Bidwells

[redacted] via email

EAS

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16th March 2019

Dear Rob,

Meldreth, Proposed Development Site

As requested I have attached the information prepared and submitted to Cambridgeshire Highways and the various emails and correspondence between ourselves and the Cambridgeshire representatives Jon Finney and Hannah Seymour-Shove.

- Transport Assessment dated September 2018.
- First response from CCC (Hannah Seymour-Shove) dated 2nd November 2018.
- Various email exchanges commencing 8th November 2018 and finishing 4th February 2019.

In short, the proposed site access has been agreed in principle. A range of traffic capacity modelling was undertaken and this showed that all junctions considered worked well and within their capacity with the exception of the give way junction of Station Road/Station Road located just south of the A10 junction.

A mini roundabout option was prepared to counter the capacity issues (that will occur in any event even without the development) and modelling of this new layout option showed that the proposed mini roundabout solves all problems. Unfortunately, despite requests for comment throughout communications with CCC we did not receive a response to this matter. Nevertheless, I do not believe that this is an issue as the improvement is so significant.

I hope that this letter and attachment contains the information that you need, but should you have any questions, please do not hesitate to contact me.

Kind Regards

[redacted]

[redacted]

Director

Station Road,

Meldreth, South Cambridgeshire

Pre- Application Transport Assessment

September 2018

Bidwells

EAS

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Contents

1 Introduction

1.1 EAS has been commissioned by Bidwells to undertake a Transport Assessment (TA) for a pre-application enquiry concerning a proposed residential development, located off Station Road, Meldreth, South Cambridgeshire. The proposed development will be of up to 200 units, with the exact mix to be determined at a later stage.

1.2 The site lies to the south of Meldreth village and also south of the London – Hitchin – Cambridge railway line and will replace an industrial estate that currently occupies part of it. The access to this estate, which is substandard, will be replaced by a new access appropriate to the scale and nature of the development.

1.3 The development is well located to take advantage of sustainable travel opportunities, being within 300 metres of Meldreth railway station. **Appendix A** illustrates the location and extent of the proposal site together with the position of local facilities. A master plan is yet to be prepared.

1.4 This report provides an assessment of the proposed location in respect to its suitability as a sustainable location in transport terms. Specifically, it examines the development's expected transport and traffic impacts, focusing on the access to the site from Station Road, two other junctions that give access to the main A10 road and a junction in Shepreth village that has been the subject of concern about generated traffic seeking to avoid the A10 junction. It also assesses the likely impacts on, and potential for, walking, cycling and the use of public transport.

1.5 This assessment is informed by the requirements of South Cambridgeshire District Council as Planning Authority and Cambridgeshire County Council as Highway Authority respectively. This assessment has been prepared with regard to the DfT guidance on Transport Assessments and Cambridgeshire County Council's *Transport Assessment Guidelines* (2017).

1.6 The contents of each section of this document are as follows:

- **Section 2** sets out the national, regional and local transport policy relevant to the development proposal.
- **Section 3** describes the existing site and the baseline conditions.
- **Section 4** describes the development proposals.
- **Section 5** sets out the likely trip generation characteristics and includes a traffic impact assessment.
- **Section 6** contains a summary and the conclusions of the assessment.

2 Policy framework

Introduction

2.7 The proposed development is subject to both national and local planning policy guidance with respect to transport and its impact upon the local environment and surrounding infrastructure. A number of policies are directly pertinent to this site and are set out below.

2.8 The policy documents reviewed include:

- National Planning Policy Framework (NPPF) 2012
- South Cambridgeshire Local Development Framework, including the Core Strategy and Development Control Policies 2007
- The emerging South Cambridgeshire District Council Local Plan 2011 – 2031
- Component documents of the Cambridgeshire Local Transport Plan (LTP3) 2011 – 2031

National Planning Policy Framework (NPPF) 2012

2.9 Paragraph 14 of the NPPF states:

> At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.

2.10 Paragraph 17 of the NPPF sets out 12 core planning principles including core principle 11 which states that planning should:

> Actively manage patterns of growth 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.

2.11 Section 4 of the NPPF on transport includes advice on Transport Assessments at paragraph 32:

> All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

2.12 Paragraph 39 discusses parking policy:

> If setting local parking standards for residential and non-residential development, local planning authorities should take into account:
>
> - the accessibility of the development;
> - the type, mix and use of development;
> - the availability of and opportunities for public transport;
> - local car ownership levels; and
> - An overall need to reduce the use of high-emission vehicles.

South Cambridgeshire District Local Development Framework

2.13 Pending adoption of the Local Plan 2011 – 2031 (whose provisions concerning parking are covered in Section 4), the adopted development plan for South Cambridgeshire comprises the Local Development Framework, the relevant documents of which are:

- the Core Strategy, adopted in January 2007; and
- the Development Control Policies, adopted in July 2007.

South Cambridgeshire Core Strategy 2007

2.14 The Core Strategy for SCDC was adopted in January 2007. This document sets out the strategic vision for South Cambridgeshire to 2016. It sets out a series of objectives in order to achieve the vision, of which those which specifically relate to transport are considered below:

2.15 In the Strategy, Objective ST/b is:

> To locate development where access to day to day needs for employment, shopping, education, recreation and other services is available by public transport, walking and cycling thus reducing the need to travel, particularly by private car.

2.16 The location of the proposal site has the potential to support the promotion of access through sustainable travel modes, as illustrated in this Transport Assessment, in accordance with the above objective.

Development Control Policies 2007

2.17 Policy TR/1 on Planning for More Sustainable Travel states that:

1. Planning permission will not be granted to developments likely to give rise to a material increase in travel demands unless the site has (or will attain) a sufficient standard of accessibility to offer an appropriate choice of travel by public transport or other non-car mode(s).

2. In considering planning applications the Council will seek to ensure that every opportunity is taken to increase integration of travel modes and accessibility to non-motorised modes by appropriate measures including:

    a) Securing appropriate improvements to public and community transport (including infrastructure requirements) in accordance with the aims of the LTP;

    b) Securing on-site and/or off-site design proposals that promote integrated travel and access by non-motorised modes as far as practicable (including walking and cycling) and facilitate and encourage their use;

    c) Minimising the amount of car parking provision in new developments, compatible with their location, by encouraging shared use parking (where appropriate) and restricting car parking to the maximum levels;

    d) Ensuring that new developments are located and designed at the outset with permeable layouts to facilitate and encourage short distance trips by cycle and walking including to public transport interchanges;

    e) Requiring safe and secure cycle parking.

3. The Local Transport Plan road user hierarchy will be taken into account in the determination of planning applications to ensure adequate emphasis has been placed on the relevant modes, although no modes should be promoted to the exclusion of others.

2.18 Policy TR/2 on Car and Cycle Parking Standards states that:

1. Car parking should be provided in accordance with the maximum standards set out in Appendix A (of the DPD), to reduce over-reliance on the car and to promote more sustainable forms of transport.

2. In some locations, such as those with good accessibility to facilities and services, and served by high quality public transport, the council will seek to reduce the amount of car parking provided. Where opportunities arise, for example on mixed use sites, shared use parking and carpooling will be encouraged to minimise provision.

3. Cycle parking should be provided in accordance with the minimum standards set out in Appendix B (of the DPD) to ensure the provision of adequate secure parking.

Appendix A sets an average standard of car parking provision of 1.5 spaces per dwelling across the whole District, with a maximum of two spaces for a dwelling with three or more bedrooms in poorly accessible areas. Garages are to count as parking spaces. Visitor parking should amount to not less than 0.25 spaces for every dwelling with two or more spaces and should be marked appropriately.

Appendix B sets a minimum standard for cycle parking of one secure space per dwelling in a covered, lockable enclosure, within the curtilage of the dwelling where possible.

2.19 Policy TR/3 on Mitigating Travel Impact requires new developments to mitigate their travel impact, including their environmental impact, such as noise, pollution and impact on amenity and health. This may mean ensuring adequate provision is made for integrated and improved transport infrastructure or appropriate mitigation measures, through direct improvements and Section 106 contributions, in accordance with the tests in Circular 05/2005.

2.20 Financial contributions will be sought towards improvements in transport infrastructure in the wider area affected by increased development, in particular to support public transport, cycling and walking.

2.21 In the case of proposals for 'major development' (defined by paragraph 2.5 of the DPD as the erection of 20 or more dwellings), or where the proposal is likely to have 'significant transport implications', the Council will require developers to submit a Transport Assessment and a Travel Plan alongside planning applications.

2.22 Travel Plans should demonstrate how it is intended to meet the tests in the first paragraph above. In appropriate cases the content of the Travel Plan may be reflected in planning conditions or a planning obligation. Travel Plans should have measurable outputs, related to targets or aims in the LTP, and provide monitoring and enforcement arrangements. A Travel Plan could also help address a particular local traffic problem associated with a planning application, which might otherwise have to be refused on local traffic grounds. The weight to be accorded to a Travel Plan will be influenced by the extent to which it affects the acceptability of the proposal and how far it can be enforced. Planning conditions or obligations may be appropriate means of securing the provision of some or all of a Travel Plan, including a requirement for the production of an annual monitoring and progress report.

2.23 In relation to outline applications, a framework for the preparation of Travel Plans will be submitted with the application proposals.

2.24 Policy TR/4 states that the District Council will use its planning powers to support increased use of non-motorised modes by all sectors of society, including cycle use and walking, by ensuring that new developments are located and designed at the outset to facilitate and encourage short distance trips between home, work, schools and colleges, other suitable destinations and for leisure. Apart from minimising the distance between trip origins and destinations it will be important to ensure:

- that adequate safe and secure cycle parking is provided in accordance with the standards in Policy TR/2;
- that individual developments contribute to the maximum possible extent to achieving the aims of the Local Transport Plan; and
- that detailed designs and layouts are permeable and encourage cycle use and walking for all or part of a journey , e.g. by including safe, direct links to schools, nearby centres of attraction and public transport interchanges, contributing towards the provision of an improved and integrated walking and cycling network in the locality, and providing safe crossing places over main roads.

2.25 In assessing such future provision for non-motorised modes, the District Council will use the following priorities:

- 1st priority – provide links to centres with a good range of facilities / services, including major employment areas;
- 2nd priority – safer routes to schools, provided school buses are not put at risk;
- 3rd priority – leisure and recreation routes.

2.26 Any new routes must form safe, highly accessible and convenient connections with Cambridge, the market towns and surrounding villages and link to the existing network. Planning decisions will need to consider the effect of proposed development on the effectiveness and amenity of these routes and take account of the need to extend or improve the attractiveness of the network, including through improved maintenance, crossings, signposting and way marking of cycle ways, footpaths and other rights of way. Where appropriate the District Council will negotiate with the relevant landowners and organisations to extend, or where necessary amend, the network of public rights of way including circular routes.

South Cambridgeshire District Council Local Plan 2011 – 2031

2.27 The SCDC Local Plan 2011 – 2031 is a set of policies and land allocations that will guide the future of the district up to 2031 and was submitted to the Secretary of State for Communities and Local Government for independent review on the 28th March 2014. Consultation has since taken place on modifications to the Plan. It could be a material consideration in planning decisions.

2.28 Reflecting the National Planning Policy Framework, Policy S/3 states:

> When considering development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals that accord with the Local Plan and Neighbourhood Plans can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area unless material considerations indicate otherwise.
>
> Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise – taking into account whether: a. Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or b. Specific policies in that Framework indicate that development should be restricted.

2.29 Policy HQ/1 on Delivering High Quality Places states that with respect to travel and transport places must:

> f. Achieve a permeable development with ease of movement and access for all users and

abilities, with user friendly and conveniently accessible streets both within the development and linking with its surroundings and existing and proposed facilities and services, focusing on delivering attractive and safe opportunities for walking, cycling and public transport;

g. Provide safe and convenient access for all users and abilities to public buildings and spaces, including those with limited mobility or those with other impairment such as of sight or hearing;

h. Ensure that car parking is integrated into the development in a convenient, accessible manner and does not dominate the development and its surroundings or cause safety issues;

i. Provide safe, secure, convenient and accessible provision for cycle parking and storage, facilities for waste management, recycling and collection in a manner that is appropriately integrated within the overall development;

j. Provide a harmonious integrated mix of uses both within the site and with its surroundings that contributes to the creation of inclusive communities providing the facilities and services to meet the needs of the community.

2.30 Policy T1/2 on Planning for Sustainable Travel states that development must be located and designed to reduce the need to travel, particularly by car, and promote sustainable travel appropriate to its location. It goes on:

Planning permission will only be granted for development likely to give rise to increased travel demands, where the site has (or will attain) sufficient integration and accessibility by walking, cycling or public and community transport, including:

a. Provision of safe, direct routes within permeable layouts that facilitate and encourage short distance trips by walking and cycling between home and nearby centres of attraction, and to bus stops or railway stations, to provide real travel choice for some or all of the journey, in accordance with Policy HQ/1;

b. Provision of new cycle and walking routes that connect to existing networks, including the wider Rights of Way network, to strengthen connections between villages, Northstowe, Cambridge, market towns, and the wider countryside;

c. Protection and improvement of existing cycle and walking routes, including the Rights of Way network, to ensure the effectiveness and amenity of these routes is maintained, including through maintenance, crossings, signposting and waymarking, and, where appropriate, widening and lighting;

d. Provision of secure, accessible and convenient cycle parking in accordance with Policy TI/3;

e. Securing appropriate improvements to public and community transport (including infrastructure requirements) in accordance with the aims of the Cambridgeshire Local Transport Plan and South Cambridgeshire Community Transport Strategy.

Developers will be required to demonstrate they will make adequate provision to mitigate the likely impacts (including cumulative impacts) of their proposal including environmental impacts (such as noise and pollution) and impact on amenity and health. This will be achieved through direct improvements and Section 106 contributions and/or the Community Infrastructure Levy (CIL), to address transport infrastructure in the wider area including across the district boundary.

Developers of 'larger developments'[footnote: including residential developments with 20 or more dwellings] or where a proposal is likely to have 'significant transport implications' will be required to demonstrate they have maximised opportunities for sustainable travel and will make adequate provision to mitigate the likely impacts through provision of a Transport Assessment and Travel Plan…Where a Transport Assessment / Statement or Travel Plan is required, a Low Emissions Strategy Statement should be integrated. Travel Plans must have measurable outputs, be related to the aims and objectives in the Local Transport Plan and provide monitoring and enforcement arrangements. Planning obligations may be an appropriate means of securing the provision of some or all of a Travel Plan, including the requirement for an annual monitoring and progress report. Submission of area-wide Travel Plans will be considered in appropriate situations. Outline planning applications are required to submit a framework for the preparation of a Travel Plan.

2.31 With regard to parking provision, paragraph 10.23 states:

The car parking standards…are indicative, providing a guide to developers as part of a design-led approach whereby car parking provision is tailored to reflect the specific development in terms of its location (whether there are local services available which may reduce the need to travel long distances by car), the density of development, the mix of uses proposed, together with consideration of any 'smart' measures being incorporated into the development, (such as car clubs), which may reduce the level of need for private car parking.

2.32 Policy TI/3 and Figure 12 set an indicative car parking provision of two spaces per dwelling of which one should be within the curtilage. Additional spaces may be needed for visitors, service vehicles and salespeople. For cycles a minimum standard of one space per bedroom is given. The Policy goes on:

Car parking provision will take into consideration the site location, type and mix of uses, car ownership levels, availability of local services, facilities and public transport, and highway and user safety issues, as well as ensuring appropriate parking for people with impaired mobility.

The Council will encourage innovative solutions to car parking, including shared spaces where the location and patterns of use permit, and incorporation of measures such as car clubs and electric charging points.

Residential garages will only be counted towards car and cycle parking provision where they meet a minimum size requirement [footnote: at least 6 x 3.3 metres plus 1 metre at the end and/or 650 – 750 mm at the side for cycles].

All parking provision must be provided in a manner that accords with Policy HQ/1 and the developer must provide clear justification for the level and type of parking proposed in the Design and Access Statement and/or Travel Plan.

The Cambridgeshire Local Transport Plan 2011 – 2031 Policies and Strategies document, as updated in 2015

2.33 Cambridgeshire County Council policy, with respect to transport, is embodied in the Local Transport Plan. The third *Cambridgeshire Local Transport Plan* covers the twenty year period from 2011 to 2031 and is split into three main parts as follows

- The *Policies and Strategies* document which sets out the Plans objectives, problems and challenges and the strategy to meet those challenges.
- The Long Term Transport Strategy, which provides a high level view of the more substantial transport infrastructure and service enhancements that are needed across the county. This is currently under consultation however a draft version is available; and
- The Transport Delivery Plan, a plan detailing how the LTP3 will be delivered.

2.34 Figure 4.1 in the Policies and Strategies document lists eight challenges that the LTP3 aims to address:

- improving the reliability of journey times by managing demand for road space, where appropriate and maximising the capacity and efficiency of the existing network;
- reducing the length of the commute and the need to travel by private car;
- making sustainable modes of transport a viable and attractive alternative to the private car;
- future-proofing the maintenance strategy and new transport infrastructure to cope with the effects of climate change;
- ensuring people – especially those at risk of social exclusion – can access the services they need within reasonable time, cost and effort wherever they live in the county;
- addressing the main causes of road accidents in Cambridgeshire;
- protecting and enhancing the natural environment by minimising the environmental impact of transport; and
- influencing national and local decisions on land-use and transport planning that impact on routes through Cambridgeshire.

2.35 On page 4-4 the document endorses the road user hierarchy set out in Manual For Streets, i.e. pedestrians, cyclists, public transport, specialist service vehicles and other motor vehicles in order of precedence. Figure 4.3 shows the A10 as a Primary Road (second in the Cambridgeshire road hierarchy) and Station Road, Meldreth High Street, North End / Meldreth Road and Station Road / Fowlmere Road (Shepreth) as Local Roads.

The Cambridgeshire Long Term Transport Strategy (2015)

2.36 This document forms part of the LTP3 suite. The Action Plan in Section 4 notes in Figure 4.3 (schemes that are required to support major development allocations in current and emerging Local Plans) that a park and ride facility should be provided at Hauxton to supplement the existing facility at Trumpington Road and with segregated bus access to the Cambridgeshire Busway.

2.37 In rural areas the Plan recognises (pages 3-2, 3-3) that the private car will often be the most viable option for many journeys although buses and community transport are vitally important for those without access to a car. Priorities for rural areas include innovative services such as demand responsive transport, reviewing local bus services to improve connections, improved access to the rail network through improved cycle routes and bus links, and making better use of technology to provide information and booking facilities for transport.

The Transport Strategy for Cambridge City and South Cambridgeshire

2.38 This document was adopted in March 2014. Its objectives are:

- to ensure that the transport network supports the economy and acts as a catalyst for sustainable growth;
- to enhance accessibility to, from and within Cambridge and South Cambridgeshire (and beyond the strategy area);
- to ensure good transport links between new and existing communities, and the jobs and services people wish to access;
- to prioritise sustainable alternatives to the private car in the strategy area, and reduce the impacts of congestion on sustainable modes of transport;
- to meet air quality objectives and carbon reduction targets, and preserve the natural environment;
- to ensure that changes to the transport network respect and conserve the distinctive character of the area and people's quality of life;
- to ensure the strategy encourages healthy and active travel, supporting improved well-being; and
- to manage the transport network effectively and efficiently.

2.39 Policy TSCSC 1 sets out the strategy's approach:

- The transport network will support economic growth, mitigate the transport impacts of the growth agenda and help protect the area's distinctive character and environment.
- To achieve this, sustainable transport capacity will be provided in and around [Cambridge] between key employment areas, and to where people live and access services. The sustainable transport network will strengthen the economic hubs and the high tech clusters in and around the city by making movement between them straightforward and convenient.
- The backbone of the strategy will be a high quality passenger transport network of bus, guided bus and rail services, fed and complemented by comprehensive pedestrian and cycle networks. Highways capacity enhancements will ensure that traffic can move efficiently in appropriate locations without interfering with passenger transport corridors.

2.40 With regard to South Cambridgeshire, Policy TSCSC 3 states:

For additional travel demand to be accommodated on the constrained transport network of South Cambridgeshire and into Cambridge and surrounding towns:

- passenger transport services on main radial corridors will be used for part or all of more trips to Cambridge and to other key destinations;
- more people will walk and cycle to access these services;
- more people will car share;
- more locally led transport solutions will provide passenger transport options in more remote areas that cannot viably be served by conventional bus services.

2.41 Policy TSCSC 6 requires Transport Assessments for developments that generate approximately 500 person trips per day, by all modes, or if there are other local issues that need to be addressed.

2.42 Policy TSCSC 7 states that:

> New development will be required to make provision for integrated and improved transport infrastructure to ensure that most people have the ability to travel by foot, bicycle or by passenger transport and in line with specified modal split targets where relevant.
>
> Access by walking, cycling and public transport will be maximised in all new developments, ensuring that planning contributions are sought for transport improvements where appropriate.

2.43 Figures 4.2 and 4.11 shows Meldreth station as an improved transport hub with the Hitchin – Cambridge line set to see improved services as a result of the Thameslink programme. No improvements are proposed along the A10 corridor.

2.44 A package of smarter choices for the area is however set out, including an awareness and marketing strategy, a progressive approach to school travel planning, a comprehensive car sharing scheme available to all, the deployment of car clubs and the securing of smarter travel choices at new development (Figure 5.18).

2.45 Figure 4.11 shows the Cambridge – Royston corridor as forming part of a cycle network for South Cambridgeshire.

Summary

2.46 The development principles with respect to transport and access to the highway will be guided by the principles and design guidance set out in the Design Manual for Roads & Bridges (DMRB), Manual for Streets (MfS) and Cambridgeshire Design Guide.

2.47 It is EAS' view that the development proposals comply with the national and local policy framework set out above and that this is demonstrated fully within this Transport Assessment.

3 The local transport network and baseline conditions

Existing site conditions

3.1 The proposed development site is located off Station Road between the villages of Meldreth (to the northwest of the A10 road) and Melbourn (to the southeast). It is approximately 17.6 kilometres by road from Cambridge and 5.5 kilometres from Royston.

3.2 The site is currently occupied by agricultural land. To the south is a small industrial estate (Valley Farm) with a floorspace of approximately 6,230 square metres. Access to the estate is by a priority junction with Station Road which also serves a private house.

3.3 The site is bounded on its northwest side by the Hitchin – Cambridge railway and on its east side by a public footpath linking Meldreth station with Melbourn. **Appendix A** shows the location of the site in relation to local facilities.

Local road network

3.4 Station Road is a local road that runs northwest, crossing the railway by a bridge a short distance west of Meldreth station. Near the proposed access to the site it is approximately 6.0 metres wide. North of the bridge it divides into two roads at a triangular priority junction. One branch (Whitecroft Road) runs north through a residential part of the village before intersecting another local road (Kneesworth Road and Fenny Lane). From here there are two routes to the A1198 Royston – Huntingdon road: one via Kneesworth Road and the other via Whaddon village.

3.5 The other branch of Station Road continues straight on as the High Street, passing the railway station and curving round to the north, passing through the village centre with a Post Office, village hall and public house. The road continues to the northeast as North End until it reaches Shepreth village. At the centre of the village it makes a priority T-junction with Station Road and Fowlmere Road; the latter links with the A10.

3.6 South of the site, Station Road curves round to the southeast at Fieldgate Nurseries, passes under the A10 and then makes a priority T-junction with another road, also named Station Road. To the north this meets the A10 at a priority T-junction while to the south it links with Melbourn village centre.

3.7 In this area the A10 is a single carriageway road approximately ten metres wide with a ghost island and right turn lane to facilitate turning movements into Station Road. (Away from the junction its width is approximately 7.5 metres.) This junction is the A10’s only link with the village roads west of Shepreth, where there is a staggered junction with Frog End and Cambridge Road and, 960 metres further east, a crossroads priority junction with Fowlmere Road and Shepreth Road.

3.8 The A10 is subject to the national speed limit with a no-stopping restriction. There is lighting at the junctions with Station Road and with Frog End / Cambridge Road, but not elsewhere. A short section of Station Road southeast of the junction with the A10 also has a nominal national speed limit. All other roads in the area have a 30 mph limit and there is street lighting along the whole length of Station Road between and including Meldreth and Melbourn villages.

3.9 East of the junction with Whitecroft Road, Meldreth High Street has traffic calming, with speed cushions and chicanes, although no 20 mph limit is signed.

Pedestrian and cycle accessibility

3.10 The Manual for Streets (MfS) and other national and local policies recognise the importance of walking and cycling as modes of transport which offer a more sustainable alternative to car travel and can make a positive contribution towards the overall character of a place, improved public health and in helping to tackle climate change.

3.11 **Appendix A** shows the location of the site in relation to local facilities and Table 3.1 gives a summary.

	Mode	Distance (metres or km)	Time (mins)	Time by alternative mode (mins)
Post Office	Walk	800 m	10	
General store *	Walk	800 m	10	
Supermarket	Car	6.1 km	8	
Primary school	Walk	650 m	8	2 (cycle)
Secondary school	Walk	1.5 km	19	5 (cycle)
FE College	Car	15.4 km	21	45 (train & bus)
Community centre	Walk	650 m	8	2 (cycle)
Public house	Walk	1.0 km	12	3 (cycle)
Library	Walk	1.1 km	13	4 (cycle)
GP surgery	Cycle	1.4 km	5	
Dentist	Cycle	1.3 km	4	
Hospital	Car	6.7 km	8	
Leisure centre	Cycle	5.1 km	18	7 (car)
Royston town centre	Train	6.1km	9	22 (cycle)
Cambridge centre	Train	17.6 km	45	
Railway station	Walk	350 m	5	

* There is a larger Co-op store in Melbourn village, 900 metres or 11 minutes walk.

Table 3.1: Local facilities with distances and journey times from the site access

3.12 There are two primary schools nearby within one kilometre of the development site, the nearer being in

Meldreth village itself. Melbourn Village College is 19 minutes walk away or five minutes by cycle. Meldreth and Melbourn villages between then have several basic facilities such as a library, public house, small supermarket, village hall and GP and dental surgeries. There are a leisure centre, a large supermarket and a hospital in Royston and Cambridge with its wide range of amenities is a 45 train ride away.

3.13 Station Road has a footway on its west side although it is narrow (no more than one metre) in places. It is continuous to Meldreth village centre. South of the industrial estate access it switches to the east side and continues to the T-junction south of the A10 where dropped kerbs facilitate the road crossing for the continuation into Melbourn village. The footpaths are lit throughout.

3.14 A public right of way runs along the east side of the site, linking Station Road near the T-junction south of the A10 with Meldreth station. It is surfaced and lit throughout its length. At Meldreth station it is necessary to cross the footbridge to reach the village but access to Melbourn village is step-free. It is somewhat secluded where it passes under the A10 via a cutting and subway but it avoids the need to cross Station Road.

3.15 The Cambridgeshire Cycle Map does not extend as far south as Meldreth but shows a shared off-road footway and cycle path alongside the A10 between Cambridge and Foxton and this in fact continues to the junction with Frog End and Cambridge Road, south of Shepreth. From here there is a choice of routes on local roads to the site, either via Cambridge Road and Melbourn or via Shepreth and Meldreth villages. As noted in Section 2 there are proposals to improve the cycle route along the A10 corridor in the Local Transport Plan.

3.16 The proposed development is therefore located within a short walk or cycle distance of a range of local facilities, reducing the need to make short journeys by private car.

Public transport

Bus Services

3.17 **Appendix B** has maps of the bus routes serving Meldreth and Melbourn.

3.18 Bus route 128, operated by A2B Bus and Coach, runs along Station Road past the site but the nearest stop is at the junction with Whitecroft Road, 210 metres from the site access. It operates two round-trip journeys on Mondays to Saturdays from Shepreth to Royston via Meldreth and Melbourn, calling at Whitecroft Road at 10:51 towards Royston, and at 12:47 returning from Royston. The bus is advertised as travelling fast from Royston to Shepreth along the A10 before beginning its inbound journey and from Shepreth to Royston at the end of its outbound journey, but residents who used them would have to make alternative arrangements for travel in the opposite direction.

3.19 Route 15, operated by C.G. Myall and Son, makes one return journey on Wednesdays only between

Haslingfield, Barrington, Orwell, Arrington and Royston, diverting to call at Meldreth and Bassingbourn en route. The Meldreth stop is at West Way, 1.4 kilometres from the site, calling at 09:45 towards Royston and at 13:07 on the return journey.

3.20 Route 26, operated by Stagecoach, calls at Vicarage Close in Melbourn, one kilometre or 12 – 13 minutes walk from the site access. It runs hourly on Mondays to Saturdays between Trumpington Park and Ride site, Cambridge, and Royston. Table 3.2 summarises the service.

26	Buses per hour		Northbound to Trumpington P & R *		Southbound to Royston bus station	
	Daytime	Evening	First bus	Last bus	First bus	Last bus
M – F	1	-	06:43	18:24	09:24	19:49
Sat	1	-	07:13	18:14	09:24	19:39
Sun	-	-	-	-	-	-

* The first and last two journeys northbound and the first one and the last three southbound run to or from St Andrew's Street, Cambridge city centre.
Operated by Stagecoach.

Table 3.2: Summary of bus route 26

3.21 There are frequent connections at Trumpington Park and Ride for central Cambridge and also for Addenbrooke's Hospital via the Cambridgeshire Guided Busway. It is anticipated that a development of 200 units would substantially add to the viability of the existing bus services and allow for some enhancement that would be of benefit to existing residents and users of the service,

Rail Services

3.22 The limited bus service at Meldreth is amply compensated for by the rail service. The station is conveniently located 350 metres from the site access and the right of way along the east side of the site will place it within 240 metres of the site centroid. There is storage for twelve cycles.

3.23 There is a half hourly service between London King's Cross and Cambridge calling at Finsbury Park, Potters Bar, Hatfield and all stations north of there. Table 3.3 summarises the service.

26	Journeys per hour		Northbound to Cambridge		Southbound to London King's Cross	
	Daytime	Evening	First	Last	First	Last
M – F	2	1 – 2	07:06	01:10	05:41	23:49
Sat	2	1 – 2	07:06	01:10	07:10	23:49
Sun	2	1 – 2	07:10	01:10	07:10	23:36

Operated by Govia Great Northern.

Table 3.3: Summary of the train service at Meldreth station (as at June 2018)

3.24 Note that Table 3.3 is based on the emergency timetable introduced in early summer 2018 as a result of difficulties with the Thameslink service and may change with introduction of the full Thameslink timetable in 2019. At that time the range of connections at Finsbury Park to destinations across central London and south of the Thames is expected to widen considerably. There are also connections at Finsbury Park for Moorgate.

3.25 In addition there are connections at Hitchin and Stevenage for points north on the East Coast Main Line and at Cambridge for Cambridge North, for East Anglia and for March, Peterborough and beyond. There is also a connection to Addenbrooke's Hospital via the Cambridgeshire Guided Busway.

3.26 The site is therefore well placed to take advantage of the rail service.

Census data

3.27 Table 3.4 uses data from the 2011 Census to show the method of travel to work for employed people living in South Cambridgeshire 018F Lower Layer Super Output Area, containing the site, comparing this with the District as a whole. Figure 3.1 shows the extent of the LSOA.

	LSOA South Cambs 018F		District
	Number	%	%
Rail	51	7.9%	4.1%
Bus, minibus or coach	7	1.1%	4.7%
Taxi	0	0.0%	0.2%
Motorcycle, scooter or moped	11	1.7%	1.1%
Driving a car or van	400	62.3%	69.3%
Passenger in a car or van	30	4.7%	4.3%
Bicycle	35	5.5%	8.5%
On foot	97	15.1%	7.2%
Other method of travel to work	11	1.7%	0.5%
Total travelling to work	642	100.0%	100.0%

Table 3.4: Work journey mode for LSOA South Cambridgeshire 018F and South Cambridgeshire District (Nomis Table QS701EW)

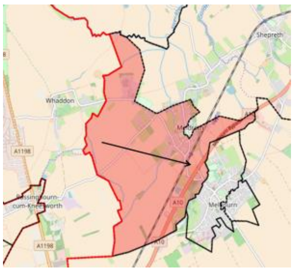


Figure 3.1: LSOA South Cambridgeshire 018F. The arrow shows the site location

3.28 The LSOA differs from the District most markedly in the proportion walking to work, more than double the District's share. The proportion cycling is less, possibly because of the above-average distance from Cambridge, although it is still higher than in many other areas. The share of public transport journeys is similar in both areas but the LSOA has a much higher proportion using rail and fewer using buses. The proportion driving is below the District average. The factors underlying the modal split are probably complex but may reflect Meldreth being a small village community, with an unusually frequent rail service, in the commuting zones of two cities where driving can be unattractive.

3.29 Table 3.5 shows the level of car availability in the LSOA and the District.

	LSOA South Cambs 018F		District
	Number	%	%
No cars or vans in household	86	15.2	11.0
1 car or van in household	238	42.0	40.4
2 cars or vans in household	190	33.6	36.6
3 cars or vans in household	29	5.1	8.7
4 or more cars or vans in household	23	4.1	3.3
All households	566	100.0	100.0
Sum of all cars or vans in the area	818	-	-
Cars per household	1.4	-	1.6

Table 3.5: Car availability in LSOA South Cambridgeshire 018F and the District (Nomis Table KS404EW)

3.30 Car availability is slightly below the average for the District, with 15% of households having no car. However, over two-fifths still have two or more cars.

Road safety

3.31 The Crashmap website has injury-accident data for the years 2013 – 2017 and this has been supplemented by data from the Cambridgeshire Interactive Map, although this does not cover 2017. The locations are shown on the map in **Appendix C**. Attention was focused on the accidents within the red ovals as being on routes likely to be used by people travelling to and from the site.

3.32 22 injury-accidents occurred over the five-year period. One was fatal and five others were serious; the rest were slight. There were no child casualties. Three involved pedestrians; two involved pedal cyclists; five involved motorcyclists and three involved light goods vehicles (up to 3.5 tonnes).

3.33 The closest accidents to the site occurred at the bend in Station Road near Fieldgate Nurseries. One was a collision between two cars and the other a single vehicle accident involving a car. Both occurred when the road was wet and the latter was late at night (after 23:00 hours).

3.34 There were no accidents at the junction of Station Road and Whitecroft Road and the only accident in

Meldreth village centre was a collision between a car and a cyclist at midday on a Sunday; it was outside the Post Office and general store, which would have been open at the time.

