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TRANSPORT STATEMENT

Land South of Brick Lane, Mepal, Cambridgeshire

The Havebury Housing Partnership

December 2019

Project no: 49533

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 Project: Land South of Brick Lane, Mepal, Cambridgeshire
 Client: Havebury Housing Partnership
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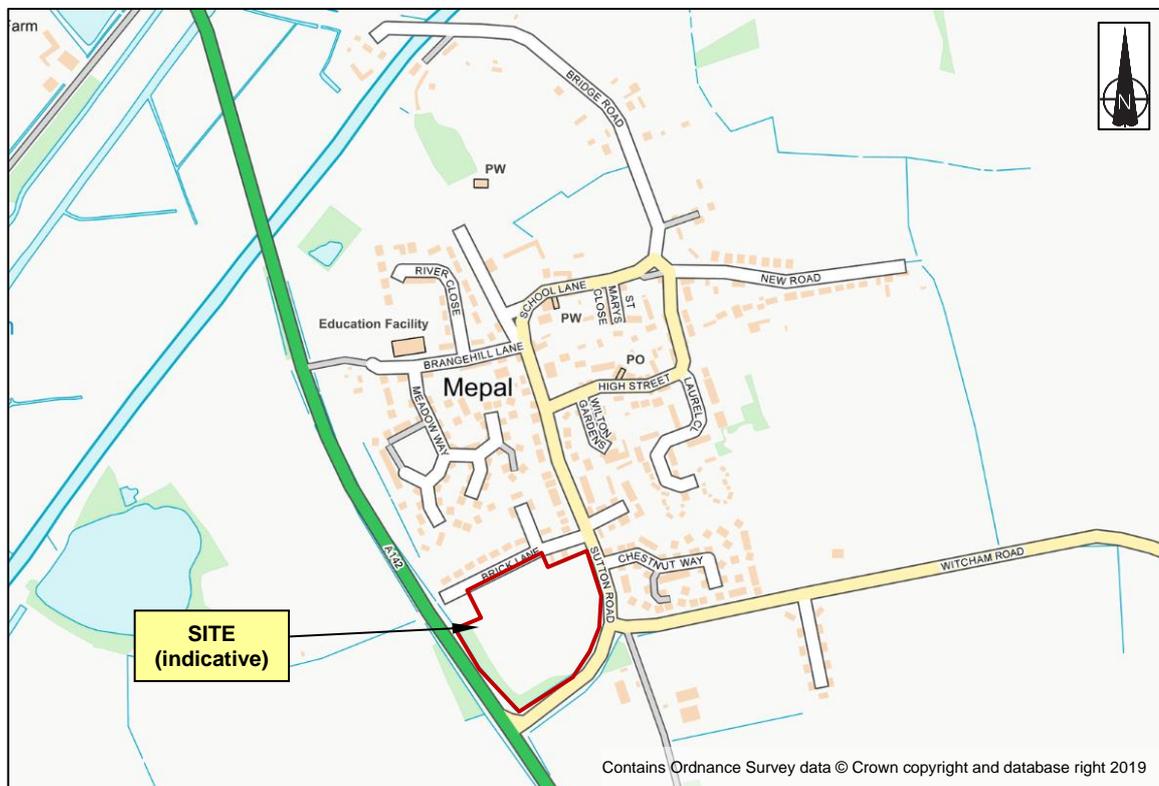
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1. INTRODUCTION

- 1.1. Richard Jackson Ltd (RJL) have been commissioned by The Havebury Housing Partnership to provide a Transport Statement (TS) to accompany a full planning application for a residential development on land to the south of Brick Lane, Mepal, Cambridgeshire.
- 1.2. This TA has been revised in June 2020 to respond to points raised by Cambridgeshire County Council in their role as Highway Authority (HA). The objection letter is in **Appendix J** along with additional updated accident data and output from the TRICS database that the HA requested.
- 1.3. The site location is shown in **Figure 1**. It has an approximate grid reference of 544150, 280550 and a postcode of CB6 2AH. The site is roughly bound by the A142, Sutton Road and Brick Lane. The existing residential areas of Mepal lie to the north and east.

Figure 1 – Site Location



- 1.4. The proposal is for residential development of 55 dwellings with access provided from Brick Lane. The proposed site layout is provided within **Appendix A**.
- 1.5. The planning authority for the site is East Cambridgeshire District Council and the Local Highway Authority is Cambridgeshire County Council (CCC).
- 1.6. CCC Highways were consulted prior to the submission of the planning application and their advice is included at **Appendix B**. Within the advice dated 05th March 2019 points 1, 3, 10 are directly relevant to this TS with the remaining points considered in the

development of the site layout. Point 1 notes the suitability of access from Brick Lane, Point 3 sets out the access road requirement of 5m width with 2m footways, whilst Point 10 considers pedestrian crossing provision. With respect to Point 10, a tactile paved pedestrian crossing point is to be provided on Brick Lane as shown in **Appendix A**, no other crossings are deemed necessary as Sutton Road to the north of Witcham Road is a no through route and it is not necessary to cross Sutton Road to reach the primary school (as outlined herein in **Chapter 3**). The location and form of the proposed site access from Brick Lane reflects comments received from CCC.

- 1.7. The development proposals were presented at a public exhibition event held at the Mepal Village Hall on Monday 23rd September 2019 between 1pm and 7pm. The consultation was well attended by members of the Parish Council and local residents. The highway and transport related points raised during the consultation are summarised below:
- The carriageway width of Brick Lane between the proposed point of access to the development and Sutton Road.
 - Vehicles travelling at excessive speeds on Sutton Road to and from the A142.
 - Vehicles queuing at the Sutton Road/A142 junction; primarily during the AM peak period.
 - To explore the potential of providing an alternative point of access to the development site from Sutton Road.
- 1.8. The feedback provided from local residents from the consultation has been largely addressed within this Transport Statement and through further discussions with CCC and Parish Council members.
- 1.9. This TS has been prepared in accordance with Cambridgeshire County Council's Guidance on Transport Assessment and has been structured as follows:
- **Section 2** outlines the national and local planning and transport policies relevant to the proposed development.
 - **Section 3** describes the existing conditions including the surrounding highway network, the available facilities for public transport, cyclists and pedestrians and the range of local amenities. Local highway safety is considered through a review of accident records.
 - **Section 4** presents the proposals of the development, including access arrangements, layout, and parking provision for vehicles and cycles.
 - **Section 5** presents the trip generation likely to be associated with the proposed development.
 - **Section 6** provides an assessment of the vehicular impacts resulting from the proposed development.
 - **Section 7** provides a summary and conclusion to this Transport Statement.

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2. POLICY CONSIDERATION

National Policy

- 2.1. National Planning Policy reflects and responds to growing concern over environmental issues and a greater public awareness of the problems associated with unrestrained car use. Current policies place a greater emphasis on increasing accessibility by more sustainable modes, such as walking, cycling and public transport.

National Planning Policy Framework

- 2.2. NPPF provides advice on assessing transport, infrastructure and sustainability for new developments. The NPPF highlights that "*transport issues should be considered from the earliest stages of plan-making and development proposals*" and that "*the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposals can be assessed*".
- 2.3. The NPPF identifies that priority should be given to pedestrian and cycle movements, followed by public transport. The development should address the needs of those with disabilities or reduced mobility, create places that are safe, secure and attractive minimising scope for conflicts between transport modes, allow for efficient delivery of goods and access by emergency services, and provide for the charging of plug-in and other ultra-low emission vehicles.
- 2.4. The highways acceptability criteria are identified at paragraph 109 which states that: "*development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or of the residual cumulative impacts on the road network would be severe.*"

Planning Practice Guidance (March 2014)

- 2.5. Planning Practice Guidance provides advice for Travel Plans, Transport Assessments and Transport Statements and Travel in decision-taking. They are required for all development which generate significant amounts of movements.
- 2.6. Paragraph 15 sets out what information should be included in Transport Assessments and Statements:
- *information about the proposed development, site layout, (particularly proposed transport access and layout across all modes of transport)*
 - *information about neighboring uses, amenity and character, existing functional classification of the nearby road network;*

- *data about existing public transport provision, including provision/ frequency of services and proposed public transport changes;*
 - *a qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport that would result from the development and in the vicinity of the site;*
 - *an assessment of trips from all directly relevant committed development in the area (i.e. development that there is a reasonable degree of certainty will proceed within the next 3 years);*
 - *data about current traffic flows on links and at junctions (including by different modes of transport and the volume and type of vehicles) within the study area and identification of critical links and junctions on the highways network;*
 - *an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area;*
 - *an assessment of the likely associated environmental impacts of transport related to the development, particularly in relation to proximity to environmentally sensitive areas (such as air quality management areas or noise sensitive areas);*
 - *measures to improve the accessibility of the location (such as provision/enhancement of nearby footpath and cycle path linkages) where these are necessary to make the development acceptable in planning terms;*
 - *a description of parking facilities in the area and the parking strategy of the development;*
 - *ways of encouraging environmental sustainability by reducing the need to travel; and*
 - *measures to mitigate the residual impacts of development (such as improvements to the public transport network, introducing walking and cycling facilities, physical improvements to existing roads.*
- 2.7. Given that the development is unlikely to generate significant amount of movements, this report has been prepared with due consideration to the above guidance.

Local Policy

Cambridgeshire Local Transport Plan 2011-2031

- 2.11 The local Transport Plan (LTP) sets out the vision for the development of transport infrastructure across Cambridgeshire up to 2031.
- 2.12 The main challenges for Cambridgeshire and the LTP are as follows:

- 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 available and an attractive alternative to the private car.
- Future proofing their 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.
- Influencing national and local decisions on land use and transport planning that impact on routes through Cambridgeshire.

Transport Strategy for East Cambridgeshire (TSEC)

2.13 The purpose of the TSEC is to:

"Provide a detailed policy framework and programme of schemes for the area, addressing current problems consistent with the policies of the Third Cambridgeshire [LTP.]

Support the East Cambridgeshire Local Plan and take account of committed and predicted levels of growth, detailing the transport infrastructure and services necessary to deliver this growth".

2.14 Many of the measures within the TSEC are intended to help facilitate and support new development. As such, contributions are likely through channels such as the Community Infrastructure Levy (CIL) and Section 106 Agreements to support the objectives of the TSEC.

2.15 The following policies of the TSEC are relevant to the scheme and its environs:

- Policy TSEC 3 – Accommodating demand in East Cambridgeshire
- Policy TSEC 5 – Planning Obligations
- Policy TSEC 6 – Transport Assessments
- Policy TSEC 7 – Supporting Sustainable Growth
- Policy TSEC 9 – Access to Jobs and Services

- Policy TSEC 12 – Encouraging Cycling and Walking
- Policy TSEC 13 – Provision of new Highway Capacity
- Policy TSEC 13 – New roads within development sites, or to provide access to development
- Policy TSEC 15 – Road Safety

East Cambridgeshire District Council Local Plan 2015 (ECLP)

- 2.8. The ECLP is the current adopted Local Plan. The following transport and locality related policies are applicable to the development:
- Policy Growth 3 – Infrastructure requirements. It will be required that developments will need to contribute towards infrastructure in accordance with the Council’s adopted CIL charging schedule.
 - Policy Growth 5 – Presumption in favour of sustainable development. Planning applications that accord with the policies in the ECLP will be approved wherever possible without delay, unless material considerations indicate otherwise.
 - Policy COM 7 – Transport impact. Development should be designed to reduce the need to travel, particularly by car, and should promote sustainable forms of transport appropriate to its particular location. Opportunities should be maximised for increased permeability and connectivity to existing networks.
 - Policy COM 8 – Parking provision. Proposals should provide adequate levels of car and cycle parking, and make provision for parking broadly in accordance with the Council’s parking standards.
- 2.9. The proposed site lies adjacent to the current development envelope of Mepal (as shown on the Local Plan Policies Map – April 2015). The ECLP describes Mepal as “a small rural village on the East Cambridgeshire/Fenland border, 6 miles west of Ely.” Mepal had a mid-2012 population of 970 in 240 dwellings. The plan also identifies that “facilities in the village include a shop and post office, church, chapel, public hall, public house and a sports field, primary school, Mepal Community Pavilion and Mepal Outdoor Centre on the edge of the village.”
- 2.10. A development off Brick Lane, was to be allocated in the emerging East Cambridgeshire Local Plan (2017) as site MEP.H1 with site specific policy of Mepal4. The emerging plan was however never adopted and was withdrawn in February 2019. The draft policy was to allow for a housing-led scheme for approximately 50 dwellings with access from Brick Lane.

3. EXISTING CONDITIONS

- 3.1. This section identifies the existing conditions associated with the proposal site. It describes its location in relation to the surrounding highway network, pedestrian and cycle facilities, public transport provision and local facilities and amenities. The section also provides a review of road accident records for the local network.

Site Location and Surrounding Highway Network

- 3.2. The site is located off Brick Lane at the southern end of Mepal. It is bound to the north by Brick Lane, to the east and south by Sutton Road and to the west by the A142. Sutton Road, north of Witcham Road is a no through route into Mepal. Locally the A142, which can be reached via Brick Lane and Sutton Road, provides a route between Ely and Chatteris.

