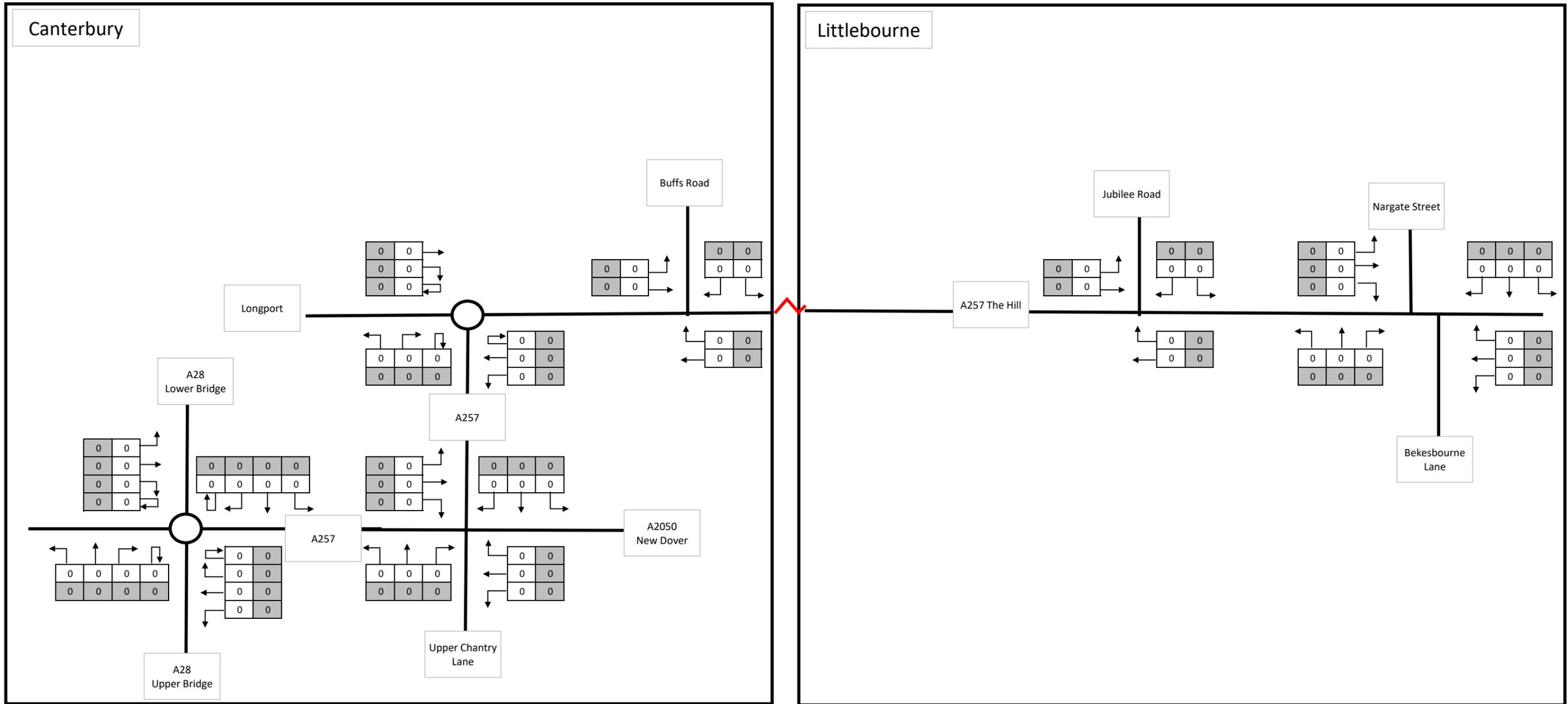
The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

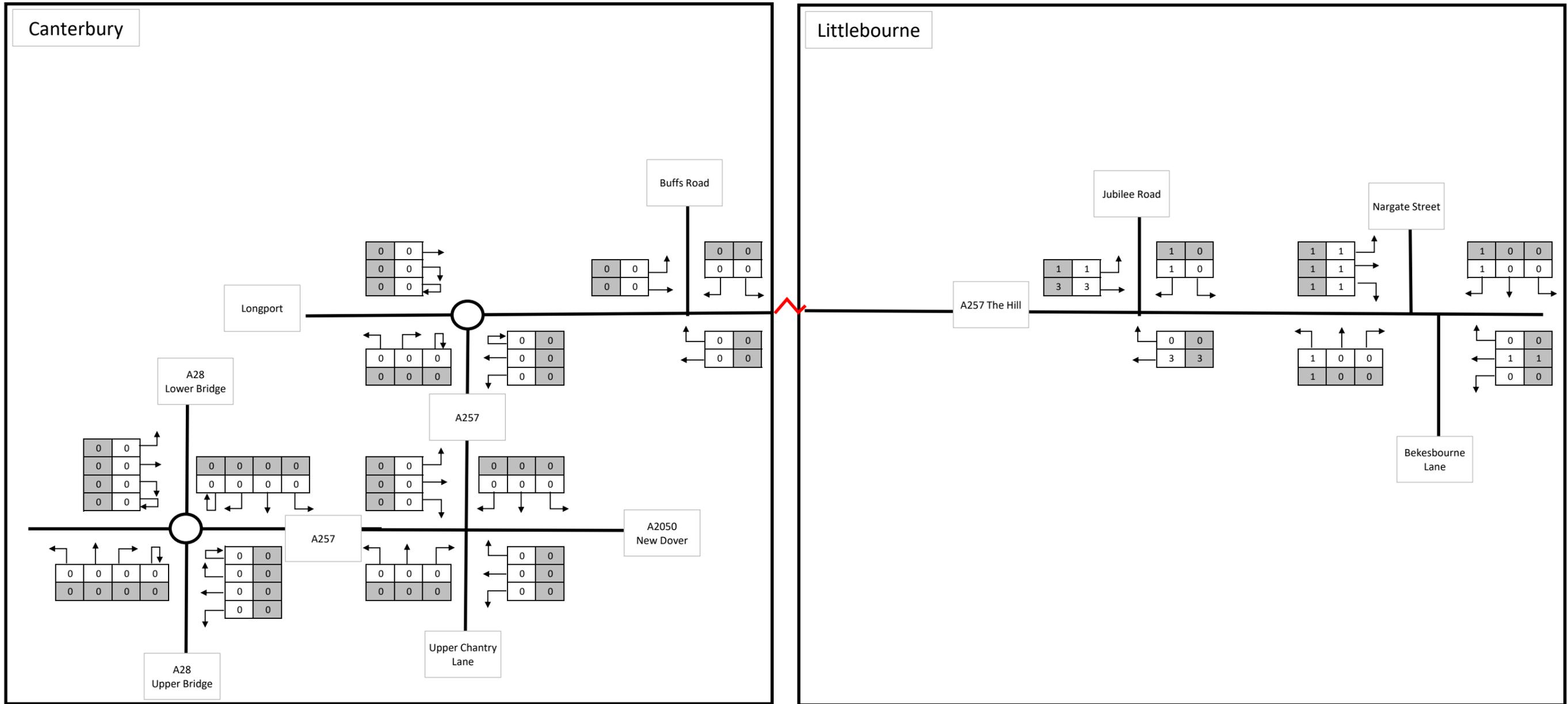
Trip rate parameter range selected:	292 - 539 (units: sqm)
Survey date range:	01/01/14 - 25/09/19
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

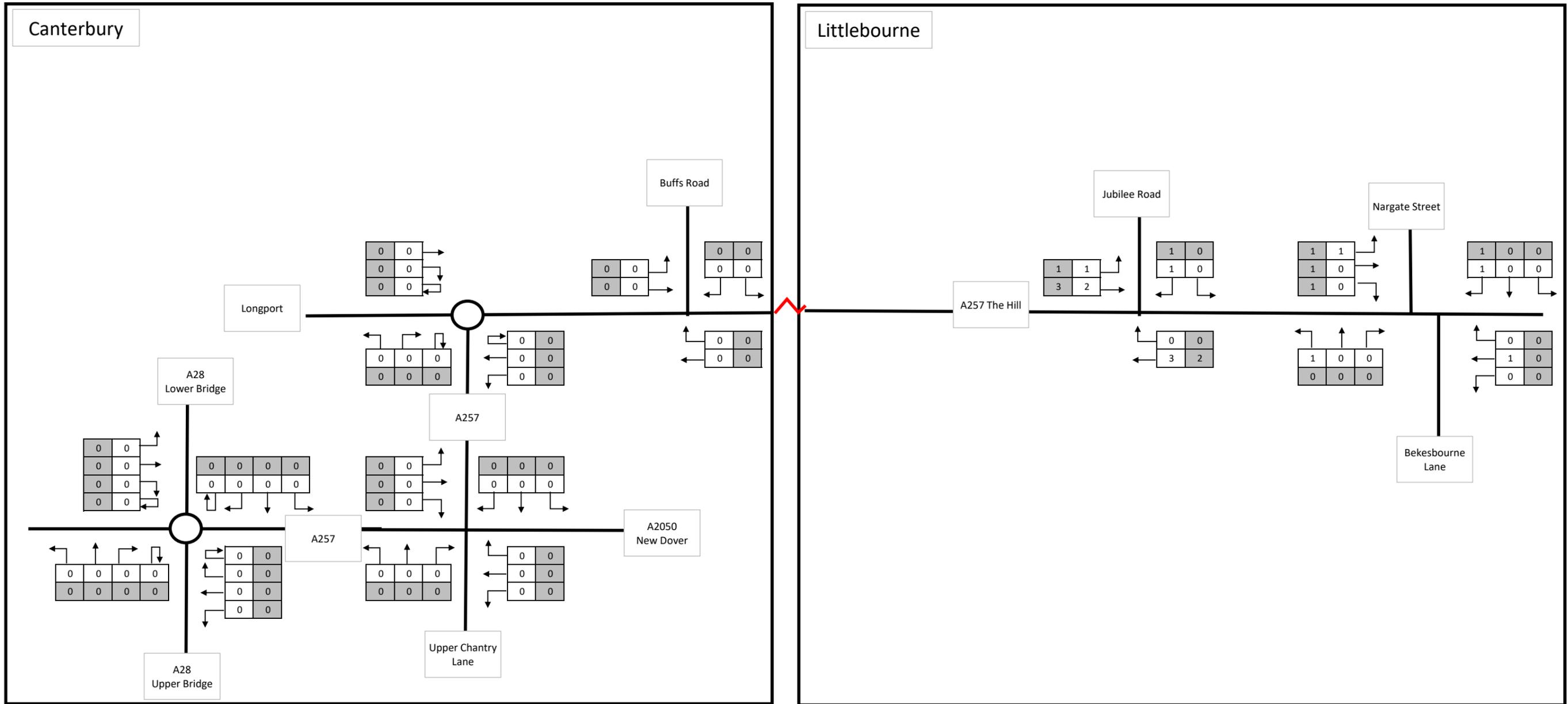
APPENDIX 6.L Proposed Local Centre Traffic Flows