3.35 There was one serious accident, also involving a car and a pedal cycle, at the junction of High Street, Fenny Lane and North End. There was also a cluster of six accidents, one of them serious, at the junction of Whitecroft Road, Whaddon Road, Kneesworth Road and Fenny Lane. All were collisions between two or three cars or, in one case, between a car and a light goods vehicle, and in two cases the road was wet. This is a priority crossroads favouring Whitecroft and Whaddon roads but Kneesworth Road and Fenny Lane form a straight route across the junction and there may be a temptation not to slow down; sight lines from Kneesworth Road in particular are poor. One of the accidents was southeast of the junction but could have been a rear end shunt.

3.36 Six accidents, four of them serious and one fatal, occurred on the A10 in the vicinity of the junction with Station Road. Only one of these was at the junction itself; it was a collision between a car and a motorcycle when the road was wet; it resulted in serious injury.

3.37 The other accidents were varied in nature. One, northeast of the junction, was a collision between two cars. One was a serious single vehicle accident and another was a collision between a motorcycle and a light goods vehicle in wet conditions. The fatal accident was a collision between two cars while the remaining serious accident was a car hitting a pedestrian. It is not known whether the pedestrian was attempting to cross the road or merely walking along it but the verges are very narrow with shrubbery close to the carriageway; it cannot in any sense be regarded as a pedestrian route.

3.38 Six accidents occurred on or close to Melbourn High Street and were considered because they lie on the route to the Village College. However, none involved children and of the two involving pedestrians one was on a Saturday and the other at 18:25, well after school hours. Three involved motorcycles, either as a sole vehicle or in collision with a car, and a serious accident that involved a pedal cycle was at 10:15, well outside pupils' travel times. There does not appear to be any identifiable hazard to schoolchildren.

3.39 It may be concluded that:

- Meldreth village is largely free of traffic accidents;
- The bend at Fieldgate Nurseries may be problematic in wet weather but there have been only two accidents in six years (the Cambridgeshire Map shows that there were none in 2012);
- The accident cluster at the Whitecroft Road / Kneesworth Road crossroads may require attention but it is 1.3 kilometres from the site access;
- Only one accident has occurred at the Station Road / A10 junction, although there were two others in 2012;
- The other accidents on the A10 near the junction have few obvious common features although high speed could well have aggravated their severity; and
- The accidents in Melbourn village centre do not suggest any obvious hazards to school pupils travelling from the site.

Summary

3.40 The proposed development site is within convenient walking distance of the facilities in Meldreth village including the primary school, Post Office and small general store, public house and village hall. It is also reasonably accessible, either on foot or by cycle, to facilities in Melbourn including a secondary school, GP and dental surgeries, library and a Co-op store.

3.41 Although bus services are limited there is a half-hourly train service linking with Royston, London and Cambridge and the station is easily accessible on foot (particularly if access can be arranged via the footpath east of the site).

3.42 It is anticipated that a development of 200 units would substantially add to the viability of the existing bus services and allow for some enhancement that would be of benefit to existing residents and users of the service,

3.43 The good rail service and accessibility to Cambridge lead to lower car use and ownership compared with other parts of South Cambridgeshire.

3.44 There have been few road accidents near the site between 2013 – 2017 and none involving children. The footpath east of the site will enable access to both Meldreth and Melbourn village centres with a minimum of road crossings.

4 Development proposal

4.1 The proposed development is expected to consist of up to 200 dwellings.

Vehicular and pedestrian access arrangements

4.2 Vehicle access to the site will be via a priority junction with Station Road. The junction design is based on the requirements of the South Cambridgeshire Design Guide SPD 2010, the Manual for Streets and the Design Manual for Roads and Bridges.

4.3 Station Road is on an embankment and some building-up will be needed to maintain a gradient of 1:20 (5%) over the first 20 metres away from the junction. It is proposed to close the industrial estate and to stop up the access to it, which is a private road. However, it may be suitable to form an emergency route to the new development. The access to the house north of the industrial estate will remain.

4.4 An ATC speed survey was undertaken by K&M surveys between 25th June 2018 to 01st July 2018 south of the railway bridge along Station Road to establish the northbound and southbound vehicle speeds. The 85th percentile speed recorded for southbound vehicles was 30.54mph and the 85th percentile speeds for vehicles travelling northbound was 31.72mph. The speed survey results are shown in **Appendix D**.

4.5 **Appendix E** shows that visibility splays of 2.4 x 65 metres can be achieved to the north of the site access in accordance with the DMRB design standards for the 85th percentile speed of 31mph. Visibility splays of 2.4 x 69 metres can be achieved to the south of the site access in accordance with the DMRB design standards for the 85th percentile speed of 32mph.

4.6 A long section is also shown in **Appendix E** illustrating that the vertical profile of Station Road does not compromise visibility in either direction for those users exiting the site access.

4.7 Other proposed modifications, shown on the same drawing, are:

- Widening of the footway on the west side of Station Road to a maximum of two metres on the section between the railway bridge and the former access to the industrial estate.
- Creation of a new footway on the east side, extending from the site access southwards to meet the existing footway across the former industrial estate access.
- Installation of a traffic island with dropped kerbs on Station Road to facilitate crossing to the footway on the west side. Dropped kerbs will similarly be installed on both the west and east side footways opposite the traffic island and also at the point where the west site footway ends.
- A slight cutting back of the kerb line on the west side of the road to ease the curve and improve the sight lines on the approach to the bridge and the new junction.

4.8 A pedestrian access into the site will also be created from the existing footpath along its east side. This will provide a short cut to the station and to Meldreth and Melbourn village centres that will be traffic free for much of the way. The access to Melbourn will also be step-free. The path will offer an attractive alternative to driving.

Servicing

4.9 All servicing requirements including refuse collection, removal vehicles and access by emergency vehicles will be wholly accommodated within the site.

4.10 It is recommended that when a detailed layout is available swept path analysis be undertaken to demonstrate that a refuse vehicle can turn within the site.

Parking provision

4.11 South Cambridgeshire District Council (SCDC) policy with regard to vehicle parking provision for new development is set out in Appendix A of the *Development Control Policies DPD*. The provision for car parking is applied as a maximum standard for South Cambridgeshire and the car parking standards applicable to the proposal site are set out below:

- Average of 1.5 spaces per dwelling across the District (up to a maximum of two per house with three or more bedrooms in poorly accessible areas).
- Provision for visitors, services and salespeople should not fall below 0.25 spaces per dwelling provided with two parking spaces.

4.12 Appendix B sets a minimum standard for cycle parking of one secure space per dwelling in a covered, lockable enclosure, within the curtilage of the dwelling where possible. The minimum standard for cycle parking is one space per dwelling. Although not specifically referred to in the parking standards, the Standards identify that developers should also consider the needs of powered two-wheeled vehicles.

4.13 Cambridgeshire Highways have recommended, in pre-application advice for other developments, that the emerging South Cambridgeshire Local Plan should also be taken into account. This sets an indicative standard (in Figure 12) for car parking provision of two spaces per dwelling, one of which is to be provided within the curtilage, and notes that additional provision may be needed for visitors, service vehicles and salespeople. For cycles Figure 12 sets a minimum provision of one space per bedroom. The Policy also notes:

> Car parking provision will take into consideration the site location, type and mix of uses, car ownership levels, availability of local services, facilities and public transport, and highway and user safety issues, as well as ensuring appropriate parking for people with impaired mobility.
>
> Residential garages will only be counted towards car and cycle parking provision where they

> meet a minimum size requirement (namely 3.3 m x 6 m for a car, with an additional 1 m at the end and / or 650-750mm at the side of a garage to park cycles).
>
> All parking provision must be provided in a manner that accords with Policy HQ/1 and the developer must provide clear justification for the level and type of parking proposed in the Design and Access Statement and/or Travel Plan.

4.14 The relevant clauses of Policy HQ/1 state that development proposals must

> Ensure that car parking is integrated into the development in a convenient, accessible manner and does not dominate the development and its surroundings or cause safety issues;
>
> Provide safe, secure, convenient and accessible provision for cycle parking and storage, facilities for waste management, recycling and collection in a manner that is appropriately integrated within the overall development.

4.15 The emerging local plan also notes:

> Under provision of car parking may lead to inappropriate on-street car parking, creating potential highway safety problems and unsightly street environments, whilst over provision may equally result in unsightly, and sometimes unsafe, car dominated developments. A balance needs to be struck to ensure sufficient parking is provided in the right locations whilst not creating excessive provision which will undermine sustainability objectives to reduce travel by car. (paragraph 10.21)
>
> The car parking standards…are indicative, providing a guide to developers as part of a design-led approach whereby car parking provision is tailored to reflect the specific development in terms of its location (whether there are local services available which may reduce the need to travel long distances by car), the density of development, the mix of uses proposed, together with consideration of any 'smart' measures being incorporated into the development (such as car clubs) which may reduce the level of need for private car parking. (paragraph 10.23)

4.16 These considerations are similar to those in the National Planning Policy Framework (Section 2), which also notes that local car ownership levels should be taken into account.

4.17 As noted in Section 3 and Table 3.5, car availability per household in LSOA South Cambridgeshire 018F is 1.4, slightly below the District level of 1.6. Nonetheless, nearly 43% of households have two or more cars.

4.18 Although Meldreth is in a rural location its train service is comparatively good and travel to Cambridge, Royston and stations onward to London, in particular, is well catered for. In view of the ready access to primary and secondary schools on foot or by cycle, the level of provision proposed should be proof against any possibility of an increase in car ownership.

4.19 The layout of the streets and the provision of forecourts in front of the garages will allow flexibility for visitor parking, whether on or off street.

4.20 Each house will provide at least one secure area for parking two to three cycles in line with emerging standards, with garages contributing towards this requirement in most if not all cases.

4.21 In line with the planning policies, one secure cycle parking place will be provided within the curtilage of each dwelling.

EAS

5 Trip generation and traffic impact

Baseline traffic data

5.22 As the site is currently in use for agricultural purposes the traffic generation from this would be negligible. However, the closure of the industrial estate will offset some of the travel generated by the proposed housing.

5.23 On Wednesday 27th June 2018 K M Traffic carried out peak hour manual classified counts of turning movements, and queuing counts, at four junctions:

- Junction 1a: the industrial estate access;
- Junction 2: the priority junction between the two arms of Station Road south of the A10;
- Junction 3: the priority junction between Station Road and the A10; and
- Junction 4: the priority junction between Meldreth Road, Station Road and Fowlmere Road in Shepreth village.

5.24 The count at the industrial estate access was to establish the amount and routeing of the industrial estate traffic so that it could be netted off from the development traffic. The proposed site access junction (Junction 1) is adjacent to Junction 1a so that the traffic counts could apply to both junctions.

5.25 The busiest periods varied from junction to junction. At the most critical junction, that on Station Road south of the A10 (Junction 2), the busiest hours were 07:45 – 08:45 and 17:00 – 18:00 and these were the periods used for detailed analysis of Junctions 1 to 3. At Junction 4 the AM peak period was somewhat earlier, at 07:15 – 08:15.

5.26 **Appendix F** contains the raw traffic count data and these are also shown in diagrammatic form in Figure 1 of **Appendix G**. Figure 2 in the same Appendix shows the percentages of heavy vehicles for each turning movement. Note that the road links between the site access and Shepreth village are greatly simplified as no analysis was required of the intervening junctions.

5.27 The data were factored up from 2018 to 2023 levels using the TEMPRO 7.2 program. No committed development was identified at the time of preparing this Assessment. Figure 3 in **Appendix G** shows the forecast baseline flows.

Trip generation

5.28 A TRICS assessment of the likely vehicle trip generation was carried out for the development site. It was based on privately owned houses in the Southeast and East Anglia in edge of town and neighbourhood centre locations; the latter sites were all in villages.

5.29 Although the proposed development may include some affordable housing, the TRICS assessment assumes that all the housing will be private. Since vehicle trip generation from private housing is usually higher than from affordable, this makes the findings of the analysis more robust.

5.30 Table 5.1 shows the vehicle trip rates per dwelling obtained and the estimated numbers of trips for a development of 200 houses. **Appendix H** shows the full TRICS output.

	08:00 – 09:00			17:00 – 18:00			07:00 – 19:00		
Trip rates:	In	Out	Total	In	Out	Total	In	Out	Total
Vehicles	0.155	0.388	0.543	0.345	0.144	0.489	2.301	2.323	4.624
of which OGVs	0.001	0	0.001	0.002	0.001	0.003	0.017	0.014	0.031
Trips:									
Vehicles	31	78	109	69	29	98	460	465	925
of which OGVs	0	0	0	0	0	1	3	3	6

Table 5.1: Vehicle trip rates and estimated vehicle trips for a development of 200 private houses (TRICS 7.5.1)

Trip distribution

5.31 To establish the distribution of peak hour traffic from the development, use was made of Census origin-destination data for Middle Layer Super Output Area (MSOA) South Cambridgeshire 018. Focusing on people driving to work, all the work locations were identified (MSOAs within South Cambridgeshire District, local authority districts elsewhere) and the numbers of employed people driving to each one were summed. They were then assigned to routes on the basis of shortest journey time. For journeys entirely within the MSOA destinations and routeings had to be determined on the basis of the location of, and travel time to, the main local workplaces.

5.32 Concern had been expressed in some quarters about traffic, generated by the proposed development, passing through Shepreth village. The rationale for this was that, although the shortest route from the site to Cambridge and other places to the northeast was along the A10, drivers might try to avoid having to make a right turn out of Station Road during the morning peak. It had been suggested that they might instead travel via Whitecroft Road and North End to Shepreth. This would enable them to make a left turn onto the A10 from Fowlmere Road.

5.33 It was assumed that a third of outbound drivers, using the A10 to the east, would travel via Shepreth. The rationale for this assumption is discussed in the section on Junction 4. In the inbound direction the drivers were all routed direct via the A10 on the grounds that, as they only needed to make a left turn into Station Road, there would be no point in taking the longer Shepreth route.

5.34 Figure 4 in **Appendix G** shows the distribution of trips from and to the proposed residential development in percentage form and Figure 5 multiplies the generated trips into and out of the site by the percentage distribution to give the numbers of vehicles using each route.

Netting off of industrial estate trips

5.35 Since the proposal for the residential development includes the closure of the industrial estate, it was necessary to subtract the reduction in trip making to and from it from the number that the new housing might generate.

5.36 Figure 6 in **Appendix G** shows the numbers and directions of vehicles turning into and out of the estate at Junction 1a (these movements can also be seen in Figure 1 in the same Appendix). These movements were distributed through all the other junctions in the same way as the residential trips and again assuming that 33% of outbound trips, headed for the A10 east, would be via Shepreth. Although this is assuming that trips to a workplace are distributed in the same way as trips from housing, the numbers are not great and any errors are expected to be small.

5.37 The industrial estate trips were then subtracted from the development trips to give net development trips as shown in Figure 7 in **Appendix G**.

5.38 Adding the net development trips to the 2023 baseline traffic gave the forecasts shown in Figure 8 of **Appendix H**.

Junction 1 assessment: site access

5.39 As described in Section 4, this is a simple priority junction As shown in **Appendix E**, it is proposed to create an access road, six metres in width, from Station Road.

5.40 The PICADY component of the Junctions9 program was used to estimate the impact of the proposed development. Table 5.2 summarises the output from the model, which is shown in full in **Appendix I**.

	AM peak (07:45 – 08:45)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Site access – Station Road	0.18	0.2	0.06	0.1
Station Road south	0.07	0.1	0.15	0.3

Table 5.2: Site access junction with development: summary PICADY results

5.41 The analysis shows that the proposed junction will operate without measurable impact on Station Road traffic.

Junction 2 assessment: Station Road junction south of the A10

5.42 This is a priority junction between three roads, all named Station Road; the major arms are Station Road south (leading to Melbourn) and Station Road north (leading to the A10). The minor arm is Station Road west (leading to the site and to Meldreth). The minor arm has a wide flare where it joins the major, while the major arm has no right turn lane.

5.43 Table 5.3a shows the PICADY results with the 2018 counted data, Table 5.3b the 2023 baseline and Table 5.3c the results with the proposed development traffic.

	AM peak (07:45 – 08:45)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Station Road west to north	0.63	1.5	0.18	0.2
Station Road west to south	0.86	5.0	0.49	0.9
Station Road north to west or south	0.16	0.2	0.27	0.4

Table 5.3a: Station Road junction south of the A10, counted data: summary PICADY results

	AM peak (07:45 – 08:45)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Station Road west to north	0.95	6.5	0.20	0.3
Station Road west to south	0.98	11.6	0.55	1.2
Station Road north to west or south	0.18	0.3	0.29	0.5

Table 5.3b: Station Road junction south of the A10, 2023 baseline: summary PICADY results

	AM peak (07:45 – 08:45)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Station Road west to north	1.07	11.9	0.24	0.3
Station Road west to south	1.07	22.4	0.59	1.4
Station Road north to west or south	0.20	0.3	0.38	0.7

Table 5.3c: Station Road junction south of the A10, 2023 with development: summary PICADY results

5.44 The results show that during the AM peak, even with the 2018 counted data, the RFC for the west to south stream just exceeds the generally accepted threshold of 0.85 above which the junction is likely to become unstable. This appears to be borne out by the count data, which show (**Appendix F**) a maximum queue of 14 vehicles at this junction at around 08:20 – 08:40; Google Maps also suggests that there is congestion there at that time.

5.45 In the 2018 baseline model the maximum RFC rises to 0.98, with the west to north stream also affected, and with the development it rises further to 1.07. In the PM peak the RFC is well below 0.85 in all cases and the count data show that only brief queues, of up to six vehicles, occurred on the Station Road west arm and then only twice between 16:00 – 19:00.

5.46 The delay at this junction appears to result from the heaviest flow in the AM peak being in the west to south direction, i.e. from Meldreth towards Melbourn. This stream is opposed by three others: from the north arm to the west and south arms and from the south arm to the north. The heavy demand from the west arm leads to queues building up. The numbers of movements into and out of the north arm, to or from the A10, are considerably less.

5.47 There has been a proposal for a right turn lane on the north arm of the junction but PICADY showed this to have little impact as it only benefits a relatively small stream of traffic and does little to ease the flow out of the west arm.

5.48 The option of replacing the priority junction with a mini-roundabout was therefore considered. A preliminary assessment, using the ARCADY component of Junctions9, has been carried out. The results are summarised in Table 5.3d and **Appendix J** shows the full model output.

	AM peak (07:45 – 08:45)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Station Road south	0.31	0.4	0.48	0.9
Station Road west	0.74	2.7	0.41	0.7
Station Road north	0.34	0.5	0.39	0.6

Table 5.3d: Station Road junction south of the A10, 2023 with development and mini-roundabout: summary ARCADY results [Generic geometry]

	AM peak (07:45 – 08:45)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Station Road south	0.29	0.4	0.45	0.8
Station Road west	0.82	4.1	0.45	0.8
Station Road north	0.26	0.4	0.30	0.4

Table 5.3d: Station Road junction south of the A10, 2023 with development and mini-roundabout: summary ARCADY results

5.49 The results suggest that a mini-roundabout at this location could greatly improve the performance of this junction and reduce queuing on the Station Road west arm in the AM peak. A plan showing a potential mini roundabout layout is contained in **Appendix K**.

Junction 3 assessment: Station Road / A10 junction

5.50 This is a priority junction between Station Road and the A10, a single carriageway road with a speed limit of 60 mph. The A10 has a long right turn lane that can accommodate approximately ten PCUs. Station Road has a wide flare at the junction that can accommodate approximately three right turning PCUs alongside those turning left.

5.51 The traffic count data for 07:00 – 10:00 show occasional queues of three to five vehicles on the Station Road arm but all clear within a short time. Between 16:00 – 19:00 queues are generally shorter and less frequent. Compared with Junction 2 to the south, queuing during the AM period occurs more often but is less severe and less persistent.

5.52 Table 5.4a shows the PICADY results for the junction for the 2023 baseline and Table 5.4b the results with the proposed development.

	AM peak (07:45 – 08:45)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Station Road – A10 west	0.35	0.5	0.25	0.3
Station Road – A10 east	0.26	0.3	0.17	0.2
A10 west – Station Road	0.27	0.4	0.33	0.5

Table 5.4a: Station road / A10 junction, 2023 baseline: summary PICADY results

	AM peak (07:45 – 08:45)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Station Road – A10 west	0.40	0.6	0.27	0.4
Station Road – A10 east	0.33	0.5	0.20	0.2
A10 west – Station Road	0.28	0.4	0.37	0.6

Table 5.4b: Station road / A10 junction, 2023 with development: summary PICADY results

5.53 The results show that the junction will perform satisfactorily even when the development is in place. The Junctions9 manual recommends (Section 3.9.2) a threshold RFC of 0.75 at junctions where the speed limit is over 50 mph. Even so, the RFC values obtained are well below that level.

Junction 4 assessment: Meldreth Road / Station Road / Fowlmere Road (Shepreth village)

5.54 This is a priority junction in the village centre between Meldreth Road to the southwest, Station Road (Shepreth) to the northwest and Fowlmere Road, curving round to the southeast. These last two form the major road.

5.55 The traffic count data show that no queues occurred at this junction during the hours observed.

5.56 As noted above, there had been some concern that development traffic headed for destinations to Cambridge and the northeast might seek to avoid the right turn onto the A10 at Junction 3 by diverting via Shepreth and reaching the A10 via Fowlmere Road. It is unlikely that HGVs will divert as there is a 7.5 tonne weight restriction at a bridge just south of Junction 4 in the village.

5.57 There is some evidence that diversion takes place. Table 5.5 presents traffic count data for the periods 07:00 – 09:00 and 16:00 – 19:00 at Junction 3 (Station Road / A10). It compares each turning movement out of and into Station Road during the AM period with its corresponding return movement in the PM period. Vehicles on the A10 that continued through the junction without turning are not shown.

07:00 – 09:00	Vehicles	16:00 – 19:00	Vehicles	Difference
Towards Royston	373	From Royston	379	+6
From Royston	284	Towards Royston	290	+6
Towards Cambridge	137	From Cambridge	156	+19
From Cambridge	113	Towards Cambridge	90	-23

Table 5.5: Turning movements into and out of Station Road at the junction with the A10 (vehicles)

5.58 The morning flows to and from the Royston direction are evenly balanced with the opposite flows in the evening, the difference being no more than six movements. In the case of the flows to and from the Cambridge direction, however, the discrepancies are greater. The number of journeys from Cambridge in the evening is rather greater than the number towards Cambridge in the morning. Conversely, the number towards Cambridge in the evening is less than the number from Cambridge in the morning.

5.59 Both these observations suggest that the route via the A10 / Station Road junction is less attractive when travelling towards Cambridge than when travelling from it. They are also consistent with the queue counts and the PICADY runs which suggest that Junction 2 in particular is under more pressure in the AM peak than in the PM and with eastbound traffic particularly affected.

5.60 Table 5.6 shows a similar analysis of turning movements out of and into Meldreth Road at the junction in Shepreth. Movements between Station Road and Fowlmere Road are not shown.

07:00 – 09:00	Vehicles	16:00 – 19:00	Vehicles	Difference
To Station Road	172	From Station Road	199	+22
From Station Road	141	To Station Road	196	+55
To Fowlmere Road	174	From Fowlmere Road	106	-68
From Fowlmere Road	96	To Fowlmere Road	97	+1

Table 5.6: Turning movements into and out of Meldreth Road at the junction in Shepreth (vehicles)

5.61 Although it is harder to account for the variations here, with evening flows on Station Road higher than morning flows in both directions, it is clear that traffic from Meldreth Road to Fowlmere Road in the morning greatly exceeds traffic in the opposite direction in the evening.

5.62 While there could be many factors behind these variations, such as the time when return journeys are made, it does appear that some diversion may occur. However, there is no obvious indication of what proportion of traffic might make the diversion through Shepreth.

5.63 For residents in the northern parts of Meldreth a diversion might be attractive. As far as the proposal site is concerned, for much of the day Google Maps gives a time of six minutes for the 5.5 kilometre journey from the site access to Foxton level crossing via the direct route. To avoid the traffic calming on High

Street, the quickest diversion route would be via Whitecroft Road, Fenny Lane and North End, taking eleven minutes (6.8 kilometres). Diverting would therefore involve a time penalty and it is not clear whether all drivers would opt for it.

5.64 Junction 4 was therefore modelled by taking outbound development traffic routed along the A10 to the east and diverting 33% of it via Shepreth.

5.65 Tables 5.7a and 5.7b summarise the results for 2023 without and with the development. It should be noted that the AM peak period modelled was 08:15 – 09:15 rather than 07:45 – 08:45 as traffic through the junction was at its maximum then. The PM peak period remains at 17:00 – 18:00.

	AM peak (08:15 – 09:15)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Meldreth Road – Station & Fowlmere Roads	0.25	0.3	0.23	0.3
Station Road – Meldreth & Fowlmere Roads	0.16	0.2	0.21	0.3

Table 5.7a: Shepreth junction, 2023 baseline: summary PICADY results (33% diversion)

	AM peak (08:15 – 09:15)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Meldreth Road – Station & Fowlmere Roads	0.27	0.4	0.23	0.3
Station Road – Meldreth & Fowlmere Roads	0.16	0.2	0.21	0.3

Table 5.7b: Shepreth junction, 2023 with development: summary PICADY results (33% diversion)

5.66 The junction operates satisfactorily without and with the development.

Junction 4 assessment: sensitivity test

5.67 A sensitivity test was carried out, assuming that all development traffic using the A10 east passed through Shepreth. Table 5.8 compares the net increases in eastbound vehicles through Shepreth, heading for the A10, assuming 33% and 100% diversions.

	AM peak (08:15 – 09:15)	PM peak (17:00 – 18:00)
33% diversion	7	3
100% diversion	22	9

Table 5.8: Eastbound development vehicles passing through Shepreth village (net increase)

5.68 These flows are shown diagrammatically in Figure 7 of **Appendix G** (33% diversion) and in **Appendix L**(100% diversion). Even with the larger diversion there would be less than one additional vehicle every two minutes.

5.69 Table 5.9 shows the results of running the PICADY model, with the development, assuming a 100% diversion. The analysis shows that there is still no discernible impact on the operation of the junction.

	AM peak (08:15 – 09:15)		PM peak (17:00 – 18:00)	
	Max RFC	Max queue (vehicles)	Max RFC	Max queue (vehicles)
Meldreth Road – Station & Fowlmere Roads	0.30	0.4	0.25	0.3
Station Road – Meldreth & Fowlmere Roads	0.16	0.2	0.21	0.3

Table 5.9: Shepreth junction, 2023 with development: summary PICADY results (100% diversion)

5.70 It was noted above that concern about possible diversion through Shepreth arose because of the perceived difficulty of making right turns onto the A10 at Junction 3. As shown above, the most serious queues occur at Junction 2, south of the A10 and it is this junction that appears to be the more problematic. Increasing capacity there, for example by replacing the priority junction with a mini-roundabout, appears to be feasible and would reduce delays, making a diversion via Shepreth less attractive.

Multi-modal trip generation

5.71 TRICS was used to produce estimates of person-trips by sustainable modes as well as by car. Table 5.10 shows the trip rates and Table 5.11 the estimated number of person-trips for a development of 200 houses.

	08:00 – 09:00			17:00 – 18:00			07:00 – 19:00		
	In	Out	Total	In	Out	Total	In	Out	Total
Vehicle occupants	0.199	0.676	0.875	0.509	0.212	0.721	3.287	3.393	6.680
Vehicles (drivers)	0.155	0.388	0.543	0.345	0.144	0.489	2.301	2.323	4.624
Pedestrians	0.029	0.114	0.143	0.066	0.043	0.109	0.584	0.565	1.149
Cyclists	0.005	0.009	0.014	0.015	0.01	0.025	0.062	0.070	0.132
Public transport	0	0.035	0.035	0.017	0.002	0.019	0.098	0.105	0.203
Total people	0.233	0.833	1.066	0.608	0.268	0.876	4.029	4.130	8.159

Table 5.10: Estimated person trip rates per dwelling (TRICS 7.5.1)

	08:00 – 09:00			17:00 – 18:00			07:00 – 19:00		
	In	Out	Total	In	Out	Total	In	Out	Total
Vehicle occupants	40	135	175	102	42	144	657	679	1,336
Vehicles (drivers)	31	78	109	69	29	98	460	465	925
Vehicle passengers	9	58	66	33	14	46	197	214	411
Pedestrians	6	23	29	13	9	22	117	113	230
Cyclists	1	2	3	3	2	5	12	14	26
Public transport	0	7	7	3	0	4	20	21	41
Total people	47	167	213	122	54	175	806	826	1,632

Table 5.11: Estimated person-trips for a development of 200 houses. s may not sum exactly owing to rounding

5.72 Unlike the Census modal split data in Table 3.4, the TRICS data are not specific to the locality although they may relate more closely to the type of dwelling proposed (private houses). Also, they refer to all trips made during a specific time period whereas the Census data only refer to work journeys, made at any time of day.

5.73 Table 5.11 suggests that through the day a quarter of journeys will be as car passengers while Table 3.4 gives only 4.7%. This may be because private houses are likely to be occupied by families with children who require lifts to school and leisure activities. Table 5.11 may underestimate the share of cycling, particularly children travelling to school, and the share of public transport may also be underestimated in view of the good access to train services. The share of walking is slightly below that in Table 3.4 but the proximity of the local schools and social facilities may make walking attractive and reduce the need to drive children there.

5.74 The site's closeness to the railway station makes it especially suitable for encouraging the use of rail, not only for commuting but for social and leisure trips, particularly to Cambridge and London.

Summary

5.75 The traffic assessment aimed to estimate the number of vehicle- and person-trips generated by the proposed development, netting off trips formerly generated by the industrial estate immediately to the south, which will be closed.

5.76 The assessment shows that the site access junction and the junction between Station Road and the A10 will perform satisfactorily. The specification for the former junction therefore meets requirements and the provision of a traffic island on Station Road will facilitate walking to and from the village (although the public footpath along the east side of the site will give an even more direct link). Although concerns have been expressed about the difficulty of making right turns from Station Road onto the A10 towards Cambridge the capacity of the junction again appears satisfactory and no modifications are indicated.

5.77 On the basis of the traffic and queue counts made for this assessment, the priority junction between the three arms of Station Road, just south of the A10 junction, is already marginally over capacity during the AM peak. Background traffic growth and the impacts of the proposed development will impose further stress. Converting the junction to a mini-roundabout will provide the needed capacity and is therefore proposed.

5.78 The junction between Meldreth Road, Station Road and Fowlmere Road in Shepreth village also has sufficient capacity to handle generated traffic even in the unlikely event of all traffic bound for the A10 eastwards using this route. A more realistic possibility is of about a third of such traffic travelling through Shepreth and this is only expected to occur in the eastbound direction as no right turn will be needed at the A10 / Station Road junction when travelling west. The improvements to the Station Road junction south of the A10 will also serve to make that route more attractive and discourage diversions through Shepreth.

5.79 Although the TRICS data do not give a good indication of the impact of the very accessible rail station on residents' travel, it may be expected to encourage train travel and many local facilities are within walking or cycling distance.

6 Summary and conclusions

6.1 This pre-application report provides an assessment of the likely transport implications arising from the proposed development of approximately 200 dwellings (the exact number and mix to be determined at a later stage) on land east of Station Road in Meldreth, South Cambridgeshire.

6.2 The development principles with respect to transport and access to the highway are guided by the *Design Manual for Roads & Bridges* (DMRB), *Manual for Streets* (MfS) and the *Cambridgeshire Design Guide*.

6.3 The proposed development site is currently occupied by agricultural land. It is bounded to the west by Station Road, to the south by the A10 road and to the east by a footpath. This footpath will offer not only a very convenient access to the station (240 metres walking distance from the site centroid) but an access to the village centres that is virtually traffic-free.

6.4 Station Road is of a good single carriageway standard with footways and street lighting. Apart from the footpath just mentioned a traffic island will be installed at the access junction to the site and the footway on the west side of the road will be widened close to the site.

6.5 Local facilities, which include a Co-operative food store, bus stops, primary and secondary schools, pubs and restaurants, GP and dental surgeries, a library and the village hall, are all within easy walking or cycling distance of the proposed development site.

6.6 Local bus services are limited but there is a half hourly train service linking with Cambridge and London with connections to a wide variety of destinations.

6.7 With regard to road safety no road traffic accidents have occurred close to the site in the period between 2013 and 2017 apart from two at the bend in Station Road south of the site. A cluster of accidents at the junction of Whitecroft Road and Kneesworth Road is 1.3 kilometres from the site. In particular, there are no obvious traffic hazards facing pupils travelling to and from schools in the two villages.

6.8 The Valley Farm industrial estate that occupies the south part of the site will be closed and the substandard vehicle access to it will be stopped up (while retaining access to the private house alongside, which will remain). A new vehicle access to the residential development will be provided to the north that will comply with current standards of engineering design.

6.9 Vehicle and cycle parking will be compliant with South Cambridgeshire District Council or Cambridgeshire County Council standards, whichever is valid at the time of consent.

6.10 The development is estimated to produce 109 traffic movements (31 in and 78 out) in the AM peak and 98 movements (69 in and 29 out) in the PM peak. This equates to under two vehicle movements per minute at these times. Modelling the junction using the PICADY program confirms that there will be adequate capacity.

6.11 The development's impact on traffic will be mitigated by the closure of the industrial estate, leading to the removal of about 33 vehicle movements in the AM peak and 15 in the PM peak.

6.12 The impact of generated traffic has also been tested on two junctions nearby: that between the A10 and Station Road and another immediately to the south where the arm of Station Road that connects with the A10 meets the routes to Meldreth (including the site) and Melbourn. While the A10 junction performs satisfactorily with the additional traffic, the junction to the south is already on the verge of overcapacity in the AM peak, possibly owing to a heavy right turning flow from the Meldreth to the Melbourn arm. Replacing this priority junction with a mini-roundabout gives a notable increase in capacity and appears to be feasible at that location.

6.13 The junction between Meldreth Road, Station Road and Fowlmere Road was also modelled but was found to operate satisfactorily even in the unlikely event that all traffic from the development, headed for the A10 east, was routed that way. While some diversion may occur, improvements to the junction south of the A10 should make this less likely.

6.14 This Transport Assessment demonstrates that a residential development of 200 dwellings can be accommodated on the proposal site without prejudicing the ability of the highway network to transport people and goods around the local and wider area. At the same time the location is accessible to many local facilities and has good rail connections.