Pedestrian and Cycle Facilities

- 3.3. A footway is present on the north side of Brick Lane providing a link to Sutton Road. On Sutton Road, footways are present on both sides to the north of Brick Lane and on the eastern side only to the south. A short section of footway is also present on the southwest corner of the Sutton Road/Brick Lane junction.
- 3.4. Footways are present throughout the village of Mepal providing a link between the site and local amenities including primary education.
- 3.5. There are no formal cycle facilities in Mepal village, however most of the village is covered by a 30mph speed limit which commences some 60m north of Witcham Road and 70m south of Brick Lane, and is considered to be suitable for local cycling trips. Witcham Road is subject to a 40mph speed limit whilst its junction with Sutton Road is covered by the national (60mph) speed limit. A cycle route is however present from the Sutton Road/Witcham Road junction to Sutton, and whilst it is necessary to cross the A142, it is not necessary to cycle on the A142 carriageway.
- 3.6. Mepal and Witcham Primary School is located on Brangehill Lane approximately 500m from the site's Brick Lane frontage (600m from the centre of the site). The school can be reached using footways on Brick Lane, Sutton Road and Brangehill Lane. It is not necessary to cross Sutton Road to reach to the school.

Public Transport Provision

- 3.7. The nearest bus stops to the site are located on Sutton Road, to the south of Brick Lane, approximately 100m from the developments access. The southbound stop includes a shelter with timetable information, whilst the northbound stop is unmarked with the bus able to set down on the short section of footway on the southwestern corner of the Sutton Road/Brick Lane junction. Given the no-through route of Sutton Road, all departing services call at the southbound stop. **Table 3.1** summarises the bus service and its frequency. A copy of the bus timetable information for the southbound stop is included at **Appendix C**.

Table 3.1: Bus Services in Mepal

Operator	Service	Frequency
Stagecoach	39 Ely – Chatteris - March	Mon - Fri: 0710, 0955, 1225, 1455, 1610, 1845, 1940 Sat: 0710, 0955, 1225, 1455, 1610, 1900
	39 March – Chatteris - Ely	Mon - Fri: 0551, 0641, 0731, 0941, 1116, 1346, 1616, 1746, 1911 Sat: 0651, 0731, 0941, 1116, 1346, 1616, 1746, 1921

Local Facilities and Amenities

- 3.8. To assess the ability for potential residents to access important and desirable services in Mepal, research has been undertaken to identify facilities and amenities local to the proposed development site.
- 3.9. The distances from the site to the local facilities were measured from a central point within the site giving average distances to the facilities using existing footways and carriageway. As a scale of measure, the CIHT Guidelines for Providing for Journeys on Foot (2000) have been applied, summarised in **Table 3.2**, which indicates walk distances for different journey purposes.

Table 3.2: CIHT Walk Journey Times

CIHT Guidelines	Distance		Walk Time	
	Commuting, Walking to School and Recreational	Other Non-Commuter Journeys	Commuting, Walking to School and Recreational	Other Non-Commuter Journeys
Desirable	500m	400m	6.25 mins	5 mins
Acceptable	1,000m	800m	12.5 mins	10 mins
Considered	2,000m	1,200m	25 mins	15 mins

- 3.10. Walking is identified as the most important form of travel at a local level, and it is also considered that walking offers the greatest potential to replace the car for journeys of less than 2.0km. Cycling also has the potential to replace many car trips of less than 5.0km, which may also form part of longer journeys supported by public transport.
- 3.11. **Table 3.3** shows the relative distances from the site with walking and cycling times to local facilities and amenities within Mepal.

Table 3.3: Walking & Cycling Times to Local Facilities & Amenities

Facilities and Amenities	Approx Distance (m)*	Walking (mins)**	Cycling (mins)***
Transport			
Bus Stop	200	3	N/A
Retail			
Mepal Post Office & Stores	500	6	2
Health			
Priors Field Surgery (Sutton)	2,300	29	9
Sutton Pharmacy	2,300	29	9
Education			
Mepal and Witcham Primary School	600	8	2
Leisure/Recreation			
Three Pickerels (PH)	1,100	14	4
Mepal Village Hall	500	6	2
St Marys Church	600	8	2
Mepal Recreation Ground	600	9	2

* Distances are in metres (to the nearest 100m) and have been measured from the middle of the site to the facilities on road, footways or cycleways

** Walking times are based on a walk speed of 80m per minute (3mph)

*** Cycling times are based on a speed of 270m per minute (10mph)

- 3.12. Whilst the doctors and pharmacy are in slightly in excess of 2.0km, footways are present along the route to/from the proposed site. These facilities are also within cycling distance. For other amenities not available in the immediate area, bus services are present close to the site and include for commuter type trips to Ely, Chatteris and March.

Review Personal Injury Collision Data

- 3.13. A review of the local highway collision data has been undertaken from records obtained from Cambridgeshire County Council during February 2019. The area plot for Mepal and details received are included at **Appendix D** and the data received summarised in **Table 3.4**. The data supplied by CCC covers the 60-month period between September 2013 to September 2018.
- 3.14. Within the data there was a single slight accident at the Witcham Road/Mepal Road junction, three accidents within 50m the A142/Sutton Road junction, a further accident was recorded on each side of but away from the A142/Sutton Road junction. The remaining four accidents were all on the A142 to the north of the Hundred Foot Drain (to the north of Mepal).

Table 3.4: Summary of Personal Injury Collision Data (2013-2018)

Ref No.	Severity	Location	Conditions					Ped/Cyc Involved
			Weather	Lighting	Road Surface	Time	Date	
133306	Serious	A142 IRETONS WAY JUNCTION LOW BANK MEPAL ELY	Fine without high winds	Daylight	Dry	15:05	20130521	N
141807	Slight	WITCHAM RD 30M W OF SUTTON RD MEPAL	Fine without high winds	Daylight	Dry	17:00	20140928	N
142045	Slight	A142 IRETONS WAY 200M SE ENGINE BANK MEPAL EXACT LOC UK	Fine without high winds	Daylight	Dry	08:02	20141104	N
141855	Fatal	A142 1200M S OF MEPAL SHORT HIGHWAY	Fine without high winds	Daylight	Wet/Damp	09:01	20141107	N
15321	Slight	A142 IRETONS WAY JUNCTION SUTTON RD ELY	Fine with high winds	Daylight	Dry	15:04	20150228	N
16137	Slight	A142 50M SUTTON RD ELY	Fog or mist	Daylight	Frost/Ice	07:02	20160121	N
1674478	Fatal	MEPAL ROAD A142 SUTTON ROAD	Fine without high winds	Daylight	Dry	07:02	20160608	N
16151400	Serious	MEPAL ROAD APPROX 300M SW FROM SUTTON ROAD JUNCTION A142	Fine without high winds	Daylight	Dry	10:01	20161022	Y
16139126	Fatal	WESTBOUND A142 SUTTON ROAD	Fine without high winds	Darkness: street lights present and lit	Dry	06:00	20161220	N
17159210	Fatal	IRETONS WAY A142	Fine without high winds	Daylight	Dry	17:00	20170227	N
17197262	Serious	IRETONS WAY A142	Fine without high winds	Daylight	Dry	17:03	20170623	N

Source: Cambridgeshire County Council

- 3.15. Of the accidents at the A142/Sutton Road junction, two of these were classified as 'slight' severity whilst the other was fatal. The fatal accident involved a powered two-wheeler.
- 3.16. The data does not indicate any specific issues which would be disproportionately affected by the development proposals.

- 3.17. In June 2020 the HA requested that an update to the accident record be obtained and reviewed. As noted above the accident records for 2013 – 2017 were originally reviewed. In June 2020 the latest available records were obtained are in **Appendix J**. These results include 2 more recent events which are reviewed below in Table 3.5.

Table 3.5: Summary of Personal Injury Collision Data (2018-2020)

Ref No.	Severity	Location	Conditions					Ped/Cyc Involved
			Weather	Lighting	Road Surface	Time	Date	
18342263	Serious	SUTTON ROAD NEAR JN WITH CHESTNUT WAY	Fine without high winds	Daylight	Dry	17:35	20181019	N
19902494	Slight	CHATTERIS ROAD (A142)	Fine without high winds	Daylight	Dry	15:39	20191114	N

- 3.18. The most recent slight severity incident occurred on the A142 some distance to the north of these proposals. The Serious incident occurred at a simple T junction just south of Brick Lane on Sutton Road. The incident involved a right turn manoeuvre.
- 3.19. There is no discernible pattern of events that suggest that the conclusions reached in December 2019 need to be altered.

Traffic Data

- 3.20. Classified traffic count data was collected at the A142/Sutton Road and Sutton Road/Brick Lane/Rectory Fields junctions on Tuesday 29 January 2019 between the hours of 0700-1000 and 1600-1900. A copy of the data collected is included at **Appendix E**. The peak hours from each junction, expressed in Passenger Car Units (PCUs) are shown on **Traffic Flow Diagram 1** in **Appendix F**.

4. DEVELOPMENT PROPOSALS

- 4.1. The development proposals are for 55 residential dwellings. The illustrative site layout is included within **Appendix A**.

Access

- 4.2. The development would be served via a new access formed from the existing Brick Lane, with a small number of properties having direct frontage access to Brick Lane. The access would be designed to CCC adoptable standards, and would be a minimum of 5.0m wide, with 6m radii and 2m wide pedestrian footways, which would connect to existing pedestrian facilities on Brick Lane. The existing ditch on the southern side of Brick Lane would be culverted as necessary. Between the access and Sutton Road, Brick Lane is some 5.2m-5.3m in width, which is considered sufficient, in serving existing residential development, and to provide a route from the development to Sutton Road. The proposed site access arrangement is shown on **Drawing No 49533/PP/001**.

Parking and Manoeuvring

- 4.3. Cycle and car parking standards are set out in ECDC Local Plan (policy COM 8). Car parking provision would be expected at an average of 2 spaces per dwelling over the whole development plus a further visitor's space per 4 dwellings. Cycle parking would be expected to be provided at a rate of 1 space per dwelling which may be within a garage where there is also room to park a car. The final parking provision within the development will be agreed as part of the planning application process.
- 4.4. Turning heads will be provided as required at appropriate locations within the development. This will allow access for service vehicles including refuse collection and a fire appliance.

Construction Traffic

- 4.5. It is difficult to establish the temporary construction vehicle movements associated with the development until a contractor is on the project team. Should it be required, a Construction Management Plan (CMP) could be conditioned on any planning permission given to be agreed with Cambridgeshire County Council. This would allow input from a contractor on vehicle movements, routing and programming, if needed.
- 4.6. General construction staff during the majority of the construction programme are likely to be from the local area. Construction staff typically start work between 0700 – 0730 and finish 1500 – 1800 (depending on the time of year), thus, most of the time vehicle movements will be outside of the traditional weekday peak hours of traffic on the network. It is recommended that to promote sustainable travel for construction operatives, the CMP (if required) reviews options for car sharing and public transport use.
- 4.7. Contractors' car/van parking will be contained within the site areas during the construction phase, with temporary parking areas used if needed.
- 4.8. Larger construction vehicles would be expected to reach the site via the Sutton Road and the A142 to reach the site off Brick Lane.

5. DEVELOPMENT TRIP GENERATION

- 5.1. This section presents the trip generation from the proposed development and its associated vehicular trip impact upon the local highway network. The vehicular impact from the development is assessed within **Section 6**.

Background Traffic Growth

- 5.2. Background traffic growth factors have been calculated from data contained in TEMPro computer programme using data sets NTEM 7.2 and NTM AF15. The calculation has been made for the East Cambridgeshire authority area with road type rural principal and is summarised in **Table 5.1**. A copy of the TEMPro outputs are included at **Appendix G**.

Table 5.1 – Traffic Growth Factors

Forecast	Weekday AM	Weekday PM
2019 – 2024	1.0938	1.0964

- 5.3. The traffic growth factors have been applied to the 2019 survey data to provide a baseline for comparison to the addition of development traffic. The resulting traffic flows are shown diagrammatically on **Traffic Flow Diagram 2** in **Appendix F**.

Trip Generation

- 5.4. Vehicular trip generation for the proposed development has been taken from the observed traffic movements from Brick Lane and Rectory Fields combined which represent a total of 32 existing dwellings. The trip generation for the observed AM and peak generation are shown in **Table 5.2**.
- 5.5. In June 2020 the HA requested additional information on trip generation using the TRICS database. The database was reviewed during the preparation of this TS and was not used as site specific vehicle trip data was recorded in the traffic counts. The results of the TRICS data is in **Appendix J** and summarised in **Table 5.2** for comparison purposes.
- 5.6. The AM peak hour from TRICS and the count data correlates well with 0800-0900 being the peak. The PM peak does not with TRICS having a 1700-1800 peak and the count data being 1630-1730.
- 5.7. The TRICS trip rate data gives a lower trip generation than the observed trip rates which are used the junction assessments in **Section 6**.