<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.L - 1	
	Local Shop 'Pass-by' Traffic Flows	

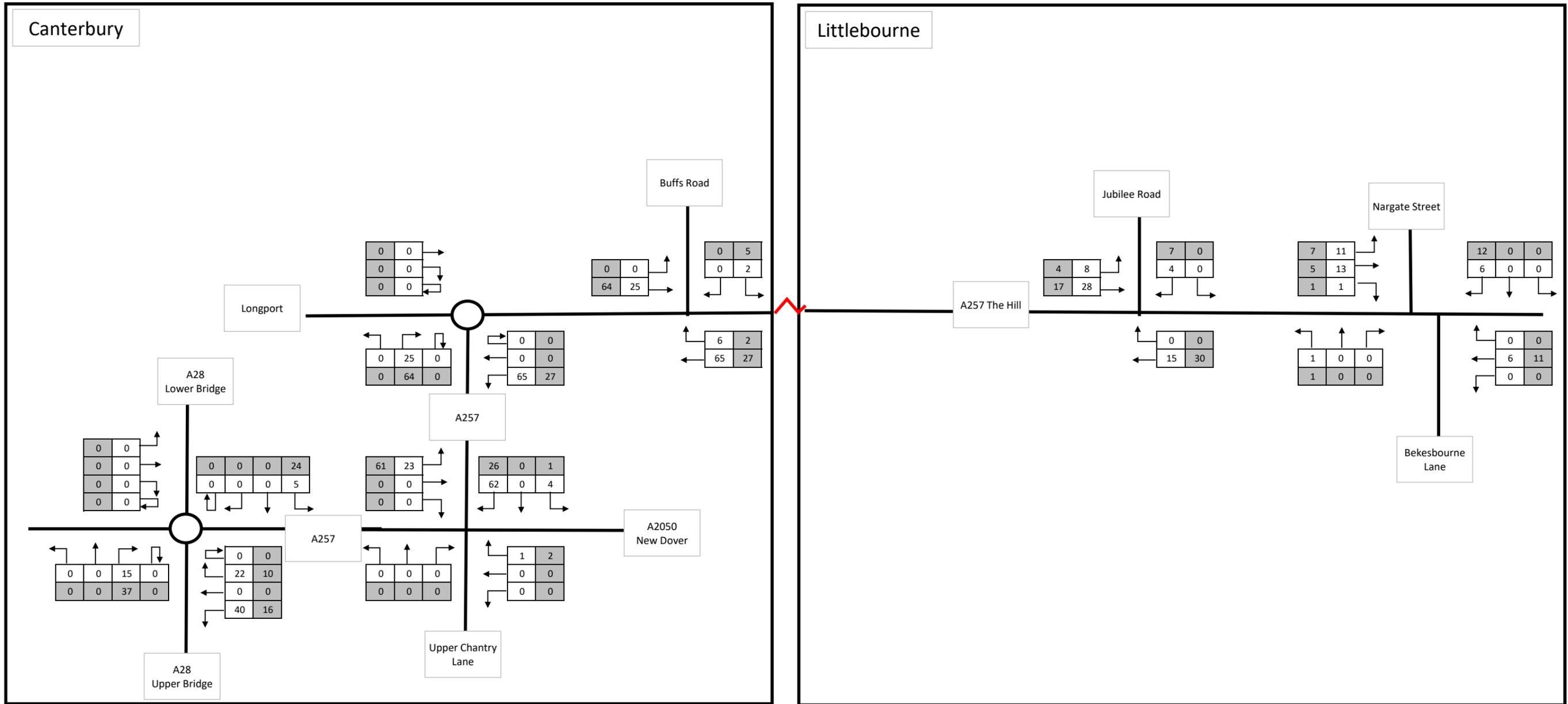


<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.L - 2	
	Local Shop 'New Trips' Traffic Flows	



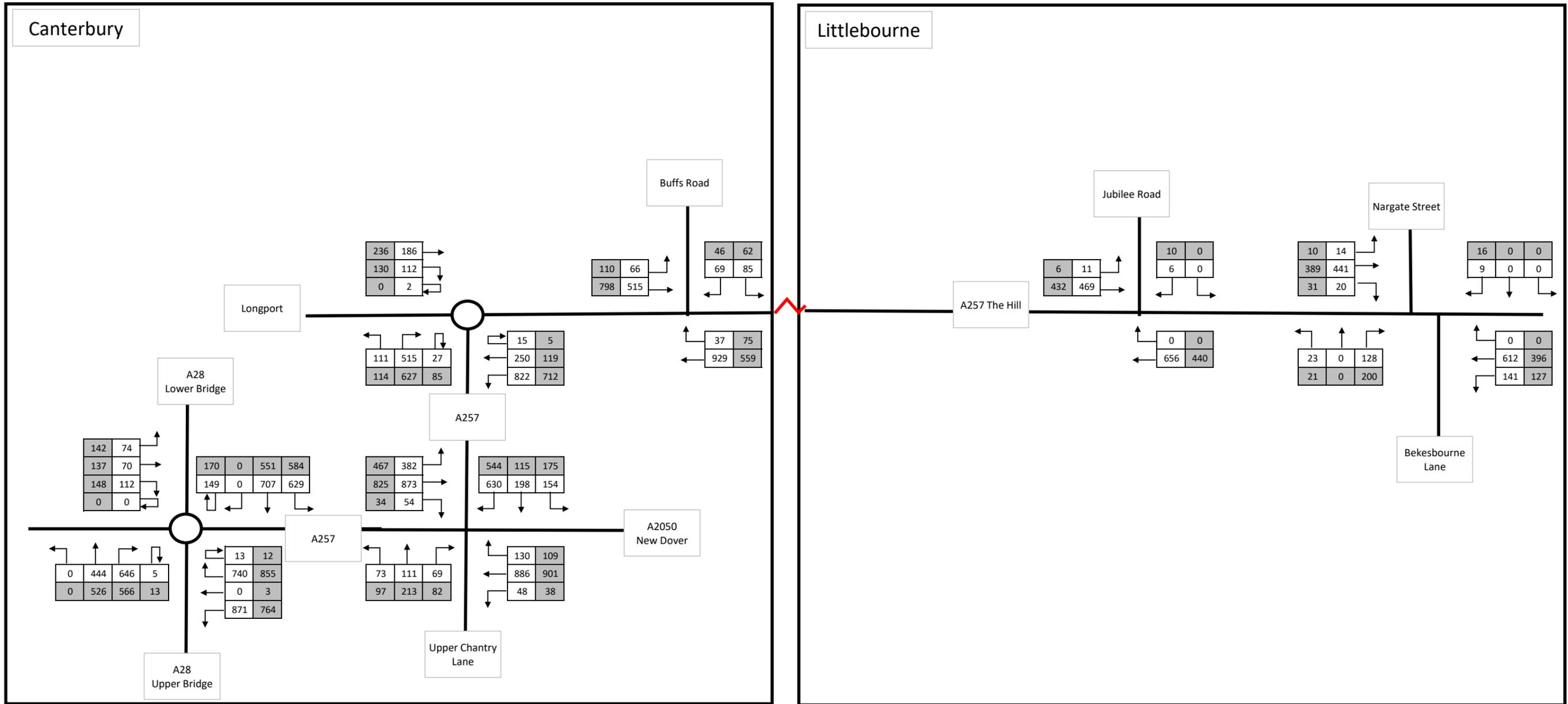
<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.L - 3	
	Work Hub/Meeting Units Traffic Flows	

APPENDIX 6.M Total Development Traffic Flows



<p>KEY</p> <p>$\begin{bmatrix} 123 \end{bmatrix}$ = AM Peak</p> <p>$\begin{bmatrix} 123 \end{bmatrix}$ = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.M	
	Total Proposed Development Traffic Flows	

APPENDIX 6.N 2045 Base + Committed + Development Traffic Flows



<p>KEY</p> <p>123 = AM Peak</p> <p>123 = PM PEAK</p>		Centurion House, 129 Deansgate, Manchester, M3 3WR Tel: 0161 830 2172 www.i-transport.co.uk
	Land South of the Hill, Littlebourne	
	Appendix 6.N	
	2045 Base + Committed + Development Traffic Flows	