6.15 The benefits of this development will be:

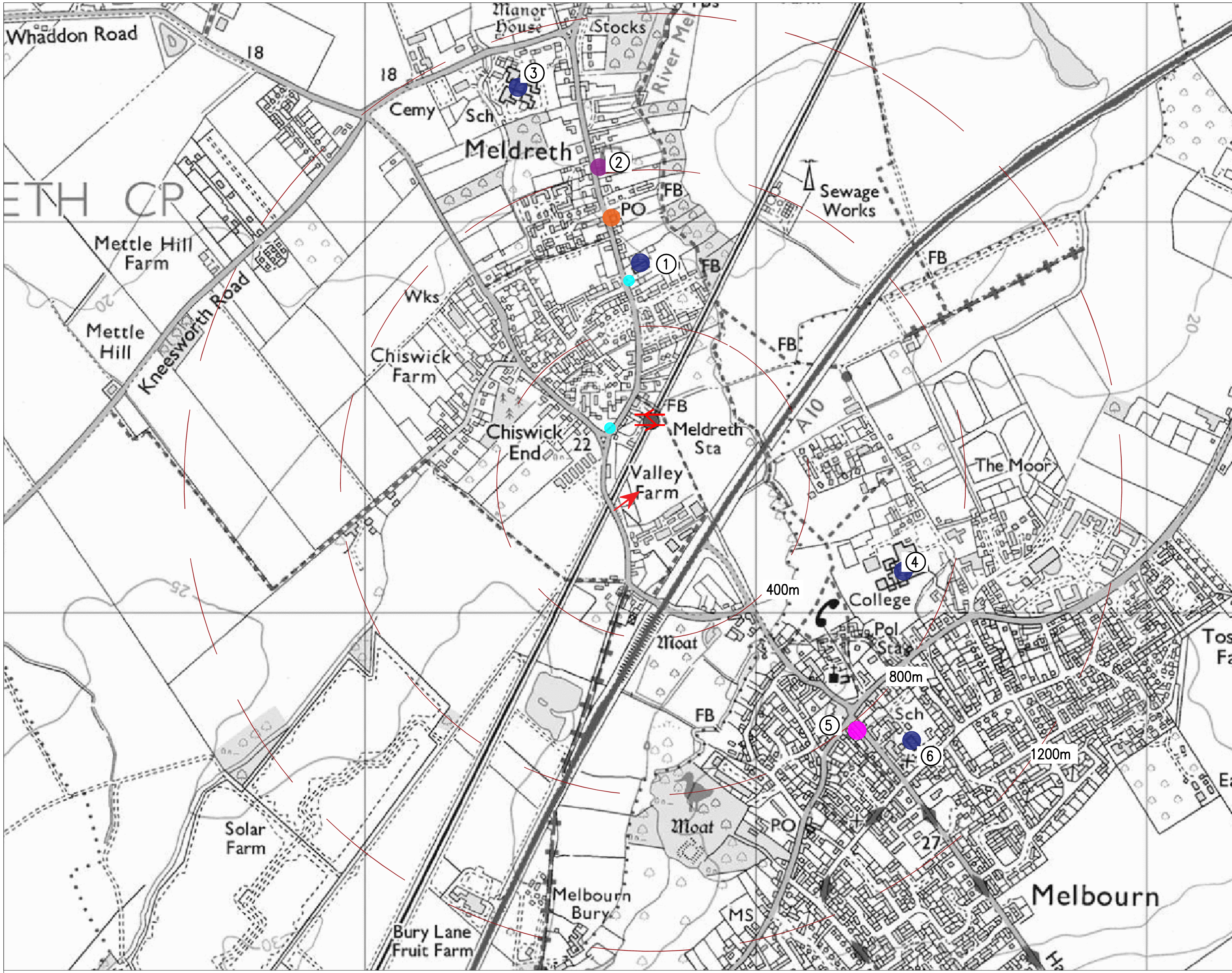
- Improved bus frequency. It is anticipated that a development of 200 units would substantially add to the viability of the existing bus services and allow for some enhancement that would be of benefit to existing residents and users of the service;
- Improved pedestrian facilities;
- Improved junction layout in terms of a mini roundabout enhancing safety and capacity;
- Improved safety through closing off industrial access which is sub-standard;
- Reducing the number of HGV's by closing the Industrial area.

6.16 It is therefore considered that the proposed development is in accordance with and conforms to the aims and objectives of Cambridgeshire and South Cambridgeshire planning policies as they apply to transport.

Appendices

Appendix: A	Location and Facilities Plan
Appendix: B	Bus Route Maps
Appendix: C	Accident Map
Appendix: D	Speed Survey Results
Appendix: E	Visibility splays
Appendix: F	Traffic Count Data
Appendix: G	Traffic Flow Diagrams
Appendix: H	TRICS Output
Appendix: I	PICADY Output
Appendix: J	ARCADY Output
Appendix: K	Indicative Mini Roundabout
Appendix: L	Traffic Flow, 100% Diversion

Appendix: A LOCATION AND FACILITIES PLAN



1. MELDRETH PRIMARY SCHOOL
2. THE BRITISH QUEEN PUB AND RESTUARANT
3. AURORA MELDRETH MANOR SCHOOL AND ORCHARD MANOR
4. MELBOURN VILLAGE COLLEGE
5. THE COOPERATIVE FOOD SUPERMARKET
6. MELBOURN PRIMARY SCHOOL

KEY:

- SITE ACCESS
- MELDRETH STATION
- BUS STOPS
- SCHOOLS
- SUPERMARKET (THE COOPERATIVE FOOD)
- POST OFFICE
- PUB AND RESTAURANT

REV	DATE	BY	DESCRIPTION	CHK	APD

DRAWING STATUS:

EAS

Unit 23, The Maltings, Stanstead Abbotts, Hertfordshire, SG12 8HG
Tel: 01920 871777

www.eastp.co.uk

CLIENT:

ARCHITECT:

PROJECT:

STATION ROAD,
MELDRETH

TITLE:

LOCATION AND FACILITIES PLAN

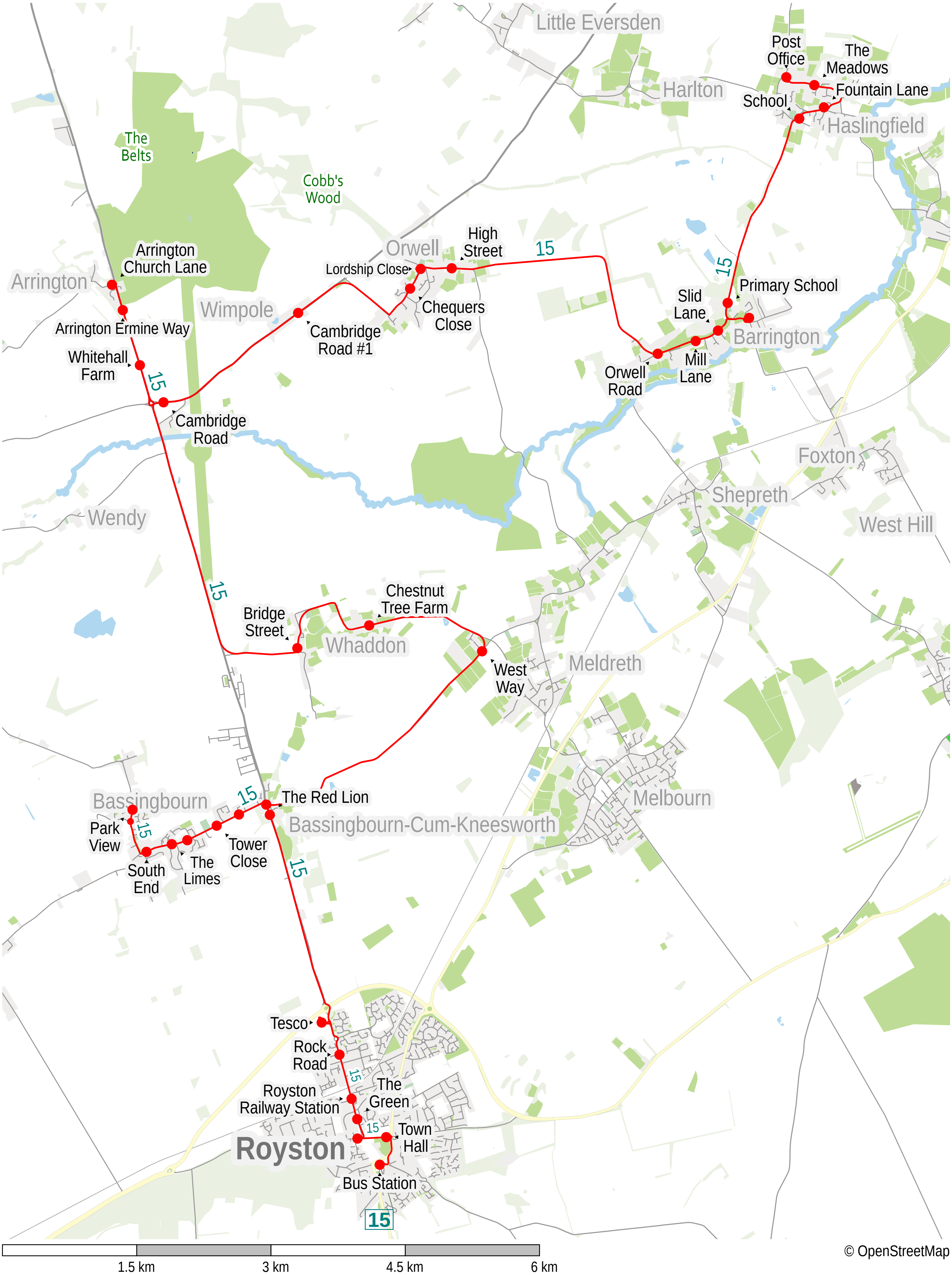
SCALE @ A3:	DESIGN–DRAWN:	DATE:
1:10000	EC	20/07/2018

PROJECT No:	DRAWING No:
1713	FIG01

Appendix: B **BUS ROUTE MAPS**

traveline
public transport info
traveline.info/se
0871 200 22 33
Calls cost 12p per minute plus your phone company's access charge

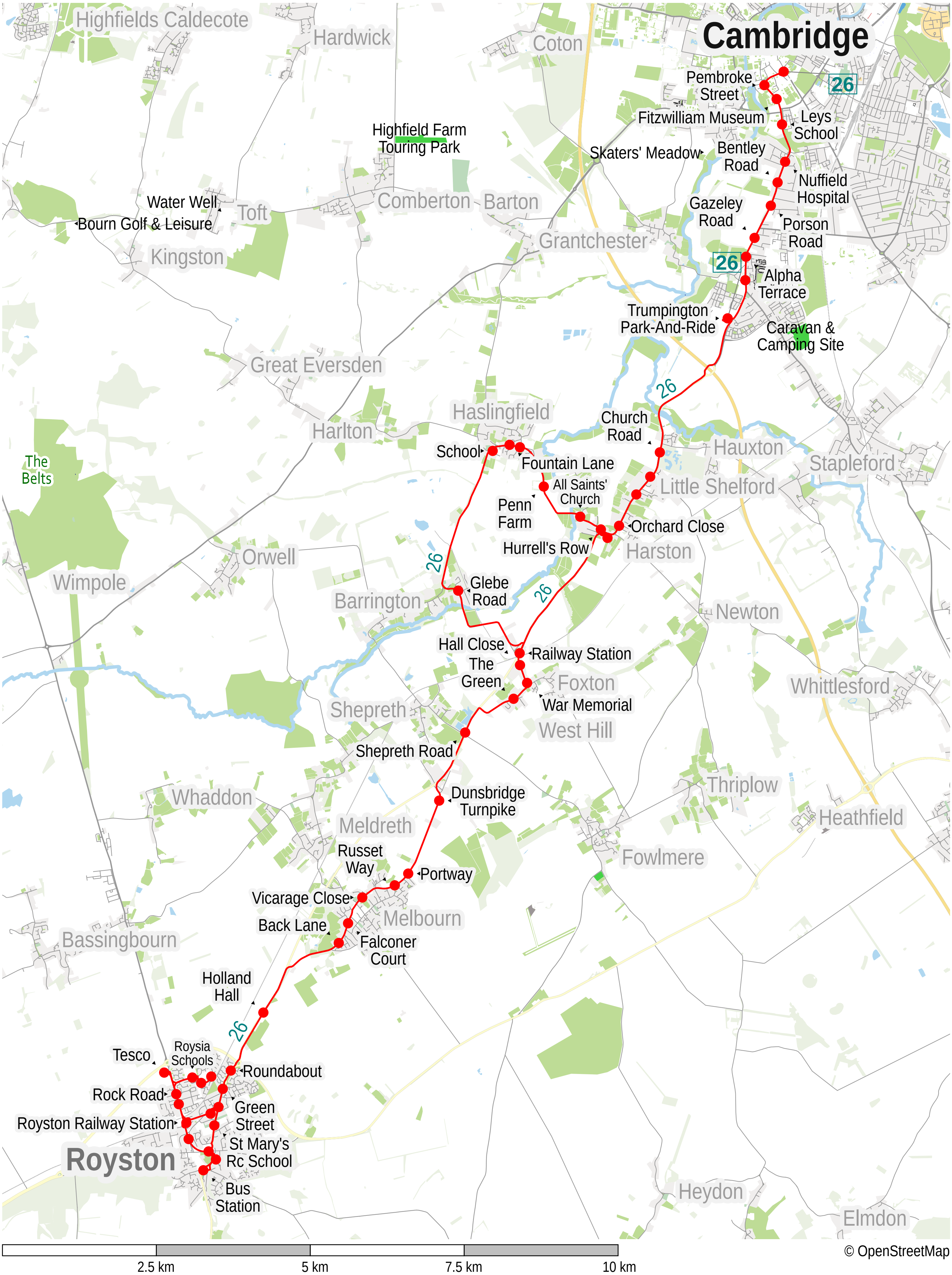
Route map for C G Myall & Son service 15 (inbound)



set-07015A(1).y08 (inbound)

traveline.info/ea
0871 200 22 33
Calls cost 12p per minute plus your phone company's access charge

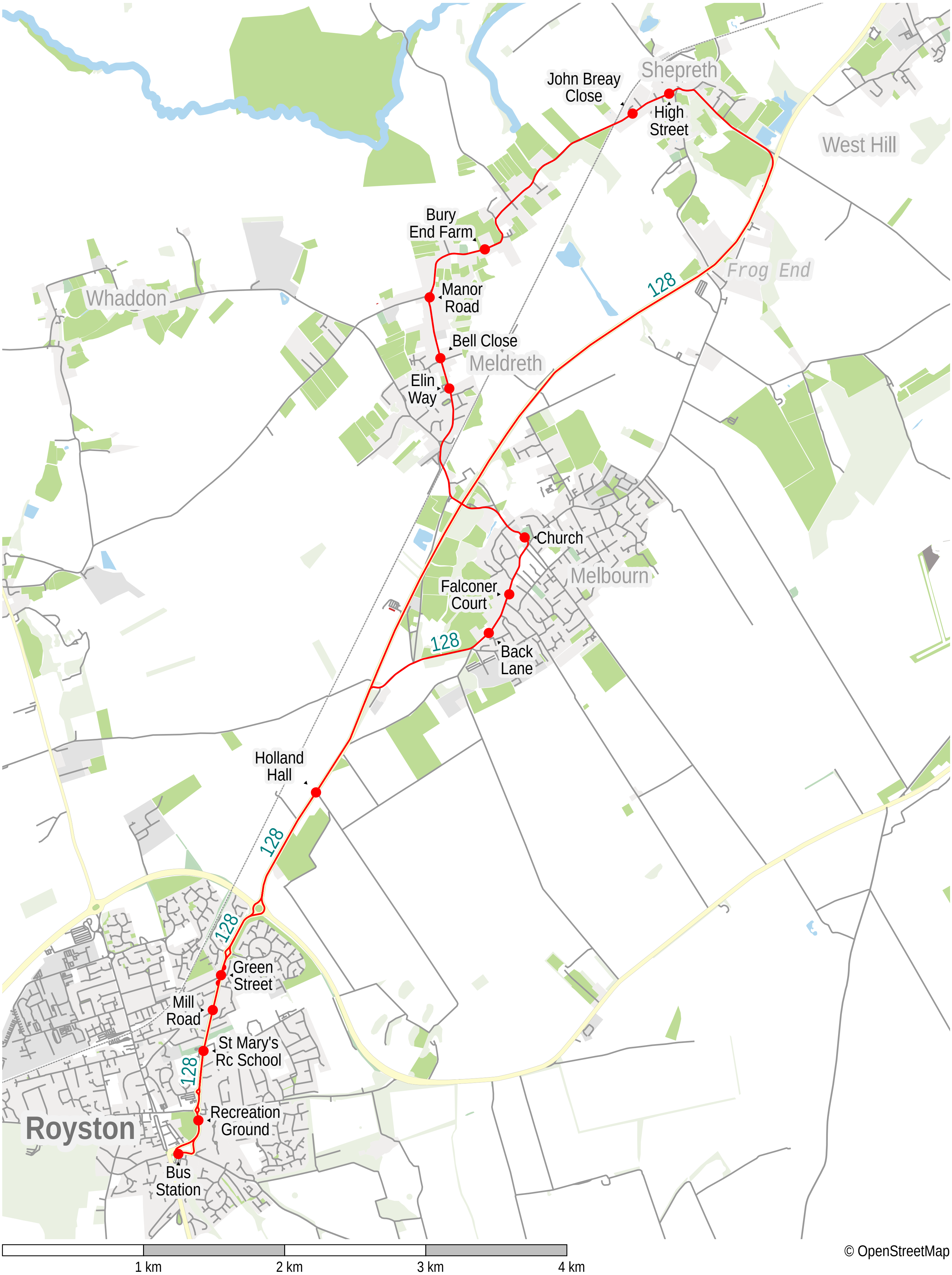
Route map for Stagecoach in Cambridge service 26 (inbound)



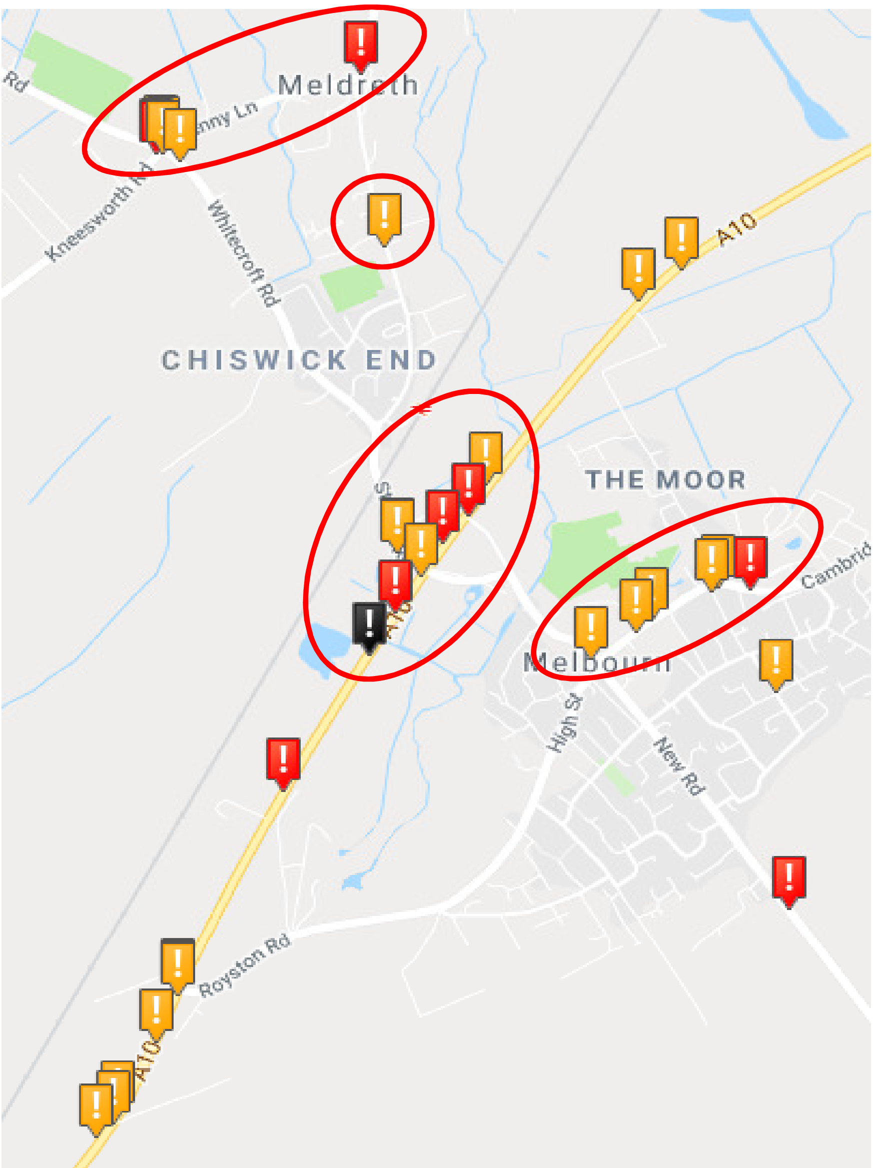
traveline
public transport info

traveline.info/ea
0871 200 22 33
Calls cost 12p per minute plus your phone company's access charge

Route map for A2B Bus & Coach (Royston) service 128 (inbound)



Appendix: C ACCIDENT MAP


Meldreth
Rd
Kneesworth Rd
Whitecroft Rd
CHISWICK END
A10
THE MOOR
Melbourn
High St
New Rd
Royston Rd
Cambrid

Appendix: D **SPEED SURVEY RESULTS**

SITE : STATION ROAD

LOCATION : South of railway bridge

GRID REFERENCE : 52.088289, 0.007713

DIRECTION : SOUTHBOUND

SPEED LIMIT : 30mph

Hour Beginning	Southbound Speeds	Northbound Speeds
Monday		
10:00	30.1	30.3
11:00	30.9	31.5
14:00	30.7	32.2
15:00	31.4	31.9
Tuesday		
10:00	29.2	30.8
11:00	30.2	31.6
14:00	30.8	31.7
15:00	31.4	32.3
Wednesday		
10:00	29.8	31.5
11:00	30	31.1
14:00	31.3	33.2
15:00	31	31.6
Thursday		
10:00	30.5	31.9
11:00	30	31.7
14:00	30.2	31.4
15:00	29.7	31.5
Friday		
10:00	30.6	31.9
11:00	30.1	31.4
14:00	31.7	33.4
15:00	31.2	31.5
85th Percentile Speeds	**30.54**	**31.72**

Appendix: E **VISIBILITY SPLAYS**

KEY:

- INDICATIVE EMBANKMENT WORKS. EXTEND SUBJECT TO DETAILED DESIGN
- PRESUMED HIGHWAY BOUNDARY BASED ON CAMBRIDGESHIRE COUNTY COUNCIL MY MAPS https://my.cambridgeshire.gov.uk/mycambridgeshire.aspx
- 2m FOOTWAY TO LINK TO RIGHT OF WAY INTO STATION

REV	DATE	BY	DESCRIPTION	CHK	APD

DRAWING STATUS:

EAS

Unit 23, The Maltings, Stanstead Abbotts, Hertfordshire, SG12 8HG
Tel: 01920 871777
www.eastp.co.uk

CLIENT:

ARCHITECT:

PROJECT:

STATION ROAD, MELDRETH

TITLE:

ACCESS ARRANGEMENT AND VISIBILITY

SCALE @ A2:	DESIGN-DRAWN:	DATE:
1:500	EC	12/09/2018

PROJECT No:	DRAWING No:
1713	SK01 REV D

EAS

Appendix: F TRAFFIC COUNT DATA

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / A10 PRIORITY JUNCTION

STATION ROAD OUT LEFT TO A10 SOUTH

	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	21					**21**
0715-0730	21					**21**
0730-0745	33	1	1			**35**
0745-0800	44	1				**45**
0800-0815	37	2	1			**40**
0815-0830	37	1				**38**
0830-0845	37		1			**38**
0845-0900	35	2				**37**
0900-0915	30	3	1			**34**
0915-0930	18	2				**20**
0930-0945	19					**19**
0945-1000	25					**25**
0700-1000	**357**	**12**	**4**	**0**	**0**	**373**
0700-0800	119	2	1	0	0	**122**
0715-0815	135	4	2	0	0	**141**
0730-0830	151	5	2	0	0	**158**
0745-0845	155	4	2	0	0	**161**
0800-0900	146	5	2	0	0	**153**
0815-0915	139	6	2	0	0	**147**
0830-0930	120	7	2	0	0	**129**
0845-0945	102	7	1	0	0	**110**
0900-1000	92	5	1	0	0	**98**

STATION ROAD OUT RIGHT TO A10 NORTH

	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	14					**14**
0715-0730	14					**14**
0730-0745	9					**9**
0745-0800	14			1		**15**
0800-0815	15	2				**17**
0815-0830	9	2				**11**
0830-0845	6			2		**8**
0845-0900	13		1			**14**
0900-0915	11					**11**
0915-0930	9		1			**10**
0930-0945	5	1				**6**
0945-1000	7	1				**8**
0700-1000	**126**	**6**	**2**	**3**	**0**	**137**
0700-0800	51	0	0	1	0	**52**
0715-0815	52	2	0	1	0	**55**
0730-0830	47	4	0	1	0	**52**
0745-0845	44	4	0	3	0	**51**
0800-0900	43	4	1	2	0	**50**
0815-0915	39	2	1	2	0	**44**
0830-0930	39	0	2	2	0	**43**
0845-0945	38	1	2	0	0	**41**
0900-1000	32	2	1	0	0	**35**

STATION ROAD RIGHT TURN IN FROM A10 SOUTH

	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	10	2				**12**
0715-0730	10	2				**12**
0730-0745	18		1			**19**
0745-0800	30	1		1		**32**
0800-0815	28	1	2			**31**
0815-0830	24	2				**26**
0830-0845	29	2				**31**
0845-0900	31	4	1			**36**
0900-0915	24					**24**
0915-0930	21		1			**22**
0930-0945	11	3				**14**
0945-1000	25					**25**
0700-1000	**261**	**17**	**5**	**1**	**0**	**284**
0700-0800	68	5	1	1	0	**75**
0715-0815	86	4	3	1	0	**94**
0730-0830	100	4	3	1	0	**108**
0745-0845	111	6	2	1	0	**120**
0800-0900	112	9	3	0	0	**124**
0815-0915	108	8	1	0	0	**117**
0830-0930	105	6	2	0	0	**113**
0845-0945	87	7	2	0	0	**96**
0900-1000	81	3	1	0	0	**85**

STATION ROAD LEFT TURN IN FROM A10 NORTH

	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	9					**9**
0715-0730	9					**9**
0730-0745	10	1	1			**12**
0745-0800	10	1	1			**12**
0800-0815	6	1	1			**8**
0815-0830	4	2				**6**
0830-0845	9		1			**10**
0845-0900	12					**12**
0900-0915	15					**15**
0915-0930	6					**6**
0930-0945	6					**6**
0945-1000	8					**8**
0700-1000	**104**	**5**	**4**	**0**	**0**	**113**
0700-0800	38	2	2	0	0	**42**
0715-0815	35	3	3	0	0	**41**
0730-0830	30	5	3	0	0	**38**
0745-0845	29	4	3	0	0	**36**
0800-0900	31	3	2	0	0	**36**
0815-0915	40	2	1	0	0	**43**
0830-0930	42	0	1	0	0	**43**
0845-0945	39	0	0	0	0	**39**
0900-1000	35	0	0	0	0	**35**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / A10 PRIORITY JUNCTION

	STATION ROAD OUT LEFT TO A10 SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	15	1				**16**
1615-1630	17		1			**18**
1630-1645	24	1		1		**26**
1645-1700	30	1				**31**
1700-1715	29					**29**
1715-1730	23	1				**24**
1730-1745	37					**37**
1745-1800	30					**30**
1800-1815	19					**19**
1815-1830	20					**20**
1830-1845	25					**25**
1845-1900	14			1		**15**
1600-1900	**283**	**4**	**1**	**2**	**0**	**290**
1600-1700	86	3	1	1	0	**91**
1615-1715	100	2	1	1	0	**104**
1630-1730	106	3	0	1	0	**110**
1645-1745	119	2	0	0	0	**121**
1700-1800	119	1	0	0	0	**120**
1715-1815	109	1	0	0	0	**110**
1730-1830	106	0	0	0	0	**106**
1745-1845	94	0	0	0	0	**94**
1800-1900	78	0	0	1	0	**79**

	STATION ROAD OUT RIGHT TO A10 NORTH					
	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	3					**3**
1615-1630	6	1				**7**
1630-1645	1					**1**
1645-1700	12	1				**13**
1700-1715	11	1				**12**
1715-1730	9	1				**10**
1730-1745	7		1			**8**
1745-1800	3					**3**
1800-1815	6					**6**
1815-1830	8					**8**
1830-1845	12	1				**13**
1845-1900	6					**6**
1600-1900	**84**	**5**	**1**	**0**	**0**	**90**
1600-1700	22	2	0	0	0	**24**
1615-1715	30	3	0	0	0	**33**
1630-1730	33	3	0	0	0	**36**
1645-1745	39	3	1	0	0	**43**
1700-1800	30	2	1	0	0	**33**
1715-1815	25	1	1	0	0	**27**
1730-1830	24	0	1	0	0	**25**
1745-1845	29	1	0	0	0	**30**
1800-1900	32	1	0	0	0	**33**

	STATION ROAD RIGHT TURN IN FROM A10 SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	27					**27**
1615-1630	24					**24**
1630-1645	33	1				**34**
1645-1700	37			1		**38**
1700-1715	41	2				**43**
1715-1730	32					**32**
1730-1745	35				1	**36**
1745-1800	39					**39**
1800-1815	32	1				**33**
1815-1830	26					**26**
1830-1845	26					**26**
1845-1900	22					**22**
1600-1900	**374**	**4**	**0**	**1**	**1**	**380**
1600-1700	121	1	0	1	0	**123**
1615-1715	135	3	0	1	0	**139**
1630-1730	143	3	0	1	0	**147**
1645-1745	145	2	0	1	1	**149**
1700-1800	147	2	0	0	1	**150**
1715-1815	138	1	0	0	1	**140**
1730-1830	132	1	0	0	1	**134**
1745-1845	123	1	0	0	0	**124**
1800-1900	106	1	0	0	0	**107**

	STATION ROAD LEFT TURN IN FROM A10 NORTH					
	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	12					**12**
1615-1630	11					**11**
1630-1645	10					**10**
1645-1700	22					**22**
1700-1715	17					**17**
1715-1730	12					**12**
1730-1745	17					**17**
1745-1800	12					**12**
1800-1815	9	1				**10**
1815-1830	10					**10**
1830-1845	11					**11**
1845-1900	12					**12**
1600-1900	**155**	**1**	**0**	**0**	**0**	**156**
1600-1700	55	0	0	0	0	**55**
1615-1715	60	0	0	0	0	**60**
1630-1730	61	0	0	0	0	**61**
1645-1745	68	0	0	0	0	**68**
1700-1800	58	0	0	0	0	**58**
1715-1815	50	1	0	0	0	**51**
1730-1830	48	1	0	0	0	**49**
1745-1845	42	1	0	0	0	**43**
1800-1900	42	1	0	0	0	**43**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / A10 PRIORITY JUNCTION

	A10 FROM SOUTH STRAIGHT AHEAD TO A10 NORTH						A10 FROM NORTH STRAIGHT AHEAD TO A10 SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	131	5				**136**	91	12			1	**104**
0715-0730	131	5				**136**	91	11				**102**
0730-0745	140	8				**148**	109	3		2		**114**
0745-0800	115	2				**117**	116	7		1		**124**
0800-0815	141	5		2		**148**	96	13				**109**
0815-0830	95	8				**103**	88	8	3			**99**
0830-0845	117	7				**124**	76	6	2	1		**85**
0845-0900	129	9		1		**139**	79	7		1		**87**
0900-0915	114	13		1		**128**	78	4	1			**83**
0915-0930	88	4	1			**93**	69	11				**80**
0930-0945	87	8	1			**96**	47	8				**55**
0945-1000	100	8	2	3		**113**	97	9				**106**
0700-1000	**1388**	**82**	**4**	**7**	**0**	**1481**	**1037**	**99**	**6**	**5**	**1**	**1148**
0700-0800	517	20	0	0	0	**537**	407	33	0	3	1	**444**
0715-0815	527	20	0	2	0	**549**	412	34	0	3	0	**449**
0730-0830	491	23	0	2	0	**516**	409	31	3	3	0	**446**
0745-0845	468	22	0	2	0	**492**	376	34	5	2	0	**417**
0800-0900	482	29	0	3	0	**514**	339	34	5	2	0	**380**
0815-0915	455	37	0	2	0	**494**	321	25	6	2	0	**354**
0830-0930	448	33	1	2	0	**484**	302	28	3	2	0	**335**
0845-0945	418	34	2	2	0	**456**	273	30	1	1	0	**305**
0900-1000	389	33	4	4	0	**430**	291	32	1	0	0	**324**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / A10 PRIORITY JUNCTION

	A10 FROM SOUTH STRAIGHT AHEAD TO A10 NORTH						A10 FROM NORTH STRAIGHT AHEAD TO A10 SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	76	3	1			**80**	128	2	1	1		**132**
1615-1630	76	4	1	1	1	**83**	129	2		1		**132**
1630-1645	72	1	1	1		**75**	139	2	2			**143**
1645-1700	103	2	1	2		**108**	129	2		1		**132**
1700-1715	114	2		2		**118**	119	2		1		**122**
1715-1730	88			2		**90**	117					**117**
1730-1745	86	2				**88**	149	1		2		**152**
1745-1800	64	3				**67**	102	1		2		**105**
1800-1815	87	3	1			**91**	119	3	1			**123**
1815-1830	73	3		1		**77**	89	1				**90**
1830-1845	76	1		2		**79**	85					**85**
1845-1900	46	1				**47**	72	1				**73**
1600-1900	**961**	**25**	**5**	**11**	**1**	**1003**	**1377**	**17**	**4**	**8**	**0**	**1406**
1600-1700	327	10	4	4	1	**346**	525	8	3	3	0	**539**
1615-1715	365	9	3	6	1	**384**	516	8	2	3	0	**529**
1630-1730	377	5	2	7	0	**391**	504	6	2	2	0	**514**
1645-1745	391	6	1	6	0	**404**	514	5	0	4	0	**523**
1700-1800	352	7	0	4	0	**363**	487	4	0	5	0	**496**
1715-1815	325	8	1	2	0	**336**	487	5	1	4	0	**497**
1730-1830	310	11	1	1	0	**323**	459	6	1	4	0	**470**
1745-1845	300	10	1	3	0	**314**	395	5	1	2	0	**403**
1800-1900	282	8	1	3	0	**294**	365	5	1	0	0	**371**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / STATON ROAD PRIORITY JUNCTION