Table 5.2 - Vehicular Trip Generation (Vehicles)

Land Use C3 Residential	AM		PM	
	Arr	Dep	Arr	Dep
32 Existing Dwellings Trips	5	15	19	13
Observed Trip Rate	0.156	0.469	0.594	0.406
55 Proposed Dwellings Trips	9	26	33	22
TRICS trip rate	0.136	0.368	0.323	0.158
55 Proposed Dwellings Trips using TRICS	7	20	18	9

Trip Distribution

- 5.8. Trip distribution is based on the observed turning proportions of the flows shown on **Traffic Flow Diagram 1**, with any movements between Brick Lane and Rectory Fields ignored. The resulting distribution of the development trips based on observed trip rates from **Table 5.2** (expressed as PCUs) are shown on **Traffic Flow Diagram 3** in **Appendix F**. The 2024 with development total traffic flows are shown on **Traffic Flow Diagram 4**.

6. HIGHWAY CAPACITY

- 6.1. Local junctions on the immediate highway network have been assessed for their operational capacity in the forecast year of 2024, 5 years following submission of the planning application. Standard modelling software Junctions 9 has been used in the junction assessments. Geometric parameters used and outputs from the junction models described in this section are included at **Appendix H**. Traffic inputs and outputs in each model are expressed in PCUs. Where HGV% are required these have been taken from the 2019 survey data and assumed to remain constant across scenarios for simplicity.
- 6.2. In June 2020 the HA requested more information on traffic generation and noted that they were not able to comment on Highway Capacity until this additional information was available. We have considered the TRICS data and noting that the trip generation is lower than that from the vehicular count data that the highway capacity assessment was undertaken on in December 2019. We consider that the results and conclusions presented in 2019 remain robust and valid. The RFC results are all well below the 0.85 value that is considered to be the point at which a junction may be approaching capacity.

Sutton Road/Brick Lane/Rectory Fields

- 6.3. The Sutton Road/Brick Lane/Rectory Fields junction is a simple priority crossroads with a left/right stagger in a 30mph speed limit area with Sutton Road forming the major arms.
- 6.4. The model results for 2024 forecast year and 2024 forecast year with development are summarised in **Table 6.1**. The results indicate that the junction will continue to operate well within capacity with the addition of development traffic.

Table 6.1 - Sutton Road/Brick Lane/Rectory Fields Model Results

Arm / Movement	2024				2024 with Proposed Development			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Queue (PCUs)	RFC	Queue (PCUs)	RFC	Queue (PCUs)	RFC	Queue (PCUs)	RFC
Rectory Fields	0.0	0.02	0.0	0.01	0.0	0.02	0.0	0.01
Sutton Road (n)	0.0	0.03	0.1	0.04	0.0	0.03	0.1	0.04
Brick Lane	0.1	0.07	0.1	0.07	0.1	0.09	0.1	0.08
Sutton Road (s)	0.0	0.01	0.0	0.01	0.0	0.01	0.0	0.01

A142/Sutton Road

- 6.5. The A142/Sutton Road junction is a priority controlled junction with a ghost island right turn lane. The national speed limit applies.

- 6.6. The model results for 2024 without development and 2024 with development are summarised in **Table 6.2**. The results indicate that the junction will continue to operate well within capacity with the addition of development traffic.

Table 6.2 - Sutton Road/Brick Lane/Rectory Fields Model Results

Arm / Movement	2024				2024 with Proposed Development			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Queue (PCUs)	RFC	Queue (PCUs)	RFC	Queue (PCUs)	RFC	Queue (PCUs)	RFC
Sutton Road (left turn)	0.2	0.17	0.2	0.15	0.2	0.20	0.2	0.17
Sutton Road (right turn)	0.3	0.22	0.2	0.13	0.4	0.26	0.2	0.15
A142 (s)	0.2	0.13	0.3	0.21	0.2	0.13	0.3	0.23

Summary

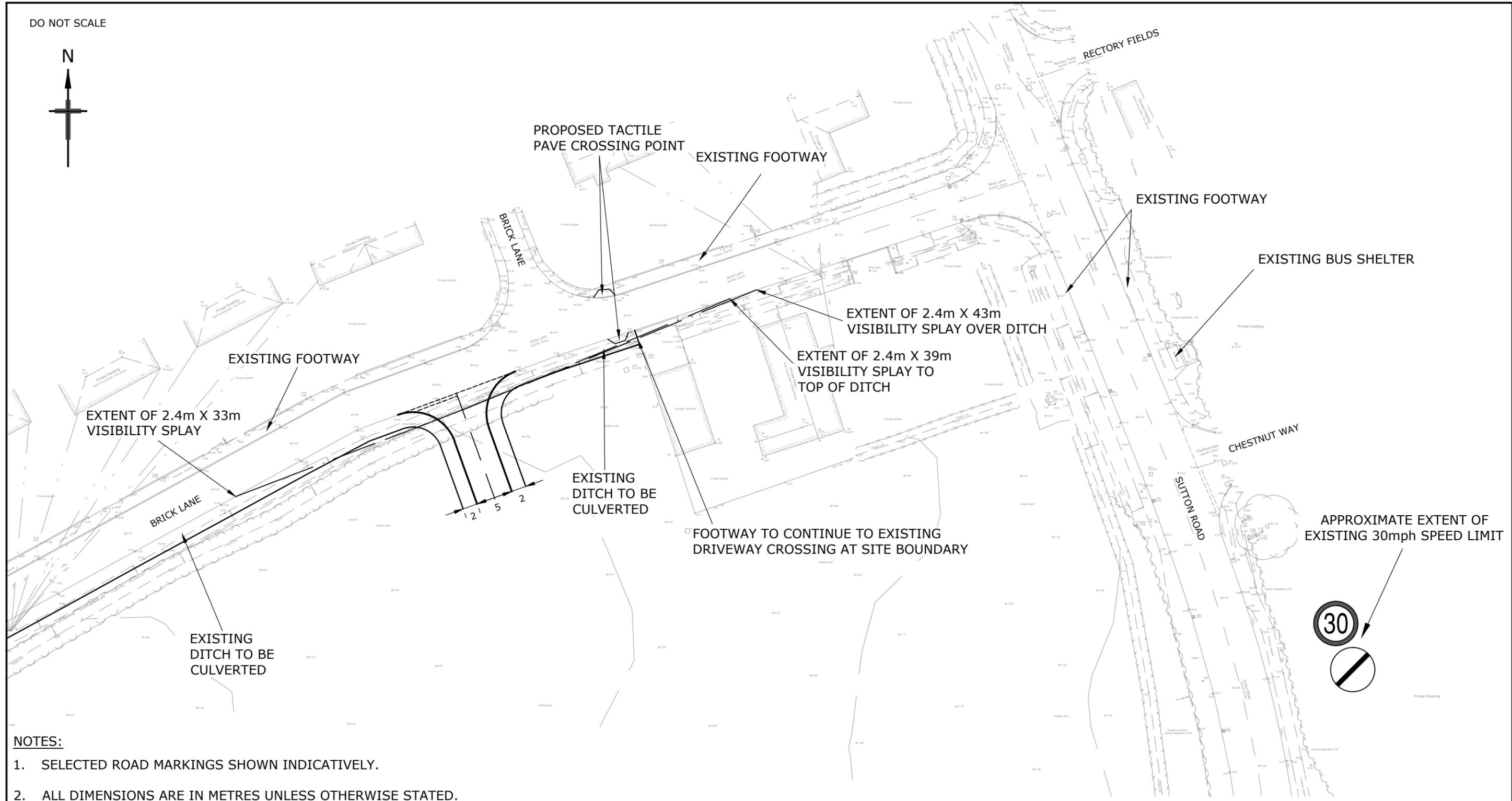
- 6.7. Both the Sutton Road/Brick Lane and the A142/Sutton Road junctions are expected to remain well within their operational capacity in 2024 with the addition of development traffic. No mitigation is required at either of these junctions for the proposed development with respect to their capacity.

7. SUMMARY AND CONCLUSION

- 7.1. Richard Jackson Ltd have reviewed the transport implications of developing the proposed site of 55 dwellings on land south of Brick Lane, Mepal. This TS has also reviewed the relevant planning policy for the site with respect to transport and it is considered that the proposals, comply with policy with respect to transport matters.
- 7.2. The location and form of the proposed access to the site from Brick Lane has been discussed and agreed with CCC highways.
- 7.3. A number of local amenities, including primary education, lie within walking or cycling distance of the site. The local amenities can be reached via a network of existing footways and cycleways.
- 7.4. The existing bus stops provide services between the site and Ely, Chatteris and March including for workplace commuting trips.
- 7.5. For travel by private car, the primary routes are via Sutton Road to the A142 which locally runs between Ely and Chatteris.
- 7.6. The review of local highway safety records found no specific issues, casualties or locations of accidents. The development is considered unlikely to have a significant impact on local highway safety.
- 7.7. Vehicular trip generation for the current proposals has been reviewed based on existing development off Brick Lane and Rectory Fields along with background traffic growth. Traffic modelling of the local road has been undertaken for the future weekday AM and PM peak hours. The conclusions from the modelling are that there are no capacity issues at the junctions assessed with the addition of development traffic. This accords with the advice of CCC highways that the junction with Brick Lane and Station Road is suitable for the increase in vehicle movements that this development would create.
- 7.8. The expected construction traffic has also been considered with construction vehicles likely to use the A142 and Sutton Road to/from the development. A Construction Management Plan, secured by a suitably worded condition, has however been identified to help manage traffic movements during the construction period.
- 7.9. In conclusion, the proposed development would be in accordance with the aims and objectives of Local and National Transport Planning Policy and would not have a severe impact on the local transport network.
- 7.10. In June 2020 the HA requested additional information in respect of the accident record and traffic generation. This revised TS provides this additional information and the conclusion reached in December 2019 remains valid.

DRAWINGS

DO NOT SCALE



NOTES:

1. SELECTED ROAD MARKINGS SHOWN INDICATIVELY.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
3. INCLUDES INFORMATION TAKEN FROM SURVEY SOLUTIONS DRAWINGS 23400ea-01 & 02 DATED 14/12/18.
4. DESIGN IS INDICATIVE, SUBJECT TO DETAILED DESIGN AND ROAD SAFETY AUDIT.

REV	DATE	DESCRIPTION	DRAWN	CHKD

Project Title
**LAND OFF BRICK LANE
 MEPAL, CAMBRIDGESHIRE**

Client Title
**THE HAVEBURY HOUSING
 PARTNERSHIP**

This drawing is to be read in conjunction with all other Engineer's drawings and all other project information. Any discrepancy between the Engineer's drawings and other project information is to be reported to the Engineer immediately.



Drawing No.
49533/PP/001

Revision

Drawing Title
PROPOSED SITE ACCESS

Scale 1:500 @ A3	Drawn DDP	Date 13/09/19
Job Manager DB	Checked DB	Approved DB



Drawing Status

<input checked="" type="checkbox"/> INFORMATION	<input type="checkbox"/> APPROVAL	<input type="checkbox"/> COSTING
<input type="checkbox"/> TENDER	<input type="checkbox"/> CONSTRUCTION	<input type="checkbox"/> AS CONSTRUCTED

A3

APPENDICES

Appendix A

CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE. ONLY FIGURED DIMENSIONS TO BE WORKED FROM. DISCREPANCIES MUST BE REPORTED TO THE DESIGN OFFICE BEFORE PROCEEDING.

FORM NEW ROAD ACCESS CCC STANDARDS FORM CULVERT TO EXISTING DITCH CONNECTING TO EXISTING PIPE TO ADJACENT DWELLINGS DRIVEWAY CROSSING

FORM NEW FOOTPATH TO FRONTAGE OF PLOT 1 AND FORM CROSSING TO FOOTPATH ON OPPOSITE SIDE OF BRICK LANE WITH TACTILE PAVING TO EITHER SIDE OF THE ROAD

FORM NEW FOOTPATH TO BRICK LAND FRONTAGE HEDGE REMOVED TO SUIT WITH CULVERT TO EXISTING DITCH CONNECTING TO EXISTING HEAD WALL AT EITHER END

600mm Knee rail fence to boundary between P05 & existing dwelling

CENTRAL OPEN SPACE AREA SURROUNDED BY RAILINGS WITH SEATING DETAILS TO BE INCORPORATED

ESTATE RAILS WITH HORNBEAM HEDGE TO BACK EDGE OF SHARED SURFACE ACCESS ROAD

ESTATE RAILS WITH HORNBEAM HEDGE TO BACK EDGE OF FOOTPATH AND PARKING BAYS

EXISTING PLANTING ADJUSTED TO SUIT SITE BOUNDARY

EXISTING 3.0m HIGH TREE AND SHRUB PLANTING TO BE RETAINED TO A142 AND SUTTON ROAD PERIMETER OF SITE AS DETAILED

HOUSE TYPE CODE	HOUSE TYPE	PLOT No.	Qty
1BHT/01	1 Bed House 58m2 (Semi-Detached)	29-32, 37&38	6
2BHT/01	2 Bed House 79m2 (Semi-Detached)	3,4,12-15	6
2BHT/02	2 Bed House 79m2 (Detached)	36,39,43	3
2BHT/03	2 Bed House 79m2 (Semi-Detached)	27,28	2
2BHT/05	2 Bed House 70 m2 (Semi-Detached & Terrace)	17,18,23-26	6
3BHT/01	3 Bed House 93 m2 (Semi-Detached)	5,6,10,11,33&34	6
3BHT/03	3 Bed House 94.2m2 (Detached)	9,16,35,40,46	5
3BHT/02	3 Bed House 94.9m2 (Detached)	41	1
3BHT/05	3 Bed House 88.5m2 (Semi-Detached)	19-22	4
4BHT/01	4 Bed House 113.1m2 (Detached)	45&48	2
4BHT/02	4 Bed House 112.9m2 (Detached)	42&47	2
4BHT/03	4 Bed House 109.3m2 (Detached)	44	1
5BHT/01	5 Bed House 128.9m2 (Detached)	49	1
2BBT/01	2 Bed Bugalow 71.7m2 (Semi-Detached)	7&8, 50&51	4
2BBT/02	2 Bed Bugalow 70m2 (Detached)	2	1
3BBT/01	3 Bed Bugalow 74m2 (Detached)	1,52,53,54 & 55	5
			55