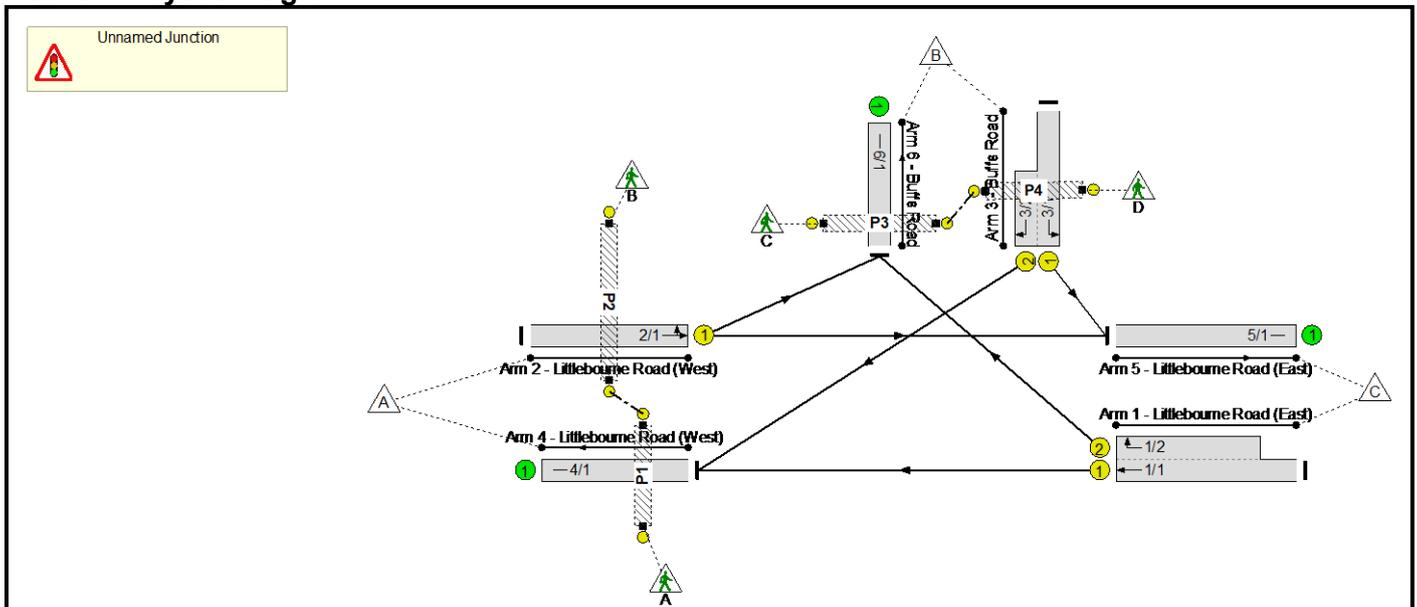
APPENDIX 7.A A257 / Buffs Road Capacity Assessment

Full Input Data And Results
Full Input Data And Results

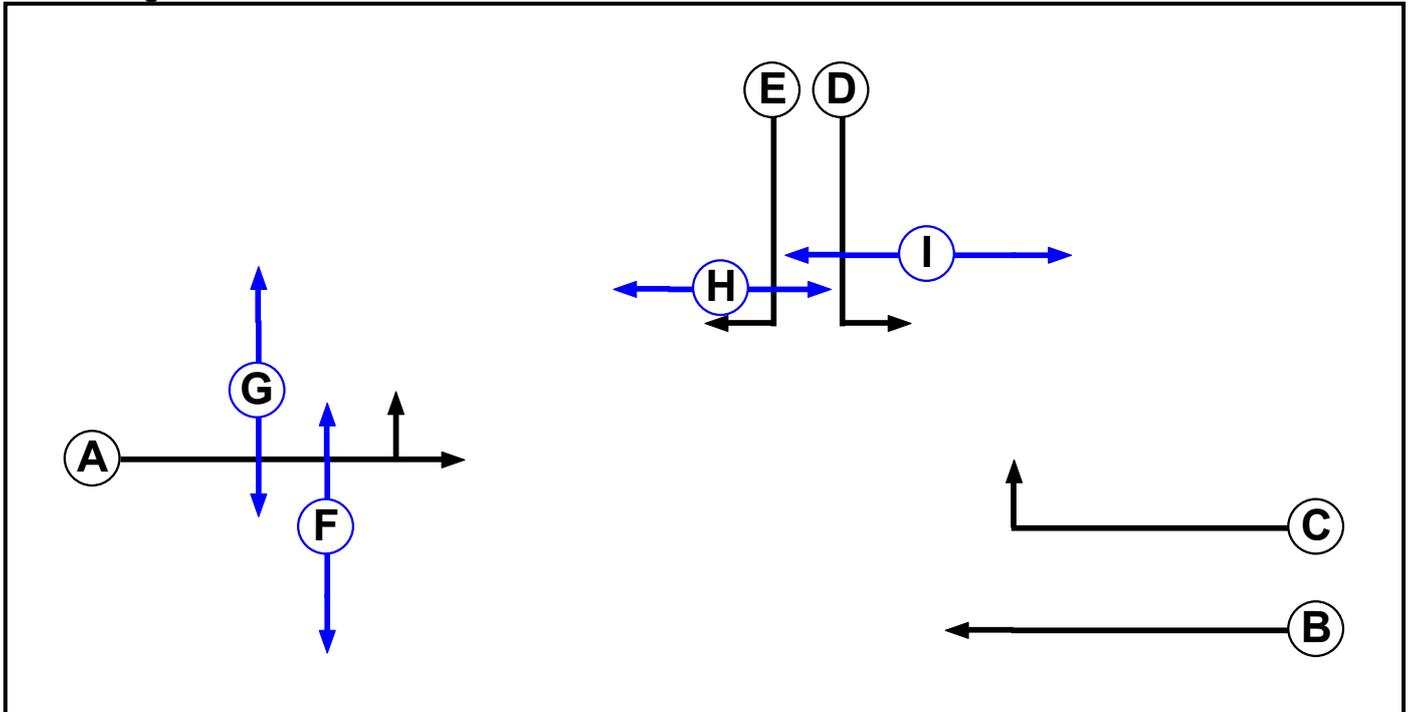
User and Project Details

Project:	Littlebourne
Title:	
Location:	
Client:	Gladman Developments
Date Started:	06/01/23
Additional detail:	
File name:	A257_Buffs Road.lsg3x
Author:	MS
Company:	i-Transport
Address:	Manchester

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Pedestrian		7	7

Full Input Data And Results

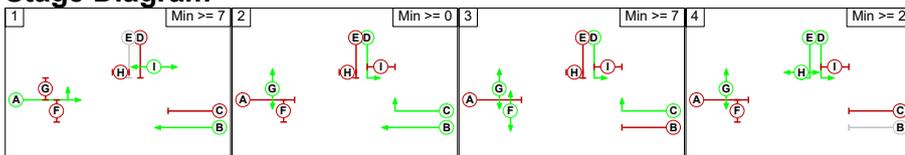
Phase Intergrens Matrix

		Starting Phase								
		A	B	C	D	E	F	G	H	I
Terminating Phase	A	-	-	5	6	-	-	5	-	-
	B	-	-	-	-	-	9	-	-	-
	C	-	-	-	-	5	-	-	10	-
	D	5	-	-	-	-	-	-	-	5
	E	-	-	-	-	-	12	-	-	-
	F	-	-	-	-	6	-	-	-	-
	G	5	-	-	-	-	-	-	-	-
	H	6	-	-	-	-	-	-	-	-
	I	-	-	-	7	-	-	-	-	-

Phases in Stage

Stage No.	Phases in Stage
1	A B I
2	B C D G
3	C D F G
4	D E G H

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1	-	7	9	7
	2	5	-	9	10
	3	5	2	-	10
	4	6	2	12	-

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction

There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Littlebourne Road (East))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Ahead	Inf
1/2 (Littlebourne Road (East))	U	C	2	3	12.0	Geom	-	3.00	0.00	Y	Arm 6 Right	13.00
2/1 (Littlebourne Road (West))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Left	11.00
3/1 (Buffs Road)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	12.28
3/2 (Buffs Road)	U	E	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 4 Right	14.43
4/1 (Littlebourne Road (West))	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Littlebourne Road (East))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Buffs Road)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2045 Base + Committed AM'	08:00	09:00	01:00	
2: '2045 Base + Committed PM'	17:00	18:00	01:00	
3: '2045 Base + Committed + Development AM'	08:00	09:00	01:00	
4: '2045 Base + Committed + Development PM'	17:00	18:00	01:00	

Scenario 1: '2045 Base + Committed AM' (FG1: '2045 Base + Committed AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	66	490	556
	B	69	0	83	152
	C	863	31	0	894
	Tot.	932	97	573	1602

Full Input Data And Results

Traffic Lane Flows

Scenario 1: 2045 Base + Committed AM	
Junction: Unnamed Junction	
1/1 (with short)	894(In) 863(Out)
1/2 (short)	31
2/1	556
3/1 (with short)	152(In) 83(Out)
3/2 (short)	69
4/1	932
5/1	573
6/1	97

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Littlebourne Road (East))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
1/2 (Littlebourne Road (East))	3.00	0.00	Y	Arm 6 Right	13.00	100.0 %	1717	1717
2/1 (Littlebourne Road (West))	3.00	0.00	Y	Arm 5 Ahead	Inf	88.1 %	1884	1884
				Arm 6 Left	11.00	11.9 %		
3/1 (Buffs Road)	3.00	0.00	Y	Arm 5 Left	12.28	100.0 %	1707	1707
3/2 (Buffs Road)	3.00	0.00	Y	Arm 4 Right	14.43	100.0 %	1735	1735
4/1 (Littlebourne Road (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Littlebourne Road (East) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Buffs Road Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2045 Base + Committed PM' (FG2: '2045 Base + Committed PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	110	734	844
	B	46	0	57	103
	C	532	72	0	604
	Tot.	578	182	791	1551

Traffic Lane Flows

Lane	Scenario 2: 2045 Base + Committed PM
Junction: Unnamed Junction	
1/1 (with short)	604(In) 532(Out)
1/2 (short)	72
2/1	844
3/1 (with short)	103(In) 57(Out)
3/2 (short)	46
4/1	578
5/1	791
6/1	182

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Littlebourne Road (East))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
1/2 (Littlebourne Road (East))	3.00	0.00	Y	Arm 6 Right	13.00	100.0 %	1717	1717
2/1 (Littlebourne Road (West))	3.00	0.00	Y	Arm 5 Ahead	Inf	87.0 %	1882	1882
3/1 (Buffs Road)	3.00	0.00	Y	Arm 6 Left	11.00	13.0 %		
3/1 (Buffs Road)	3.00	0.00	Y	Arm 5 Left	12.28	100.0 %	1707	1707
3/2 (Buffs Road)	3.00	0.00	Y	Arm 4 Right	14.43	100.0 %	1735	1735
4/1 (Littlebourne Road (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Littlebourne Road (East) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Buffs Road Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2045 Base + Committed + Development AM' (FG3: '2045 Base + Committed + Development AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	66	515	581
	B	69	0	85	154
	C	929	37	0	966
	Tot.	998	103	600	1701