	STATION ROAD (WEST) OUT LEFT TO STATION ROAD NORTH / A10					
	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	20					**20**
0715-0730	25					**25**
0730-0745	27	1	1			**29**
0745-0800	35			1		**36**
0800-0815	30	4	1			**35**
0815-0830	29	3				**32**
0830-0845	25		1	1		**27**
0845-0900	36	1	1			**38**
0900-0915	24	2	1			**27**
0915-0930	15	2	1			**18**
0930-0945	12					**12**
0945-1000	13					**13**
0700-1000	**291**	**13**	**6**	**2**	**0**	**312**
0700-0800	107	1	1	1	0	**110**
0715-0815	117	5	2	1	0	**125**
0730-0830	121	8	2	1	0	**132**
0745-0845	119	7	2	2	0	**130**
0800-0900	120	8	3	1	0	**132**
0815-0915	114	6	3	1	0	**124**
0830-0930	100	5	4	1	0	**110**
0845-0945	87	5	3	0	0	**95**
0900-1000	64	4	2	0	0	**70**

	STATION ROAD (WEST) OUT RIGHT TO STATION ROAD SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	24					**24**
0715-0730	30				3	**33**
0730-0745	46			1	2	**49**
0745-0800	76	3		2	1	**82**
0800-0815	81				1	**82**
0815-0830	91	1			1	**93**
0830-0845	73			3	1	**77**
0845-0900	66				2	**68**
0900-0915	45				3	**48**
0915-0930	29					**29**
0930-0945	19	1			3	**23**
0945-1000	27	2		1	1	**31**
0700-1000	**607**	**7**	**0**	**7**	**18**	**639**
0700-0800	176	3	0	3	6	**188**
0715-0815	233	3	0	3	7	**246**
0730-0830	294	4	0	3	5	**306**
0745-0845	321	4	0	5	4	**334**
0800-0900	311	1	0	3	5	**320**
0815-0915	275	1	0	3	7	**286**
0830-0930	213	0	0	3	6	**222**
0845-0945	159	1	0	0	8	**168**
0900-1000	120	3	0	1	7	**131**

	STATION ROAD (WEST) RIGHT TURN IN FROM STATION ROAD NORTH / A10					
	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	12	2				**14**
0715-0730	11					**11**
0730-0745	15	1	1			**17**
0745-0800	16	1				**17**
0800-0815	18	2	2			**22**
0815-0830	15	2				**17**
0830-0845	13	2	1			**16**
0845-0900	19	3	1			**23**
0900-0915	19					**19**
0915-0930	11		1			**12**
0930-0945	10	1				**11**
0945-1000	15					**15**
0700-1000	**174**	**14**	**6**	**0**	**0**	**194**
0700-0800	54	4	1	0	0	**59**
0715-0815	60	4	3	0	0	**67**
0730-0830	64	6	3	0	0	**73**
0745-0845	62	7	3	0	0	**72**
0800-0900	65	9	4	0	0	**78**
0815-0915	66	7	2	0	0	**75**
0830-0930	62	5	3	0	0	**70**
0845-0945	59	4	2	0	0	**65**
0900-1000	55	1	1	0	0	**57**

	STATION ROAD (WEST) LEFT TURN IN FROM STATION ROAD SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	15	1				**16**
0715-0730	17	2			2	**21**
0730-0745	32		1	1	1	**35**
0745-0800	25				3	**28**
0800-0815	41	1			1	**43**
0815-0830	47	1			1	**49**
0830-0845	40	1				**41**
0845-0900	36					**36**
0900-0915	16	1				**17**
0915-0930	20					**20**
0930-0945	28	2		1		**31**
0945-1000	23	1			1	**25**
0700-1000	**340**	**10**	**1**	**2**	**9**	**362**
0700-0800	89	3	1	1	6	**100**
0715-0815	115	3	1	1	7	**127**
0730-0830	145	2	1	1	6	**155**
0745-0845	153	3	0	0	5	**161**
0800-0900	164	3	0	0	2	**169**
0815-0915	139	3	0	0	1	**143**
0830-0930	112	2	0	0	0	**114**
0845-0945	100	3	0	1	0	**104**
0900-1000	87	4	0	1	1	**93**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / STATON ROAD PRIORITY JUNCTION

STATION ROAD (WEST) OUT LEFT TO STATION ROAD NORTH / A10

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	14					**14**
1615-1630	12	1	1			**14**
1630-1645	17	1				**18**
1645-1700	14	1				**15**
1700-1715	19					**19**
1715-1730	15	1				**16**
1730-1745	20		1			**21**
1745-1800	19					**19**
1800-1815	9					**9**
1815-1830	17					**17**
1830-1845	19	1				**20**
1845-1900	10			1		**11**
1600-1900	**185**	**5**	**2**	**1**	**0**	**193**
1600-1700	57	3	1	0	0	**61**
1615-1715	62	3	1	0	0	**66**
1630-1730	65	3	0	0	0	**68**
1645-1745	68	2	1	0	0	**71**
1700-1800	73	1	1	0	0	**75**
1715-1815	63	1	1	0	0	**65**
1730-1830	65	0	1	0	0	**66**
1745-1845	64	1	0	0	0	**65**
1800-1900	55	1	0	1	0	**57**

STATION ROAD (WEST) OUT RIGHT TO STATION ROAD SOUTH

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	42				2	**44**
1615-1630	39		1	2		**42**
1630-1645	46	1		1		**48**
1645-1700	24				1	**25**
1700-1715	51				1	**52**
1715-1730	52					**52**
1730-1745	46				2	**48**
1745-1800	43			1	3	**47**
1800-1815	38			2	1	**41**
1815-1830	29					**29**
1830-1845	29				2	**31**
1845-1900	28				6	**34**
1600-1900	**467**	**1**	**1**	**6**	**18**	**493**
1600-1700	151	1	1	3	3	**159**
1615-1715	160	1	1	3	2	**167**
1630-1730	173	1	0	1	2	**177**
1645-1745	173	0	0	0	4	**177**
1700-1800	192	0	0	1	6	**199**
1715-1815	179	0	0	3	6	**188**
1730-1830	156	0	0	3	6	**165**
1745-1845	139	0	0	3	6	**148**
1800-1900	124	0	0	2	9	**135**

STATION ROAD (WEST) RIGHT TURN IN FROM STATION ROAD NORTH / A10

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	14					**14**
1615-1630	17					**17**
1630-1645	34					**34**
1645-1700	31			1		**32**
1700-1715	37	1				**38**
1715-1730	31					**31**
1730-1745	29					**29**
1745-1800	31					**31**
1800-1815	19	2				**21**
1815-1830	24					**24**
1830-1845	22					**22**
1845-1900	18					**18**
1600-1900	**307**	**3**	**0**	**1**	**0**	**311**
1600-1700	96	0	0	1	0	**97**
1615-1715	119	1	0	1	0	**121**
1630-1730	133	1	0	1	0	**135**
1645-1745	128	1	0	1	0	**130**
1700-1800	128	1	0	0	0	**129**
1715-1815	110	2	0	0	0	**112**
1730-1830	103	2	0	0	0	**105**
1745-1845	96	2	0	0	0	**98**
1800-1900	83	2	0	0	0	**85**

STATION ROAD (WEST) LEFT TURN IN FROM STATION ROAD SOUTH

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	39				1	**40**
1615-1630	36		1			**37**
1630-1645	64			1	1	**66**
1645-1700	41				3	**44**
1700-1715	64				1	**65**
1715-1730	58			1		**59**
1730-1745	76				1	**77**
1745-1800	67				4	**71**
1800-1815	49			1	4	**54**
1815-1830	30	1			1	**32**
1830-1845	39			1	2	**42**
1845-1900	35					**35**
1600-1900	**598**	**1**	**1**	**4**	**18**	**622**
1600-1700	180	0	1	1	5	**187**
1615-1715	205	0	1	1	5	**212**
1630-1730	227	0	0	2	5	**234**
1645-1745	239	0	0	1	5	**245**
1700-1800	265	0	0	1	6	**272**
1715-1815	250	0	0	2	9	**261**
1730-1830	222	1	0	1	10	**234**
1745-1845	185	1	0	2	11	**199**
1800-1900	153	1	0	2	7	**163**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / STATON ROAD PRIORITY JUNCTION

	STATION ROAD FROM NORTH / A10 STRAIGHT AHEAD TO STATION ROAD SOUTH						STATION ROAD FROM SOUTH STRAIGHT AHEAD TO STATION ROAD NORTH / A10					
	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	7					**7**	15					**15**
0715-0730	8	2				**10**	10					**10**
0730-0745	13		1			**14**	15					**15**
0745-0800	24	1	1	1		**27**	23	1				**24**
0800-0815	16		1			**17**	22					**22**
0815-0830	13	2				**15**	17					**17**
0830-0845	25					**25**	18			1		**19**
0845-0900	24	1				**25**	12	1				**13**
0900-0915	20					**20**	17	1				**18**
0915-0930	16					**16**	12					**12**
0930-0945	7	2				**9**	12	1				**13**
0945-1000	18					**18**	19	1				**20**
0700-1000	**191**	**8**	**3**	**1**	**0**	**203**	**192**	**5**	**0**	**1**	**0**	**198**
0700-0800	52	3	2	1	0	**58**	63	1	0	0	0	**64**
0715-0815	61	3	3	1	0	**68**	70	1	0	0	0	**71**
0730-0830	66	3	3	1	0	**73**	77	1	0	0	0	**78**
0745-0845	78	3	2	1	0	**84**	80	1	0	1	0	**82**
0800-0900	78	3	1	0	0	**82**	69	1	0	1	0	**71**
0815-0915	82	3	0	0	0	**85**	64	2	0	1	0	**67**
0830-0930	85	1	0	0	0	**86**	59	2	0	1	0	**62**
0845-0945	67	3	0	0	0	**70**	53	3	0	0	0	**56**
0900-1000	61	2	0	0	0	**63**	60	3	0	0	0	**63**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / STATON ROAD PRIORITY JUNCTION

	STATION ROAD FROM NORTH / A10 STRAIGHT AHEAD TO STATION ROAD SOUTH						STATION ROAD FROM SOUTH STRAIGHT AHEAD TO STATION ROAD NORTH / A10					
	CAR	HGV	BUS	MCY	PCY	**TOT**	CAR	HGV	BUS	MCY	PCY	**TOT**
1600-1615	25					**25**	4	1				**5**
1615-1630	18					**18**	11					**11**
1630-1645	9	1				**10**	8			1		**9**
1645-1700	28					**28**	28	1				**29**
1700-1715	21	1				**22**	21	1				**22**
1715-1730	13					**13**	17	1				**18**
1730-1745	23				1	**24**	24					**24**
1745-1800	20					**20**	14					**14**
1800-1815	22					**22**	16					**16**
1815-1830	12					**12**	11					**11**
1830-1845	15					**15**	18					**18**
1845-1900	16					**16**	10					**10**
1600-1900	**222**	**2**	**0**	**0**	**1**	**225**	**182**	**4**	**0**	**1**	**0**	**187**
1600-1700	80	1	0	0	0	**81**	51	2	0	1	0	**54**
1615-1715	76	2	0	0	0	**78**	68	2	0	1	0	**71**
1630-1730	71	2	0	0	0	**73**	74	3	0	1	0	**78**
1645-1745	85	1	0	0	1	**87**	90	3	0	0	0	**93**
1700-1800	77	1	0	0	1	**79**	76	2	0	0	0	**78**
1715-1815	78	0	0	0	1	**79**	71	1	0	0	0	**72**
1730-1830	77	0	0	0	1	**78**	65	0	0	0	0	**65**
1745-1845	69	0	0	0	0	**69**	59	0	0	0	0	**59**
1800-1900	65	0	0	0	0	**65**	55	0	0	0	0	**55**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / VALLEY FARM INDUSTRIAL ESTATE

	VALLEY FARM INDUSTRIAL ESTATE OUT LEFT TO STATION ROAD SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	1					1
0715-0730	0					0
0730-0745	0					0
0745-0800	1					1
0800-0815	0					0
0815-0830	0	1				1
0830-0845	4					4
0845-0900	2					2
0900-0915	4					4
0915-0930	0					0
0930-0945	0					0
0945-1000	0					0
0700-1000	**12**	**1**	**0**	**0**	**0**	**13**
0700-0800	2	0	0	0	0	2
0715-0815	1	0	0	0	0	1
0730-0830	1	1	0	0	0	2
0745-0845	5	1	0	0	0	6
0800-0900	6	1	0	0	0	7
0815-0915	10	1	0	0	0	11
0830-0930	10	0	0	0	0	10
0845-0945	6	0	0	0	0	6
0900-1000	4	0	0	0	0	4

	VALLEY FARM INDUSTRIAL ESTATE OUT RIGHT TO STATION ROAD NORTH					
	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	2					2
0715-0730	0	1				1
0730-0745	0					0
0745-0800	0					0
0800-0815	0	1				1
0815-0830	1	1				2
0830-0845	3	2				5
0845-0900	2	1				3
0900-0915	1					1
0915-0930	0					0
0930-0945	0					0
0945-1000	1					1
0700-1000	**10**	**6**	**0**	**0**	**0**	**16**
0700-0800	2	1	0	0	0	3
0715-0815	0	2	0	0	0	2
0730-0830	1	2	0	0	0	3
0745-0845	4	4	0	0	0	8
0800-0900	6	5	0	0	0	11
0815-0915	7	4	0	0	0	11
0830-0930	6	3	0	0	0	9
0845-0945	3	1	0	0	0	4
0900-1000	2	0	0	0	0	2

	VALLEY FARM INDUSTRIAL ESTATE RIGHT TURN IN FROM STATION ROAD SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	3					3
0715-0730	2					2
0730-0745	0					0
0745-0800	2	1				3
0800-0815	1				1	2
0815-0830	2					2
0830-0845	3					3
0845-0900	5					5
0900-0915	3					3
0915-0930	0					0
0930-0945	0	2				2
0945-1000	0					0
0700-1000	**21**	**3**	**0**	**0**	**1**	**25**
0700-0800	7	1	0	0	0	8
0715-0815	5	1	0	0	1	7
0730-0830	5	1	0	0	1	7
0745-0845	8	1	0	0	1	10
0800-0900	11	0	0	0	1	12
0815-0915	13	0	0	0	0	13
0830-0930	11	0	0	0	0	11
0845-0945	8	2	0	0	0	10
0900-1000	3	2	0	0	0	5

	VALLEY FARM INDUSTRIAL ESTATE LEFT TURN IN FROM STATION ROAD NORTH					
	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	1					1
0715-0730	0	1				1
0730-0745	2					2
0745-0800	1	1				2
0800-0815	2	1				3
0815-0830	2					2
0830-0845	3					3
0845-0900	3					3
0900-0915	2					2
0915-0930	0					0
0930-0945	0					0
0945-1000	2					2
0700-1000	**18**	**3**	**0**	**0**	**0**	**21**
0700-0800	4	2	0	0	0	6
0715-0815	5	3	0	0	0	8
0730-0830	7	2	0	0	0	9
0745-0845	8	2	0	0	0	10
0800-0900	10	1	0	0	0	11
0815-0915	10	0	0	0	0	10
0830-0930	8	0	0	0	0	8
0845-0945	5	0	0	0	0	5
0900-1000	4	0	0	0	0	4

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / VALLEY FARM INDUSTRIAL ESTATE

VALLEY FARM INDUSTRIAL ESTATE OUT LEFT TO STATION ROAD SOUTH

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	4					**4**
1615-1630	1					**1**
1630-1645	2					**2**
1645-1700	2					**2**
1700-1715	1					**1**
1715-1730	1					**1**
1730-1745	1					**1**
1745-1800	1					**1**
1800-1815	0					**0**
1815-1830	0					**0**
1830-1845	1					**1**
1845-1900	0					**0**
1600-1900	**14**	**0**	**0**	**0**	**0**	**14**
1600-1700	9	0	0	0	0	**9**
1615-1715	6	0	0	0	0	**6**
1630-1730	6	0	0	0	0	**6**
1645-1745	5	0	0	0	0	**5**
1700-1800	4	0	0	0	0	**4**
1715-1815	3	0	0	0	0	**3**
1730-1830	2	0	0	0	0	**2**
1745-1845	2	0	0	0	0	**2**
1800-1900	1	0	0	0	0	**1**

VALLEY FARM INDUSTRIAL ESTATE OUT RIGHT TO STATION ROAD NORTH

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	0					**0**
1615-1630	0					**0**
1630-1645	2					**2**
1645-1700	4					**4**
1700-1715	2					**2**
1715-1730	0					**0**
1730-1745	0					**0**
1745-1800	0					**0**
1800-1815	0					**0**
1815-1830	0					**0**
1830-1845	1					**1**
1845-1900	0					**0**
1600-1900	**9**	**0**	**0**	**0**	**0**	**9**
1600-1700	6	0	0	0	0	**6**
1615-1715	8	0	0	0	0	**8**
1630-1730	8	0	0	0	0	**8**
1645-1745	6	0	0	0	0	**6**
1700-1800	2	0	0	0	0	**2**
1715-1815	0	0	0	0	0	**0**
1730-1830	0	0	0	0	0	**0**
1745-1845	1	0	0	0	0	**1**
1800-1900	1	0	0	0	0	**1**

VALLEY FARM INDUSTRIAL ESTATE RIGHT TURN IN FROM STATION ROAD SOUTH

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	0					**0**
1615-1630	0					**0**
1630-1645	1					**1**
1645-1700	0					**0**
1700-1715	1					**1**
1715-1730	1					**1**
1730-1745	0					**0**
1745-1800	2					**2**
1800-1815	0					**0**
1815-1830	0					**0**
1830-1845	0					**0**
1845-1900	0					**0**
1600-1900	**5**	**0**	**0**	**0**	**0**	**5**
1600-1700	1	0	0	0	0	**1**
1615-1715	2	0	0	0	0	**2**
1630-1730	3	0	0	0	0	**3**
1645-1745	2	0	0	0	0	**2**
1700-1800	4	0	0	0	0	**4**
1715-1815	3	0	0	0	0	**3**
1730-1830	2	0	0	0	0	**2**
1745-1845	2	0	0	0	0	**2**
1800-1900	0	0	0	0	0	**0**

VALLEY FARM INDUSTRIAL ESTATE LEFT TURN IN FROM STATION ROAD NORTH

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	0					**0**
1615-1630	0					**0**
1630-1645	1					**1**
1645-1700	2					**2**
1700-1715	0					**0**
1715-1730	3					**3**
1730-1745	0					**0**
1745-1800	2					**2**
1800-1815	1					**1**
1815-1830	0					**0**
1830-1845	0					**0**
1845-1900	0					**0**
1600-1900	**9**	**0**	**0**	**0**	**0**	**9**
1600-1700	3	0	0	0	0	**3**
1615-1715	3	0	0	0	0	**3**
1630-1730	6	0	0	0	0	**6**
1645-1745	5	0	0	0	0	**5**
1700-1800	5	0	0	0	0	**5**
1715-1815	6	0	0	0	0	**6**
1730-1830	3	0	0	0	0	**3**
1745-1845	3	0	0	0	0	**3**
1800-1900	1	0	0	0	0	**1**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / VALLEY FARM INDUSTRIAL ESTATE

	STATION ROAD FROM SOUTH STRAIGHT AHEAD TO STATION ROAD NORTH						STATION ROAD FROM NORTH STRAIGHT AHEAD TO STATION ROAD SOUTH					
	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	10	3	1		3	**17**	47		1		2	**50**
0715-0730	29	2			1	**32**	49				3	**52**
0730-0745	41	1	1	1	2	**46**	71		2	2		**75**
0745-0800	48	2	2		4	**56**	100	1	1	3		**105**
0800-0815	65	1	2			**68**	120	4	1			**125**
0815-0830	52	2				**54**	103	3				**106**
0830-0845	52	3	2			**57**	82		1	4	3	**90**
0845-0900	54	2				**56**	96	4				**100**
0900-0915	36		1			**37**	60	2	1		3	**66**
0915-0930	32					**32**	42		1		1	**44**
0930-0945	44	1		1		**46**	30	1	1		3	**35**
0945-1000	37	1			1	**39**	42	2		1	1	**46**
0700-1000	**500**	**18**	**9**	**2**	**11**	**540**	**842**	**17**	**9**	**10**	**16**	**894**
0700-0800	128	8	4	1	10	**151**	267	1	4	5	5	**282**
0715-0815	183	6	5	1	7	**202**	340	5	4	5	3	**357**
0730-0830	206	6	5	1	6	**224**	394	8	4	5	0	**411**
0745-0845	217	8	6	0	4	**235**	405	8	3	7	3	**426**
0800-0900	223	8	4	0	0	**235**	401	11	2	4	3	**421**
0815-0915	194	7	3	0	0	**204**	341	9	2	4	6	**362**
0830-0930	174	5	3	0	0	**182**	280	6	3	4	7	**300**
0845-0945	166	3	1	1	0	**171**	228	7	3	0	7	**245**
0900-1000	149	2	1	1	1	**154**	174	5	3	1	8	**191**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : MELDRETH, HERTS

STATION ROAD / VALLEY FARM INDUSTRIAL ESTATE

	STATION ROAD FROM SOUTH STRAIGHT AHEAD TO STATION ROAD NORTH						STATION ROAD FROM NORTH STRAIGHT AHEAD TO STATION ROAD SOUTH					
	CAR	HGV	BUS	MCY	PCY	**TOT**	CAR	HGV	BUS	MCY	PCY	**TOT**
1600-1615	69	1		1	2	**73**	62				1	**63**
1615-1630	51		1			**52**	48	1	1	1		**51**
1630-1645	91				2	**93**	53	2		2		**57**
1645-1700	91			1	3	**95**	42				1	**43**
1700-1715	96				1	**97**	69	1				**70**
1715-1730	89					**89**	63					**63**
1730-1745	108		1		2	**111**	68		1		1	**70**
1745-1800	84				5	**89**	58			1	2	**61**
1800-1815	71	2		1	5	**79**	42			1	2	**45**
1815-1830	48	1			1	**50**	34					**34**
1830-1845	61			1	2	**64**	49				1	**50**
1845-1900	59					**59**	36	1		1	4	**42**
1600-1900	**918**	**4**	**2**	**4**	**23**	**951**	**624**	**5**	**2**	**6**	**12**	**649**
1600-1700	302	1	1	2	7	**313**	205	3	1	3	2	**214**
1615-1715	329	0	1	1	6	**337**	212	4	1	3	1	**221**
1630-1730	367	0	0	1	6	**374**	227	3	0	2	1	**233**
1645-1745	384	0	1	1	6	**392**	242	1	1	0	2	**246**
1700-1800	377	0	1	0	8	**386**	258	1	1	1	3	**264**
1715-1815	352	2	1	1	12	**368**	231	0	1	2	5	**239**
1730-1830	311	3	1	1	13	**329**	202	0	1	2	5	**210**
1745-1845	264	3	0	2	13	**282**	183	0	0	2	5	**190**
1800-1900	239	3	0	2	8	**252**	161	1	0	2	7	**171**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : SHEPRETH, HERTS

MELDRETH ROAD / FOWLMERE ROAD / STATION ROAD PRIORITY JUNCTION

MELDRETH ROAD OUT LEFT TO STATION ROAD NORTH

	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	5					**5**
0715-0730	7	1				**8**
0730-0745	20	2		1		**23**
0745-0800	22		2		1	**25**
0800-0815	24		1			**25**
0815-0830	13					**13**
0830-0845	13	1	1			**15**
0845-0900	14			1		**15**
0900-0915	14				1	**15**
0915-0930	7	1				**8**
0930-0945	11					**11**
0945-1000	10		1		1	**12**
0700-1000	**160**	**5**	**5**	**2**	**3**	**175**
0700-0800	54	3	2	1	1	**61**
0715-0815	73	3	3	1	1	**81**
0730-0830	79	2	3	1	1	**86**
0745-0845	72	1	4	0	1	**78**
0800-0900	64	1	2	1	0	**68**
0815-0915	54	1	1	1	1	**58**
0830-0930	48	2	1	1	1	**53**
0845-0945	46	1	0	1	1	**49**
0900-1000	42	1	1	0	2	**46**

MELDRETH ROAD OUT RIGHT TO FOWLMERE ROAD SE

	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	13			1	1	**15**
0715-0730	15			1	2	**18**
0730-0745	14			1		**15**
0745-0800	24		1		3	**28**
0800-0815	19	1			4	**24**
0815-0830	11				3	**14**
0830-0845	18				3	**21**
0845-0900	15					**15**
0900-0915	9	1			1	**11**
0915-0930	10					**10**
0930-0945	8					**8**
0945-1000	12					**12**
0700-1000	**168**	**2**	**1**	**3**	**17**	**191**
0700-0800	66	0	1	3	6	**76**
0715-0815	72	1	1	2	9	**85**
0730-0830	68	1	1	1	10	**81**
0745-0845	72	1	1	0	13	**87**
0800-0900	63	1	0	0	10	**74**
0815-0915	53	1	0	0	7	**61**
0830-0930	52	1	0	0	4	**57**
0845-0945	42	1	0	0	1	**44**
0900-1000	39	1	0	0	1	**41**

MELDRETH ROAD RIGHT TURN IN FROM STATION ROAD NORTH

	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	6					**6**
0715-0730	5	1	1		1	**8**
0730-0745	9	1		1		**11**
0745-0800	14	3		1		**18**
0800-0815	7					**7**
0815-0830	11		2		1	**14**
0830-0845	24				1	**25**
0845-0900	12			1		**13**
0900-0915	17		1		1	**19**
0915-0930	8	1		1		**10**
0930-0945	6		1		1	**8**
0945-1000	7				1	**8**
0700-1000	**126**	**6**	**5**	**4**	**6**	**147**
0700-0800	34	5	1	2	1	**43**
0715-0815	35	5	1	2	1	**44**
0730-0830	41	4	2	2	1	**50**
0745-0845	56	3	2	1	2	**64**
0800-0900	54	0	2	1	2	**59**
0815-0915	64	0	3	1	3	**71**
0830-0930	61	1	1	2	2	**67**
0845-0945	43	1	2	2	2	**50**
0900-1000	38	1	2	1	3	**45**

MELDRETH ROAD LEFT TURN IN FROM FOWLMERE ROAD SE

	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	7					**7**
0715-0730	8			1		**9**
0730-0745	10					**10**
0745-0800	8					**8**
0800-0815	4					**4**
0815-0830	11					**11**
0830-0845	6				2	**8**
0845-0900	6	1			1	**8**
0900-0915	8	1				**9**
0915-0930	5	1				**6**
0930-0945	6					**6**
0945-1000	12	1				**13**
0700-1000	**91**	**4**	**0**	**1**	**3**	**99**
0700-0800	33	0	0	1	0	**34**
0715-0815	30	0	0	1	0	**31**
0730-0830	33	0	0	0	0	**33**
0745-0845	29	0	0	0	2	**31**
0800-0900	27	1	0	0	3	**31**
0815-0915	31	2	0	0	3	**36**
0830-0930	25	3	0	0	3	**31**
0845-0945	25	3	0	0	1	**29**
0900-1000	31	3	0	0	0	**34**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : SHEPRETH, HERTS

MELDRETH ROAD / FOWLMERE ROAD / STATION ROAD PRIORITY JUNCTION

MELDRETH ROAD OUT LEFT TO STATION ROAD NORTH

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	13	1	1			**15**
1615-1630	15					**15**
1630-1645	25			1		**26**
1645-1700	8					**8**
1700-1715	18	1		1	1	**21**
1715-1730	11				1	**12**
1730-1745	31	1			1	**33**
1745-1800	16			1		**17**
1800-1815	17			1		**18**
1815-1830	11				4	**15**
1830-1845	14			1		**15**
1845-1900	8					**8**
1600-1900	**187**	**3**	**1**	**5**	**7**	**203**
1600-1700	61	1	1	1	0	**64**
1615-1715	66	1	0	2	1	**70**
1630-1730	62	1	0	2	2	**67**
1645-1745	68	2	0	1	3	**74**
1700-1800	76	2	0	2	3	**83**
1715-1815	75	1	0	2	2	**80**
1730-1830	75	1	0	2	5	**83**
1745-1845	58	0	0	3	4	**65**
1800-1900	50	0	0	2	4	**56**

MELDRETH ROAD OUT RIGHT TO FOWLMERE ROAD SE

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	10					**10**
1615-1630	10		1			**11**
1630-1645	8			1		**9**
1645-1700	6					**6**
1700-1715	5			1		**6**
1715-1730	2				1	**3**
1730-1745	12					**12**
1745-1800	9					**9**
1800-1815	6	1				**7**
1815-1830	5					**5**
1830-1845	13					**13**
1845-1900	7					**7**
1600-1900	**93**	**1**	**1**	**2**	**1**	**98**
1600-1700	34	0	1	1	0	**36**
1615-1715	29	0	1	2	0	**32**
1630-1730	21	0	0	2	1	**24**
1645-1745	25	0	0	1	1	**27**
1700-1800	28	0	0	1	1	**30**
1715-1815	29	1	0	0	1	**31**
1730-1830	32	1	0	0	0	**33**
1745-1845	33	1	0	0	0	**34**
1800-1900	31	1	0	0	0	**32**

MELDRETH ROAD RIGHT TURN IN FROM STATION ROAD NORTH

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	16			1		**17**
1615-1630	16					**16**
1630-1645	19					**19**
1645-1700	10					**10**
1700-1715	25				1	**26**
1715-1730	16					**16**
1730-1745	30			1		**31**
1745-1800	20					**20**
1800-1815	14				1	**15**
1815-1830	11				1	**12**
1830-1845	12			1		**13**
1845-1900	6			1	1	**8**
1600-1900	**195**	**0**	**0**	**4**	**4**	**203**
1600-1700	61	0	0	1	0	**62**
1615-1715	70	0	0	0	1	**71**
1630-1730	70	0	0	0	1	**71**
1645-1745	81	0	0	1	1	**83**
1700-1800	91	0	0	1	1	**93**
1715-1815	80	0	0	1	1	**82**
1730-1830	75	0	0	1	2	**78**
1745-1845	57	0	0	1	2	**60**
1800-1900	43	0	0	2	3	**48**

MELDRETH ROAD LEFT TURN IN FROM FOWLMERE ROAD SE

	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	7			1		**8**
1615-1630	10				1	**11**
1630-1645	8					**8**
1645-1700	6				1	**7**
1700-1715	9			1	1	**11**
1715-1730	8			1		**9**
1730-1745	14			2	1	**17**
1745-1800	9				3	**12**
1800-1815	8				1	**9**
1815-1830	7				1	**8**
1830-1845	4				5	**9**
1845-1900	11				1	**12**
1600-1900	**101**	**0**	**0**	**5**	**15**	**121**
1600-1700	31	0	0	1	2	**34**
1615-1715	33	0	0	1	3	**37**
1630-1730	31	0	0	2	2	**35**
1645-1745	37	0	0	4	3	**44**
1700-1800	40	0	0	4	5	**49**
1715-1815	39	0	0	3	5	**47**
1730-1830	38	0	0	2	6	**46**
1745-1845	28	0	0	0	10	**38**
1800-1900	30	0	0	0	8	**38**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : SHEPRETH, HERTS

MELDRETH ROAD / FOWLMERE ROAD / STATION ROAD PRIORITY JUNCTION

	STATION RD NORTH STRAIGHT AHEAD TO FOWLMERE ROAD						FOWLMERE ROAD STRAIGHT AHEAD TO STATION ROAD NORTH					
	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
0700-0715	4					**4**	7					**7**
0715-0730	6		1			**7**	7		2			**9**
0730-0745	14		1			**15**	11					**11**
0745-0800	10					**10**	13		1		1	**15**
0800-0815	11		1			**12**	3			1	1	**5**
0815-0830	5	1	2			**8**	19	2	1		2	**24**
0830-0845	23					**23**	20	1	1			**22**
0845-0900	14		1			**15**	19	3	1			**23**
0900-0915	22	1				**23**	27					**27**
0915-0930	13		1			**14**	19	1	2			**22**
0930-0945	18					**18**	7	3				**10**
0945-1000	16					**16**	11		2			**13**
0700-1000	**156**	**2**	**7**	**0**	**0**	**165**	**163**	**10**	**10**	**1**	**4**	**188**
0700-0800	34	0	2	0	0	**36**	38	0	3	0	1	**42**
0715-0815	41	0	3	0	0	**44**	34	0	3	1	2	**40**
0730-0830	40	1	4	0	0	**45**	46	2	2	1	4	**55**
0745-0845	49	1	3	0	0	**53**	55	3	3	1	4	**66**
0800-0900	53	1	4	0	0	**58**	61	6	3	1	3	**74**
0815-0915	64	2	3	0	0	**69**	85	6	3	0	2	**96**
0830-0930	72	1	2	0	0	**75**	85	5	4	0	0	**94**
0845-0945	67	1	2	0	0	**70**	72	7	3	0	0	**82**
0900-1000	69	1	1	0	0	**71**	64	4	4	0	0	**72**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018

LOCATION : SHEPRETH, HERTS

MELDRETH ROAD / FOWLMERE ROAD / STATION ROAD PRIORITY JUNCTION

	STATION RD NORTH STRAIGHT AHEAD TO FOWLMERE ROAD						FOWLMERE ROAD STRAIGHT AHEAD TO STATION ROAD NORTH					
	CAR	HGV	BUS	MCY	PCY	TOT	CAR	HGV	BUS	MCY	PCY	TOT
1600-1615	7					**7**	12	1				**13**
1615-1630	17	1			1	**19**	11					**11**
1630-1645	15				1	**16**	9				1	**10**
1645-1700	10				1	**11**	14				1	**15**
1700-1715	37				1	**38**	15				1	**16**
1715-1730	17					**17**	21					**21**
1730-1745	17					**17**	17					**17**
1745-1800	15		1	1		**17**	15	1	1			**17**
1800-1815	11				1	**12**	12	1		1	3	**17**
1815-1830	4					**4**	11					**11**
1830-1845	9					**9**	9					**9**
1845-1900	6					**6**	7					**7**
1600-1900	**165**	**1**	**1**	**1**	**5**	**173**	**153**	**3**	**1**	**1**	**6**	**164**
1600-1700	49	1	0	0	3	**53**	46	1	0	0	2	**49**
1615-1715	79	1	0	0	4	**84**	49	0	0	0	3	**52**
1630-1730	79	0	0	0	3	**82**	59	0	0	0	3	**62**
1645-1745	81	0	0	0	2	**83**	67	0	0	0	2	**69**
1700-1800	86	0	1	1	1	**89**	68	1	1	0	1	**71**
1715-1815	60	0	1	1	1	**63**	65	2	1	1	3	**72**
1730-1830	47	0	1	1	1	**50**	55	2	1	1	3	**62**
1745-1845	39	0	1	1	1	**42**	47	2	1	1	3	**54**
1800-1900	30	0	0	0	1	**31**	39	1	0	1	3	**44**