KEY

- 1.2m Estate rail fence
- 1.8m closeboard fencing with concrete posts
- 1.8m brick wall
- 1.8m gate with galvanized latch and shoot bolt (or similar)
- Indicative landscaping please refer to landscape architects scheme for details
- Visitor parking spaces
- Location of refuse bin communal collection point
- Minimum 4m2 (suggested 2.4x1.8m) SW timber shed with lockable door and window and concrete base with cycle security lock fixings
- Indicative Proposed Ground Floor Slab Levels (To be confirmed by project engineer)
- Location of refuse bins screened by rear garden closeboard fence (each bin placed on 600x600 paving slab)
- Minimum 6m long washing line with concrete base

DRAWING REVISIONS

Rev	Date	Details
A	21-03-19	Scheme up-dated
B	01-07-19	Scheme up-dated
C	17-07-19	Scheme up-dated
D	28-08-19	Drive hatch added to plot 2&3, sheds omitted plots 11&12, boundary adjusted between plots 10&11, additional gate omitted plot 18 and additional path from parked added to plot 50
E	29-08-19	Area of landscaping omitted adjacent to existing bungalow on brick lane
F	30-08-19	Red title line omitted from area of landscaping omitted adjacent to existing bungalow on brick lane
G	11-09-19	Up-dated to suit house type up-dates
H	07-10-19	Patios & rear paths added
J	01-11-19	Amended to suit house type up-dates
K	21-11-19	Rotary dryers added
L	25-11-19	Boundary fencing up-dated to plots 8,16,38,47&49

MWS Architectural Ltd
 ARCHITECTURAL CONSULTANT
 Tel/Fax: 01353 665 352
 Email: mark@mwsarchitectural.co.uk

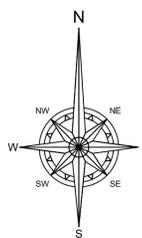
Project:
PROPOSED DEVELOPMENT AT LAND OF BRICK LANE & SUTTON ROAD MEPAL

Drawing:
Proposed Site Plan

Drawing File Location:
 DRAWING-FILE-LOCATION
 Drawn by: MWS Scale: 1:500@A1 Date: 07-01-19

This drawing is © copyright protected. All dimensions to be checked on site. Any discrepancies to be reported to the Architect immediately. This drawing should not be scaled.

Drawing no: **355/P/01** Revision **L**



Appendix B

My ref: G104/196
Your ref: N/A

Date: 05th March 2019

Contact: Geoffrey Ellwood
Telephone: 01353 650 576
E Mail: Geoffrey.ellwood@cambridgeshire.gov.uk



Economy, Transport and Environment
Highways Service

PlanSurv
76 Broad Street
Ely
Cambridgeshire
CB7 4BE

Highways Depot
Sterling Way
Witchford
Ely
CB6 3NR

FTAO – Edward Clarke

Re: Highways Pre-Application Advise – Land off Brick Lane, Mepal

I write to you regarding the above Highways Pre-Application advice and fee payment. I have not had confirmation of payment to date but as the CCC accounts team issued two invoices for the same site, which is holding the process up, I will provide comments in good faith this will be paid in due course if it has not been already.

1. The junction with Brick Lane and Station road is suitable for the increase in vehicle movements that this development would create
2. The parking bays by Plot 30 and 32 are not acceptable from an adoption point of view. Drivers at Plot 30 would have to reverse on to and up the footway and / or at an angle to leave the space. Drivers at both Plots would also have to reverse up the road and in to the turning head which is a safety concern. The parking for Plot 40 would also require vehicles to enter Plot 41 to leave the parking space as there is not enough room to the rear of these spaces (See comment 8 below)
3. The internal roads at 5m with 2m x footways should be suitable for refuse vehicles (dependent upon layout / turning heads). East Cambs may however require swept path or vehicle tracking analysis to support the application and internal road layout
4. In order to make the internal roads adoptable there must be a suitable turning head at the end of each section of road. This is so members of the public can turn within the road and entirely within the highway. As such swept path analysis will be required for the turning head by plots 48, 49 and 50. I would also add at this point that this entire section of road would likely not be acceptable for adoption. This is because it does not meet with CCC standards of shared use areas please see comments 7. below and Appendix 7. of the CCC HERCS April 2018 for ramps in to shared use areas, which also requires

shared use areas to be raised and access points to other others to be legible for the visually impaired and include landing platforms

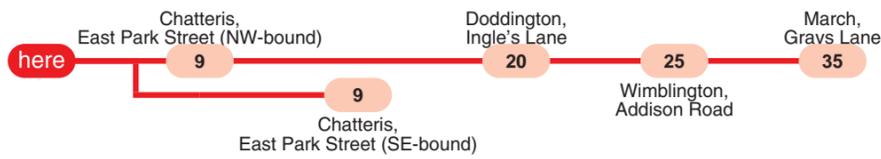
5. The access to the shared use area by plot 56 is not acceptable this should be as per CCC HERCS April 2019 Appendix 6.
6. The shared use areas between plots 51 to 53 & 47 to 42 & 37 to 33 or not laid out to and adoptable standard
7. Adoptable shared use areas must be 6m with 2x 0.5m maintenance strip/s around their entirety
8. Parking spaces should have 6m to the rear of any space in order for vehicle to complete the require manoeuvres. Spaces should be 5.5m x 2.5m. Anything less than 5.5m next to the footway would not be acceptable as vehicles will over hang the footway and obstruct and impeded users of the footway potentially pushing them in to the carriageway to pass
9. The access from Brick Lane for Plots 2 to 8 is acceptable but the access road is not adoptable as it does not meet CCC standards. Multiple access points would be accepted but the ditch would likely require culverting. Any access would require the approval of the local water management authority. The ditch is not in the adopted highway.
10. No pedestrian link / uncontrolled crossing/s have been proposed to the village or its amenities. This will be required so that pedestrian from the development site can access the footway network
11. No visitor parking spaces have been shown but they should not be placed in the proposed adopted highway. Visitor bays can only be accepted as adoptable highway if they serve a highway function for the larger network
12. The highways authority does not adopt SUDs, areas of attenuation / filtration, swales or ditches. If the adopted highways surface water is proposed to be discharged in to the public open space this / these area(s) must be adopted by a local authority or governing body.
13. CCC Transport Assessment team pre-application comments and advice will be send to you separately.

Yours sincerely

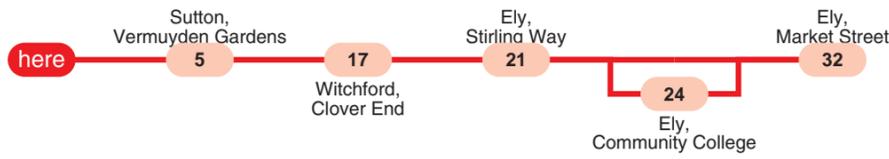
Geoffrey Ellwood
Highways Development Management Engineer

Appendix C

39 Ely - Chatteris - March Stagecoach in Cambridge



39 March - Chatteris - Ely Stagecoach in Cambridge



The numbers circled indicate approximate timings in minutes from Mepal, Brick Lane

Mondays to Fridays Bus times as at 14th August 2019

Time	Service	Note																					
0551	39	E	0710	39	M	0941	39	E	1116	39	E	1346	39	E	1610	39	M	1746	39	E	1911	39	E
0641	39	E	0731	39	1,E	0955	39	M	1225	39	M	1455	39	M	1616	39	E	1845	39	2,M	1940	39	2,M

Saturdays Bus times as at 17th August 2019

Time	Service	Note																		
0651	39	E	0731	39	E	0955	39	M	1225	39	M	1455	39	M	1616	39	E	1900	39	2,M
0710	39	M	0941	39	E	1116	39	E	1346	39	E	1610	39	M	1746	39	E	1921	39	E

Sundays

No Service

Notes: 1 - serves Ely, Community College 2 - terminates at Chatteris, East Park Street (SE-bound) E - towards Ely M - towards March
 Times shown in italics are approximate times



Next bus times on your phone

the code for this stop is **CMBDJDGW**

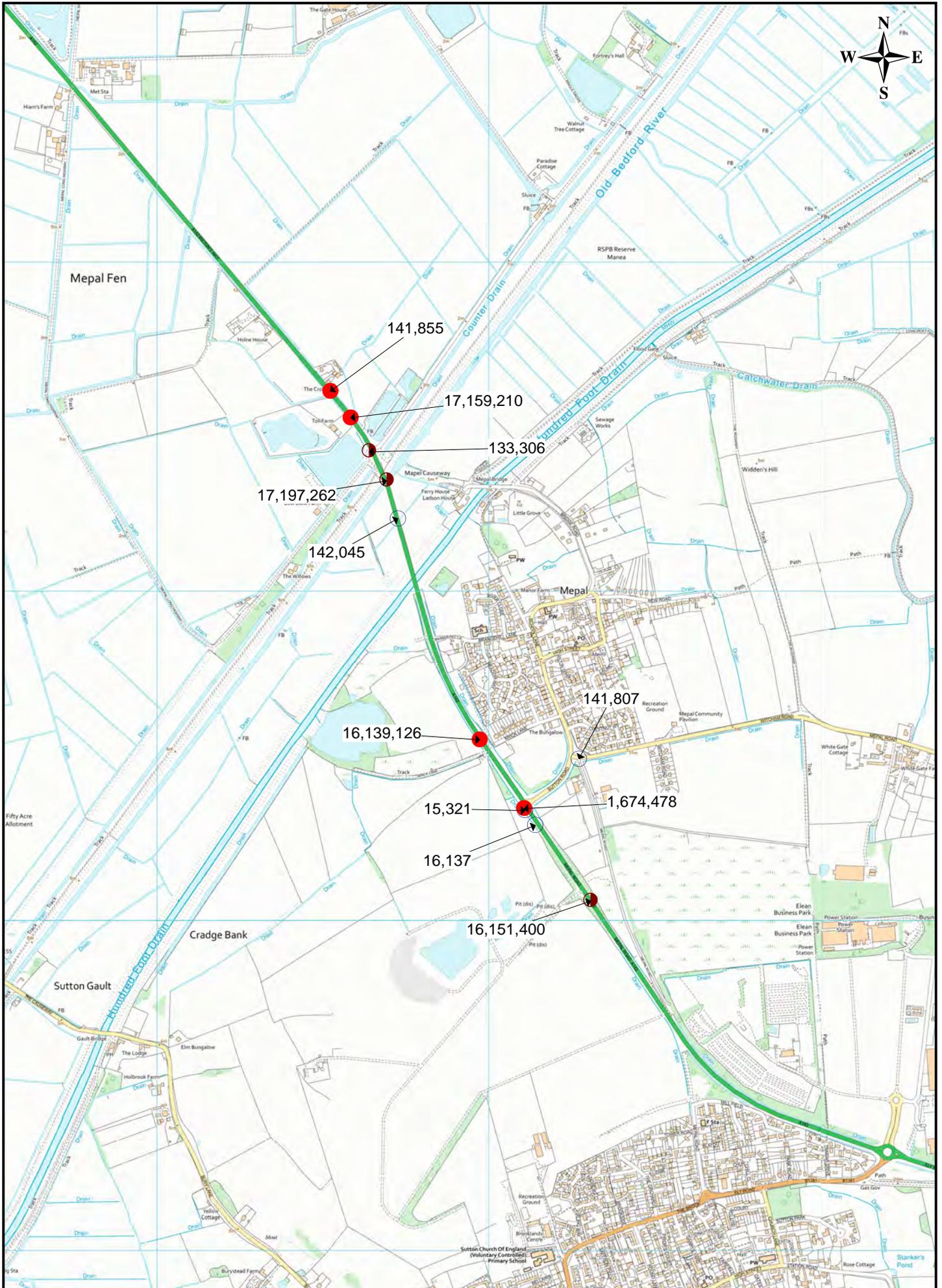
Mobile internet: Use the QR code (left) if you can, or enter the stop code at www.nextbuses.mobi

By SMS: text the stop code to 84268. Add a space and service number for just that service.

Internet enquiries incur normal mobile internet charges. SMS messages cost 25p plus your normal text message charge.

Live Departure information will be given if available (eg 3 mins) - otherwise scheduled times will be shown as clock times (eg 1007).