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2045 Base + Committed + Development AM
Junction: Unnamed Junction	
1/1 (with short)	966(In) 929(Out)
1/2 (short)	37
2/1	581
3/1 (with short)	154(In) 85(Out)
3/2 (short)	69
4/1	998
5/1	600
6/1	103

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Littlebourne Road (East))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
1/2 (Littlebourne Road (East))	3.00	0.00	Y	Arm 6 Right	13.00	100.0 %	1717	1717
2/1 (Littlebourne Road (West))	3.00	0.00	Y	Arm 5 Ahead	Inf	88.6 %	1886	1886
				Arm 6 Left	11.00	11.4 %		
3/1 (Buffs Road)	3.00	0.00	Y	Arm 5 Left	12.28	100.0 %	1707	1707
3/2 (Buffs Road)	3.00	0.00	Y	Arm 4 Right	14.43	100.0 %	1735	1735
4/1 (Littlebourne Road (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Littlebourne Road (East) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Buffs Road Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2045 Base + Committed + Development PM' (FG4: '2045 Base + Committed + Development PM', Plan

Full Input Data And Results
 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	110	798	908
	B	46	0	62	108
	C	559	75	0	634
	Tot.	605	185	860	1650

Traffic Lane Flows

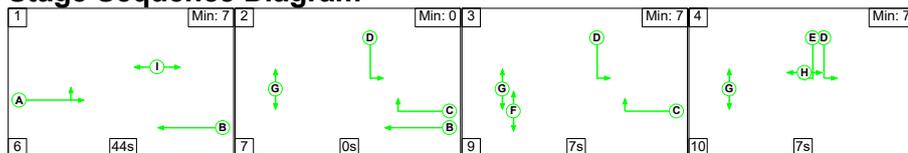
Lane	Scenario 4: 2045 Base + Committed + Development PM
Junction: Unnamed Junction	
1/1 (with short)	634(In) 559(Out)
1/2 (short)	75
2/1	908
3/1 (with short)	108(In) 62(Out)
3/2 (short)	46
4/1	605
5/1	860
6/1	185

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Littlebourne Road (East))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
1/2 (Littlebourne Road (East))	3.00	0.00	Y	Arm 6 Right	13.00	100.0 %	1717	1717
2/1 (Littlebourne Road (West))	3.00	0.00	Y	Arm 5 Ahead	Inf	87.9 %	1884	1884
3/1 (Buffs Road)	3.00	0.00	Y	Arm 5 Left	12.28	100.0 %	1707	1707
3/2 (Buffs Road)	3.00	0.00	Y	Arm 4 Right	14.43	100.0 %	1735	1735
4/1 (Littlebourne Road (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Littlebourne Road (East) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Buffs Road Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2045 Base + Committed AM' (FG1: '2045 Base + Committed AM', Plan 1: 'Network Control Plan 1')

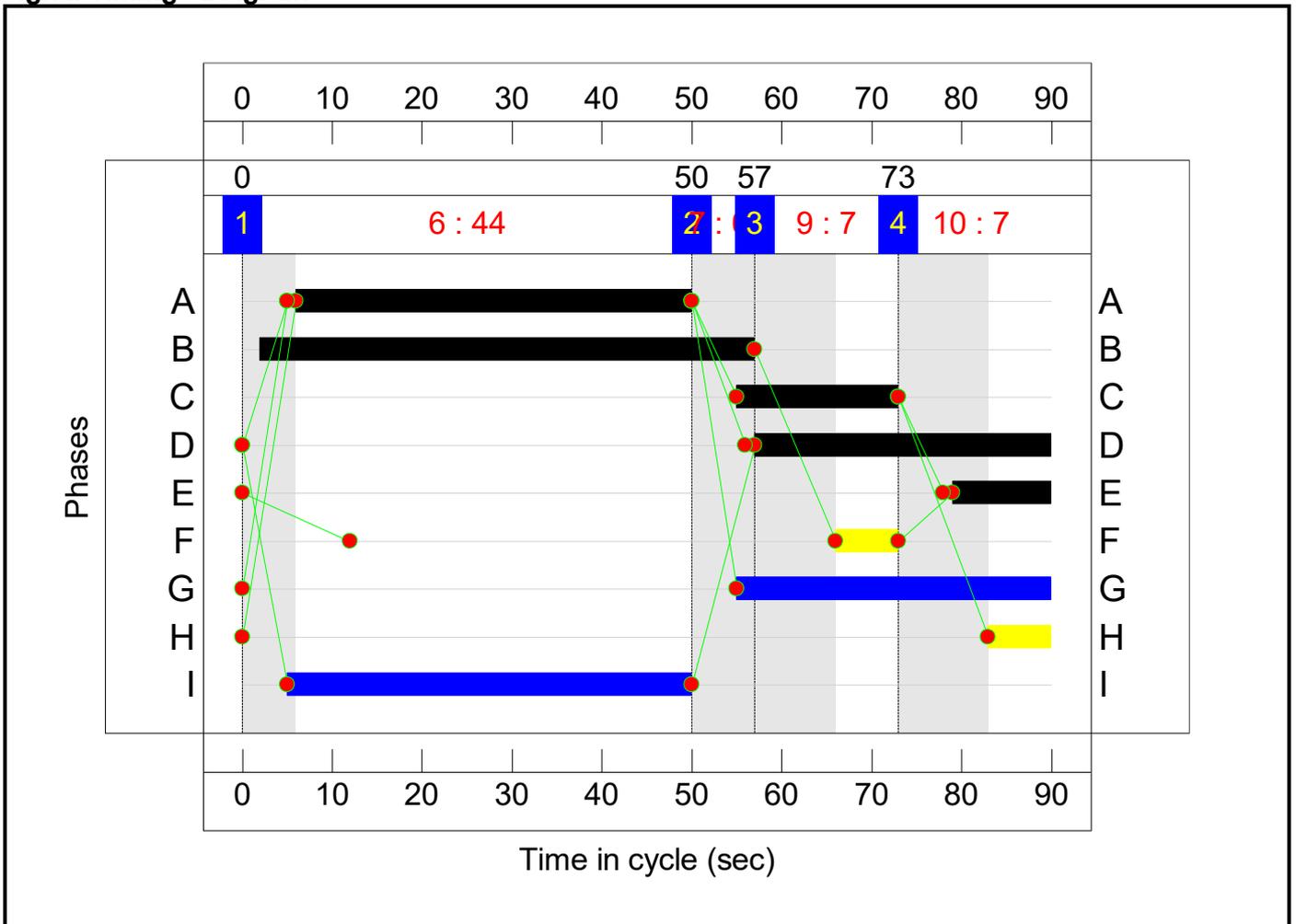
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	44	0	7	7
Change Point	0	50	57	73

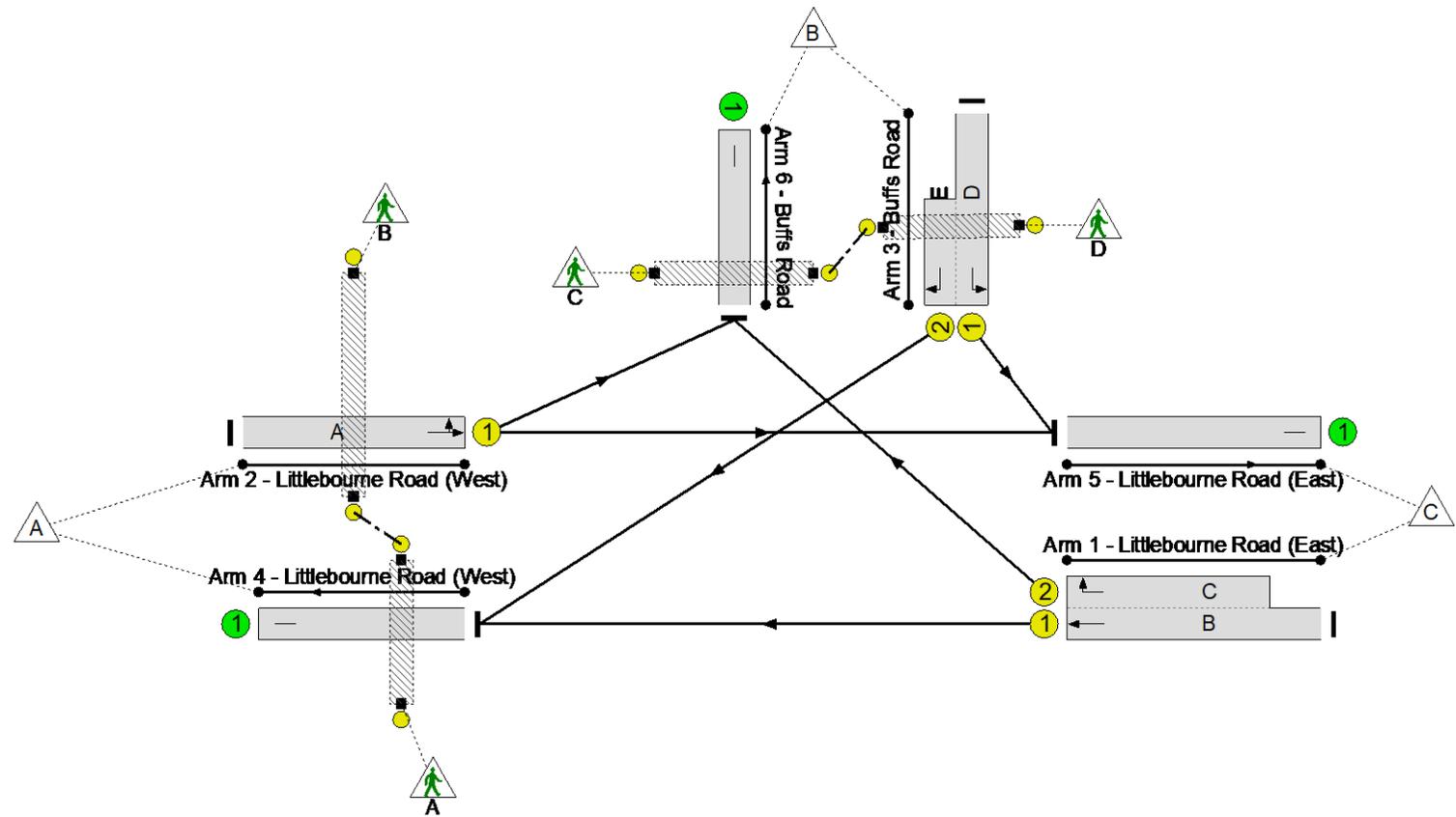
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 20.5 %
Total Traffic Delay: 9.0 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	74.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	74.7%
1/1+1/2	Littlebourne Road (East) Ahead Right	U	N/A	N/A	B C		1	55:18	-	894	1915:1717	1155+41	74.7 : 74.7%
2/1	Littlebourne Road (West) Ahead Left	U	N/A	N/A	A		1	44	-	556	1884	942	59.0%
3/1+3/2	Bufs Road Right Left	U	N/A	N/A	D E		1	33:11	-	152	1707:1735	261+217	31.7 : 31.7%
4/1	Littlebourne Road (West)	U	N/A	N/A	-		-	-	-	932	Inf	Inf	0.0%
5/1	Littlebourne Road (East)	U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
6/1	Bufs Road	U	N/A	N/A	-		-	-	-	97	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	5600	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	35	-	0	-	28000	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	7	-	0	-	5600	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	45	-	0	-	36000	0.0%