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018 LOCATION : MELDRETH & SHEPRETH, HERTS

	A10 / STATON RD		STATION RD		INDUSTRAIL ESTATE		SHEPRETH
	OUT OF STATION RD		OUT OF STATION ROAD		OUT OF INDUSTRIAL ESTATE		OUT OF MELDRETH ROAD
0705	0	0705	0	0705	0	0705	0
0710	0	0710	0	0710	0	0710	0
0715	0	0715	0	0715	0	0715	0
0720	0	0720	0	0720	0	0720	0
0725	5	0725	0	0725	0	0725	0
0730	0	0730	0	0730	0	0730	0
0735	5	0735	0	0735	0	0735	0
0740	2	0740	0	0740	0	0740	0
0745	0	0745	0	0745	0	0745	0
0750	2	0750	0	0750	0	0750	0
0755	0	0755	8	0755	0	0755	0
0800	2	0800	0	0800	0	0800	0
0805	0	0805	0	0805	0	0805	0
0810	0	0810	5	0810	0	0810	0
0815	3	0815	0	0815	0	0815	0
0820	0	0820	7	0820	0	0820	0
0825	0	0825	12	0825	0	0825	0
0830	0	0830	2	0830	0	0830	0
0835	0	0835	12	0835	0	0835	0
0840	4	0840	14	0840	0	0840	0
0845	0	0845	0	0845	0	0845	0
0850	5	0850	0	0850	0	0850	0
0855	3	0855	0	0855	0	0855	0
0900	0	0900	0	0900	0	0900	0
0905	0	0905	0	0905	0	0905	0
0910	0	0910	0	0910	0	0910	0
0915	0	0915	0	0915	0	0915	0
0920	0	0920	0	0920	0	0920	0
0925	0	0925	0	0925	0	0925	0
0930	0	0930	0	0930	0	0930	0
0935	0	0935	0	0935	0	0935	0
0940	0	0940	0	0940	0	0940	0
0945	0	0945	0	0945	0	0945	0
0950	0	0950	0	0950	0	0950	0
0955	0	0955	0	0955	0	0955	0
1000	0	1000	0	1000	0	1000	0

QUEUES RECORDED IN TOTAL NUMBER OF VEHICLES

K&M TRAFFIC SURVEYS

DATE : WEDNESDAY 27TH JUNE 2018 LOCATION : MELDRETH & SHEPRETH, HERTS

	A10 / STATON RD		STATION RD		INDUSTRAIL ESTATE		SHEPRETH
	OUT OF STATION RD		OUT OF STATION ROAD		OUT OF INDUSTRIAL ESTATE		OUT OF MELDRETH ROAD
1605	0	1605	0	1605	0	1605	0
1610	0	1610	0	1610	0	1610	0
1615	0	1615	0	1615	0	1615	0
1620	0	1620	0	1620	0	1620	0
1625	0	1625	0	1625	0	1625	0
1630	0	1630	0	1630	0	1630	0
1635	3	1635	0	1635	0	1635	0
1640	0	1640	0	1640	0	1640	0
1645	0	1645	0	1645	0	1645	0
1650	4	1650	0	1650	0	1650	0
1655	0	1655	0	1655	0	1655	0
1700	0	1700	0	1700	0	1700	0
1705	5	1705	0	1705	0	1705	0
1710	1	1710	5	1710	0	1710	0
1715	0	1715	0	1715	0	1715	0
1720	3	1720	0	1720	0	1720	0
1725	0	1725	0	1725	0	1725	0
1730	0	1730	0	1730	0	1730	0
1735	3	1735	0	1735	0	1735	0
1740	4	1740	0	1740	0	1740	0
1745	0	1745	0	1745	0	1745	0
1750	0	1750	6	1750	0	1750	0
1755	0	1755	0	1755	0	1755	0
1800	0	1800	0	1800	0	1800	0
1805	0	1805	0	1805	0	1805	0
1810	0	1810	0	1810	0	1810	0
1815	0	1815	0	1815	0	1815	0
1820	0	1820	0	1820	0	1820	0
1825	0	1825	0	1825	0	1825	0
1830	3	1830	0	1830	0	1830	0
1835	0	1835	0	1835	0	1835	0
1840	0	1840	0	1840	0	1840	0
1845	0	1845	0	1845	0	1845	0
1850	0	1850	0	1850	0	1850	0
1855	0	1855	0	1855	0	1855	0
1900	0	1900	0	1900	0	1900	0

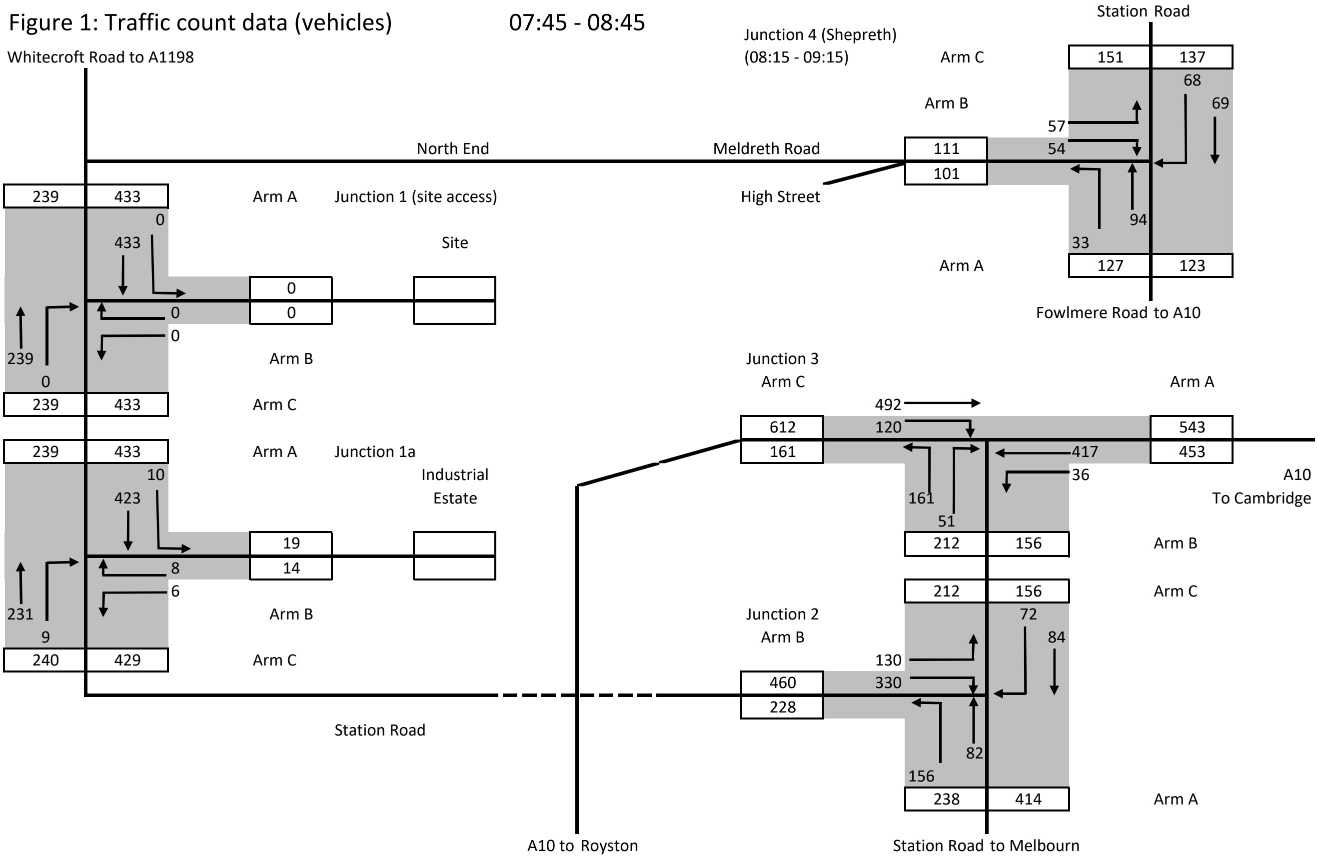
QUEUES RECORDED IN TOTAL NUMBER OF VEHICLES

Appendix: G TRAFFIC FLOW DIAGRAMS

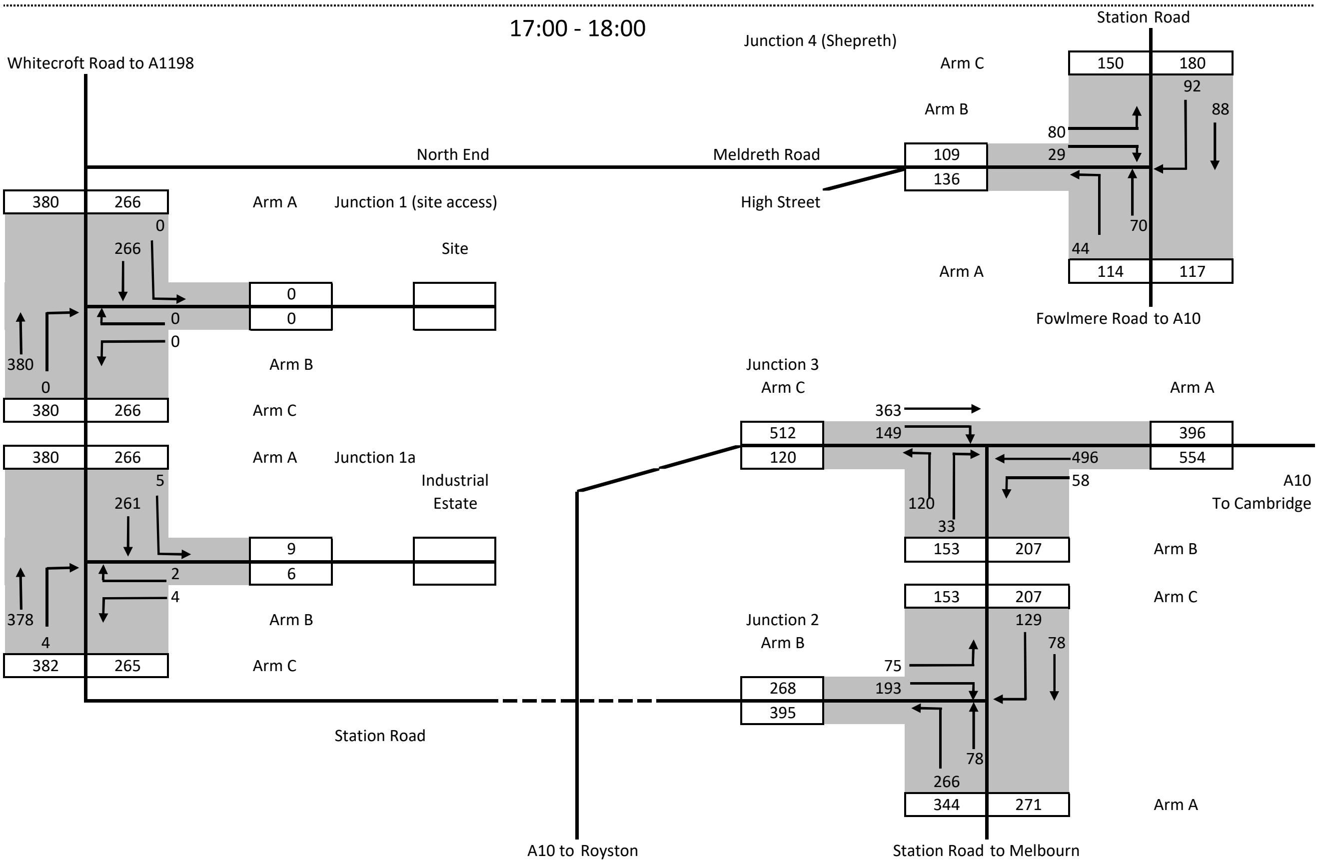
1713 Meldreth

Figure 1: Traffic count data (vehicles)

07:45 - 08:45

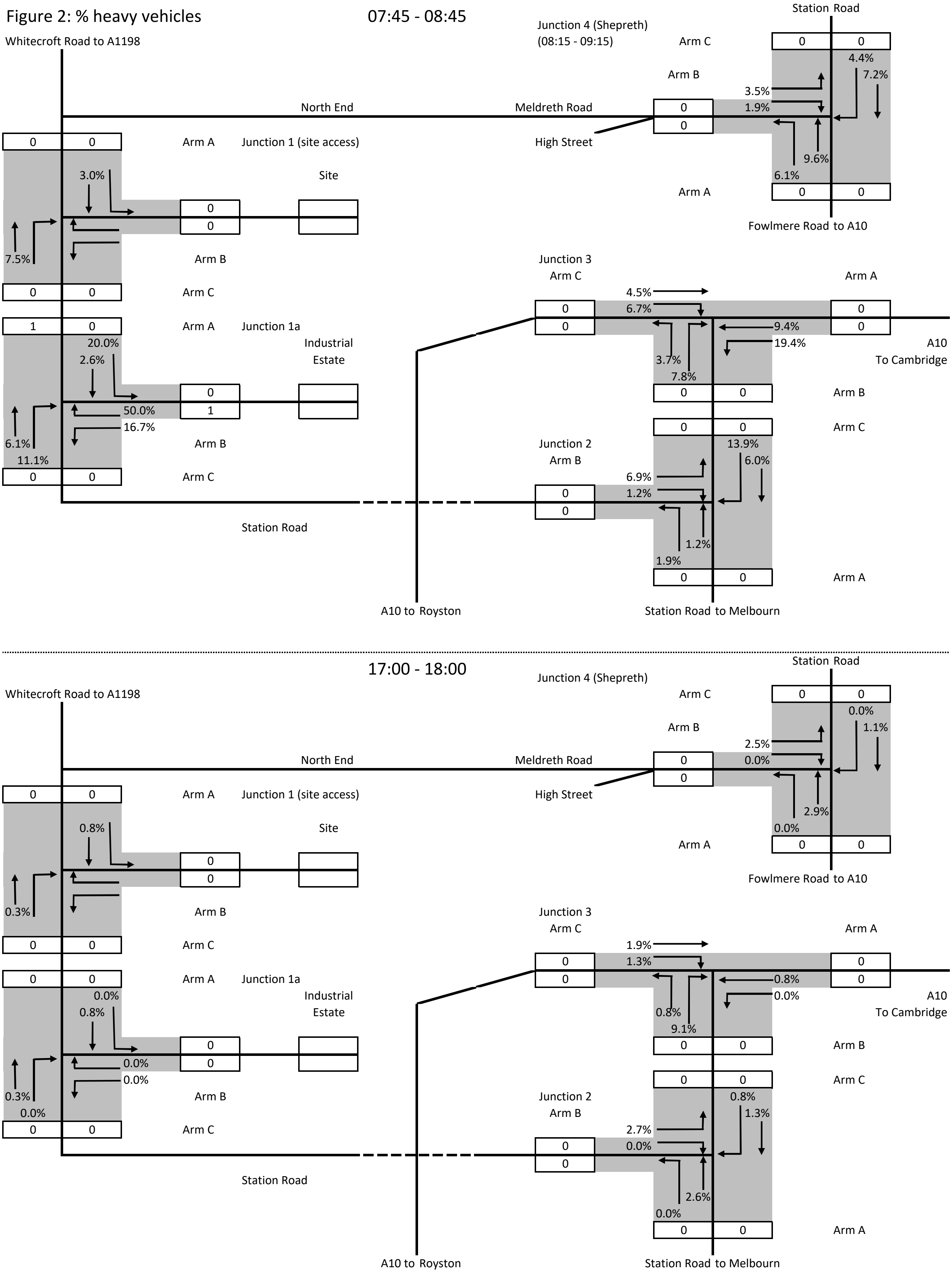


17:00 - 18:00



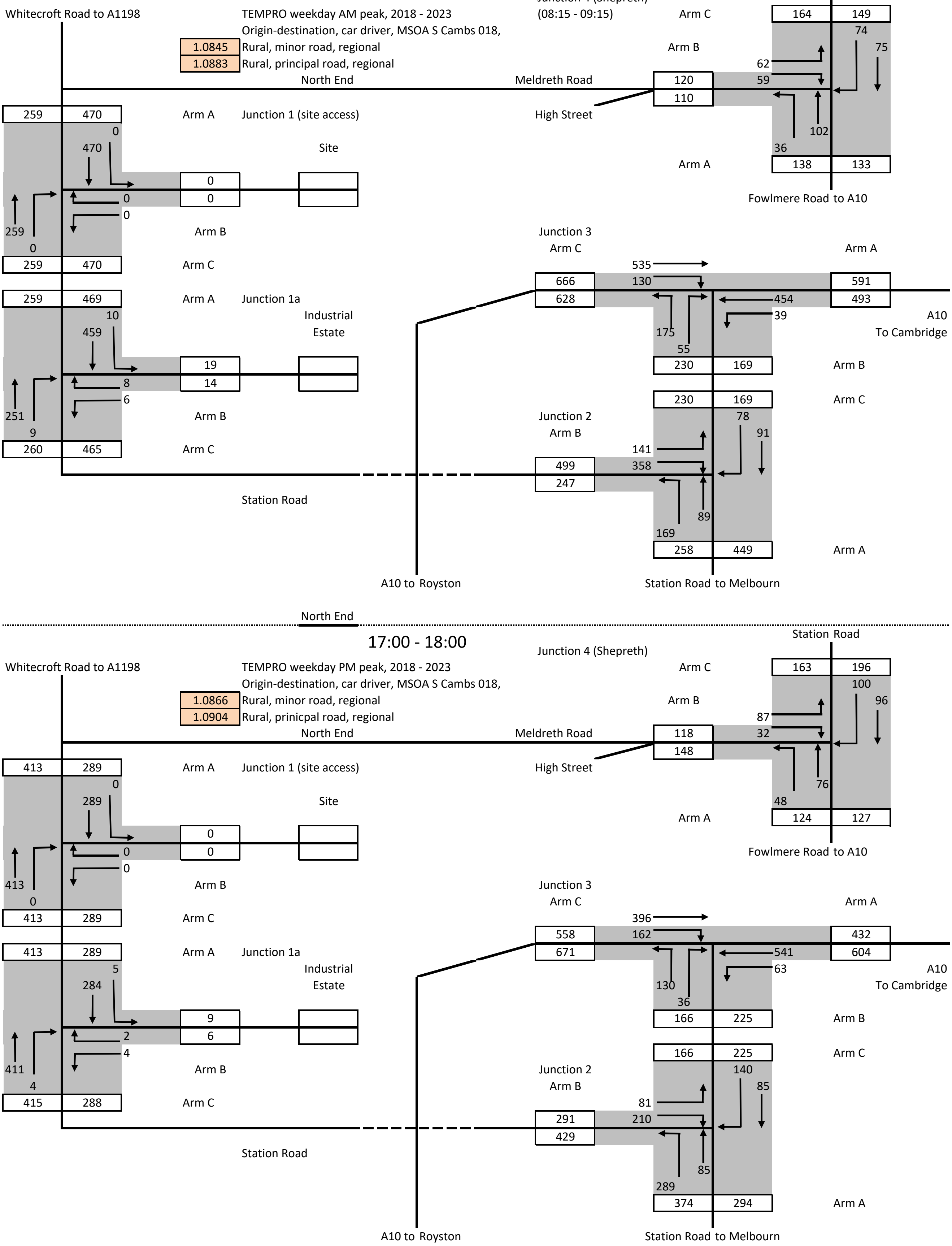
1713 Meldreth

Figure 2: % heavy vehicles



1713 Meldreth

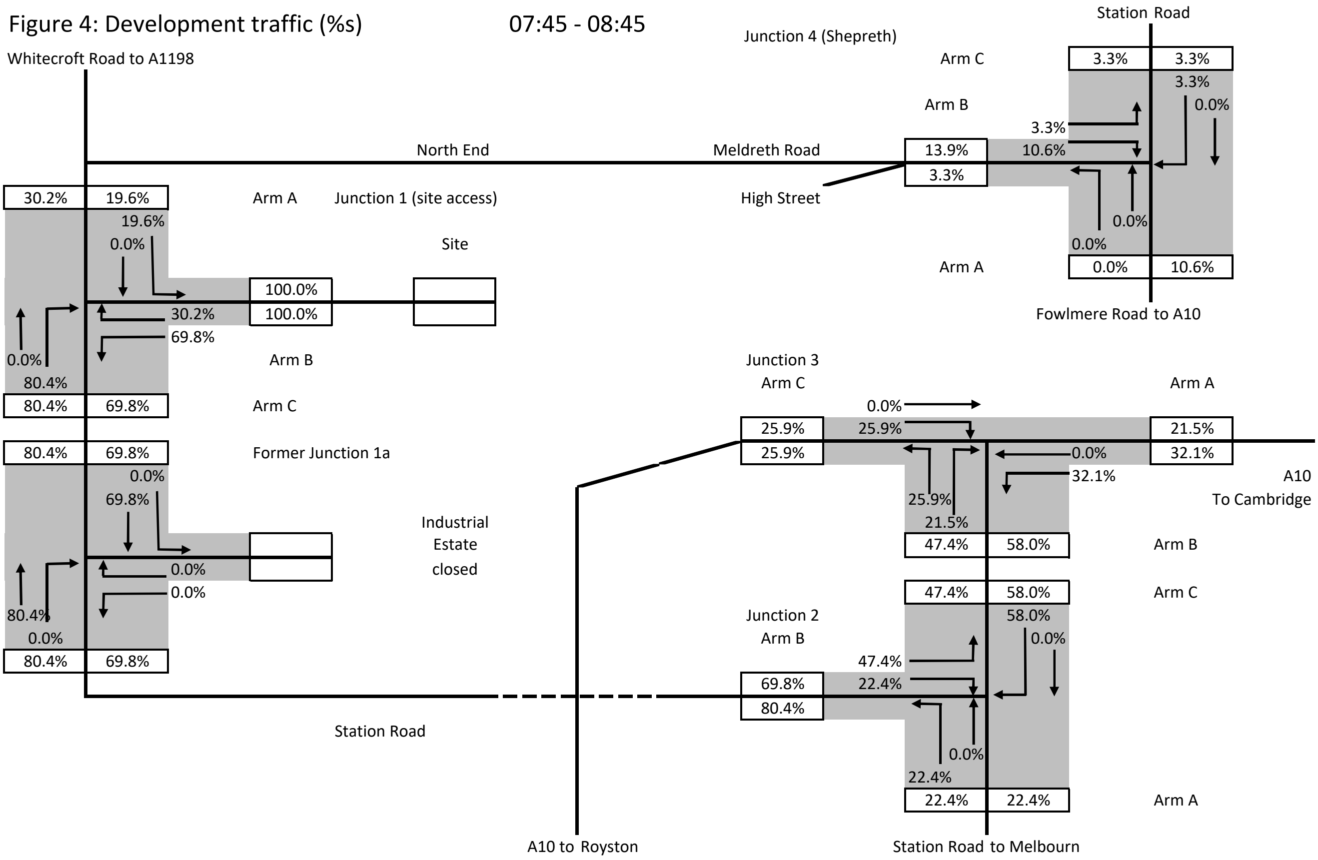
Figure 3: Baseline traffic (vehicles) 07:45 - 08:45



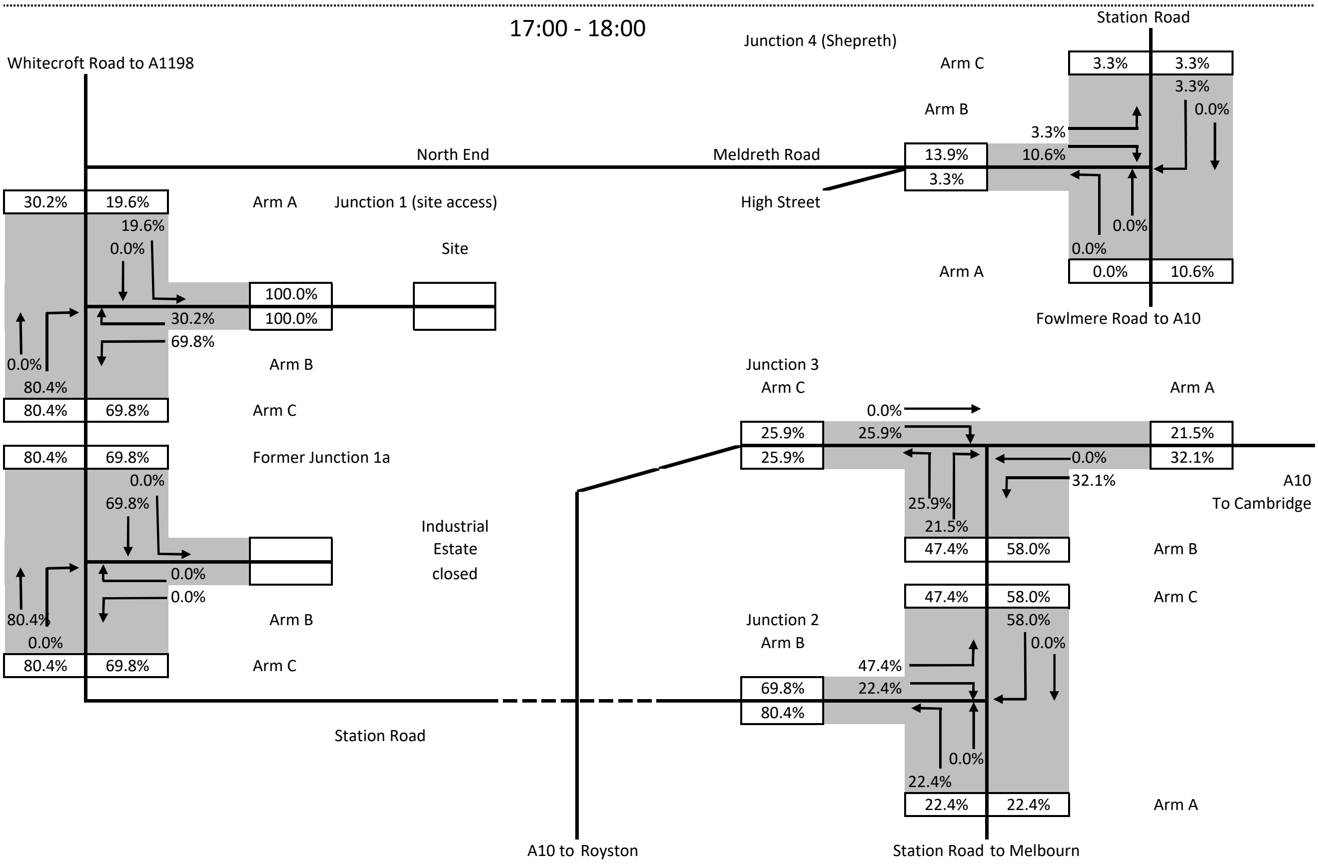
1713 Meldreth

Figure 4: Development traffic (%s)

07:45 - 08:45



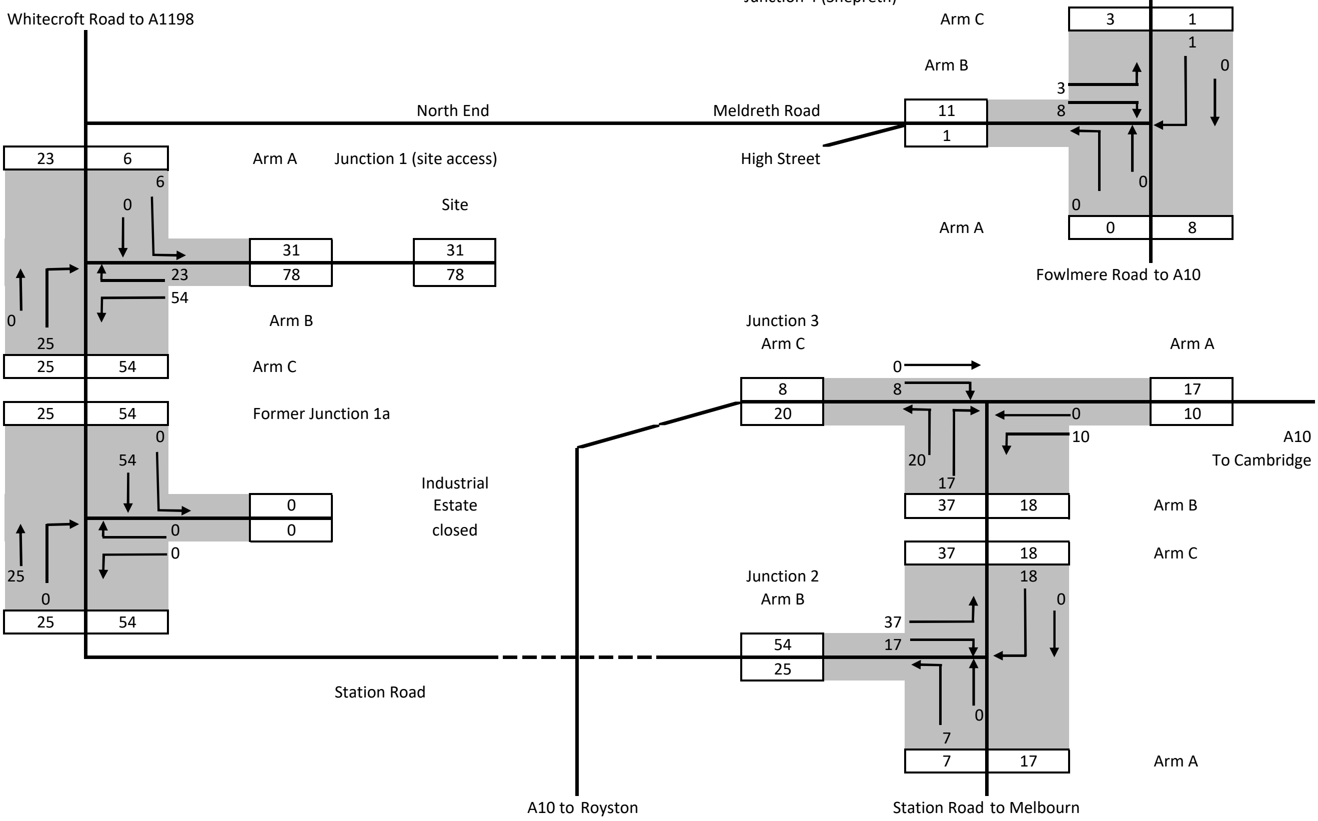
17:00 - 18:00



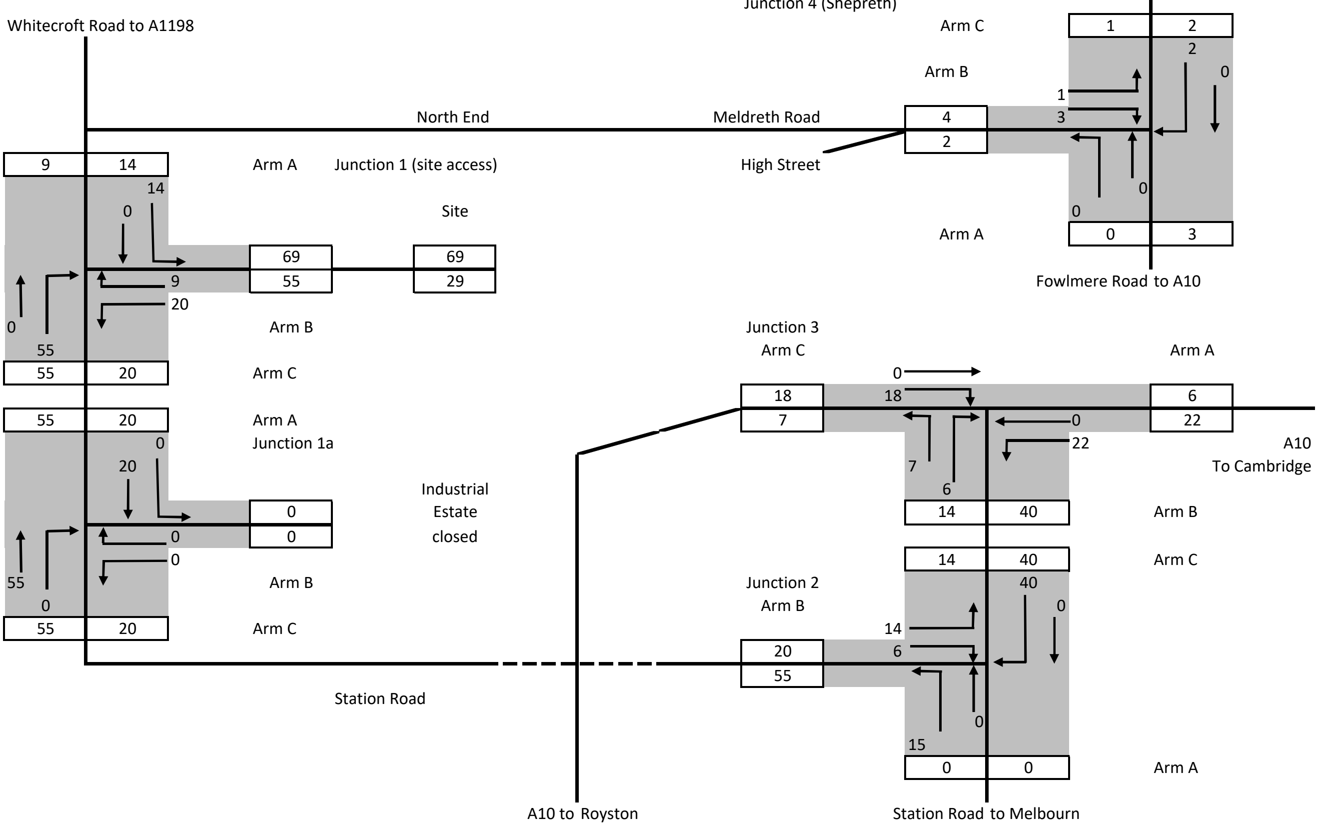
1713 Meldreth

Figure 5: Development traffic (vehicles)