Appendix D



Appendix E

PCC - Mepal - Manual Traffic Survey, Tuesday 29th January 2019

Traffic Information Consultancy

Junction: (1) Sutton Road / Rectory Fields / Brick Lane

Approach: Sutton Road (North)

TIME	Left to Rectory Fields								S/B to Sutton Road (South)								Right to Brick Lane							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0	16	3	0	0	1	20	0	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0	0	0	0	19	1	1	0	0	21	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	1	19	5	0	0	1	26	0	0	0	0	0	0	0	0
0745 - 0800	0	0	0	0	0	0	0	0	1	0	21	0	0	0	0	22	0	0	1	0	0	0	0	1
Hourly Total	0	0	0	0	0	0	0	0	1	1	75	9	1	0	2	89	0	0	1	0	0	0	0	1
0800 - 0815	0	0	0	0	0	0	0	0	1	0	20	2	0	0	1	24	0	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0	0	0	0	20	2	0	0	1	23	1	0	0	0	0	0	0	1
0830 - 0845	0	0	0	0	0	0	0	0	2	0	20	0	1	0	1	24	0	0	0	0	0	0	0	0
0845 - 0900	0	0	0	0	0	0	0	0	0	0	21	2	0	0	0	23	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	3	0	81	6	1	0	3	94	1	0	0	0	0	0	0	1
0900 - 0915	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	0	0	0	0	0	0	0	0
0915 - 0930	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	12	0	0	0	0	0	0	0	0
0930 - 0945	0	0	0	0	0	0	0	0	0	0	18	2	1	0	1	22	0	0	0	0	0	0	0	0
0945 - 1000	0	0	0	1	0	0	0	1	0	0	19	5	0	0	1	25	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	1	0	0	0	1	0	0	62	9	1	0	2	74	0	0	0	0	0	0	0	0
Session Total	0	0	0	1	0	0	0	1	4	1	218	24	3	0	7	257	1	0	1	0	0	0	0	2
1600 - 1615	0	0	0	0	0	0	0	0	0	0	18	5	0	0	0	23	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	12	3	0	0	2	17	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	11	4	0	1	0	16	0	0	2	0	0	0	0	2
1645 - 1700	0	0	0	0	0	0	0	0	0	0	10	4	0	0	1	15	0	0	1	0	0	0	0	1
Hourly Total	0	0	0	0	0	0	0	0	0	0	51	16	0	1	3	71	0	0	3	0	0	0	0	3
1700 - 1715	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0
1715 - 1730	0	0	0	0	0	0	0	0	0	0	15	3	0	0	0	18	0	0	2	1	0	0	0	3
1730 - 1745	0	0	0	0	0	0	0	0	1	0	5	1	1	0	0	8	0	0	0	0	0	0	0	0
1745 - 1800	0	0	0	0	0	0	0	0	0	0	11	1	0	0	1	13	0	0	0	1	0	0	0	1
Hourly Total	0	0	0	0	0	0	0	0	1	0	37	6	1	0	1	46	0	0	2	2	0	0	0	4
1800 - 1815	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	0	0	0	0	0	0	0	0
1815 - 1830	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	0	0	2	0	0	0	0	2
1830 - 1845	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	0	0	0	0	0	0	0	0
1845 - 1900	0	0	0	0	0	0	0	0	0	0	7	3	1	0	1	12	0	0	0	0	0	0	0	0
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Session Total	0	0	0	0	0	0	0	0	1	0	133	25	2	1	5	167	0	0	7	2	0	0	0	9

PCC - Mepal - Manual Traffic Survey, Tuesday 29th January 2019

Traffic Information Consultancy

Junction: (1) Sutton Road / Rectory Fields / Brick Lane

Approach: Rectory Fields

TIME	Left to Sutton Road (South)								W/B to Brick Lane								Right to Sutton Road (North)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0715 - 0730	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745 - 0800	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0815	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
0815 - 0830	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
0845 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	4	0	0	0	0	4	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0
0900 - 0915	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0915 - 0930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0930 - 0945	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0945 - 1000	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1
Hourly Total	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	
Session Total	0	0	8	0	0	0	0	8	0	0	2	0	1	0	3	0	0	0	1	0	0	0	1	
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715 - 1730	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1730 - 1745	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
1800 - 1815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1815 - 1830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1830 - 1845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1845 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Session Total	0	0	1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	

PCC - Mepal - Manual Traffic Survey, Tuesday 29th January 2019

Traffic Information Consultancy

Junction: (1) Sutton Road / Rectory Fields / Brick Lane

Approach: Brick Lane

TIME	Left to Sutton Road (North)								E/B to Rectory Fields								Right to Sutton Road (South)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	2
0715 - 0730	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
0745 - 0800	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hourly Total	1	0	2	1	0	0	0	4	0	0	1	0	0	0	0	1	0	0	3	3	0	0	0	6
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
0830 - 0845	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
0845 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
Hourly Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10
0900 - 0915	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
0915 - 0930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0930 - 0945	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
0945 - 1000	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hourly Total	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	2	0	0	2	0	0	0	0	2
Session Total	1	0	3	1	1	0	0	6	0	0	2	1	0	0	0	3	0	0	14	4	0	0	0	18
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1615 - 1630	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
1645 - 1700	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
Hourly Total	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5	3	0	0	0	8
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
1715 - 1730	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1730 - 1745	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
1800 - 1815	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1815 - 1830	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1830 - 1845	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1845 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Hourly Total	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
Session Total	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	10	3	0	0	0	13

PCC - Mepal - Manual Traffic Survey, Tuesday 29th January 2019
Traffic Information Consultancy

Junction: (2) A142 Brangehill Lane / Sutton Road / A142 Mepal Road

Approach: A142 Brangehill Lane

TIME	Left to Sutton Road								S/B to A142 Mepal Road							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	3	1	1	0	0	5	0	1	230	26	15	0	0	272
0715 - 0730	0	0	3	0	0	0	0	3	0	1	185	35	6	9	0	236
0730 - 0745	0	0	14	4	0	0	1	19	0	1	146	40	7	12	1	207
0745 - 0800	0	0	13	4	0	0	0	17	0	1	155	43	2	10	0	211
Hourly Total	0	0	33	9	1	0	1	44	0	4	716	144	30	31	1	926
0800 - 0815	0	0	8	3	0	0	0	11	0	0	153	40	4	10	0	207
0815 - 0830	0	0	7	4	1	0	0	12	0	3	144	21	5	15	0	188
0830 - 0845	0	0	8	2	1	0	0	11	0	0	139	33	6	14	0	192
0845 - 0900	0	0	6	0	1	0	0	7	0	1	129	27	6	8	0	171
Hourly Total	0	0	29	9	3	0	0	41	0	4	565	121	21	47	0	758
0900 - 0915	0	0	4	1	0	0	0	5	0	1	117	27	3	14	0	162
0915 - 0930	0	0	4	0	0	0	0	4	0	0	109	39	7	12	0	167
0930 - 0945	0	0	1	6	0	0	1	8	0	0	97	24	3	12	0	136
0945 - 1000	0	0	6	1	1	0	0	8	0	0	82	26	9	17	0	134
Hourly Total	0	0	15	8	1	0	1	25	0	1	405	116	22	55	0	599

Session Total	0	0	77	26	5	0	2	110	0	9	1686	381	73	133	1	2283
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1600 - 1615	0	0	6	1	0	0	0	7	0	0	79	18	4	7	0	108
1615 - 1630	0	0	5	1	0	0	1	7	0	0	72	30	0	7	0	109
1630 - 1645	0	0	3	2	0	0	0	5	0	0	78	15	1	11	0	105
1645 - 1700	0	0	5	2	0	0	0	7	0	0	88	25	0	4	0	117
Hourly Total	0	0	19	6	0	0	1	26	0	0	317	88	5	29	0	439
1700 - 1715	0	0	5	2	0	0	0	7	0	0	77	18	1	2	1	99
1715 - 1730	0	0	9	0	0	0	0	9	0	1	112	5	3	6	0	127
1730 - 1745	0	0	4	0	0	0	1	5	0	0	91	7	0	3	0	101
1745 - 1800	0	0	8	1	0	0	0	9	0	0	87	7	1	4	0	99
Hourly Total	0	0	26	3	0	0	1	30	0	1	367	37	5	15	1	426
1800 - 1815	0	0	6	0	0	0	0	6	0	0	59	6	0	8	1	74
1815 - 1830	0	0	7	0	0	0	0	7	0	0	75	8	0	4	0	87
1830 - 1845	0	0	6	0	0	0	0	6	0	0	57	1	1	5	0	64
1845 - 1900	0	0	2	0	1	0	0	3	0	0	37	3	0	5	0	45
Hourly Total	0	0	21	0	1	0	0	22	0	0	228	18	1	22	1	270

Session Total	0	0	66	9	1	0	2	78	0	1	912	143	11	66	2	1135
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PCC - Mepal - Manual Traffic Survey, Tuesday 29th January 2019
Traffic Information Consultancy

Junction: (2) A142 Brangehill Lane / Sutton Road / A142 Mepal Road

Approach: Sutton Road

TIME	Left to A142 Mepal Road								Right to A142 Brangehill Lane							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	6	1	0	0	0	7	0	0	4	0	0	0	0	4
0715 - 0730	0	0	7	1	1	0	1	10	0	0	7	3	0	0	1	11
0730 - 0745	0	1	3	3	0	0	1	8	0	0	6	0	0	0	0	6
0745 - 0800	0	0	13	0	0	0	0	13	0	0	6	1	0	0	0	7
Hourly Total	0	1	29	5	1	0	2	38	0	0	23	4	0	0	1	28
0800 - 0815	0	0	15	2	0	0	0	17	0	0	5	1	0	0	0	6
0815 - 0830	0	0	18	3	0	0	0	21	0	0	2	0	0	0	0	2
0830 - 0845	0	0	10	1	2	0	1	14	0	0	5	0	0	0	0	5
0845 - 0900	0	0	9	2	0	0	0	11	0	0	8	0	0	0	0	8
Hourly Total	0	0	52	8	2	0	1	63	0	0	20	1	0	0	0	21
0900 - 0915	0	0	6	0	0	0	0	6	0	0	7	0	0	0	0	7
0915 - 0930	0	0	10	3	0	0	0	13	0	0	3	0	0	0	0	3
0930 - 0945	0	0	20	3	1	0	1	25	0	0	3	0	0	0	0	3
0945 - 1000	0	0	13	4	0	0	0	17	0	0	3	0	0	0	1	4
Hourly Total	0	0	49	10	1	0	1	61	0	0	16	0	0	0	1	17
Session Total	0	1	130	23	4	0	4	162	0	0	59	5	0	0	2	66
1600 - 1615	0	0	12	3	0	0	0	15	0	0	3	2	0	0	1	6
1615 - 1630	0	0	8	1	0	0	1	10	0	0	4	2	0	0	1	7
1630 - 1645	0	0	11	9	0	1	0	21	0	0	4	0	0	0	0	4
1645 - 1700	0	0	7	4	0	0	0	11	0	0	1	0	0	0	0	1
Hourly Total	0	0	38	17	0	1	1	57	0	0	12	4	0	0	2	18
1700 - 1715	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
1715 - 1730	0	0	12	1	0	0	0	13	0	0	4	1	0	0	0	5
1730 - 1745	0	0	3	0	0	0	0	3	0	0	5	1	0	0	0	6
1745 - 1800	0	0	5	1	0	0	1	7	0	0	4	0	0	0	0	4
Hourly Total	0	0	25	2	0	0	1	28	0	0	13	2	0	0	0	15
1800 - 1815	0	0	7	0	0	0	0	7	0	0	9	0	0	0	0	9
1815 - 1830	0	0	10	0	0	0	0	10	0	0	4	0	0	0	0	4
1830 - 1845	0	0	10	1	0	0	0	11	0	0	5	0	0	0	0	5
1845 - 1900	0	0	10	2	0	0	0	12	0	0	4	0	0	0	1	5
Hourly Total	0	0	37	3	0	0	0	40	0	0	22	0	0	0	1	23
Session Total	0	0	100	22	0	1	2	125	0	0	47	6	0	0	3	56