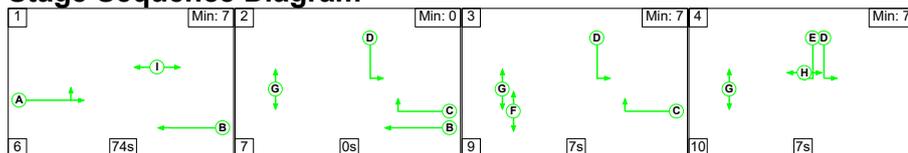
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	6.6	2.4	0.0	9.0	-	-	-	-
Unnamed Junction	-	-	0	0	0	6.6	2.4	0.0	9.0	-	-	-	-
1/1+1/2	894	894	-	-	-	3.1	1.5	-	4.5	18.2	15.2	1.5	16.7
2/1	556	556	-	-	-	2.5	0.7	-	3.2	20.6	9.7	0.7	10.4
3/1+3/2	152	152	-	-	-	1.1	0.2	-	1.3	31.5	1.6	0.2	1.8
4/1	932	932	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	97	97	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1 PRC for Signalled Lanes (%): 20.5 Total Delay for Signalled Lanes (pcuHr): 9.04 Cycle Time (s): 90 PRC Over All Lanes (%): 20.5 Total Delay Over All Lanes(pcuHr): 9.04													

Full Input Data And Results

Scenario 2: '2045 Base + Committed PM' (FG2: '2045 Base + Committed PM', Plan 1: 'Network Control Plan 1')

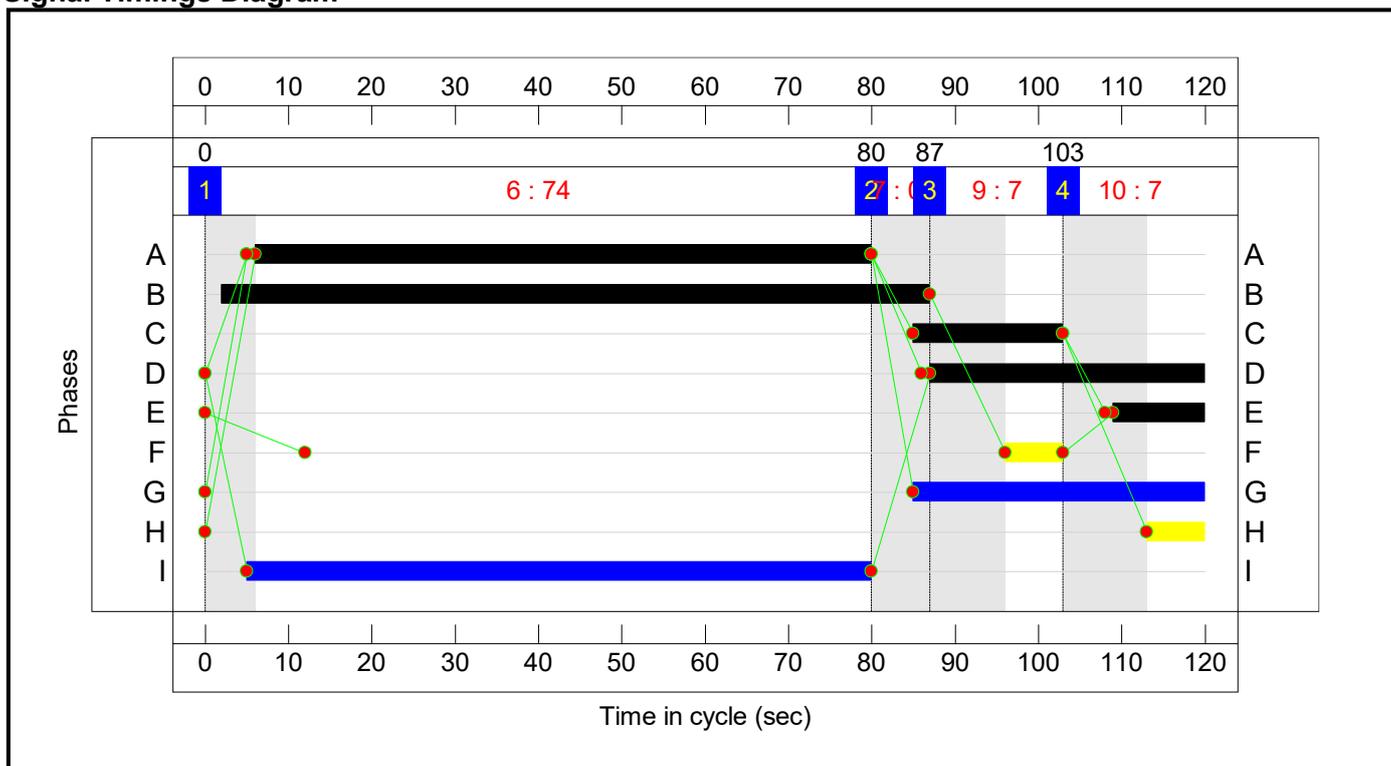
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	74	0	7	7
Change Point	0	80	87	103

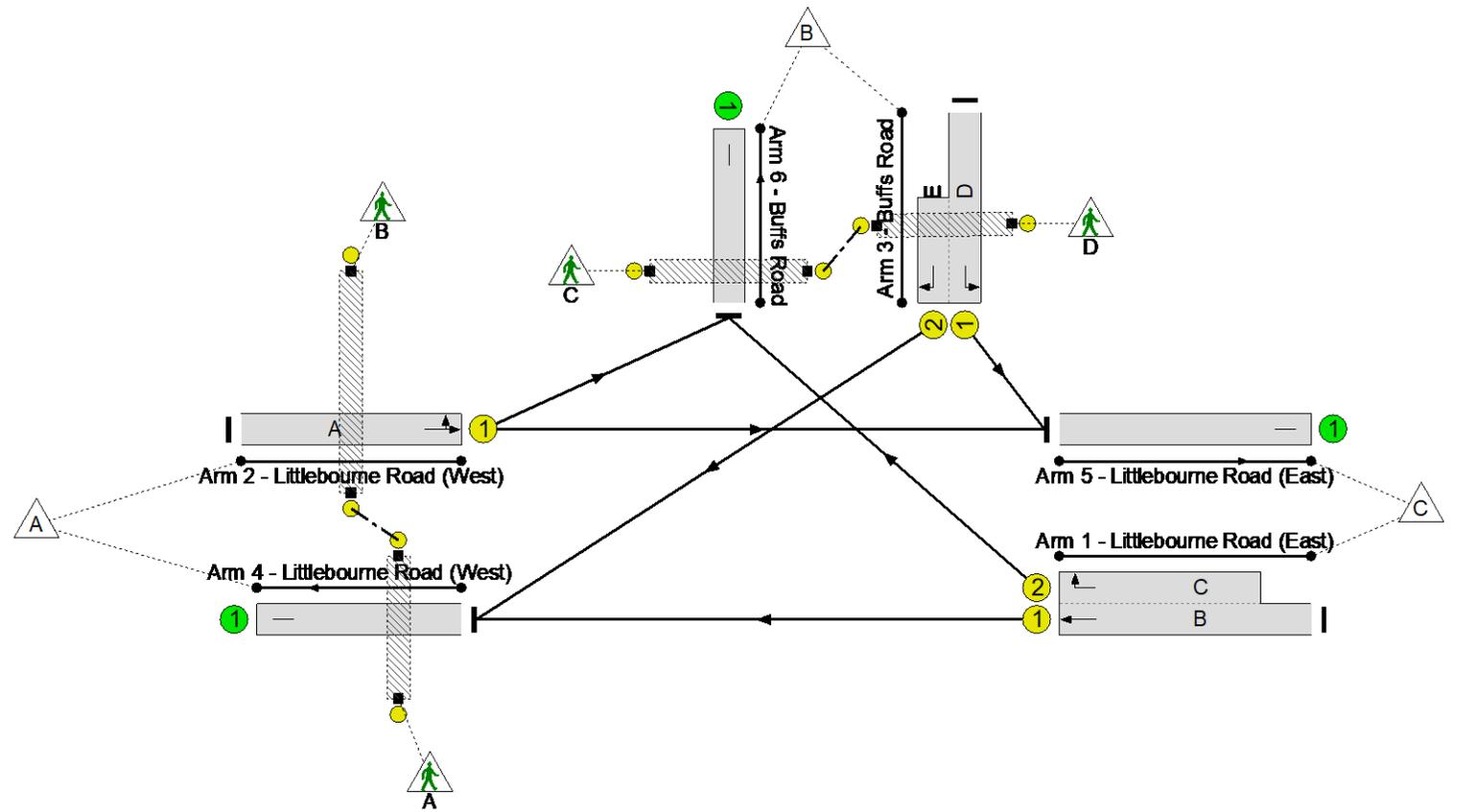
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 25.4 %
Total Traffic Delay: 8.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