07:45 - 08:45



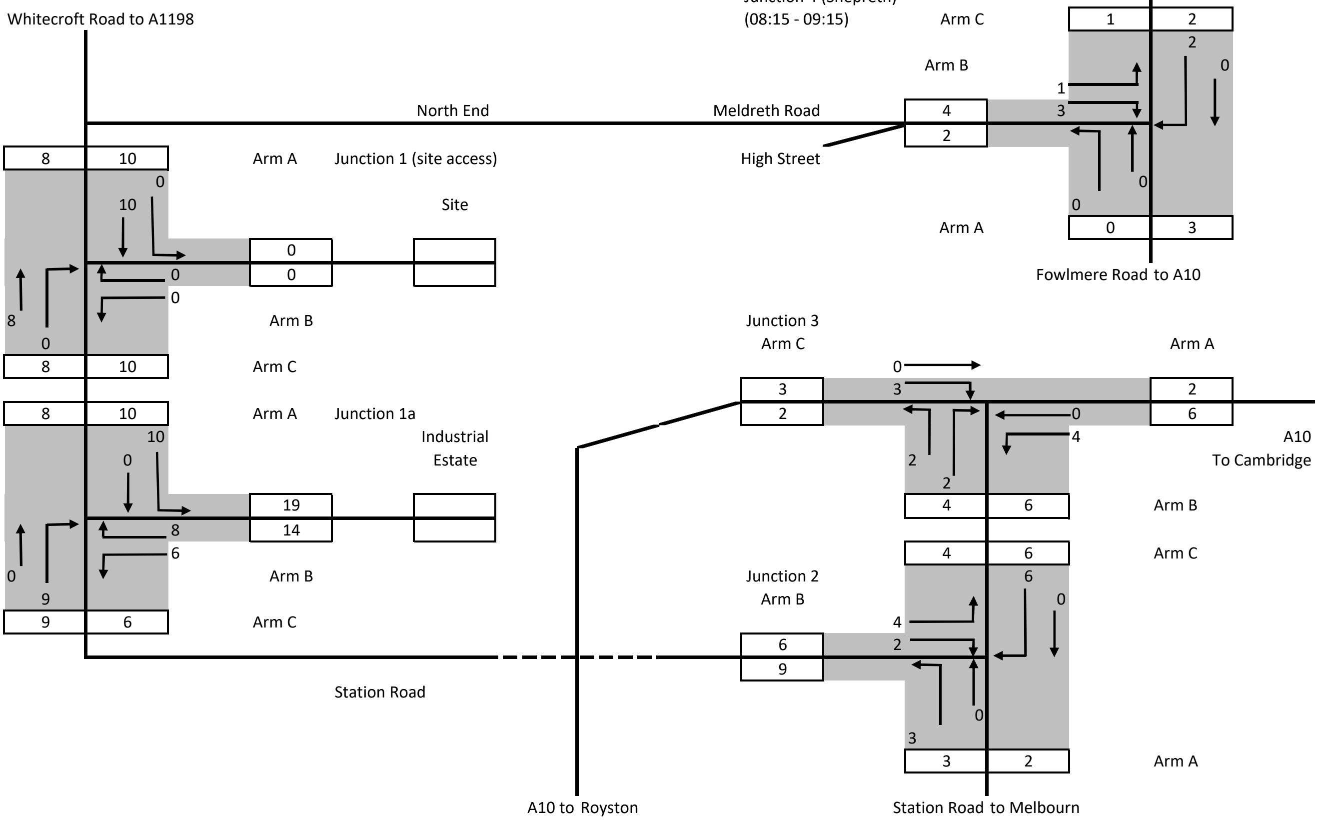
17:00 - 18:00



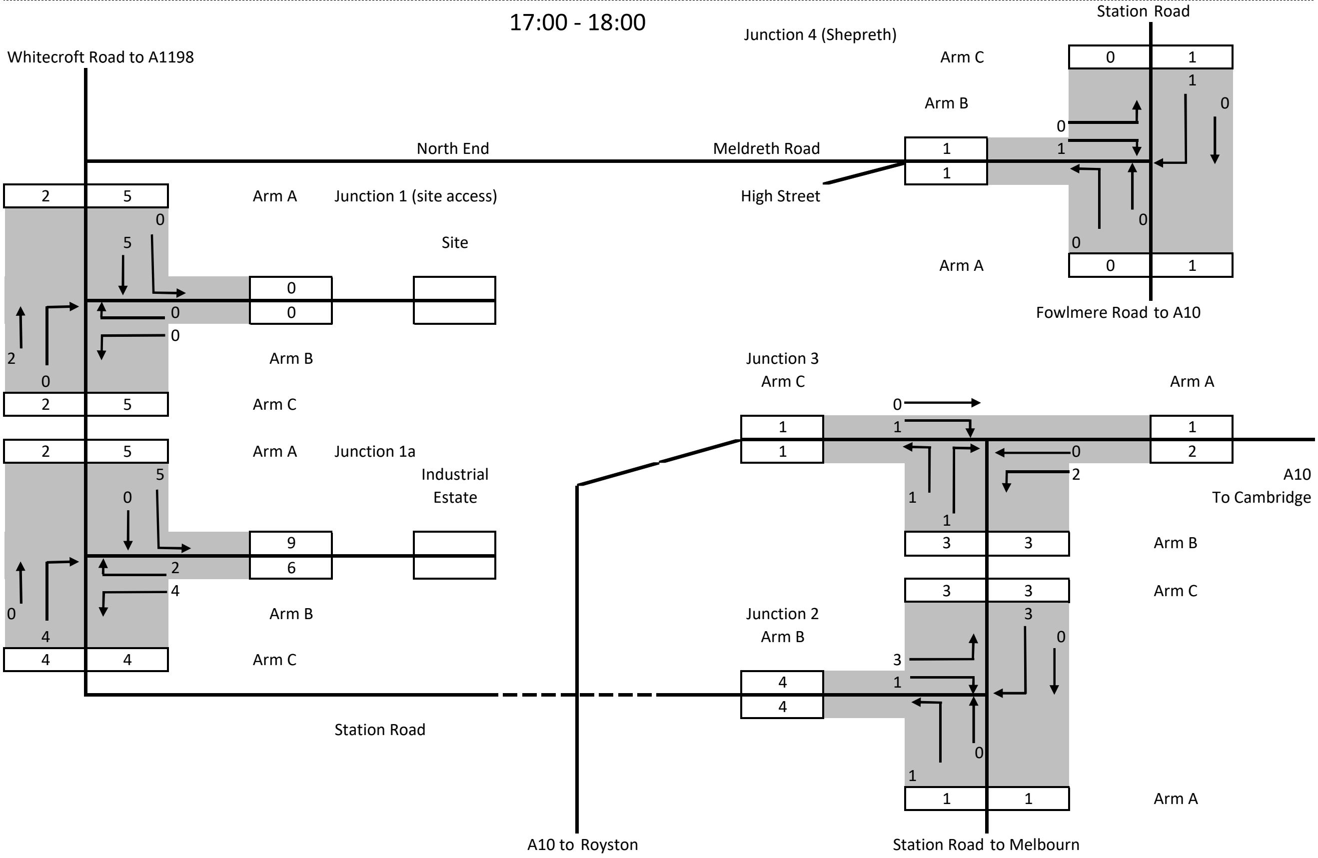
1713 Meldreth

Figure 6: Industrial estate (vehicles)

07:45 - 08:45

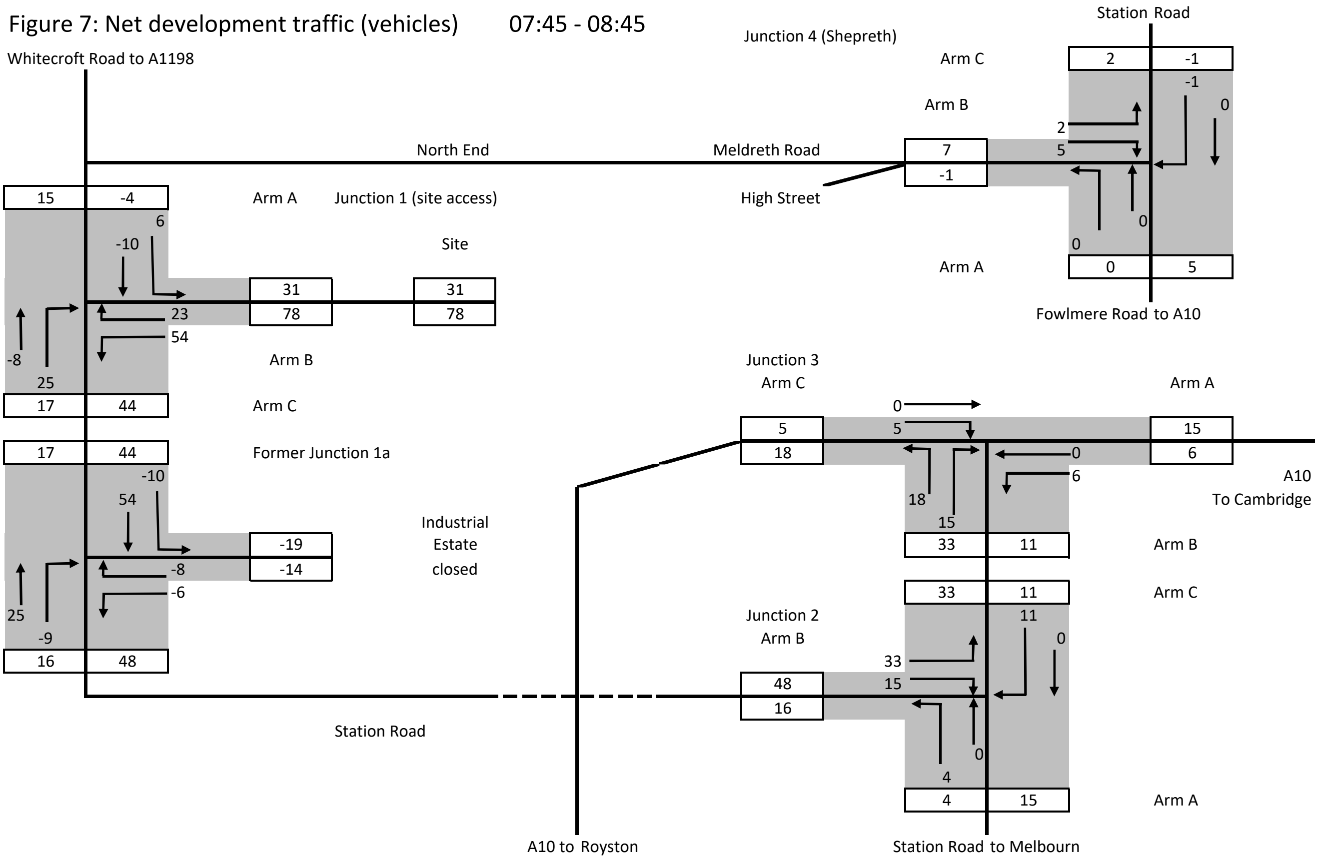


17:00 - 18:00

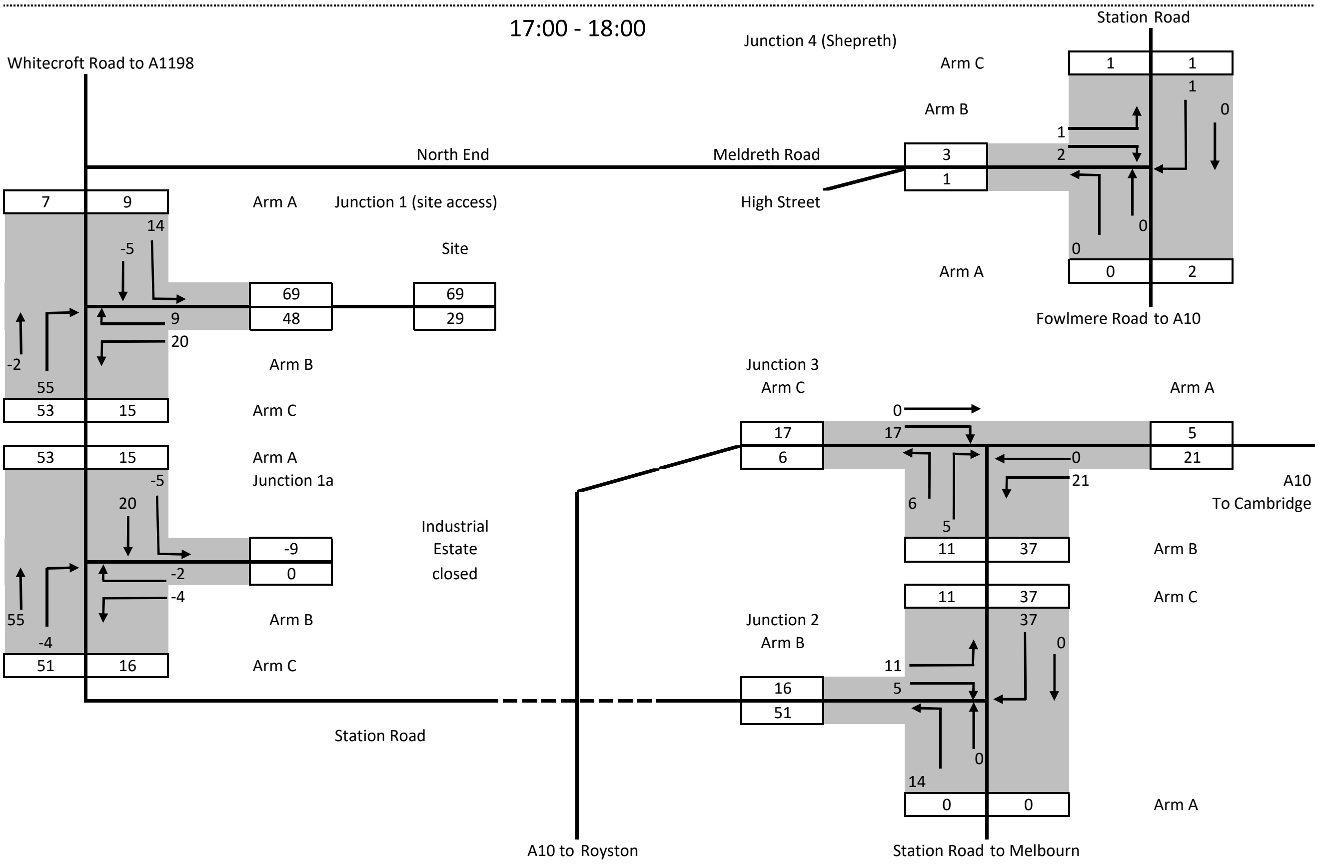


1713 Meldreth

Figure 7: Net development traffic (vehicles) 07:45 - 08:45

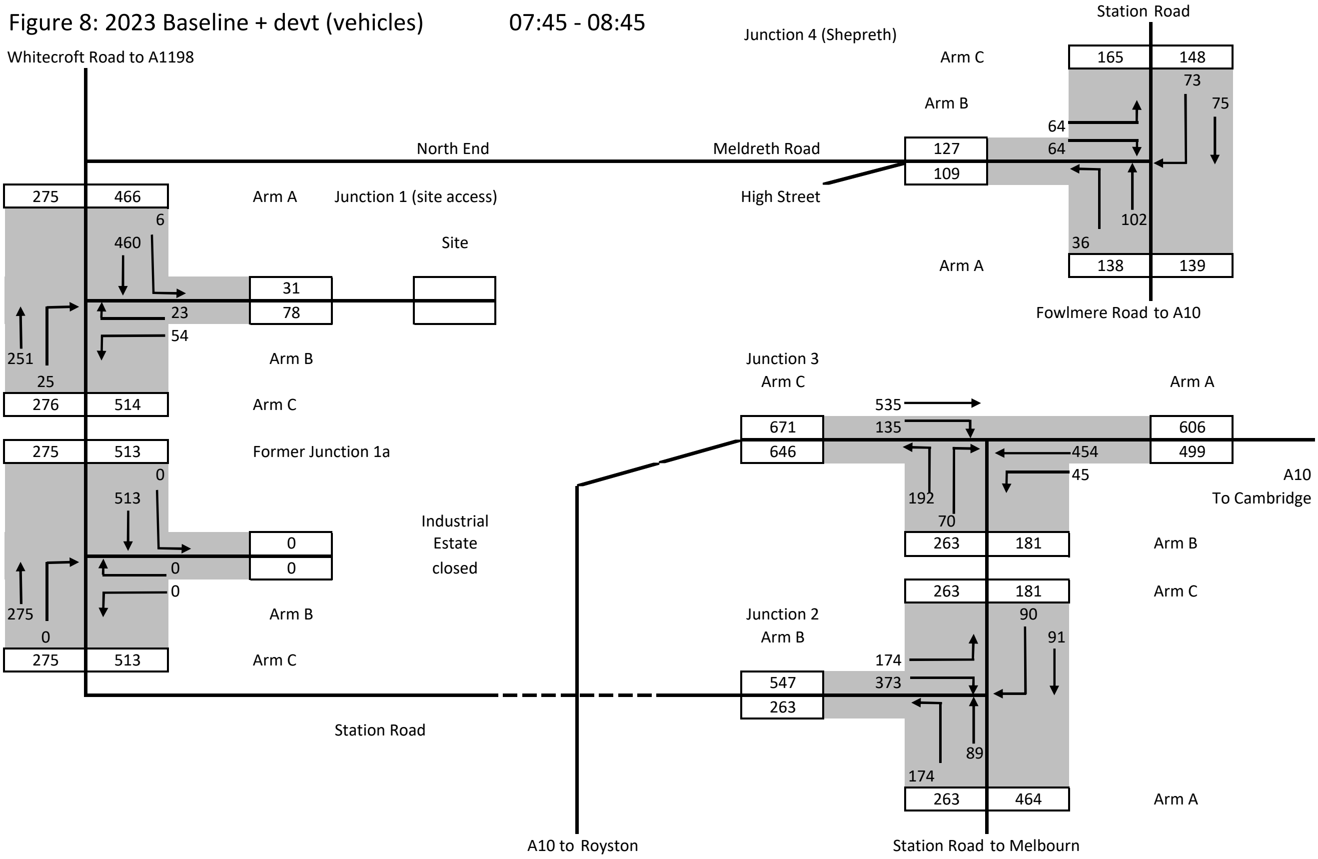


17:00 - 18:00

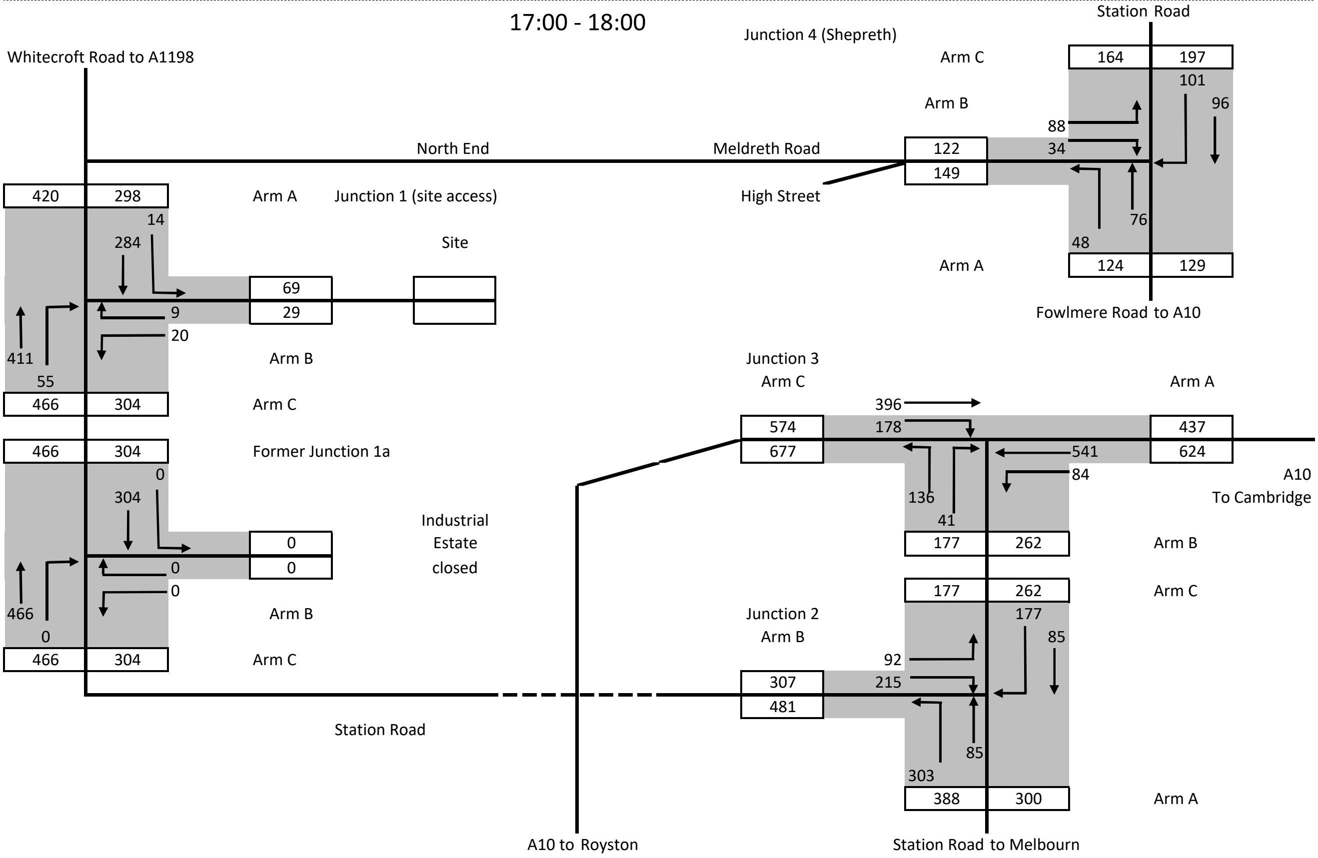


1713 Meldreth

Figure 8: 2023 Baseline + devt (vehicles) 07:45 - 08:45



17:00 - 18:00



Appendix: H TRICS OUTPUT

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	3 days
	KC	KENT	3 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	3 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	2 days

Secondary Filtering selection:

Parameter: Number of dwellings
Actual Range: 8 to 805 (units:)
Range Selected by User: 7 to 805 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 27/11/17

Selected survey days:

Monday	1 days
Wednesday	3 days
Thursday	4 days
Friday	5 days

Selected survey types:

Manual count	13 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town	10
Neighbourhood Centre (PPS6 Local Centre)	3

Selected Location Sub Categories:

Residential Zone	10
Village	3

Secondary Filtering selection:

Use Class:

C3	13 days

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	3 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	1 days

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	3 days
50,001 to 75,000	2 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days
125,001 to 250,000	3 days

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	8 days
1.6 to 2.0	2 days

Travel Plan:

Yes	3 days
No	10 days

PTAL Rating:

No PTAL Present	13 days

LIST OF SITES relevant to selection parameters

1 ES-03-A-02 PRIVATE HOUSING EAST SUSSEX
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY 18/11/11 Survey Type: MANUAL

2 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE

POLEGATE
Edge of Town
Residential Zone
Total Number of dwellings: 212
Survey date: MONDAY 11/07/16 Survey Type: MANUAL

3 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD

CAMBER
Edge of Town
Residential Zone
Total Number of dwellings: 134
Survey date: FRIDAY 15/07/16 Survey Type: MANUAL

4 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
DITTON
AYLESFORD
Edge of Town
Residential Zone
Total Number of dwellings: 110
Survey date: FRIDAY 22/09/17 Survey Type: MANUAL

5 KC-03-A-05 DETACHED & SEMI-DETACHED KENT
ROCHESTER ROAD
BURHAM
NEAR CHATHAM
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 8
Survey date: FRIDAY 22/09/17 Survey Type: MANUAL

6 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD

HERNE BAY
Edge of Town
Residential Zone
Total Number of dwellings: 288
Survey date: WEDNESDAY 27/09/17 Survey Type: MANUAL

7 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY

THETFORD
Edge of Town
Residential Zone
Total Number of dwellings: 10
Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL

8 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD

BYFLEET
Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY 23/01/14 Survey Type: MANUAL

9 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE

BURY ST EDMUNDS
Edge of Town
Residential Zone
Total Number of dwellings: 18
Survey date: WEDNESDAY 09/09/15 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10 SF-03-A-06 DETACHED & SEMI-DETACHED SUFFOLK
BURY ROAD

KENTFORD
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 38
Survey date: FRIDAY 22/09/17 Survey Type: MANUAL

11 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
BROADBRIDGE HEATH
HORSHAM
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY 11/12/14 Survey Type: MANUAL

12 WS-03-A-06 MIXED HOUSES WEST SUSSEX
ELLIS ROAD
S BROADBRIDGE HEATH
WEST HORSHAM
Edge of Town
Residential Zone
Total Number of dwellings: 805
Survey date: THURSDAY 02/03/17 Survey Type: MANUAL

13 WS-03-A-07 BUNGALOWS WEST SUSSEX
EMMS LANE
BROOKS GREEN
NEAR HORSHAM
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Number of dwellings: 57
Survey date: THURSDAY 19/10/17 Survey Type: MANUAL

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	149	0.079	13	149	0.306	13	149	0.385
08:00 - 09:00	13	149	0.155	**13**	**149**	**0.388**	**13**	**149**	**0.543**
09:00 - 10:00	13	149	0.145	13	149	0.176	13	149	0.321
10:00 - 11:00	13	149	0.126	13	149	0.158	13	149	0.284
11:00 - 12:00	13	149	0.136	13	149	0.166	13	149	0.302
12:00 - 13:00	13	149	0.144	13	149	0.147	13	149	0.291
13:00 - 14:00	13	149	0.166	13	149	0.149	13	149	0.315
14:00 - 15:00	13	149	0.167	13	149	0.174	13	149	0.341
15:00 - 16:00	13	149	0.263	13	149	0.174	13	149	0.437
16:00 - 17:00	13	149	0.266	13	149	0.167	13	149	0.433
17:00 - 18:00	**13**	**149**	**0.345**	13	149	0.144	13	149	0.489
18:00 - 19:00	13	149	0.309	13	149	0.174	13	149	0.483
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.301			2.323			4.624

Parameter summary

Trip rate parameter range selected:	8 - 805 (units:)
Survey date date range:	01/01/10 - 27/11/17
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	149	0.001	13	149	0.001	13	149	0.002
08:00 - 09:00	13	149	0.001	13	149	0.000	13	149	0.001
09:00 - 10:00	13	149	0.003	13	149	0.002	13	149	0.005
10:00 - 11:00	**13**	**149**	**0.004**	**13**	**149**	**0.003**	**13**	**149**	**0.007**
11:00 - 12:00	13	149	0.002	13	149	0.003	13	149	0.005
12:00 - 13:00	13	149	0.001	13	149	0.001	13	149	0.002
13:00 - 14:00	13	149	0.002	13	149	0.001	13	149	0.003
14:00 - 15:00	13	149	0.000	13	149	0.001	13	149	0.001
15:00 - 16:00	13	149	0.000	13	149	0.000	13	149	0.000
16:00 - 17:00	13	149	0.001	13	149	0.001	13	149	0.002
17:00 - 18:00	13	149	0.002	13	149	0.001	13	149	0.003
18:00 - 19:00	13	149	0.000	13	149	0.000	13	149	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.014			0.031

Parameter summary

Trip rate parameter range selected:	8 - 805 (units:)
Survey date date range:	01/01/10 - 27/11/17
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	149	0.007	13	149	0.008	13	149	0.015
08:00 - 09:00	13	149	0.005	13	149	0.009	13	149	0.014
09:00 - 10:00	13	149	0.001	13	149	0.004	13	149	0.005
10:00 - 11:00	13	149	0.002	13	149	0.003	13	149	0.005
11:00 - 12:00	13	149	0.003	13	149	0.005	13	149	0.008
12:00 - 13:00	13	149	0.003	13	149	0.003	13	149	0.006
13:00 - 14:00	13	149	0.002	13	149	0.004	13	149	0.006
14:00 - 15:00	13	149	0.003	13	149	0.002	13	149	0.005
15:00 - 16:00	13	149	0.004	13	149	0.006	13	149	0.010
16:00 - 17:00	13	149	0.010	**13**	**149**	**0.011**	13	149	0.021
17:00 - 18:00	**13**	**149**	**0.015**	13	149	0.010	**13**	**149**	**0.025**
18:00 - 19:00	13	149	0.007	13	149	0.005	13	149	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.062			0.070			0.132

Parameter summary

Trip rate parameter range selected:	8 - 805 (units:)
Survey date date range:	01/01/10 - 27/11/17
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	149	0.101	13	149	0.425	13	149	0.526
08:00 - 09:00	13	149	0.199	**13**	**149**	**0.676**	**13**	**149**	**0.875**
09:00 - 10:00	13	149	0.182	13	149	0.244	13	149	0.426
10:00 - 11:00	13	149	0.160	13	149	0.216	13	149	0.376
11:00 - 12:00	13	149	0.175	13	149	0.237	13	149	0.412
12:00 - 13:00	13	149	0.190	13	149	0.200	13	149	0.390
13:00 - 14:00	13	149	0.233	13	149	0.202	13	149	0.435
14:00 - 15:00	13	149	0.228	13	149	0.231	13	149	0.459
15:00 - 16:00	13	149	0.457	13	149	0.240	13	149	0.697
16:00 - 17:00	13	149	0.422	13	149	0.243	13	149	0.665
17:00 - 18:00	**13**	**149**	**0.509**	13	149	0.212	13	149	0.721
18:00 - 19:00	13	149	0.431	13	149	0.267	13	149	0.698
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.287			3.393			6.680

Parameter summary

Trip rate parameter range selected:	8 - 805 (units:)
Survey date date range:	01/01/10 - 27/11/17
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	149	0.019	13	149	0.025	13	149	0.044
08:00 - 09:00	13	149	0.029	**13**	**149**	**0.114**	13	149	0.143
09:00 - 10:00	13	149	0.048	13	149	0.044	13	149	0.092
10:00 - 11:00	13	149	0.041	13	149	0.048	13	149	0.089
11:00 - 12:00	13	149	0.029	13	149	0.031	13	149	0.060
12:00 - 13:00	13	149	0.031	13	149	0.039	13	149	0.070
13:00 - 14:00	13	149	0.037	13	149	0.023	13	149	0.060
14:00 - 15:00	13	149	0.034	13	149	0.050	13	149	0.084
15:00 - 16:00	**13**	**149**	**0.127**	13	149	0.054	**13**	**149**	**0.181**
16:00 - 17:00	13	149	0.076	13	149	0.047	13	149	0.123
17:00 - 18:00	13	149	0.066	13	149	0.043	13	149	0.109
18:00 - 19:00	13	149	0.047	13	149	0.047	13	149	0.094
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.584			0.565			1.149

Parameter summary

Trip rate parameter range selected:	8 - 805 (units:)
Survey date date range:	01/01/10 - 27/11/17
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	149	0.001	13	149	0.017	13	149	0.018
08:00 - 09:00	13	149	0.000	**13**	**149**	**0.035**	**13**	**149**	**0.035**
09:00 - 10:00	13	149	0.001	13	149	0.009	13	149	0.010
10:00 - 11:00	13	149	0.003	13	149	0.006	13	149	0.009
11:00 - 12:00	13	149	0.001	13	149	0.005	13	149	0.006
12:00 - 13:00	13	149	0.002	13	149	0.003	13	149	0.005
13:00 - 14:00	13	149	0.006	13	149	0.004	13	149	0.010
14:00 - 15:00	13	149	0.005	13	149	0.002	13	149	0.007
15:00 - 16:00	13	149	0.020	13	149	0.009	13	149	0.029
16:00 - 17:00	13	149	0.019	13	149	0.006	13	149	0.025
17:00 - 18:00	13	149	0.017	13	149	0.002	13	149	0.019
18:00 - 19:00	**13**	**149**	**0.023**	13	149	0.007	13	149	0.030
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.098			0.105			0.203

Parameter summary

Trip rate parameter range selected:	8 - 805 (units:)
Survey date date range:	01/01/10 - 27/11/17
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	149	0.127	13	149	0.474	13	149	0.601
08:00 - 09:00	13	149	0.233	**13**	**149**	**0.833**	**13**	**149**	**1.066**
09:00 - 10:00	13	149	0.231	13	149	0.300	13	149	0.531
10:00 - 11:00	13	149	0.206	13	149	0.273	13	149	0.479
11:00 - 12:00	13	149	0.207	13	149	0.278	13	149	0.485
12:00 - 13:00	13	149	0.225	13	149	0.244	13	149	0.469
13:00 - 14:00	13	149	0.278	13	149	0.233	13	149	0.511
14:00 - 15:00	13	149	0.270	13	149	0.284	13	149	0.554
15:00 - 16:00	**13**	**149**	**0.608**	13	149	0.309	13	149	0.917
16:00 - 17:00	13	149	0.527	13	149	0.308	13	149	0.835
17:00 - 18:00	13	149	0.608	13	149	0.268	13	149	0.876
18:00 - 19:00	13	149	0.509	13	149	0.326	13	149	0.835
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.029			4.130			8.159

Parameter summary

Trip rate parameter range selected:	8 - 805 (units:)
Survey date date range:	01/01/10 - 27/11/17
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

Appendix: I PICADY OUTPUT

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Meldreth Jn 1 baseline+devt.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 11:30:46

»2023 Baseline + devt, AM
»2023 Baseline + devt, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline + devt							
Stream B-AC	0.2	9.12	0.18	A	0.1	7.53	0.06	A
Stream C-AB	0.1	5.68	0.07	A	0.3	5.10	0.15	A

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 1
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	07:30	09:00	15
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline + devt, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Residential site access	T-Junction	Two-way	1.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Station Road north		Major
B	Site access		Minor
C	Station Road south		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.75			67.0	✓	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	3.00	135	68

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	556	0.094	0.236	0.149	0.338
1	B-C	666	0.094	0.239	-	-
1	C-B	613	0.219	0.219	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	466	100.000
B		✓	77	100.000
C		✓	276	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	6	460
	B	23	0	54
	C	251	25	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.18	9.12	0.2	A
C-AB	0.07	5.68	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	58	528	0.110	57	0.1	7.647	A
C-AB	26	662	0.040	26	0.1	5.660	A
C-A	181			181			
A-B	5			5			
A-C	346			346			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	69	508	0.136	69	0.2	8.206	A
C-AB	34	674	0.050	34	0.1	5.618	A
C-A	214			214			
A-B	5			5			
A-C	414			414			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	85	480	0.177	85	0.2	9.111	A
C-AB	46	691	0.067	46	0.1	5.569	A
C-A	258			258			
A-B	7			7			
A-C	506			506			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	85	480	0.177	85	0.2	9.119	A
C-AB	46	691	0.067	46	0.1	5.585	A
C-A	258			258			
A-B	7			7			
A-C	506			506			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	69	508	0.136	69	0.2	8.220	A
C-AB	34	674	0.050	34	0.1	5.650	A
C-A	214			214			
A-B	5			5			
A-C	414			414			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	58	528	0.110	58	0.1	7.667	A
C-AB	26	662	0.040	27	0.1	5.681	A
C-A	181			181			
A-B	5			5			
A-C	346			346			