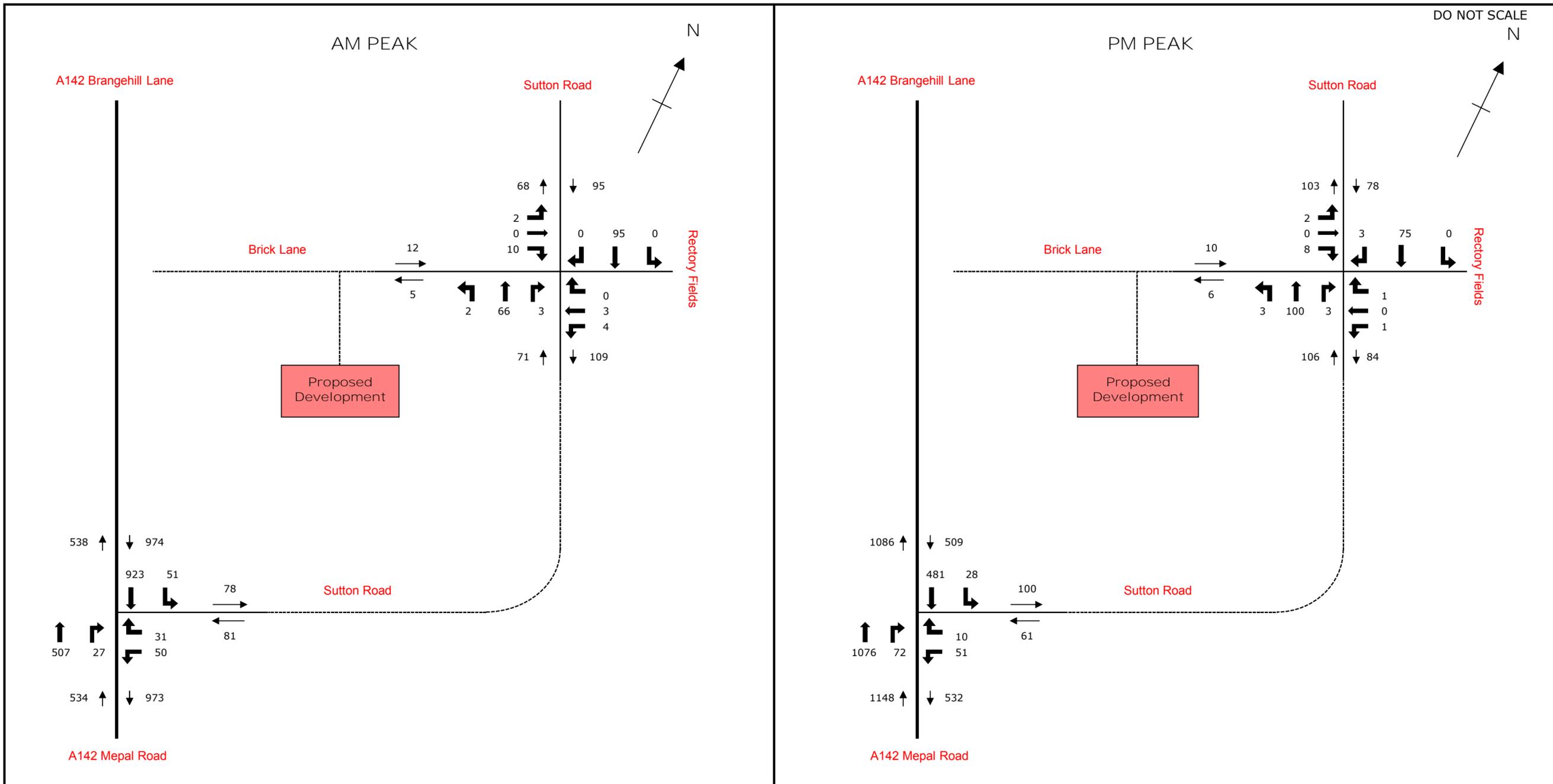
PCC - Mepal - Manual Traffic Survey, Tuesday 29th January 2019
Traffic Information Consultancy

Junction: (2) A142 Brangehill Lane / Sutton Road / A142 Mepal Road

Approach: A142 Mepal Road

TIME	N/B to A142 Brangehill Lane								Right to Sutton Road							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	1	78	7	3	2	2	93	0	0	2	0	0	0	0	2
0715 - 0730	0	0	85	7	7	5	2	106	0	0	4	1	0	0	0	5
0730 - 0745	0	1	63	18	5	9	0	96	0	0	3	2	0	0	0	5
0745 - 0800	0	0	103	8	3	13	0	127	0	0	4	1	0	0	0	5
Hourly Total	0	2	329	40	18	29	4	422	0	0	13	4	0	0	0	17
0800 - 0815	0	0	89	15	8	7	1	120	0	0	9	1	0	0	1	11
0815 - 0830	0	0	80	19	4	11	0	114	0	0	8	1	0	0	0	9
0830 - 0845	0	0	68	18	1	12	0	99	0	0	9	3	0	0	0	12
0845 - 0900	0	0	79	18	3	6	0	106	0	0	9	2	0	0	0	11
Hourly Total	0	0	316	70	16	36	1	439	0	0	35	7	0	0	1	43
0900 - 0915	0	0	55	15	6	14	2	92	0	0	7	0	0	0	0	7
0915 - 0930	0	0	68	16	7	10	0	101	0	0	6	3	1	0	0	10
0930 - 0945	0	0	62	20	7	15	1	105	0	0	6	3	0	0	0	9
0945 - 1000	0	0	65	18	4	10	0	97	0	0	2	0	0	0	0	2
Hourly Total	0	0	250	69	24	49	3	395	0	0	21	6	1	0	0	28
Session Total	0	2	895	179	58	114	8	1256	0	0	69	17	1	0	1	88
1600 - 1615	0	0	153	52	2	17	1	225	0	0	14	1	0	1	1	17
1615 - 1630	0	0	145	57	4	9	3	218	0	0	15	4	0	0	1	20
1630 - 1645	0	0	160	49	3	10	0	222	0	0	16	4	0	0	1	21
1645 - 1700	0	2	207	51	7	13	1	281	0	0	7	3	0	0	0	10
Hourly Total	0	2	665	209	16	49	5	946	0	0	52	12	0	1	3	68
1700 - 1715	0	2	190	52	3	6	1	254	0	0	10	4	0	0	1	15
1715 - 1730	0	0	213	39	2	8	1	263	0	0	21	3	0	0	0	24
1730 - 1745	0	0	177	30	4	12	0	223	0	0	18	0	0	0	0	18
1745 - 1800	0	0	179	33	1	8	1	222	0	0	12	2	0	0	0	14
Hourly Total	0	2	759	154	10	34	3	962	0	0	61	9	0	0	1	71
1800 - 1815	0	1	170	15	3	9	0	198	0	0	12	0	0	0	0	12
1815 - 1830	0	0	143	13	3	4	0	163	0	1	15	2	0	0	0	18
1830 - 1845	0	1	125	17	1	4	0	148	0	0	13	1	0	0	1	15
1845 - 1900	0	1	113	10	2	6	0	132	0	0	7	1	0	0	0	8
Hourly Total	0	3	551	55	9	23	0	641	0	1	47	4	0	0	1	53
Session Total	0	7	1975	418	35	106	8	2549	0	1	160	25	0	1	5	192

Appendix F



Notes:

- Original survey date was Tuesday 29th January 2019.
- Peak 60min flows range between 07.00-10.00 and 16.00-19.00.
- Highest peak 60min interval for each period presented for robustness unless specific time period stated.
- Road network layout is representative only and not to scale.
- Junctions that are not being investigated are unlikely to show complete data in all scenarios.
- All flows are in PCUs

Key:

- Principal Road Network Assessed
- - - Local Road Network Assessed
- Indicative Road Network

Traffic Growth Factors		
	AM	PM
2019-2024	1.0938	1.0964

REV	DATE	DESCRIPTION	DRAWN	CHKD

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Project Title
Land off Brick Lane, Mepal, Cambridgeshire

Client Title
The Havebury Housing Partnership

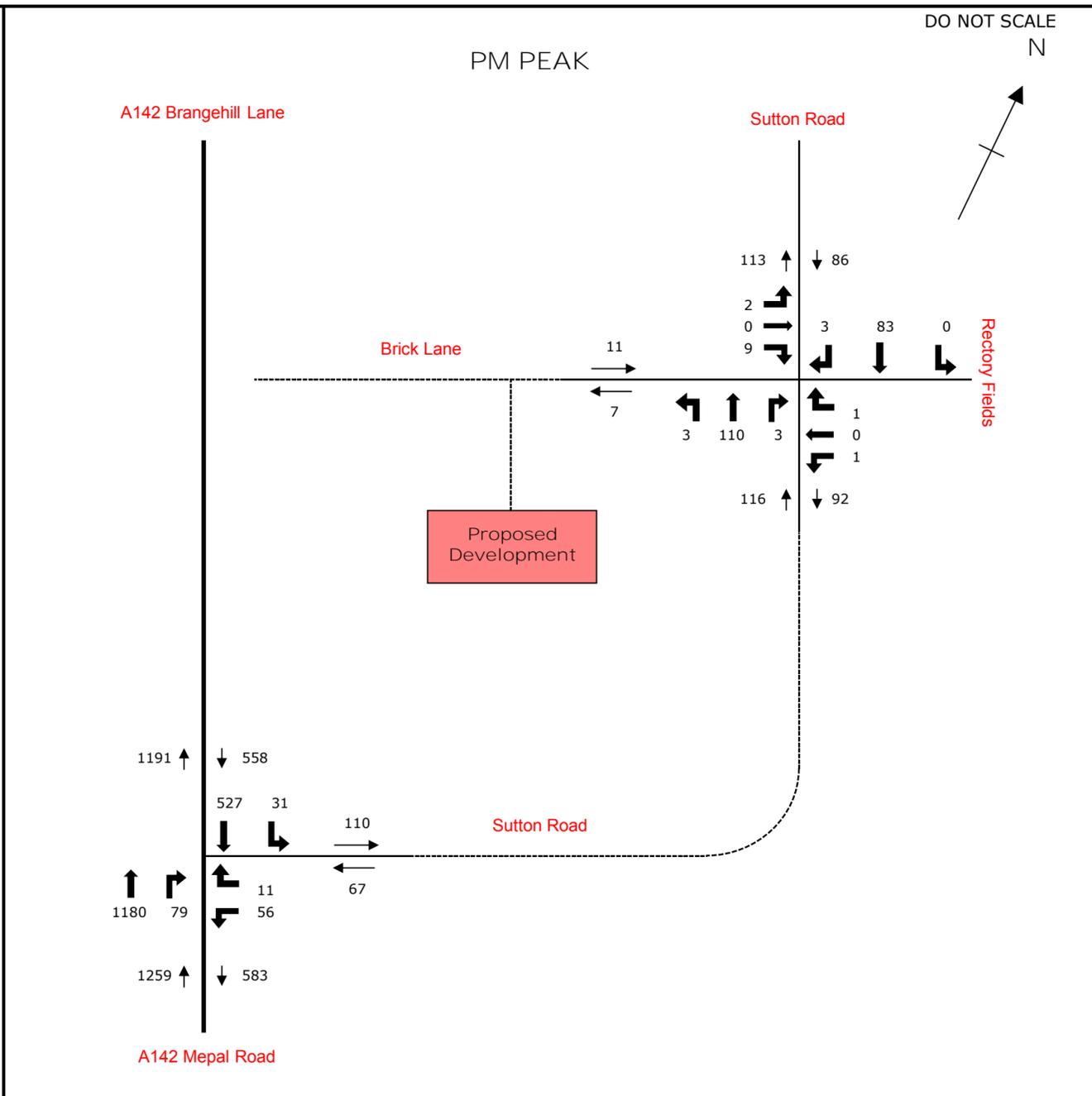
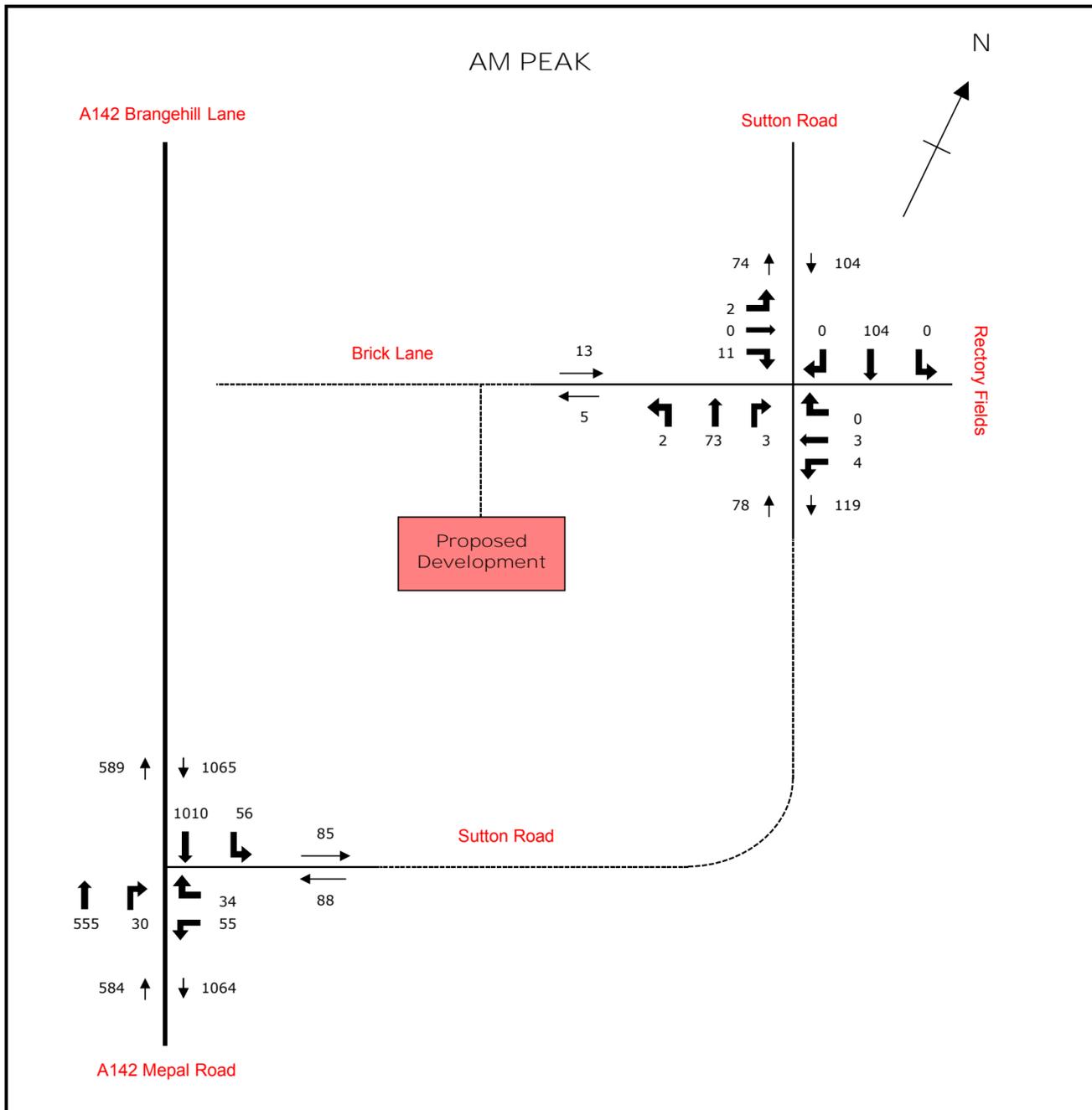
Drawing Title
TRAFFIC FLOW DIAGRAM 1
2019 Peak Hour (Maximum Junction Flows)