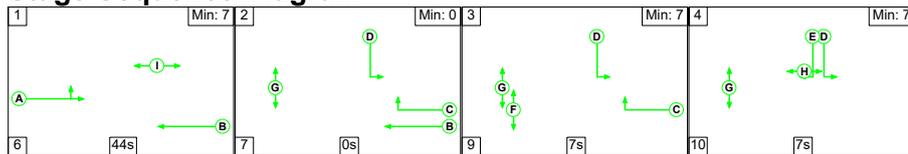
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	71.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	71.8%
1/1+1/2	Littlebourne Road (East) Ahead Right	U	N/A	N/A	B C		1	85:18	-	604	1915:1717	1234+167	43.1 : 43.1%
2/1	Littlebourne Road (West) Ahead Left	U	N/A	N/A	A		1	74	-	844	1882	1176	71.8%
3/1+3/2	Bufs Road Right Left	U	N/A	N/A	D E		1	33:11	-	103	1707:1735	202+163	28.3 : 28.3%
4/1	Littlebourne Road (West)	U	N/A	N/A	-		-	-	-	578	Inf	Inf	0.0%
5/1	Littlebourne Road (East)	U	N/A	N/A	-		-	-	-	791	Inf	Inf	0.0%
6/1	Bufs Road	U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	4200	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	35	-	0	-	21000	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	7	-	0	-	4200	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	75	-	0	-	45000	0.0%

Full Input Data And Results

Scenario 3: '2045 Base + Committed + Development AM' (FG3: '2045 Base + Committed + Development AM', Plan 1: 'Network Control Plan 1')

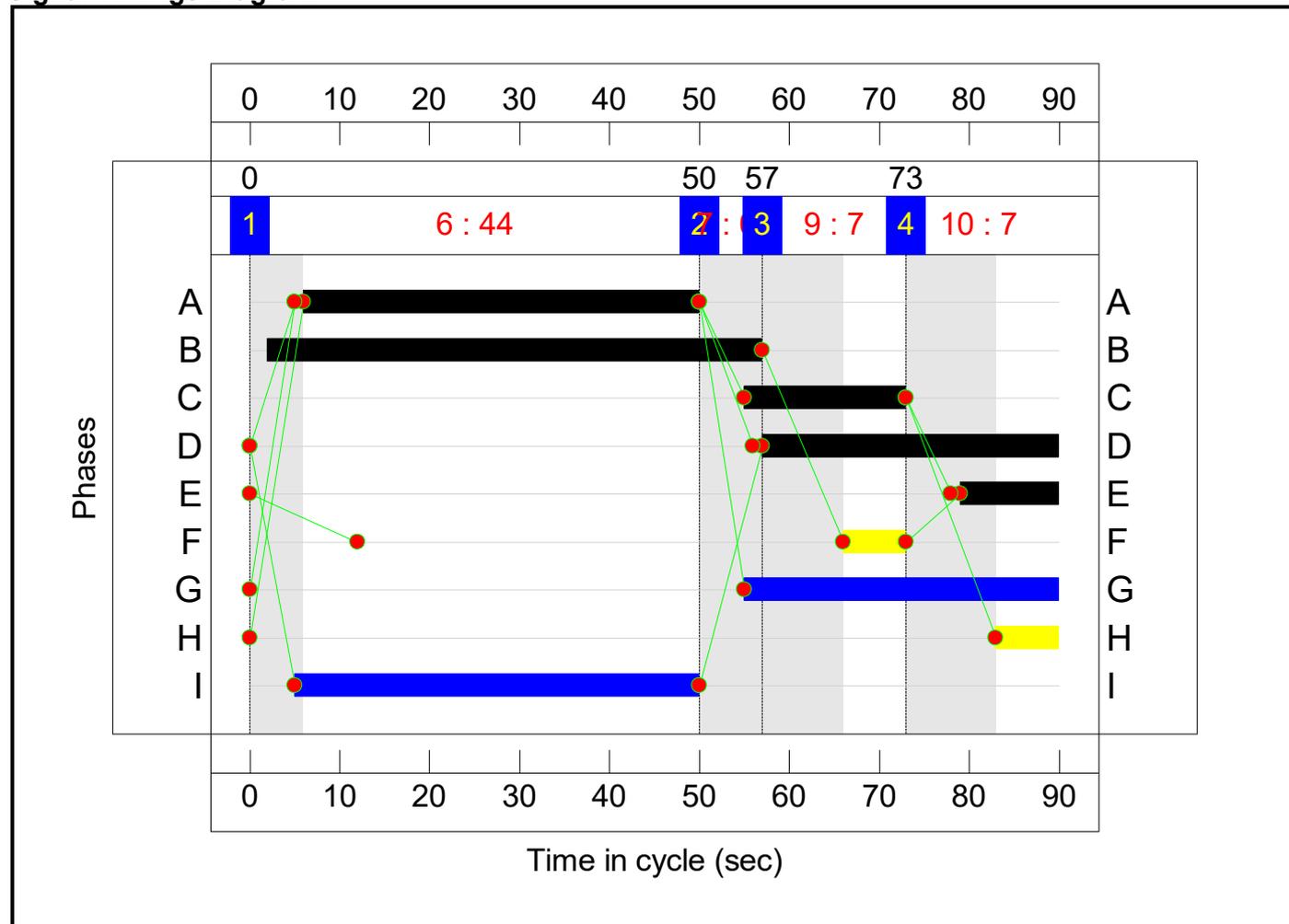
Stage Sequence Diagram



Stage Timings

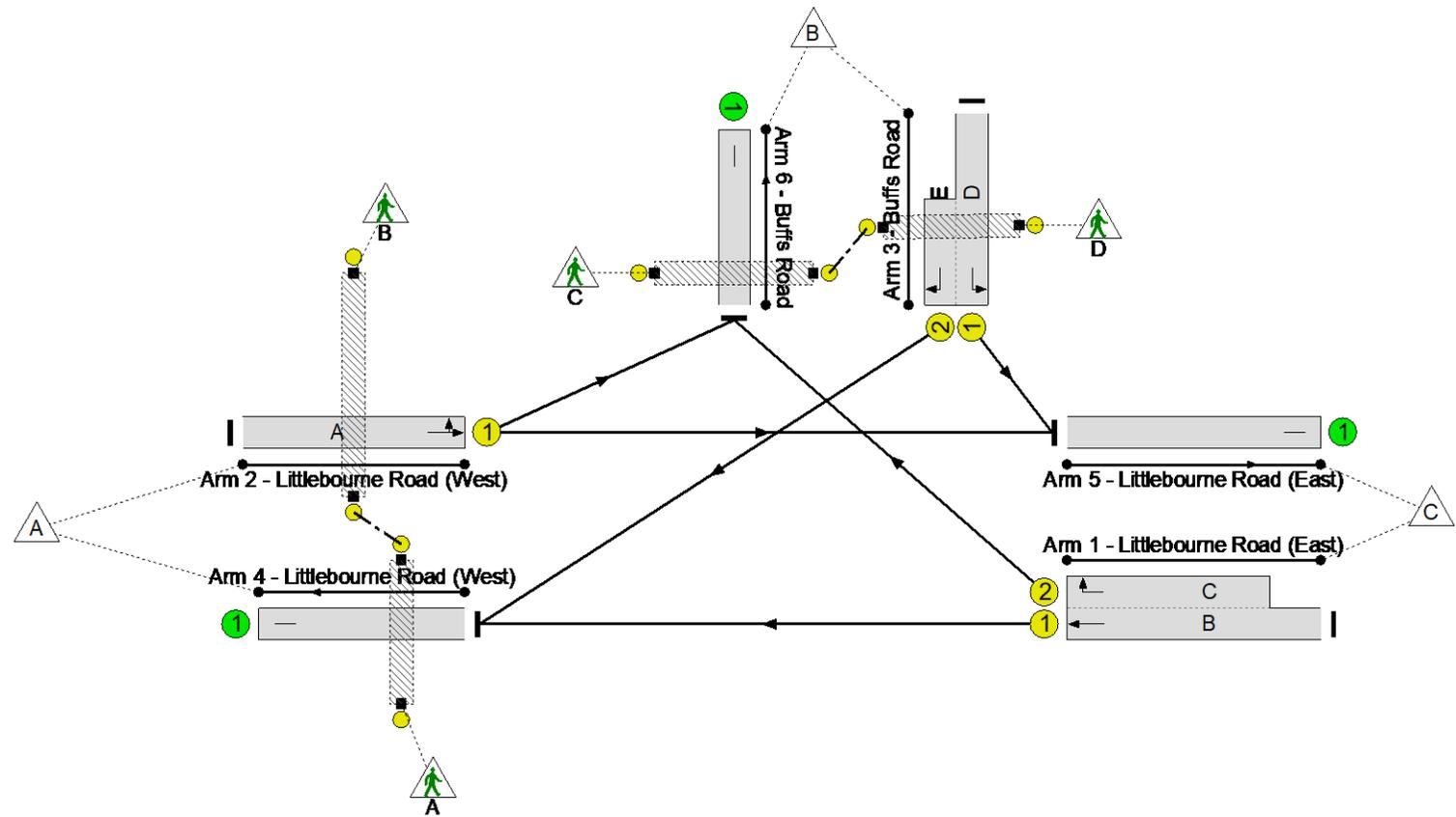
Stage	1	2	3	4
Duration	44	0	7	7
Change Point	0	50	57	73

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Unnamed Junction
PRC: 11.6 %
Total Traffic Delay: 10.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