2023 Baseline + devt, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Residential site access	T-Junction	Two-way	0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	298	100.000
B		✓	29	100.000
C		✓	466	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	14	284
	B	9	0	20
	C	411	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.06	7.53	0.1	A
C-AB	0.15	5.10	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	22	549	0.040	22	0.0	6.830	A
C-AB	69	776	0.089	68	0.2	5.088	A
C-A	282			282			
A-B	11			11			
A-C	214			214			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	26	532	0.049	26	0.1	7.107	A
C-AB	91	810	0.113	91	0.2	5.014	A
C-A	328			328			
A-B	13			13			
A-C	255			255			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	32	510	0.063	32	0.1	7.533	A
C-AB	129	857	0.150	128	0.3	4.947	A
C-A	384			384			
A-B	15			15			
A-C	313			313			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	32	510	0.063	32	0.1	7.534	A
C-AB	129	857	0.151	129	0.3	4.951	A
C-A	384			384			
A-B	15			15			
A-C	313			313			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	26	532	0.049	26	0.1	7.110	A
C-AB	92	810	0.113	92	0.2	5.025	A
C-A	327			327			
A-B	13			13			
A-C	255			255			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	22	549	0.040	22	0.0	6.837	A
C-AB	69	776	0.089	69	0.2	5.103	A
C-A	282			282			
A-B	11			11			
A-C	214			214			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Meldreth Jn 2 baseline.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 10:31:56

»2023 Baseline, AM
»2023 Baseline, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline							
Stream B-C	6.5	156.47	0.95	F	0.3	10.31	0.20	B
Stream B-A	11.6	109.77	0.98	F	1.2	18.73	0.55	C
Stream C-AB	0.3	7.47	0.18	A	0.5	8.28	0.29	A

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 2
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline	AM	ONE HOUR	07:30	09:00	15
D2	2023 Baseline	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
2	Station Road south of A10	T-Junction	Two-way	66.73	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Station Road south		Major
B	Station Road west		Minor
C	Station Road north		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50			143.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	7.00	4.00	2.70	2.70	✓	1.00	55	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	549	0.093	0.236	0.149	0.338
2	B-C	670	0.096	0.243	-	-
2	C-B	657	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	258	100.000
B		✓	499	100.000
C		✓	169	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	169	89
	B	358	0	141
	C	91	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	1
	B	1	0	7
	C	6	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.95	156.47	6.5	F
B-A	0.98	109.77	11.6	F
C-AB	0.18	7.47	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	106	432	0.246	105	0.3	10.965	B
B-A	270	471	0.572	264	1.3	17.011	C
C-AB	67	582	0.114	66	0.1	6.971	A
C-A	61			61			
A-B	127			127			
A-C	67			67			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	127	339	0.374	126	0.6	16.775	C
B-A	322	449	0.717	318	2.3	26.592	D
C-AB	82	583	0.140	81	0.2	7.179	A
C-A	70			70			
A-B	152			152			
A-C	80			80			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	155	166	0.935	139	4.7	101.323	F
B-A	394	408	0.966	370	8.2	70.432	F
C-AB	104	586	0.177	103	0.2	7.473	A
C-A	82			82			
A-B	186			186			
A-C	98			98			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	155	164	0.947	148	6.5	156.475	F
B-A	394	402	0.980	381	11.6	109.766	F
C-AB	104	586	0.177	104	0.3	7.474	A
C-A	82			82			
A-B	186			186			
A-C	98			98			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	127	267	0.474	149	1.0	35.287	E
B-A	322	434	0.742	355	3.3	55.614	F
C-AB	82	584	0.140	82	0.2	7.175	A
C-A	70			70			
A-B	152			152			
A-C	80			80			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	106	415	0.255	109	0.3	11.819	B
B-A	270	470	0.574	277	1.4	19.376	C
C-AB	67	582	0.115	67	0.1	6.984	A
C-A	61			61			
A-B	127			127			
A-C	67			67			

2023 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
2	Station Road south of A10	T-Junction	Two-way	6.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	374	100.000
B		✓	291	100.000
C		✓	225	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	289	85
	B	210	0	81
	C	85	140	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	3
	C	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.20	10.31	0.3	B
B-A	0.55	18.73	1.2	C
C-AB	0.29	8.28	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	61	542	0.113	60	0.1	7.473	A
B-A	158	466	0.339	156	0.5	11.531	B
C-AB	117	627	0.187	116	0.3	7.044	A
C-A	52			52			
A-B	218			218			
A-C	64			64			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	73	505	0.144	73	0.2	8.322	A
B-A	189	449	0.421	188	0.7	13.759	B
C-AB	144	623	0.231	143	0.3	7.509	A
C-A	59			59			
A-B	260			260			
A-C	76			76			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	89	441	0.202	89	0.3	10.227	B
B-A	231	423	0.546	229	1.2	18.387	C
C-AB	182	617	0.295	181	0.5	8.249	A
C-A	66			66			
A-B	318			318			
A-C	94			94			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	89	438	0.204	89	0.3	10.314	B
B-A	231	423	0.546	231	1.2	18.725	C
C-AB	182	617	0.295	182	0.5	8.276	A
C-A	66			66			
A-B	318			318			
A-C	94			94			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	73	503	0.145	73	0.2	8.388	A
B-A	189	448	0.421	191	0.7	14.054	B
C-AB	144	623	0.231	144	0.3	7.535	A
C-A	59			59			
A-B	260			260			
A-C	76			76			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	61	539	0.113	61	0.1	7.527	A
B-A	158	466	0.339	159	0.5	11.767	B
C-AB	118	627	0.188	118	0.3	7.084	A
C-A	52			52			
A-B	218			218			
A-C	64			64			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Meldreth Jn 2 baseline+devt.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 11:35:46

»2023 Baseline + devt, AM
»2023 Baseline + devt, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline + devt							
Stream B-C	11.9	234.05	1.07	F	0.3	11.34	0.24	B
Stream B-A	22.4	192.48	1.07	F	1.4	21.42	0.59	C
Stream C-AB	0.3	7.75	0.20	A	0.7	9.39	0.38	A

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 2
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	07:30	09:00	15
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline + devt, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
2	Station Road south of A10	T-Junction	Two-way	113.68	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Station Road south		Major
B	Station Road west		Minor
C	Station Road north		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50			143.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	7.00	4.00	2.70	2.70	✓	1.00	55	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	546	0.093	0.235	0.148	0.336
2	B-C	678	0.097	0.246	-	-
2	C-B	657	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	263	100.000
B		✓	547	100.000
C		✓	181	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	174	89
	B	373	0	174
	C	91	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	1
	B	1	0	7
	C	6	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	1.07	234.05	11.9	F
B-A	1.07	192.48	22.4	F
C-AB	0.20	7.75	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	131	417	0.314	129	0.4	12.414	B
B-A	281	459	0.612	275	1.5	19.018	C
C-AB	77	581	0.132	76	0.2	7.121	A
C-A	59			59			
A-B	131			131			
A-C	67			67			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	156	309	0.507	154	1.0	23.010	C
B-A	335	429	0.781	329	3.1	33.908	D
C-AB	94	583	0.162	94	0.2	7.378	A
C-A	68			68			
A-B	156			156			
A-C	80			80			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	192	179	1.069	162	8.3	136.505	F
B-A	411	388	1.059	368	13.7	104.740	F
C-AB	120	585	0.205	119	0.3	7.748	A
C-A	80			80			
A-B	192			192			
A-C	98			98			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	192	184	1.039	177	11.9	234.049	F
B-A	411	382	1.075	376	22.4	192.481	F
C-AB	120	585	0.205	120	0.3	7.748	A
C-A	79			79			
A-B	192			192			
A-C	98			98			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	156	191	0.820	177	6.7	197.230	F
B-A	335	398	0.843	381	11.1	165.213	F
C-AB	94	583	0.162	95	0.2	7.372	A
C-A	68			68			
A-B	156			156			
A-C	80			80			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	131	353	0.371	155	0.6	20.417	C
B-A	281	444	0.632	318	1.8	35.375	E
C-AB	77	581	0.132	77	0.2	7.141	A
C-A	59			59			
A-B	131			131			
A-C	67			67			

2023 Baseline + devt, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
2	Station Road south of A10	T-Junction	Two-way	7.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	388	100.000
B		✓	307	100.000
C		✓	262	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	303	85
	B	215	0	92
	C	85	177	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	3
	C	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.24	11.34	0.3	B
B-A	0.59	21.42	1.4	C
C-AB	0.38	9.39	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	69	539	0.129	69	0.1	7.648	A
B-A	162	454	0.356	160	0.5	12.141	B
C-AB	148	624	0.238	147	0.3	7.528	A
C-A	49			49			
A-B	228			228			
A-C	64			64			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	83	497	0.166	83	0.2	8.670	A
B-A	193	434	0.445	192	0.8	14.839	B
C-AB	182	620	0.293	181	0.5	8.206	A
C-A	54			54			
A-B	272			272			
A-C	76			76			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	101	422	0.240	101	0.3	11.192	B
B-A	237	405	0.585	234	1.3	20.878	C
C-AB	230	614	0.375	229	0.7	9.354	A
C-A	58			58			
A-B	334			334			
A-C	94			94			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	101	419	0.242	101	0.3	11.343	B
B-A	237	404	0.586	237	1.4	21.422	C
C-AB	230	614	0.375	230	0.7	9.395	A
C-A	58			58			
A-B	334			334			
A-C	94			94			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	83	494	0.168	83	0.2	8.778	A
B-A	193	433	0.446	195	0.8	15.264	C
C-AB	182	620	0.293	183	0.5	8.253	A
C-A	54			54			
A-B	272			272			
A-C	76			76			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	69	536	0.129	69	0.1	7.722	A
B-A	162	454	0.357	163	0.6	12.433	B
C-AB	149	624	0.238	149	0.3	7.586	A
C-A	49			49			
A-B	228			228			
A-C	64			64			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Meldreth Jn 2 counted.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 11:54:24

»2018 Counted, AM
»2018 Counted, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2018 Counted							
Stream B-C	1.5	41.12	0.63	E	0.2	9.29	0.18	A
Stream B-A	5.0	52.89	0.86	F	0.9	16.21	0.49	C
Stream C-AB	0.2	7.34	0.16	A	0.4	7.93	0.27	A

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 2
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018 Counted	AM	ONE HOUR	07:30	09:00	15
D2	2018 Counted	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018 Counted, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
2	Station Road south of A10	T-Junction	Two-way	27.15	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Station Road south		Major
B	Station Road west		Minor
C	Station Road north		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.50			143.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	7.00	4.00	2.70	2.70	✓	1.00	55	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
2	B-A	549	0.093	0.236	0.149	0.338
2	B-C	670	0.096	0.243	-	-
2	C-B	657	0.238	0.238	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018 Counted	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	238	100.000
B		✓	460	100.000
C		✓	156	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	156	82
	B	330	0	130
	C	84	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	1
	B	1	0	7
	C	6	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.63	41.12	1.5	E
B-A	0.86	52.89	5.0	F
C-AB	0.16	7.34	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	98	460	0.213	97	0.3	9.894	A
B-A	248	479	0.519	244	1.0	15.101	C
C-AB	61	581	0.105	60	0.1	6.904	A
C-A	57			57			
A-B	117			117			
A-C	62			62			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	117	385	0.303	116	0.4	13.357	B
B-A	297	460	0.645	294	1.7	21.326	C
C-AB	74	583	0.128	74	0.2	7.087	A
C-A	66			66			
A-B	140			140			
A-C	74			74			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	143	249	0.576	140	1.3	32.162	D
B-A	363	427	0.850	353	4.3	43.216	E
C-AB	94	585	0.161	94	0.2	7.343	A
C-A	77			77			
A-B	172			172			
A-C	90			90			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	143	228	0.628	142	1.5	41.118	E
B-A	363	424	0.856	361	5.0	52.891	F
C-AB	94	585	0.161	94	0.2	7.344	A
C-A	77			77			
A-B	172			172			
A-C	90			90			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	117	362	0.322	121	0.5	15.165	C
B-A	297	457	0.649	309	2.0	25.860	D
C-AB	74	583	0.128	75	0.2	7.080	A
C-A	66			66			
A-B	140			140			
A-C	74			74			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	98	451	0.217	99	0.3	10.246	B
B-A	248	478	0.520	252	1.1	16.149	C
C-AB	61	581	0.105	61	0.1	6.917	A
C-A	57			57			
A-B	117			117			
A-C	62			62			

2018 Counted, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
2	Station Road south of A10	T-Junction	Two-way	6.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2018 Counted	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	344	100.000
B		✓	268	100.000
C		✓	207	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	266	78
	B	193	0	75
	C	78	129	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	3
	C	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.18	9.29	0.2	A
B-A	0.49	16.21	0.9	C
C-AB	0.27	7.93	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	56	554	0.102	56	0.1	7.223	A
B-A	145	473	0.307	144	0.4	10.863	B
C-AB	107	628	0.171	106	0.2	6.889	A
C-A	49			49			
A-B	200			200			
A-C	59			59			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	67	524	0.129	67	0.1	7.883	A
B-A	174	457	0.379	173	0.6	12.624	B
C-AB	131	624	0.209	130	0.3	7.288	A
C-A	55			55			
A-B	239			239			
A-C	70			70			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	83	472	0.175	82	0.2	9.239	A
B-A	212	435	0.489	211	0.9	16.014	C
C-AB	165	619	0.266	165	0.4	7.913	A
C-A	63			63			
A-B	293			293			
A-C	86			86			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	83	470	0.176	83	0.2	9.285	A
B-A	212	434	0.489	212	0.9	16.207	C
C-AB	165	619	0.267	165	0.4	7.929	A
C-A	63			63			
A-B	293			293			
A-C	86			86			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	67	522	0.129	68	0.1	7.927	A
B-A	174	457	0.380	175	0.6	12.810	B
C-AB	131	625	0.209	131	0.3	7.307	A
C-A	55			55			
A-B	239			239			
A-C	70			70			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	56	552	0.102	57	0.1	7.263	A
B-A	145	473	0.307	146	0.5	11.038	B
C-AB	107	628	0.171	108	0.2	6.917	A
C-A	49			49			
A-B	200			200			
A-C	59			59			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Meldreth Jn 3 baseline.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 11:10:02

»2023 Baseline, AM
»2023 Baseline, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline							
Stream B-C	0.5	10.07	0.35	B	0.3	8.52	0.25	A
Stream B-A	0.3	20.39	0.26	C	0.2	18.37	0.17	C
Stream C-AB	0.4	9.31	0.27	A	0.5	9.92	0.33	A

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 3
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline	AM	ONE HOUR	07:30	09:00	15
D2	2023 Baseline	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
3	Station Road jn with A10	T-Junction	Two-way	2.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A10 northeast		Major
B	Station Road south		Minor
C	A10 southwest		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.00		✓	2.70	200.0	✓	10.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	9.00	6.00	5.00	4.50		3.00	95	95

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
3	B-A	532	0.093	0.234	0.147	0.335
3	B-C	775	0.114	0.287	-	-
3	C-B	727	0.270	0.270	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	493	100.000
B		✓	230	100.000
C		✓	665	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	39	454
	B	55	0	175
	C	535	130	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	19	9
	B	8	0	4
	C	5	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.35	10.07	0.5	B
B-A	0.26	20.39	0.3	C
C-AB	0.27	9.31	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	132	618	0.213	131	0.3	7.371	A
B-A	41	319	0.130	41	0.1	12.934	B
C-AB	98	577	0.170	97	0.2	7.487	A
C-A	403			403			
A-B	29			29			
A-C	342			342			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	157	591	0.266	157	0.4	8.295	A
B-A	49	284	0.174	49	0.2	15.287	C
C-AB	117	557	0.210	117	0.3	8.168	A
C-A	481			481			
A-B	35			35			
A-C	408			408			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	193	551	0.350	192	0.5	10.020	B
B-A	61	237	0.255	60	0.3	20.272	C
C-AB	143	530	0.270	143	0.4	9.294	A
C-A	589			589			
A-B	43			43			
A-C	500			500			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	193	550	0.350	193	0.5	10.069	B
B-A	61	237	0.255	61	0.3	20.392	C
C-AB	143	530	0.270	143	0.4	9.314	A
C-A	589			589			
A-B	43			43			
A-C	500			500			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	157	590	0.267	158	0.4	8.347	A
B-A	49	284	0.174	50	0.2	15.389	C
C-AB	117	557	0.210	117	0.3	8.192	A
C-A	481			481			
A-B	35			35			
A-C	408			408			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	132	617	0.213	132	0.3	7.429	A
B-A	41	318	0.130	42	0.2	13.019	B
C-AB	98	577	0.170	98	0.2	7.522	A
C-A	403			403			
A-B	29			29			
A-C	342			342			

2023 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
3	Station Road jn with A10	T-Junction	Two-way	2.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	604	100.000
B		✓	166	100.000
C		✓	558	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	63	541
	B	36	0	130
	C	396	162	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	9	0	1
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.25	8.52	0.3	A
B-A	0.17	18.37	0.2	C
C-AB	0.33	9.92	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	98	634	0.154	97	0.2	6.696	A
B-A	27	315	0.086	27	0.1	12.470	B
C-AB	122	598	0.204	121	0.3	7.536	A
C-A	298			298			
A-B	47			47			
A-C	407			407			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	117	606	0.193	117	0.2	7.354	A
B-A	32	282	0.115	32	0.1	14.421	B
C-AB	146	574	0.254	145	0.3	8.386	A
C-A	356			356			
A-B	57			57			
A-C	486			486			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	143	566	0.253	143	0.3	8.501	A
B-A	40	236	0.168	39	0.2	18.302	C
C-AB	178	541	0.330	178	0.5	9.894	A
C-A	436			436			
A-B	69			69			
A-C	596			596			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	143	566	0.253	143	0.3	8.522	A
B-A	40	236	0.168	40	0.2	18.365	C
C-AB	178	541	0.330	178	0.5	9.925	A
C-A	436			436			
A-B	69			69			
A-C	596			596			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	117	605	0.193	117	0.2	7.378	A
B-A	32	282	0.115	33	0.1	14.476	B
C-AB	146	574	0.254	146	0.3	8.429	A
C-A	356			356			
A-B	57			57			
A-C	486			486			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	98	634	0.154	98	0.2	6.728	A
B-A	27	315	0.086	27	0.1	12.525	B
C-AB	122	598	0.204	122	0.3	7.577	A
C-A	298			298			
A-B	47			47			
A-C	407			407			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []

Filename: Meldreth Jn 3 baseline+devt.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 11:40:57

»2023 Baseline + devt, AM
»2023 Baseline + devt, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline + devt							
Stream B-C	0.6	11.18	0.40	B	0.4	8.86	0.27	A
Stream B-A	0.5	22.63	0.33	C	0.2	19.55	0.20	C
Stream C-AB	0.4	9.50	0.28	A	0.6	10.62	0.37	B

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 3
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	07:30	09:00	15
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline + devt, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
3	Station Road jn with A10	T-Junction	Two-way	3.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A10 northeast		Major
B	Station Road south		Minor
C	A10 southwest		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.00		✓	2.70	200.0	✓	10.00

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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	9.00	6.00	5.00	4.50		3.00	95	95

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
3	B-A	537	0.094	0.236	0.149	0.338
3	B-C	769	0.113	0.285	-	-
3	C-B	727	0.270	0.270	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	499	100.000
B		✓	262	100.000
C		✓	670	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	45	454
	B	70	0	192
	C	535	135	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	19	9
	B	8	0	4
	C	5	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.40	11.18	0.6	B
B-A	0.33	22.63	0.5	C
C-AB	0.28	9.50	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	145	607	0.238	143	0.3	7.744	A
B-A	53	320	0.165	52	0.2	13.403	B
C-AB	102	576	0.177	101	0.2	7.565	A
C-A	403			403			
A-B	34			34			
A-C	342			342			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	173	578	0.299	172	0.4	8.864	A
B-A	63	285	0.221	63	0.3	16.173	C
C-AB	121	556	0.218	121	0.3	8.281	A
C-A	481			481			
A-B	40			40			
A-C	408			408			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	211	534	0.396	211	0.6	11.097	B
B-A	77	236	0.326	76	0.5	22.423	C
C-AB	149	528	0.282	148	0.4	9.476	A
C-A	589			589			
A-B	50			50			
A-C	500			500			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	211	533	0.396	211	0.6	11.180	B
B-A	77	236	0.327	77	0.5	22.629	C
C-AB	149	528	0.282	149	0.4	9.498	A
C-A	589			589			
A-B	50			50			
A-C	500			500			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	173	577	0.299	173	0.4	8.944	A
B-A	63	285	0.221	64	0.3	16.338	C
C-AB	121	556	0.218	122	0.3	8.309	A
C-A	481			481			
A-B	40			40			
A-C	408			408			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	145	606	0.239	145	0.3	7.815	A
B-A	53	320	0.165	53	0.2	13.528	B
C-AB	102	576	0.177	102	0.2	7.603	A
C-A	403			403			
A-B	34			34			
A-C	342			342			

2023 Baseline + devt, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
3	Station Road jn with A10	T-Junction	Two-way	2.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	625	100.000
B		✓	177	100.000
C		✓	574	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	84	541
	B	41	0	136
	C	396	178	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	1
	B	9	0	1
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-C	0.27	8.86	0.4	A
B-A	0.20	19.55	0.2	C
C-AB	0.37	10.62	0.6	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	102	628	0.163	102	0.2	6.834	A
B-A	31	312	0.099	30	0.1	12.785	B
C-AB	134	593	0.226	133	0.3	7.796	A
C-A	298			298			
A-B	63			63			
A-C	407			407			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	122	598	0.204	122	0.3	7.553	A
B-A	37	277	0.133	37	0.2	14.967	B
C-AB	160	569	0.281	160	0.4	8.786	A
C-A	356			356			
A-B	76			76			
A-C	486			486			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	150	557	0.269	149	0.4	8.828	A
B-A	45	229	0.197	45	0.2	19.460	C
C-AB	196	535	0.366	195	0.6	10.575	B
C-A	436			436			
A-B	92			92			
A-C	596			596			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	150	556	0.269	150	0.4	8.855	A
B-A	45	229	0.197	45	0.2	19.548	C
C-AB	196	535	0.366	196	0.6	10.619	B
C-A	436			436			
A-B	92			92			
A-C	596			596			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	122	598	0.205	123	0.3	7.582	A
B-A	37	277	0.133	37	0.2	15.043	C
C-AB	160	569	0.281	161	0.4	8.836	A
C-A	356			356			
A-B	76			76			
A-C	486			486			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	102	627	0.163	103	0.2	6.871	A
B-A	31	311	0.099	31	0.1	12.856	B
C-AB	134	593	0.226	134	0.3	7.849	A
C-A	298			298			
A-B	63			63			
A-C	407			407			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Shepreth Jn 4 100% baseline+devt.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 14:58:04

»2023 Baseline + devt 100% routeing, AM
»2023 Baseline + devt 100% routeing, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline + devt 100% routeing							
Stream B-AC	0.4	9.90	0.30	A	0.3	8.34	0.25	A
Stream C-AB	0.2	7.11	0.16	A	0.3	7.06	0.21	A

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 4, Shepreth with 100% routeing
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt 100% routeing	AM	ONE HOUR	08:00	09:30	15
D2	2023 Baseline + devt 100% routeing	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline + devt 100% routeing, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	Shepreth village centre	T-Junction	Two-way	4.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Fowlmere Road		Major
B	Meldreth Road		Minor
C	Station Road Shepreth		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.70			50.0	✓	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	3.50	30	55

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
4	B-A	540	0.095	0.241	0.152	0.344
4	B-C	692	0.103	0.260	-	-
4	C-B	603	0.226	0.226	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt 100% routeing	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	138	100.000
B		✓	142	100.000
C		✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	36	102
	B	78	0	64
	C	75	73	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	6	10
	B	2	0	4
	C	7	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.30	9.90	0.4	A
C-AB	0.16	7.11	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	107	540	0.198	106	0.2	8.271	A
C-AB	61	593	0.102	60	0.1	6.753	A
C-A	51			51			
A-B	27			27			
A-C	77			77			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	128	532	0.240	127	0.3	8.896	A
C-AB	74	596	0.124	74	0.2	6.898	A
C-A	59			59			
A-B	32			32			
A-C	92			92			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	156	520	0.301	156	0.4	9.877	A
C-AB	93	600	0.156	93	0.2	7.106	A
C-A	70			70			
A-B	40			40			
A-C	112			112			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	156	520	0.301	156	0.4	9.901	A
C-AB	93	600	0.156	93	0.2	7.115	A
C-A	70			70			
A-B	40			40			
A-C	112			112			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	128	532	0.240	128	0.3	8.931	A
C-AB	74	596	0.124	74	0.2	6.913	A
C-A	59			59			
A-B	32			32			
A-C	92			92			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	107	540	0.198	107	0.2	8.322	A
C-AB	61	593	0.103	61	0.1	6.773	A
C-A	51			51			
A-B	27			27			
A-C	77			77			

2023 Baseline + devt 100% routeing, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	Shepreth village centre	T-Junction	Two-way	4.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline + devt 100% routeing	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	124	100.000
B		✓	128	100.000
C		✓	197	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	48	76
	B	40	0	88
	C	96	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	3
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.25	8.34	0.3	A
C-AB	0.21	7.06	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	96	589	0.164	96	0.2	7.282	A
C-AB	86	630	0.136	85	0.2	6.601	A
C-A	62			62			
A-B	36			36			
A-C	57			57			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	115	582	0.198	115	0.2	7.700	A
C-AB	105	636	0.165	105	0.2	6.785	A
C-A	72			72			
A-B	43			43			
A-C	68			68			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	141	572	0.246	141	0.3	8.331	A
C-AB	133	643	0.207	133	0.3	7.052	A
C-A	84			84			
A-B	53			53			
A-C	84			84			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	141	572	0.246	141	0.3	8.343	A
C-AB	133	643	0.207	133	0.3	7.061	A
C-A	84			84			
A-B	53			53			
A-C	84			84			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	115	582	0.198	115	0.2	7.719	A
C-AB	105	636	0.166	106	0.2	6.800	A
C-A	72			72			
A-B	43			43			
A-C	68			68			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	96	589	0.164	97	0.2	7.313	A
C-AB	86	630	0.136	86	0.2	6.625	A
C-A	62			62			
A-B	36			36			
A-C	57			57			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []

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Filename: Shepreth Jn 4 baseline.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 11:18:32

»2023 Baseline, AM
»2023 Baseline, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline							
Stream B-AC	0.3	9.07	0.25	A	0.3	7.99	0.23	A
Stream C-AB	0.2	7.13	0.16	A	0.3	7.04	0.21	A

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 4, Shepreth
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline	AM	ONE HOUR	08:00	09:30	15
D2	2023 Baseline	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	Shepreth village centre	T-Junction	Two-way	4.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Fowlmere Road		Major
B	Meldreth Road		Minor
C	Station Road Shepreth		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.70			50.0	✓	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	3.50	30	55

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
4	B-A	540	0.095	0.241	0.152	0.344
4	B-C	692	0.103	0.260	-	-
4	C-B	603	0.226	0.226	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	138	100.000
B		✓	121	100.000
C		✓	149	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	36	102
	B	59	0	62
	C	75	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	6	10
	B	2	0	4
	C	7	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.25	9.07	0.3	A
C-AB	0.16	7.13	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	91	550	0.166	90	0.2	7.821	A
C-AB	62	593	0.104	61	0.1	6.763	A
C-A	51			51			
A-B	27			27			
A-C	77			77			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	109	542	0.201	109	0.2	8.310	A
C-AB	75	596	0.126	75	0.2	6.912	A
C-A	59			59			
A-B	32			32			
A-C	92			92			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	133	530	0.251	133	0.3	9.056	A
C-AB	95	600	0.158	94	0.2	7.124	A
C-A	69			69			
A-B	40			40			
A-C	112			112			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	133	530	0.251	133	0.3	9.071	A
C-AB	95	600	0.158	95	0.2	7.133	A
C-A	69			69			
A-B	40			40			
A-C	112			112			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	109	541	0.201	109	0.3	8.334	A
C-AB	75	596	0.126	75	0.2	6.924	A
C-A	59			59			
A-B	32			32			
A-C	92			92			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	91	550	0.166	91	0.2	7.859	A
C-AB	62	593	0.104	62	0.1	6.782	A
C-A	51			51			
A-B	27			27			
A-C	77			77			

2023 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	Shepreth village centre	T-Junction	Two-way	4.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	124	100.000
B		✓	119	100.000
C		✓	196	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	48	76
	B	32	0	87
	C	96	100	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	3
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.23	7.99	0.3	A
C-AB	0.21	7.04	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	90	597	0.150	89	0.2	7.070	A
C-AB	85	630	0.135	84	0.2	6.591	A
C-A	63			63			
A-B	36			36			
A-C	57			57			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	107	591	0.181	107	0.2	7.436	A
C-AB	104	636	0.164	104	0.2	6.771	A
C-A	72			72			
A-B	43			43			
A-C	68			68			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	131	582	0.225	131	0.3	7.979	A
C-AB	132	643	0.205	132	0.3	7.034	A
C-A	84			84			
A-B	53			53			
A-C	84			84			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	131	582	0.225	131	0.3	7.989	A
C-AB	132	643	0.205	132	0.3	7.042	A
C-A	84			84			
A-B	53			53			
A-C	84			84			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	107	591	0.181	107	0.2	7.451	A
C-AB	104	636	0.164	104	0.2	6.784	A
C-A	72			72			
A-B	43			43			
A-C	68			68			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	90	597	0.150	90	0.2	7.093	A
C-AB	85	630	0.135	85	0.2	6.614	A
C-A	62			62			
A-B	36			36			
A-C	57			57			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Shepreth Jn 4 baseline+devt.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\PICADY
Report generation date: 02/07/2018 11:45:27

»2023 Baseline + devt, AM
»2023 Baseline + devt, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline + devt							
Stream B-AC	0.4	9.30	0.27	A	0.3	8.09	0.23	A
Stream C-AB	0.2	7.11	0.16	A	0.3	7.06	0.21	A

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

File summary

File Description

Title	Meldreth Station Road
Location	Junction 4, Shepreth
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	08:00	09:30	15
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline + devt, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	Shepreth village centre	T-Junction	Two-way	4.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Fowlmere Road		Major
B	Meldreth Road		Minor
C	Station Road Shepreth		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.70			50.0	✓	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	3.50	30	55

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
4	B-A	540	0.095	0.241	0.152	0.344
4	B-C	692	0.103	0.260	-	-
4	C-B	603	0.226	0.226	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	138	100.000
B		✓	128	100.000
C		✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	36	102
	B	64	0	64
	C	75	73	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	6	10
	B	2	0	4
	C	7	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.27	9.30	0.4	A
C-AB	0.16	7.11	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	96	548	0.176	96	0.2	7.942	A
C-AB	61	593	0.102	60	0.1	6.753	A
C-A	51			51			
A-B	27			27			
A-C	77			77			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	115	540	0.213	115	0.3	8.469	A
C-AB	74	596	0.124	74	0.2	6.898	A
C-A	59			59			
A-B	32			32			
A-C	92			92			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	141	528	0.267	141	0.4	9.278	A
C-AB	93	600	0.156	93	0.2	7.106	A
C-A	70			70			
A-B	40			40			
A-C	112			112			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	141	528	0.267	141	0.4	9.295	A
C-AB	93	600	0.156	93	0.2	7.115	A
C-A	70			70			
A-B	40			40			
A-C	112			112			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	115	540	0.213	115	0.3	8.495	A
C-AB	74	596	0.124	74	0.2	6.913	A
C-A	59			59			
A-B	32			32			
A-C	92			92			

09:15 - 09:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	96	548	0.176	97	0.2	7.981	A
C-AB	61	593	0.103	61	0.1	6.773	A
C-A	51			51			
A-B	27			27			
A-C	77			77			

2023 Baseline + devt, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
4	Shepreth village centre	T-Junction	Two-way	4.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	124	100.000
B		✓	122	100.000
C		✓	197	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	48	76
	B	34	0	88
	C	96	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	3
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.23	8.09	0.3	A
C-AB	0.21	7.06	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	92	596	0.154	91	0.2	7.126	A
C-AB	86	630	0.136	85	0.2	6.601	A
C-A	62			62			
A-B	36			36			
A-C	57			57			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	110	589	0.186	109	0.2	7.505	A
C-AB	105	636	0.165	105	0.2	6.785	A
C-A	72			72			
A-B	43			43			
A-C	68			68			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	134	579	0.232	134	0.3	8.078	A
C-AB	133	643	0.207	133	0.3	7.052	A
C-A	84			84			
A-B	53			53			
A-C	84			84			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	134	579	0.232	134	0.3	8.088	A
C-AB	133	643	0.207	133	0.3	7.061	A
C-A	84			84			
A-B	53			53			
A-C	84			84			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	110	589	0.186	110	0.2	7.525	A
C-AB	105	636	0.166	106	0.2	6.800	A
C-A	72			72			
A-B	43			43			
A-C	68			68			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	92	595	0.154	92	0.2	7.153	A
C-AB	86	630	0.136	86	0.2	6.625	A
C-A	62			62			
A-B	36			36			
A-C	57			57			

Appendix: J **ARCADY OUTPUT**

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Meldreth Jn 2 mini-r baseline+devt.j9
Path: Z:\EAS\Current Projects\South Cambridgeshire, Meldreth, Various Sites, 1713\Analysis\ARCADY
Report generation date: 02/07/2018 15:42:15

»2023 Baseline + devt, AM
»2023 Baseline + devt, PM

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
	2023 Baseline + devt			
Arm A	0.9	7.67	0.48	A
Arm B	0.7	7.26	0.41	A
Arm C	0.6	8.02	0.39	A

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

File summary

File Description

Title	Station Road Meldreth
Location	Junction 2
Site number	
Date	02/07/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	1713
Enumerator	Asus\EAS
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	07:30	09:00	15
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Baseline + devt, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Station Road S of A10	Mini-roundabout	12.41	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
A	Station Road south	
B	Station Road west	
C	Station Road north	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A	4.00	4.00	4.00	0.0	9.50	7.00	0.0	
B	3.50	3.00	3.70	5.0	9.00	6.00	0.0	
C	3.00	3.00	3.00	0.0	11.50	9.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.628	1026
B	0.609	900
C	0.591	885