Scale: NTS
 Drawn: DDP
 Date: 11/09/19
 Job Manager: DB
 Quality Checked: DB

Drawing No.
49533/P/TA/001

Drawing Status

INFORMATION APPROVAL COSTING
 TENDER CONSTRUCTION AS CONSTRUCTED



Notes:

- Original survey date was Tuesday 29th January 2019.
- Peak 60min flows range between 07.00-10.00 and 16.00-19.00.
- Highest peak 60min interval for each period presented for robustness unless specific time period stated.
- Road network layout is representative only and not to scale.
- Junctions that are not being investigated are unlikely to show complete data in all scenarios.
- All flows are in PCUs

Key:

- Principal Road Network Assessed
- Local Road Network Assessed
- Indicative Road Network

Traffic Growth Factors		
	AM	PM
2019-2024	1.0938	1.0964

REV	DATE	DESCRIPTION	DRAWN	CHKD

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Project Title
 Land off Brick Lane, Mepal, Cambridgeshire

Client Title
 The Havebury Housing Partnership

Drawing No.
 49533/P/TA/002

Drawing Title
 TRAFFIC FLOW DIAGRAM 2

2024 Peak Hour Flows

Scale
 NTS

Drawn
 DDP

Date
 11/09/19

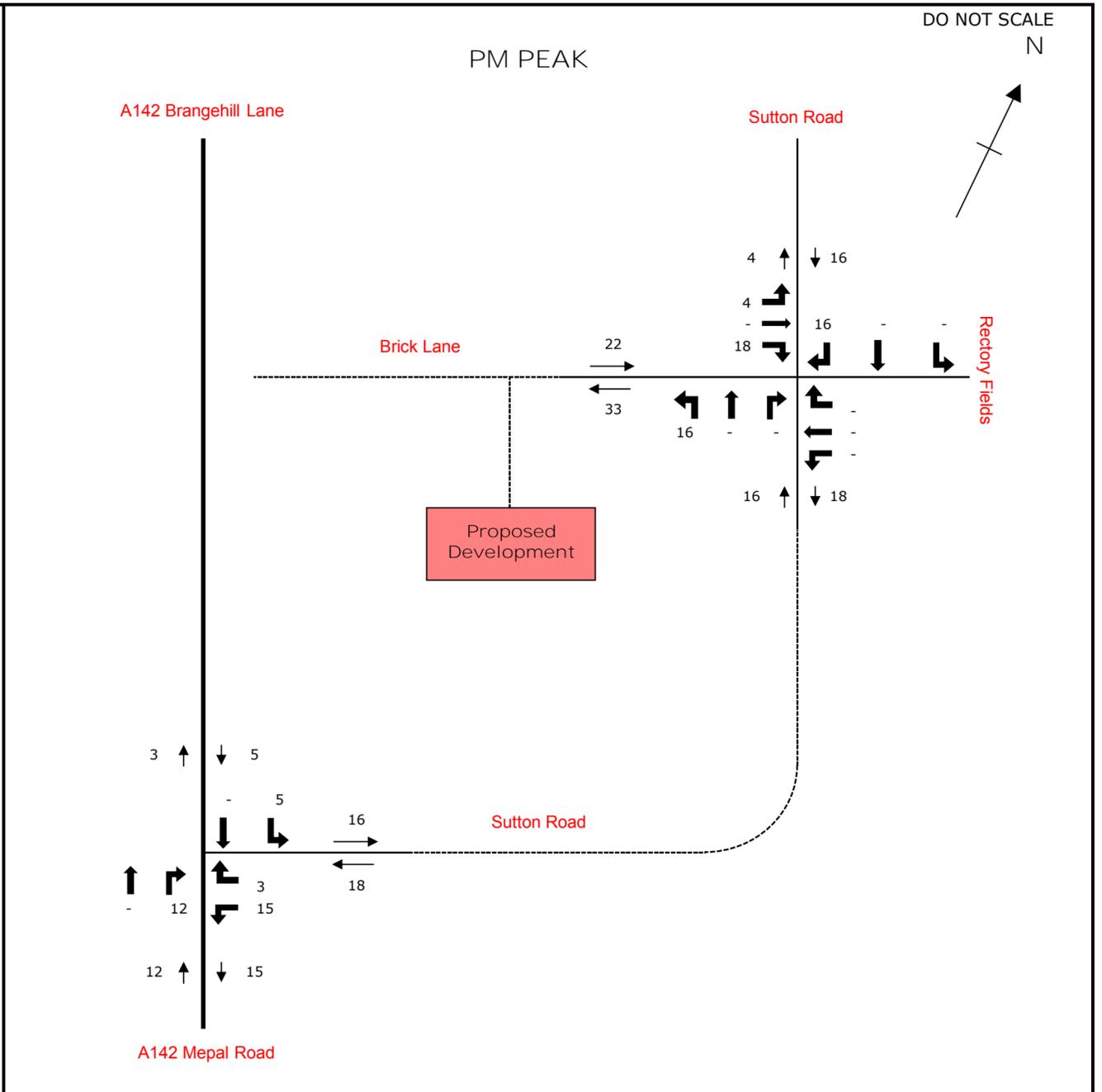
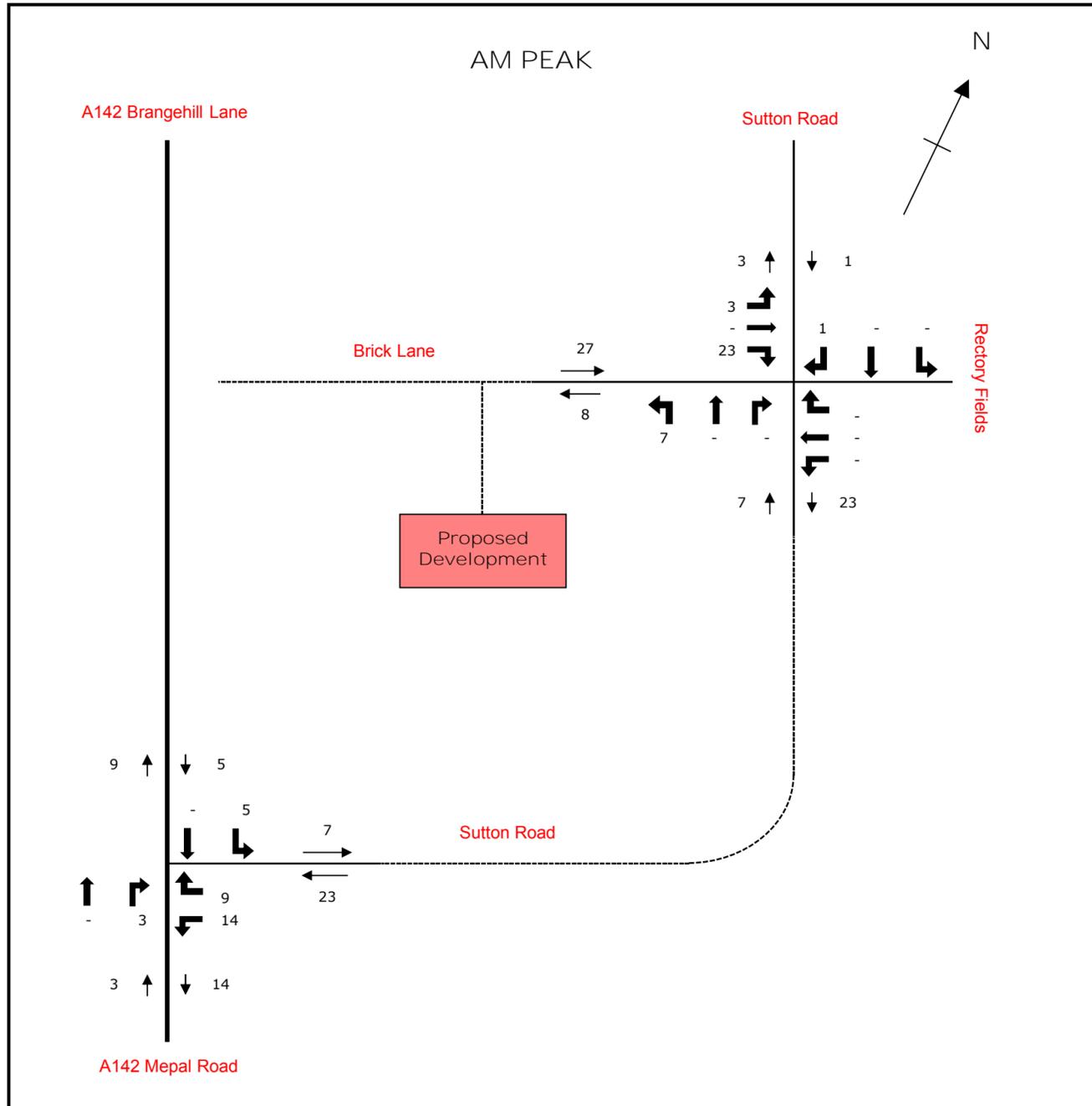
Job Manager
 DB

Quality Checked
 DB

Drawing Status

INFORMATION APPROVAL COSTING

TENDER CONSTRUCTION AS CONSTRUCTED



Notes:

- Original survey date was Tuesday 29th January 2019.
- Peak 60min flows range between 07.00-10.00 and 16.00-19.00.
- Highest peak 60min interval for each period presented for robustness unless specific time period stated.
- Road network layout is representative only and not to scale.
- Junctions that are not being investigated are unlikely to show complete data in all scenarios.
- All flows are in PCUs

Key:

- Principal Road Network Assessed
- Local Road Network Assessed
- Indicative Road Network

Traffic Growth Factors		
	AM	PM
2019-2024	1.0938	1.0964

REV	DATE	DESCRIPTION	DRAWN	CHKD

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 5 Quern House, Mill Court, Great Shelford, Cambs, CB22 5LD
 4 The Old Church, St. Matthews Road, Norwich, Norfolk NR1 1SP
 The Wheelhouse, Bonds Mill, Stonehouse, Gloucestershire GL10 3RF
 Email Address: mail@rj.uk.com

Tel: 01206 228800
 Tel: 020 7448 9910
 Tel: 01223 314794
 Tel: 01603 230240
 Tel: 01172 020270
 Web Site: http://www.rj.uk.com