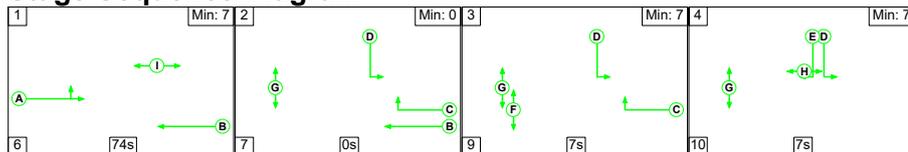
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	80.6%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	80.6%
1/1+1/2	Littlebourne Road (East) Ahead Right	U	N/A	N/A	B C		1	55:18	-	966	1915:1717	1152+46	80.6 : 80.6%
2/1	Littlebourne Road (West) Ahead Left	U	N/A	N/A	A		1	44	-	581	1886	943	61.6%
3/1+3/2	Bufs Road Right Left	U	N/A	N/A	D E		1	33:11	-	154	1707:1735	267+217	31.8 : 31.8%
4/1	Littlebourne Road (West)	U	N/A	N/A	-		-	-	-	998	Inf	Inf	0.0%
5/1	Littlebourne Road (East)	U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
6/1	Bufs Road	U	N/A	N/A	-		-	-	-	103	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	5600	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	35	-	0	-	28000	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	7	-	0	-	5600	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	45	-	0	-	36000	0.0%

Full Input Data And Results

Scenario 4: '2045 Base + Committed + Development PM' (FG4: '2045 Base + Committed + Development PM', Plan 1: 'Network Control Plan 1')

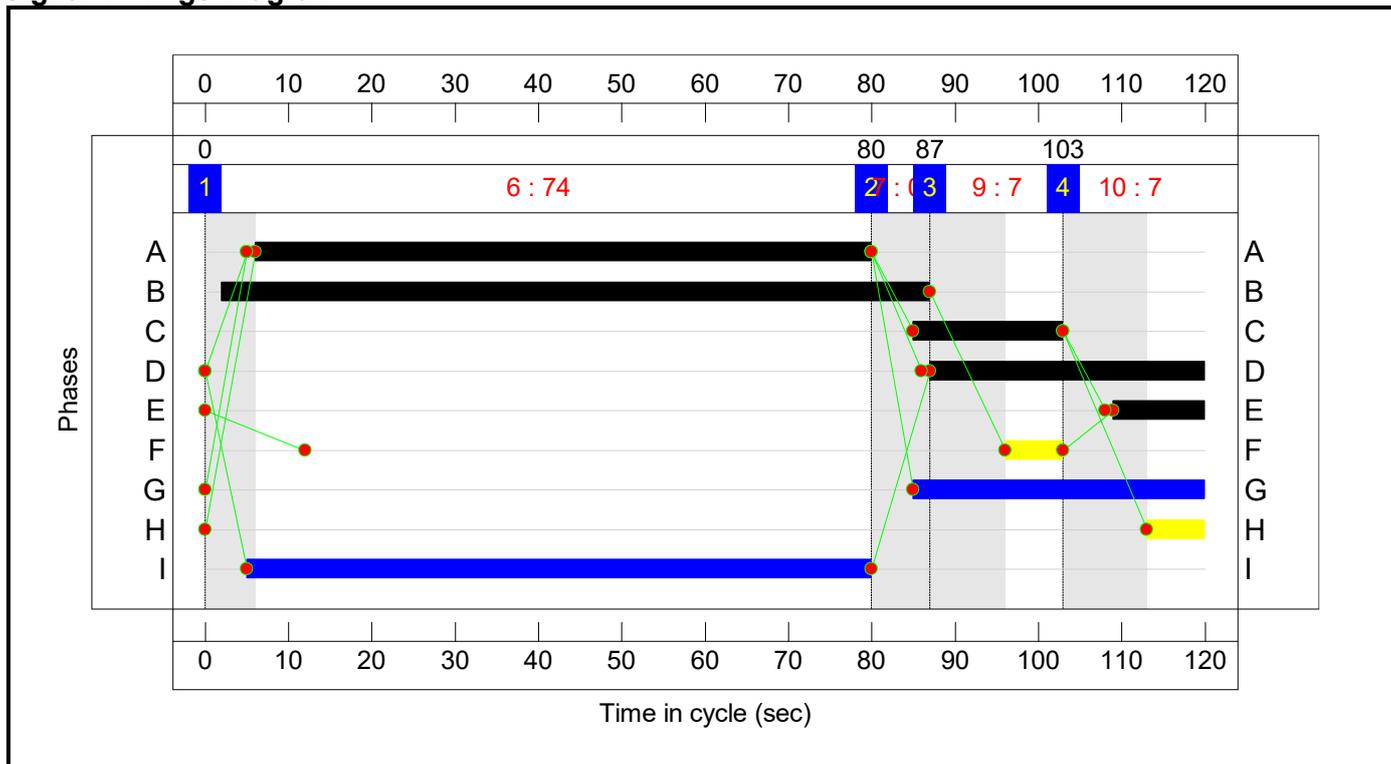
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	74	0	7	7
Change Point	0	80	87	103

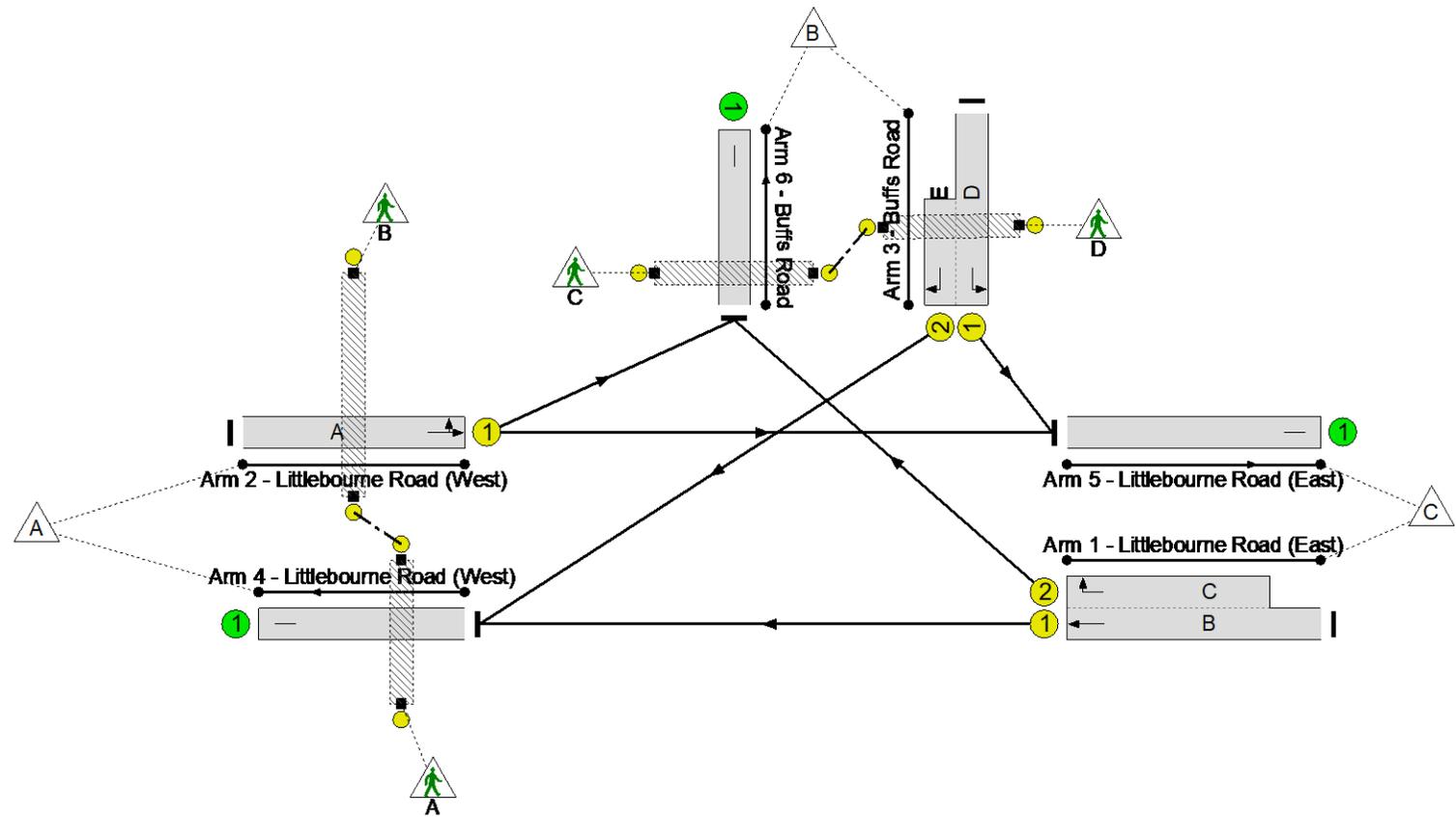
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 16.7 %
Total Traffic Delay: 9.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	77.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	77.1%
1/1+1/2	Littlebourne Road (East) Ahead Right	U	N/A	N/A	B C		1	85:18	-	634	1915:1717	1235+166	45.3 : 45.3%
2/1	Littlebourne Road (West) Ahead Left	U	N/A	N/A	A		1	74	-	908	1884	1177	77.1%
3/1+3/2	Bufs Road Right Left	U	N/A	N/A	D E		1	33:11	-	108	1707:1735	219+162	28.4 : 28.4%
4/1	Littlebourne Road (West)	U	N/A	N/A	-		-	-	-	605	Inf	Inf	0.0%
5/1	Littlebourne Road (East)	U	N/A	N/A	-		-	-	-	860	Inf	Inf	0.0%
6/1	Bufs Road	U	N/A	N/A	-		-	-	-	185	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	4200	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	G		1	35	-	0	-	21000	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	H		1	7	-	0	-	4200	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	75	-	0	-	45000	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	7.3	2.3	0.0	9.6	-	-	-	-
Unnamed Junction	-	-	0	0	0	7.3	2.3	0.0	9.6	-	-	-	-
1/1+1/2	634	634	-	-	-	2.0	0.4	-	2.4	13.6	7.5	0.4	7.9
2/1	908	908	-	-	-	4.1	1.7	-	5.8	22.9	21.7	1.7	23.4
3/1+3/2	108	108	-	-	-	1.2	0.2	-	1.4	46.2	1.5	0.2	1.7
4/1	605	605	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	860	860	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
C1 PRC for Signalled Lanes (%): 16.7 Total Delay for Signalled Lanes (pcuHr): 9.55 Cycle Time (s): 120 PRC Over All Lanes (%): 16.7 Total Delay Over All Lanes(pcuHr): 9.55													