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Baseline + devt	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	263	100.000
B		✓	547	100.000
C		✓	181	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	174	89
	B	373	0	174
	C	91	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	1
	B	1	0	7
	C	6	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
A	0.31	5.53	0.4	A
B	0.74	16.74	2.7	C
C	0.34	9.41	0.5	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	198	67	963	0.206	197	0.3	4.694	A
B	412	67	835	0.493	408	1.0	8.361	A
C	136	278	653	0.209	135	0.3	6.932	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	236	81	953	0.248	236	0.3	5.015	A
B	492	80	827	0.595	490	1.4	10.618	B
C	163	334	623	0.261	162	0.3	7.801	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	290	99	941	0.308	289	0.4	5.521	A
B	602	98	816	0.738	597	2.6	16.091	C
C	199	407	583	0.342	199	0.5	9.342	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	290	99	941	0.308	290	0.4	5.529	A
B	602	98	816	0.738	602	2.7	16.739	C
C	199	410	582	0.343	199	0.5	9.413	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	236	81	953	0.248	237	0.3	5.030	A
B	492	80	827	0.595	497	1.5	11.059	B
C	163	339	621	0.262	163	0.4	7.884	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	198	68	962	0.206	198	0.3	4.714	A
B	412	67	835	0.493	414	1.0	8.599	A
C	136	282	651	0.209	137	0.3	6.999	A

2023 Baseline + devt, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	Station Road S of A10	Mini-roundabout	7.63	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Baseline + devt	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	388	100.000
B		✓	307	100.000
C		✓	262	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	303	85
	B	215	0	92
	C	85	177	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	3
	C	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
A	0.48	7.67	0.9	A
B	0.41	7.26	0.7	A
C	0.39	8.02	0.6	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	292	132	936	0.312	290	0.4	5.562	A
B	231	64	853	0.271	230	0.4	5.770	A
C	197	161	782	0.252	196	0.3	6.130	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	349	159	919	0.380	348	0.6	6.300	A
B	276	76	845	0.327	276	0.5	6.319	A
C	236	193	763	0.309	235	0.4	6.812	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	427	194	897	0.476	426	0.9	7.632	A
B	338	93	834	0.405	337	0.7	7.233	A
C	288	236	738	0.391	288	0.6	7.985	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	427	195	896	0.477	427	0.9	7.673	A
B	338	94	834	0.405	338	0.7	7.258	A
C	288	237	737	0.391	288	0.6	8.017	A

17:45 - 18:00

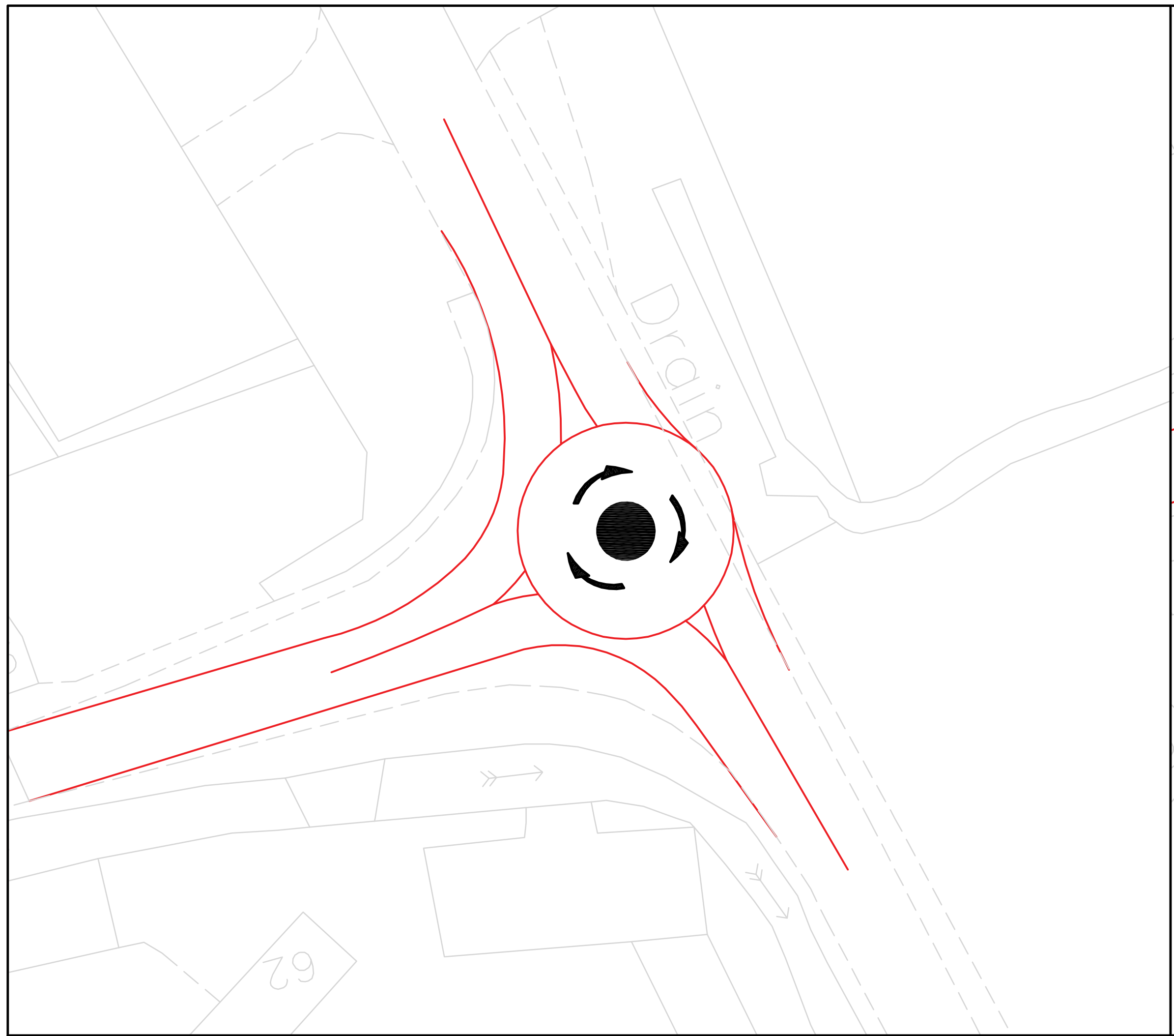
Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	349	160	919	0.380	350	0.6	6.343	A
B	276	77	844	0.327	277	0.5	6.351	A
C	236	194	763	0.309	236	0.5	6.849	A

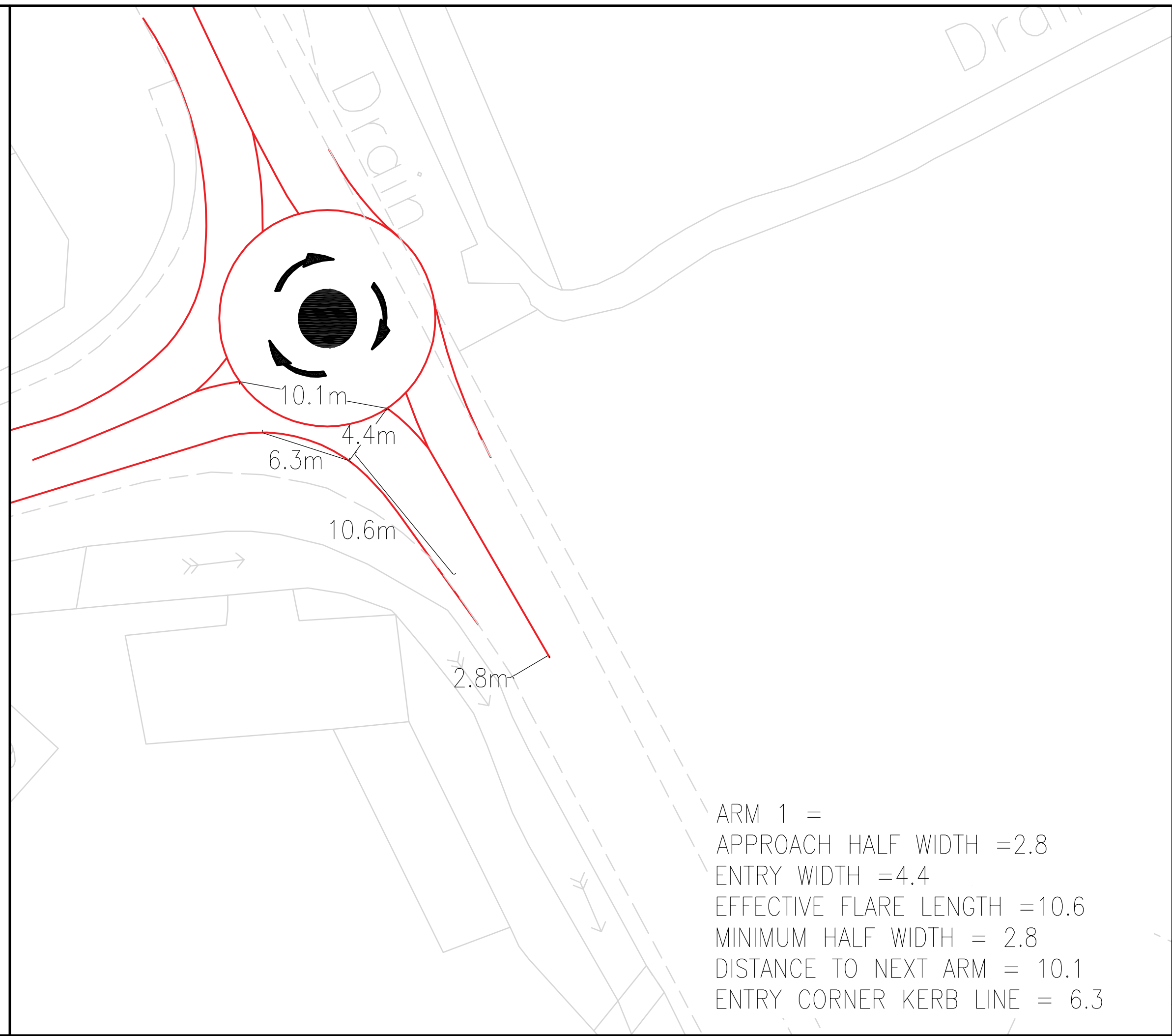
18:00 - 18:15

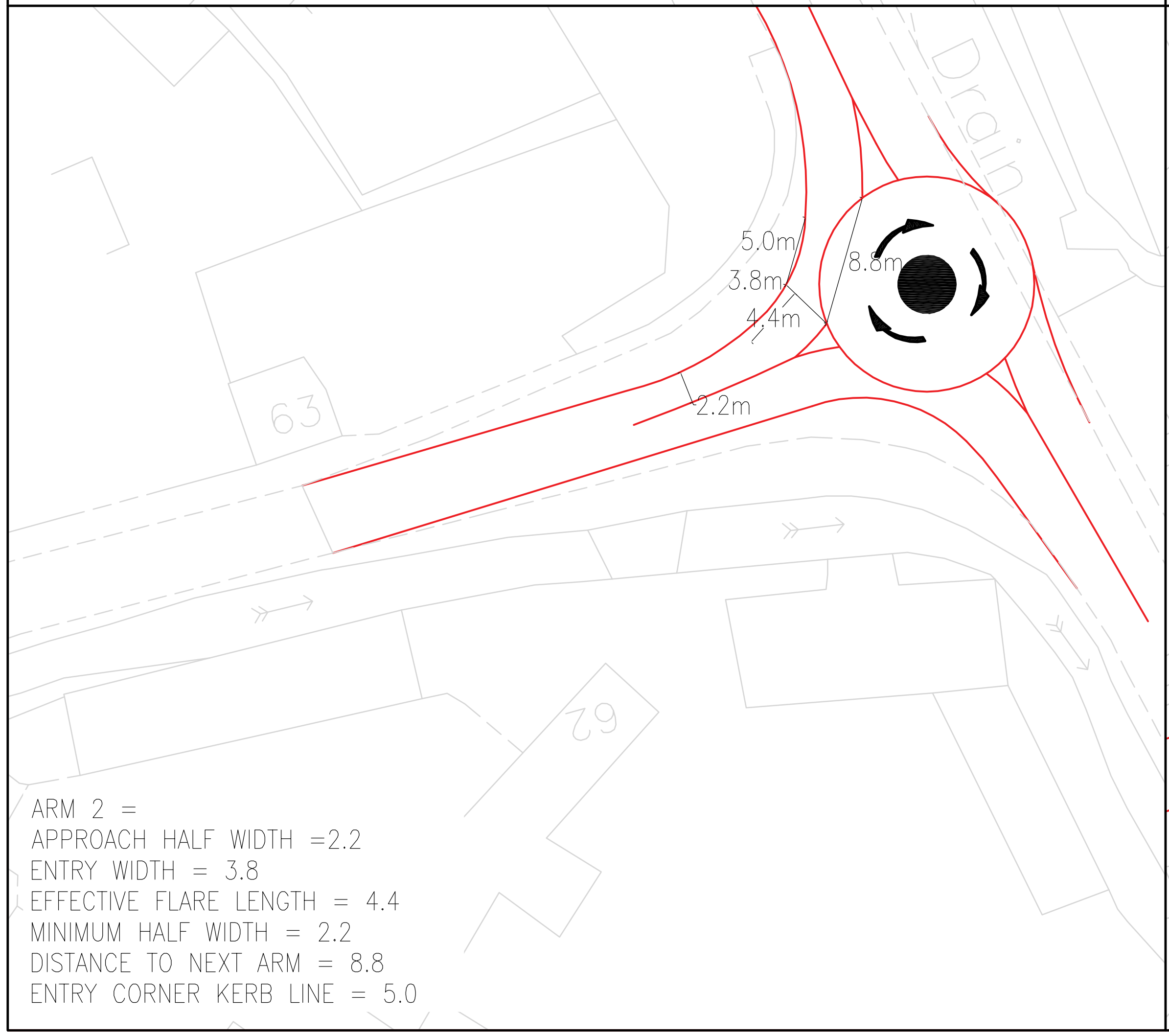
Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
A	292	134	935	0.312	293	0.5	5.612	A
B	231	64	852	0.271	232	0.4	5.806	A
C	197	162	781	0.253	198	0.3	6.177	A

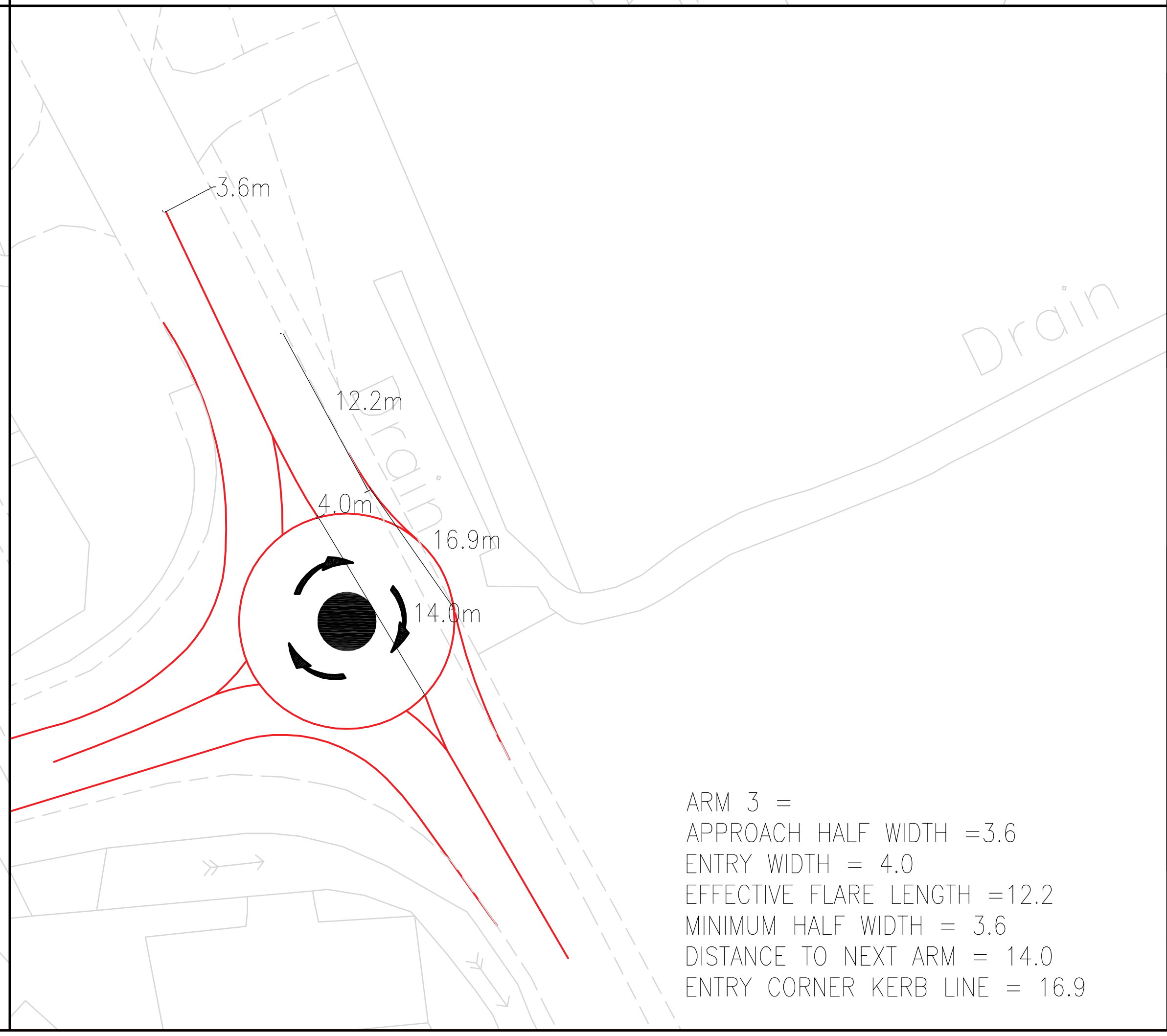
Appendix: K

INDICATIVE MINI ROUNDABOUT









REV	DATE	BY	DESCRIPTION	CHK	APD

DRAWING STATUS:

EAS

Unit 23, The Maltings, Stanstead Abbotts, Hertfordshire, SG12 8HG
Tel: 01920 871777

www.eastp.co.uk

CLIENT:

ARCHITECT:

PROJECT:

MELDRETH SITES
STATION ROAD

TITLE:

INDICATIVE MINI ROUNDABOUT DESIGN

SCALE @ A3:	DESIGN-DRAWN:	DATE:
1:500	EC	16/07/2018

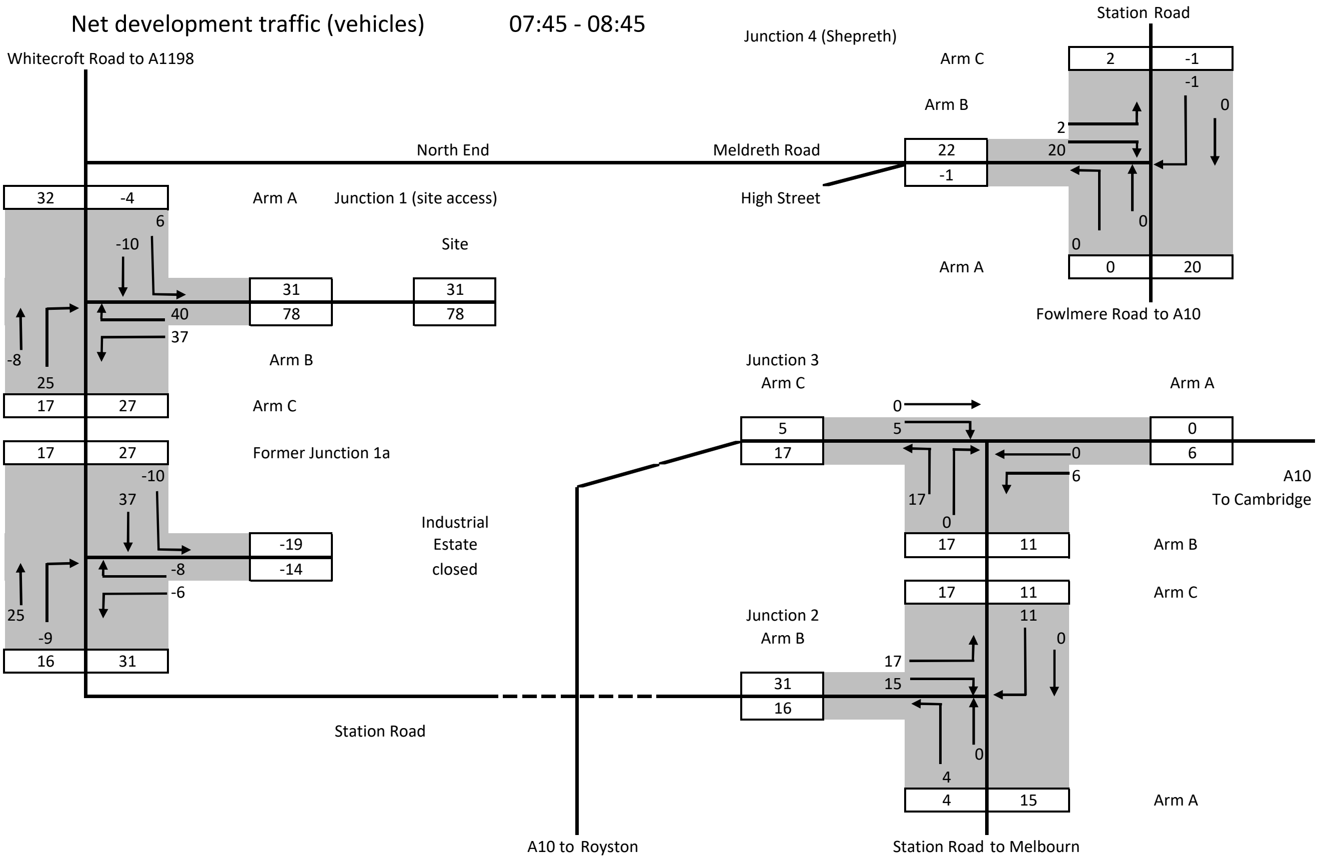
PROJECT No:	DRAWING No:
1713	SK06

Appendix: L **TRAFFIC FLOW, 100% DIVERSION**

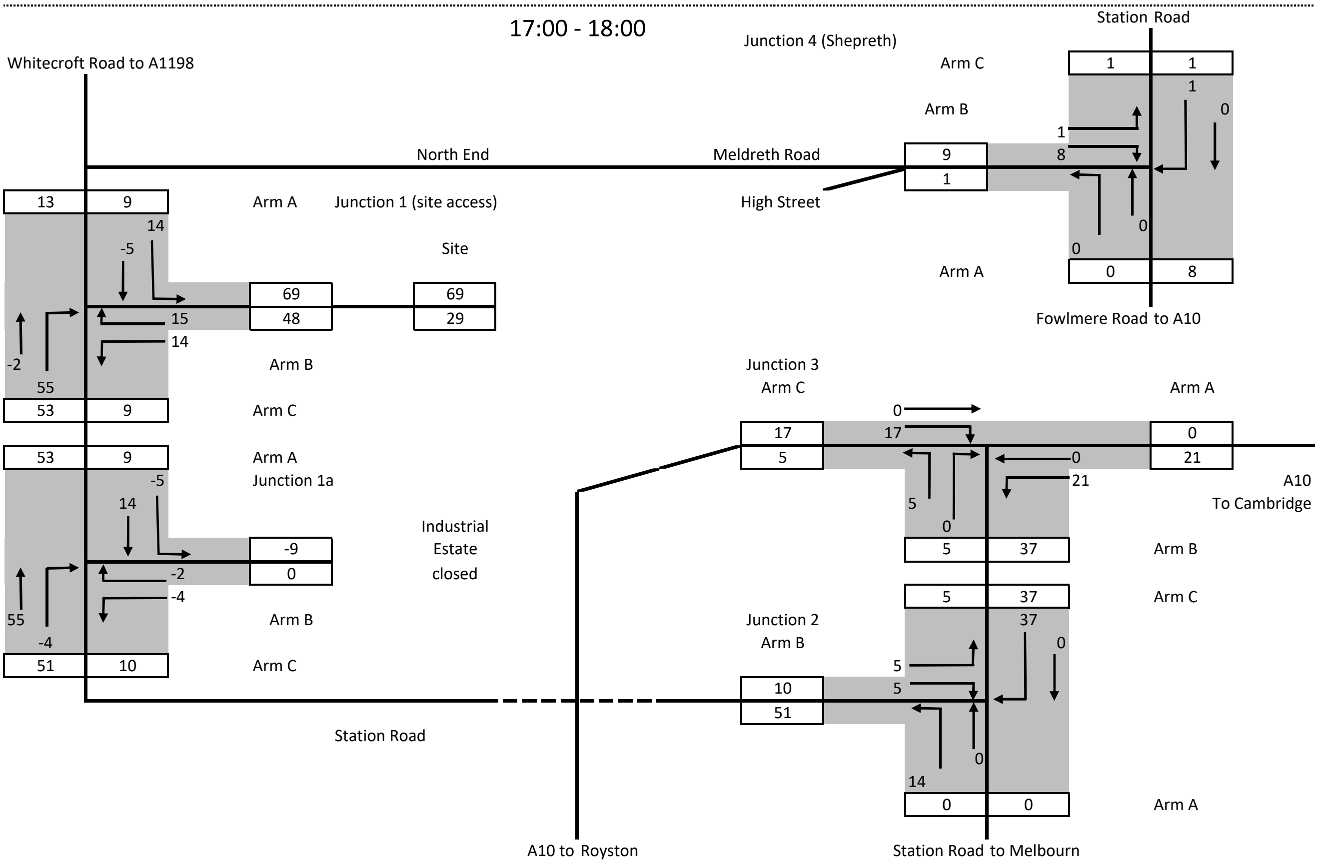
1713 Meldreth

Net development traffic (vehicles)

07:45 - 08:45



17:00 - 18:00



Cambridgeshire County Council

Station Road, Meldreth
Pre-App Advice - SCDC 1635
TRANSPORTATION COMMENTS
PREPARED BY: Transport Assessment Team
AUTHOR: Hannah Seymour-Shove
CHECKED BY: Tam Parry
DATE: 2nd November 2018

Background
The document reviewed is the Pre-Application Transport Assessment dated September 2018 produced by EAS for the proposed erection of 200 dwellings on the land off Station Road, Meldreth.

In preparing a TA the applicant is referred to the County Council's Transport Assessment Guidance June 2017 of which a copy can be found in the link below:
https://www.cambridgeshire.gov.uk/business/planning-and-development/developing-new-communities/

As such a TA should consider the following in its content.

- Travel Plan
- The planning and transport policy context of the development
- Reference to the potential for use of other transport modes to the development site, including bus, cycle and walking. To include reference to the location of the nearest bus stops in relation to the development
- Identification of the traffic related study area including any key junctions that may be affected by the development
- Baseline traffic surveys at these key junctions and consideration of any committed developments in the area that may add to local traffic flows
- Previous 60 months accident records as obtained from Cambridgeshire County Council for the study area
- Trip generation assessment from surveys taken from any other nearby similar sites and or TRICS as a comparison
- Trip distribution on the network according to a clear methodology
- Future year assessment of the key junctions with the development
- Assessment of any mitigation for vehicle impacts, and difficulties of access by walking, cycling and public transport to the site

The remainder of this note sets out the comments of Cambridgeshire County Council (CCC) on the Pre-Application Transport Assessment:

1. Existing Conditions

Local Road Network

Consideration should be given to any deficiencies in the local highway network within any TA submitted.

Pedestrian and Cycle Travel

It is noted Public Footpath No.9 abuts the development site. The TA should outline whether such PROW will be widened as part of the proposals. Furthermore, the development should connect to this footpath.

The County Council are aware that improvements are scheduled for Footpath No.9 as part of application (ref: S/2791/14/OL). Further improvements to Footpath No.9 should be considered as part of any application submitted. Public Rights of Way details should be conversed with James Stringer J

Bus and Rail Travel

An analysis of the nearest bus stops accessible to the site including the current infrastructure available at the bus stops and any existing constraints in terms of walking to these stops is required within any TA submitted. An audit of the existing local bus services at these stops; inclusive of destinations served and frequency should also be provided as part of the assessment. Bus timetables should be appended to the TA.

The TA should provide an audit of Meldreth Railway Station, in addition to summarising the existing services and destinations served at the stations, and identifying any existing constraints regarding access to the station from the development site. Rail timetables should be appended to the TA.

Road Safety

Contact should be made with CCC via e to obtain the latest accident data available for the study area. This will include the junctions modelled, and the area between Meldreth and Shepreth. Full CCC outputs should be provided. It should be noted the use of Crashmap would not be acceptable as it does not provide the latest available data.

Accident analysis needs to identify any trends with regards to accidents that have occurred involving vulnerable road users, or at specific locations, and determine the extent to which the development will affect the identified pattern and rate of accidents. Of particular relevance are the collisions on the A10 in the vicinity of its junction with Station Road.

2. Proposed Development

Access and Parking

A single point of access in the form of a priority junction with Station Road is proposed to serve the development site. It is noted a pedestrian access into the site will be delivered linking the development to the existing PROW east of the site. Contact should be made with Highways Development Management via to agree the internal layout and site access details.

An ATC survey should be undertaken at the proposed site access to provide speed data and justification for the peak periods used within the assessment. The ATC survey undertaken south of the railway bridge is not agreed. This survey as it was undertaken between 10:00 and 15:00 from 25th June to 1st July 2018. This does not cover peak periods. It is advised a 12 hour ATC survey is undertaken. All surveys should be undertaken at a neutral time (see Webtag Unit M1.2) avoiding school, college and university holiday periods.

The Transport Assessment submitted should set out the number of car and cycle spaces that are proposed. It should be clearly stated within the Transport Assessment that both car and cycle provision will accord to the parking standards outlined in the South Cambridgeshire Local Plan (2018).

Baseline Traffic Data

Junction capacity assessments and traffic count surveys were undertaken at the following junctions:

- Industrial Site Access/Station Road junction
- Station Road junction south of A10
- Station Road/A10 junction
- Meldreth Road/Station Road/Fowlmere Road (Shepreth)

The traffic surveys are noted to comprise manual classified counts of turning movements and queuing counts undertaken on Wednesday 27th June 2018.

In addition to the above, the County Council consider the following additional junction is also incorporated within the capacity assessments and Manual Classified Count traffic surveys undertaken:

- Station Road/High Street/Mortlock crossroad (Melbourn)

All surveys included within the assessment should be undertaken at a neutral time during peak hours whilst avoiding school, college and university holiday periods (see Webtag Unit M1.2). Full survey outputs should be appended to the TA when submitted. It should also be noted that the County Council reserve the right for further traffic surveys and analysis if it is shown to be needed.

Trip Generation

The TRICS database has been used to determine trip generation for the development. The proposed development is anticipated to generate 109 two-way vehicle movements in the AM peak and 98 two-way vehicle movements in the PM peak. The trip rates provided appear to be low for the development proposed. It is advised the applicant refers to the trip rates submitted as part of application (ref: S/2791/14/OL) which provide a higher trip rate. Full TRICS outputs should be appended to the TA.

Multi-modal trip generation should be provided within the TA and compared to the TRICS analysis. This should be estimated by using total person trip rates with the mode shares in conjunction with 2011 Census 'Method of Travel to Work' data for the Meldreth Ward.

The proposal comprises the closure of the existing industrial estate. The net trip generation for the development site has been calculated by deducting the existing industrial trips from the proposed development trips. It is noted trip generation figures for the existing industrial estate have been obtained from the traffic surveys undertaken in June 2018.

Trip Distribution and Assignment

Trip distribution for the development on the local highway network has been calculated using 2011 Census 'Travel to Work' data for the MSOA South Cambridgeshire 018. 30.2% of development traffic departing the site in both peak periods is anticipated to travel to the north heading towards Whitecroft Road, whilst 69.8% of development traffic is anticipated to travel to the south towards the Station Road priority junction south of the A10.

Furthermore, 80.4% of arrivals to the site in both peak periods will enter from the south, whilst 19.6% will arrive from the north. Please clarify from the census data the method used to determine the distribution, and outline in the TA the destination and route choice assumptions that have been made.

Trip distribution percentages for the development proposals should be justified as CCC consider a greater proportion of development traffic will use the A10/Station Road junction to travel northeast towards Cambridge and other key locations to the north.

It is noted that the departure traffic distribution has been determined on the basis that whilst the shortest route from the site to Cambridge and other destinations to the northeast is along the A10, drivers might avoid making the right turn out of Station Road onto the A10 during the morning peak and instead access the A10 via Fowlmere Road in Shepreth. The TA should assume that all northeast-bound traffic will use the Station Road junction to access the A10. There should also be a sensitivity scenario included within any TA submitted testing the hypothesis that a third of outbound drivers using the A10 to the east would travel via Shepreth. The sensitivity scenario would also test the capacity of the A10/Fowlmere Road junction in Shepreth.

The vehicle trip generation anticipated to travel through Melbourn, inclusive for access to the A505, should be detailed within any TA submitted. A junction capacity assessment at the Station Road/High Street/Mortlock crossroad junction may also be required.

Committed Development

It is noted no committed development was identified at the time of preparing the Pre-Application Transport Assessment. Committed developments should include New Road Melbourn, ref: S/2791/14/OL and S/2141/17/OL which may go to appeal, and S/2941/18 should this be approved. Contact should be made with South Cambridgeshire District Council to see if any committed development has since been included in the area when the TA is updated.

Assessment Years

CCC requires the following scenarios be modelled for the weekday AM and PM peak assessment periods:

- 2018 Base Year
- 2023 Future Year = 2023 Base + TEMPRO GROWTH + Committed Development
- 2023 Future Year With Development = 2023 Base + TEMPRO GROWTH + Committed Development + Proposed Development

The use of TEMPRO is an acceptable method of calculating future growth.

Junction Capacity Assessments

The use of Junctions 9 and LinSig software to perform the capacity assessments is agreed. Any modelling work submitted as part of the planning application must include full junction modelling outputs appended to the TA. Furthermore, CCC require a scale drawing to be provided showing the geometric measurements for each of the junction assessments in order for the models to be checked.

The mitigation proposals comprising a mini roundabout in replacement of the priority junction on Station Road south of the A10 is noted. Layout details of the mini roundabout should be agreed with Highways Development Management and provided within the Transport Assessment.

A capacity assessment should also be undertaken for the Station Road/High Street/ Mortlock crossroad junction in Melbourn, unless it is demonstrated to not be required.

Proposed mitigation and accessibility

The Transport Assessment should identify a suitable package of measures to mitigate the impact of the development on the surrounding highway network. This should include any improvements necessary for pedestrians and cyclists to access local facilities along with any bus stop improvements in order to promote travel by sustainable modes. It should also identify any improvements necessary to the local highway network in order to mitigate the development.

It should be noted that, under most circumstances, works in the public highway will be undertaken by the applicant through S278 agreements for the site.

Travel Plan

A Travel Plan should be submitted as part of the application. This should include details of targets, measures and its management with the aim to encourage sustainable travel. The detailed Travel Plan will be secured as a pre-occupation condition.

Note

The officer comments in this note are provided on an informal and without prejudice basis, based on current information. The County Council's officer comments and requirements may change and this will be confirmed in response to any subsequent planning application, or other, consultation.