APPENDIX 7.B Proposed Site Access Capacity Assessments

Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.0.4.1693 © Copyright TRL Software Limited, 2021
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: A257 The Hill Site Access (300 Dwellings).j10
Path: M:\Projects\16283ITM - Land South of The Hill, Littlebourne\Tech\Junction Assessments\Picady
Report generation date: 04/01/2023 16:28:55

- »Proposed - 2045 Base + Comm + Dev, AM
- »Proposed - 2045 Base + Comm + Dev, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
Proposed - 2045 Base + Comm + Dev												
Stream B-AC	D1	1.3	22.69	0.57	C	4.88	D2	0.7	13.17	0.41	B	4.17
Stream C-AB		1.6	8.42	0.48	A			1.5	8.20	0.49	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	Proposed Site Access
Location	A257 The Hill
Site number	
Date	04/01/2023
Version	
Status	Proposed
Identifier	
Client	Gladman
Jobnumber	ITM16283
Enumerator	I-TRANSPORT\jonwilkinson
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2045 Base + Comm + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2045 Base + Comm + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Proposed	✓	100.000	100.000

Proposed - 2045 Base + Comm + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.88	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.88	A

Arms

Arms

Arm	Name	Description	Arm type
A	A257 East		Major
B	Site Access		Minor
C	A257 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.10			170.0	✓	0.00

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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.25	25	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	505	0.096	0.242	0.152	0.345
B-C	649	0.103	0.261	-	-
C-B	672	0.271	0.271	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)	Run automatically
D1	2045 Base + Comm + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	662	100.000
B		ONE HOUR	✓	193	100.000
C		ONE HOUR	✓	595	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	19	643
	B	36	0	157
	C	444	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.57	22.69	1.3	C	177	266
C-AB	0.48	8.42	1.6	A	293	440
C-A					253	379
A-B					17	26
A-C					590	885

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	145	36	457	0.318	143	0.0	0.5	11.424	B
C-AB	201	50	772	0.260	198	0.0	0.5	6.269	A
C-A	247	62			247				
A-B	14	4			14				
A-C	484	121			484				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	43	422	0.411	173	0.5	0.7	14.363	B
C-AB	273	68	798	0.343	272	0.5	0.8	6.867	A
C-A	262	65			262				
A-B	17	4			17				
A-C	578	145			578				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	212	53	371	0.573	210	0.7	1.3	22.047	C
C-AB	404	101	836	0.483	401	0.8	1.6	8.310	A
C-A	251	63			251				
A-B	21	5			21				
A-C	708	177			708				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	212	53	371	0.573	212	1.3	1.3	22.690	C
C-AB	405	101	838	0.484	405	1.6	1.6	8.424	A
C-A	250	62			250				
A-B	21	5			21				
A-C	708	177			708				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	174	43	422	0.411	176	1.3	0.7	14.771	B
C-AB	275	69	800	0.344	278	1.6	0.9	6.973	A
C-A	260	65			260				
A-B	17	4			17				
A-C	578	145			578				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	145	36	456	0.318	146	0.7	0.5	11.641	B
C-AB	202	50	773	0.261	203	0.9	0.6	6.346	A
C-A	246	62			246				
A-B	14	4			14				
A-C	484	121			484				

Proposed - 2045 Base + Comm + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.17	A

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)	Run automatically
D2	2045 Base + Comm + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	450	100.000
B		ONE HOUR	✓	175	100.000
C		ONE HOUR	✓	593	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	413
	B	21	0	154
	C	417	176	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.41	13.17	0.7	B	161	241
C-AB	0.49	8.20	1.5	A	311	466
C-A					234	350
A-B					34	51
A-C					379	568

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	132	33	522	0.253	130	0.0	0.3	9.168	A
C-AB	219	55	793	0.276	217	0.0	0.6	6.238	A
C-A	227	57			227				
A-B	28	7			28				
A-C	311	78			311				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	39	499	0.315	157	0.3	0.5	10.502	B
C-AB	293	73	821	0.356	291	0.6	0.8	6.809	A
C-A	241	60			241				
A-B	33	8			33				
A-C	371	93			371				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	466	0.413	192	0.5	0.7	13.071	B
C-AB	418	104	861	0.485	415	0.8	1.5	8.106	A
C-A	235	59			235				
A-B	41	10			41				
A-C	455	114			455				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	193	48	466	0.414	193	0.7	0.7	13.167	B
C-AB	419	105	862	0.486	419	1.5	1.5	8.200	A
C-A	234	58			234				
A-B	41	10			41				
A-C	455	114			455				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	39	499	0.315	158	0.7	0.5	10.596	B
C-AB	294	73	823	0.357	296	1.5	0.9	6.904	A
C-A	239	60			239				
A-B	33	8			33				
A-C	371	93			371				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	132	33	522	0.253	132	0.5	0.3	9.261	A
C-AB	221	55	794	0.278	222	0.9	0.6	6.314	A
C-A	226	56			226				
A-B	28	7			28				
A-C	311	78			311				

Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.0.4.1693 © Copyright TRL Software Limited, 2021
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Bekesbourne Lane Site Access (300 Dwellings).j10
Path: M:\Projects\16283ITM - Land South of The Hill, Littlebourne\Tech\Junction Assessments\Picady
Report generation date: 04/01/2023 16:28:16

- »Proposed - 2045 Base + Comm + Dev, AM
- »Proposed - 2045 Base + Comm + Dev, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
Proposed - 2045 Base + Comm + Dev												
Stream B-AC	D1	0.5	12.24	0.32	B	3.00	D2	0.4	12.17	0.28	B	2.10
Stream C-AB		0.0	0.00	0.00	A			0.0	0.00	0.00	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	Proposed Site Access
Location	Bekesbourne Lane
Site number	
Date	04/01/2023
Version	
Status	Proposed
Identifier	
Client	Gladman
Jobnumber	ITM16283
Enumerator	I-TRANSPORT\jonwilkinson
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2045 Base + Comm + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D2	2045 Base + Comm + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Proposed	✓	100.000	100.000

Proposed - 2045 Base + Comm + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bekesbourne Lane Access	T-Junction	Two-way	Two-way	Two-way		3.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.00	A

Arms

Arms

Arm	Name	Description	Arm type
A	Bekesbourne Lane (South)		Major
B	Site Access		Minor
C	Bekesbourne Lane (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	4.30			200.0	✓	0.00

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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.25	30	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	515	0.101	0.254	0.160	0.363
B-C	659	0.108	0.274	-	-
C-B	690	0.287	0.287	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)	Run automatically
D1	2045 Base + Comm + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	233	100.000
B		ONE HOUR	✓	128	100.000
C		ONE HOUR	✓	161	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	83	150
	B	128	0	0
	C	161	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.32	12.24	0.5	B	117	176
C-AB	0.00	0.00	0.0	A	0	0
C-A					148	222
A-B					76	114
A-C					138	206

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	460	0.209	95	0.0	0.3	9.840	A
C-AB	0	0	639	0.000	0	0.0	0.0	0.000	A
C-A	121	30			121				
A-B	62	16			62				
A-C	113	28			113				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	115	29	450	0.256	115	0.3	0.3	10.740	B
C-AB	0	0	630	0.000	0	0.0	0.0	0.000	A
C-A	145	36			145				
A-B	75	19			75				
A-C	135	34			135				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	141	35	435	0.324	140	0.3	0.5	12.197	B
C-AB	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	177	44			177				
A-B	91	23			91				
A-C	165	41			165				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	141	35	435	0.324	141	0.5	0.5	12.237	B
C-AB	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	177	44			177				
A-B	91	23			91				
A-C	165	41			165				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	115	29	450	0.256	116	0.5	0.3	10.794	B
C-AB	0	0	630	0.000	0	0.0	0.0	0.000	A
C-A	145	36			145				
A-B	75	19			75				
A-C	135	34			135				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	96	24	460	0.209	97	0.3	0.3	9.914	A
C-AB	0	0	639	0.000	0	0.0	0.0	0.000	A
C-A	121	30			121				
A-B	62	16			62				
A-C	113	28			113				

Proposed - 2045 Base + Comm + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Bekesbourne Lane Access	T-Junction	Two-way	Two-way	Two-way		2.10	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.10	A

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)	Run automatically
D2	2045 Base + Comm + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	346	100.000
B		ONE HOUR	✓	105	100.000
C		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	126	220
	B	105	0	0
	C	157	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.28	12.17	0.4	B	96	145
C-AB	0.00	0.00	0.0	A	0	0
C-A					144	216
A-B					116	173
A-C					202	303

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	79	20	444	0.178	78	0.0	0.2	9.819	A
C-AB	0	0	615	0.000	0	0.0	0.0	0.000	A
C-A	118	30			118				
A-B	95	24			95				
A-C	166	41			166				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	24	430	0.219	94	0.2	0.3	10.709	B
C-AB	0	0	601	0.000	0	0.0	0.0	0.000	A
C-A	141	35			141				
A-B	113	28			113				
A-C	198	49			198				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	411	0.281	115	0.3	0.4	12.136	B
C-AB	0	0	580	0.000	0	0.0	0.0	0.000	A
C-A	173	43			173				
A-B	139	35			139				
A-C	242	61			242				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	411	0.281	116	0.4	0.4	12.171	B
C-AB	0	0	580	0.000	0	0.0	0.0	0.000	A
C-A	173	43			173				
A-B	139	35			139				
A-C	242	61			242				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	24	430	0.219	95	0.4	0.3	10.745	B
C-AB	0	0	601	0.000	0	0.0	0.0	0.000	A
C-A	141	35			141				
A-B	113	28			113				
A-C	198	49			198				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	79	20	444	0.178	79	0.3	0.2	9.880	A
C-AB	0	0	615	0.000	0	0.0	0.0	0.000	A
C-A	118	30			118				
A-B	95	24			95				
A-C	166	41			166				