Project Title
Land off Brick Lane, Mepal, Cambridgeshire

Client Title
The Havebury Housing Partnership

Drawing No.
49533/P/TA/003

Drawing Title
TRAFFIC FLOW DIAGRAM 3

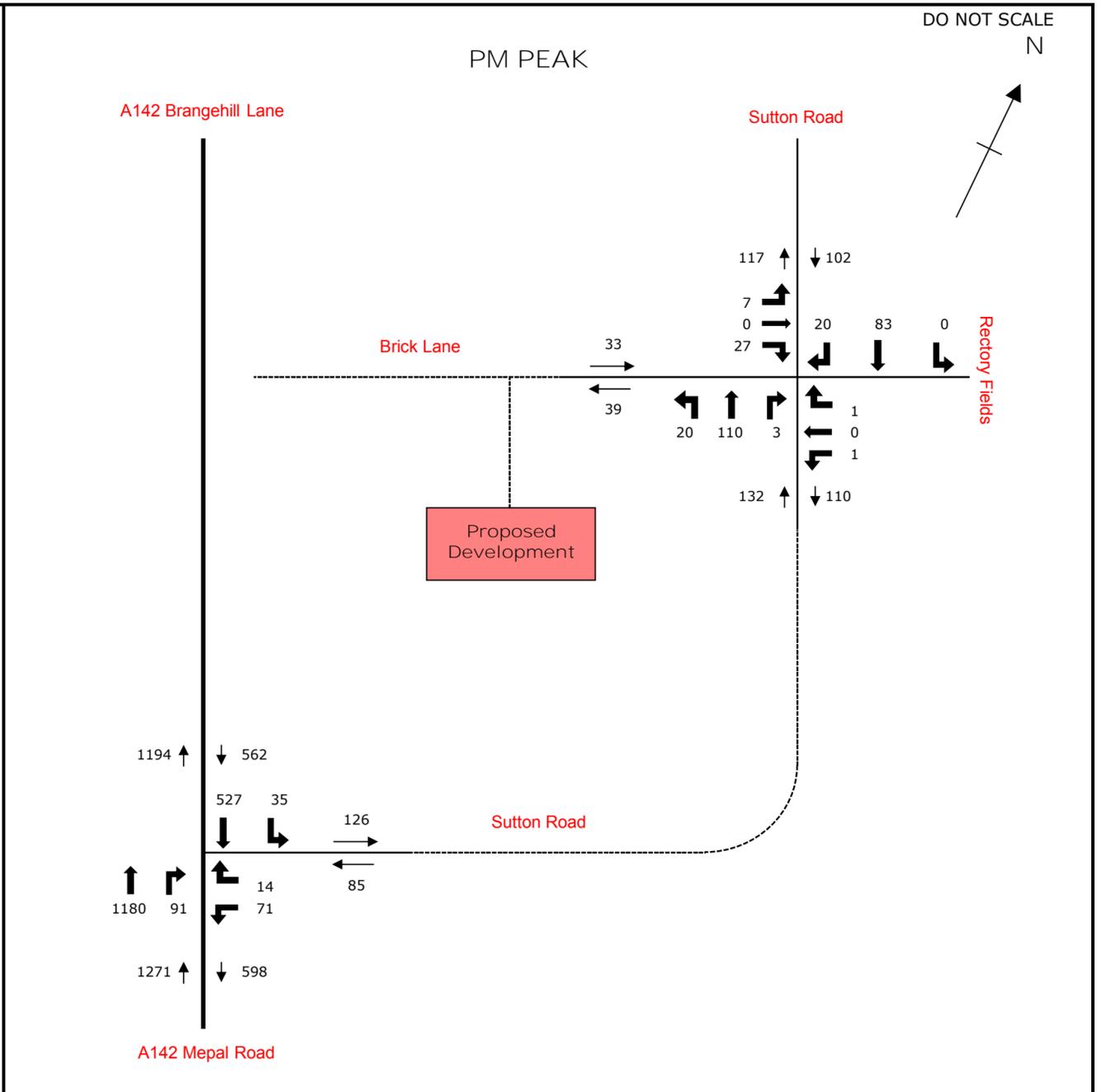
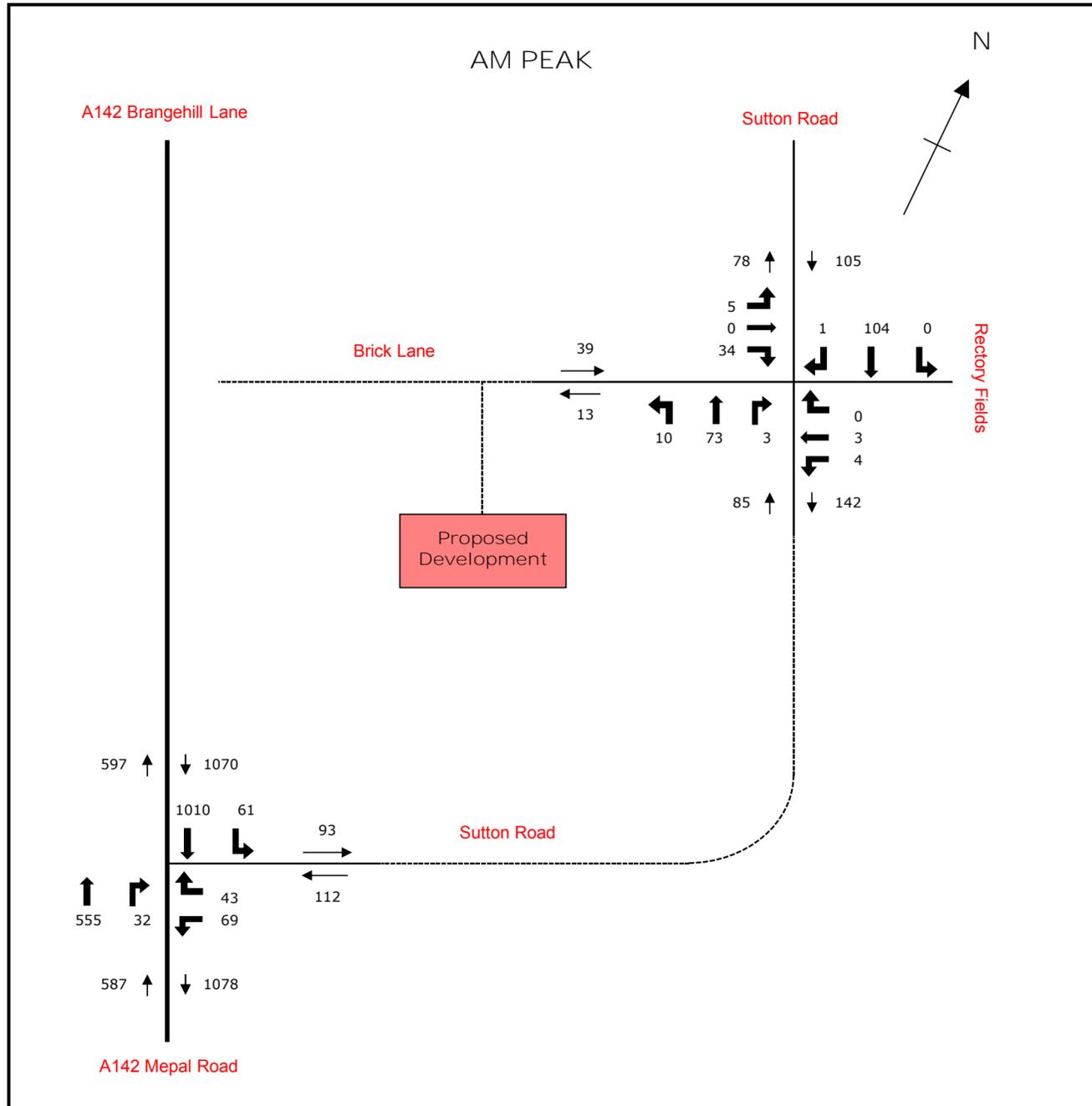
Scale: NTS
 Drawn: DDP
 Date: 11/09/19

Drawing Status

INFORMATION APPROVAL COSTING
 TENDER CONSTRUCTION AS CONSTRUCTED

Proposed Development (55 Dwellings)

Job Manager: DB
 Quality Checked: DB



Notes:

- Original survey date was Tuesday 29th January 2019.
- Peak 60min flows range between 07.00-10.00 and 16.00-19.00.
- Highest peak 60min interval for each period presented for robustness unless specific time period stated.
- Road network layout is representative only and not to scale.
- Junctions that are not being investigated are unlikely to show complete data in all scenarios.
- All flows are in PCUs

Key:

- Principal Road Network Assessed
- Local Road Network Assessed
- Indicative Road Network

Traffic Growth Factors		
	AM	PM
2019-2024	1.0938	1.0964

REV	DATE	DESCRIPTION	DRAWN	CHKD

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Engineering Consultants

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 Tel: 01172 020270
 Web Site: http://www.rj.uk.com

Project Title
Land off Brick Lane, Mepal, Cambridgeshire

Client Title
The Havebury Housing Partnership

Drawing No.
49533/P/TA/004

Drawing Title
TRAFFIC FLOW DIAGRAM 4

Scale: NTS
 Drawn: DDP
 Date: 11/09/19

Drawing Status

INFORMATION APPROVAL COSTING
 TENDER CONSTRUCTION AS CONSTRUCTED

2024 Peak Hour with Development

Job Manager: DB
 Quality Checked: DB

Appendix G

TEMPro main form

Data selections

Select dataset version: 72

Result type

- Trip ends by time period
- Trip ends by car availability
- Car ownership data
- Planning data

Set area definition...

Enter base year: 2019

Enter future year: 2024

Trip end selections

Trip end by time period selections

Select time period:

Weekday AM peak period (0700 - 0959)

Trip end type

- Production/Attraction
- Origin/Destination

Select data type

- Growth factors
- Future year minus base year
- Base year data
- Future year data

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes

Area Description		All Purposes	
Level	Name	Origin	Destination
Authority	East Cambridgeshire	1.0577	1.0566

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

East Cambridgeshire

3. Select area type:

- Urban
- Rural
- All

4. Select road type:

- Motorway
- Trunk
- Principal
- Minor
- All

5. Select which area it serves:

- Region
- England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
Authority	East Cambridgeshire	1.0938

TEMPro main form

Data selections

Select dataset version: 72

Result type

- Trip ends by time period
- Trip ends by car availability
- Car ownership data
- Planning data

Set area definition...

Enter base year: 2019

Enter future year: 2024

Trip end selections

Trip end by time period selections

Select time period:

Weekday PM peak period (1600 - 1859)

Trip end type

- Production/Attraction
- Origin/Destination

Select data type

- Growth factors
- Future year minus base year
- Base year data
- Future year data

*Italicised results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels

Car Driver Combined Modes

Area Description		All Purposes	
Level	Name	Origin	Destination
Authority	East Cambridgeshire	1.0592	1.0601

NTM Traffic Growth Calculations

1: Select NTM Dataset:

NTM Dataset Description	From	To
NTM AF15 Dataset	2010	2040
NTM AF09 Dataset	2003	2035
NTM AF08 Dataset	2003	2025

2: Select Areas to make up the geographic region:

East Cambridgeshire

3. Select area type:

- Urban
- Rural
- All

4. Select road type:

- Motorway
- Trunk
- Principal
- Minor
- All

5. Select which area it serves:

- Region
- England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
Authority	East Cambridgeshire	1.0964

Appendix H

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: Brick Lane.j9
Path: O:\49000 - Engineering\49500\49533 - Land off Brick Lane, Mepal\Calculations\Transport\Models
Report generation date: 12/09/2019 17:31:41

- »2019, AM
- »2019, PM
- »2024, AM
- »2024, PM
- »2024 with Development, AM
- »2024 with Development, PM

Summary of junction performance

	AM				PM			
	Set ID	Q (PCU)	RFC	Junction Delay (s)	Set ID	Q (PCU)	RFC	Junction Delay (s)
2019								
Stream B-ACD	D1	0.0	0.02	0.67	D2	0.0	0.01	0.44
Stream AB-CD		0.0	0.03			0.0	0.03	
Stream D-ABC		0.1	0.06			0.1	0.06	
Stream CD-AB		0.0	0.01			0.0	0.01	
2024								
Stream B-ACD	D3	0.0	0.02	0.68	D4	0.0	0.01	0.48
Stream AB-CD		0.0	0.03			0.1	0.04	
Stream D-ABC		0.1	0.07			0.1	0.07	
Stream CD-AB		0.0	0.01			0.0	0.01	
2024 with Development								
Stream B-ACD	D5	0.0	0.02	1.15	D6	0.0	0.01	0.96
Stream AB-CD		0.0	0.03			0.1	0.04	
Stream D-ABC		0.1	0.09			0.1	0.08	
Stream CD-AB		0.0	0.01			0.0	0.01	

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

File summary

File Description

Title	Sutton Road / Brick Lane / Rectory Fields
Location	
Site number	
Date	21/01/2019
Version	
Status	TA
Identifier	
Client	
Jobnumber	
Enumerator	D Palmer
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perTimeSegment	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				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 period length (min)	Time segment length (min)	Run automatically
D1	2019	AM	DIRECT	07:45	09:15	90	15	✓
D2	2019	PM	DIRECT	15:45	17:15	90	15	✓
D3	2024	AM	DIRECT	07:45	09:15	90	15	✓
D4	2024	PM	DIRECT	15:45	17:15	90	15	✓
D5	2024 with Development	AM	DIRECT	07:45	09:15	90	15	✓
D6	2024 with Development	PM	DIRECT	15:45	17:15	90	15	✓

Analysis Set Details

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

2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sutton Road / Brick Lane / Rectory Fields	Left-Right Stagger	Two-way		0.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Sutton Road		Major
B	Rectory Fields		Minor
C	Sutton Road		Major
D	Brick Lane		Minor

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)
A	7.08			150.0	✓	0.00
C	6.76			104.6	✓	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	2.20	9	13
D	One lane	3.27	10	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/TS)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	165.207	-	-	-	-	-	0.244	0.244	0.244	-	-
B-A	111.997	0.079	0.199	0.199	-	-	0.125	0.285	-	0.125	0.285
B-CD	145.373	0.086	0.218	0.218	-	-	-	-	-	-	-
CD-B	158.635	0.238	0.238	0.238	-	-	-	-	-	-	-
D-AB	162.464	-	-	-	-	-	0.240	0.240	0.095	-	-
D-C	125.246	-	0.138	0.314	0.138	0.314	0.220	0.220	0.087	-	-

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 period length (min)	Time segment length (min)	Run automatically
D1	2019	AM	DIRECT	07:45	09:15	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000
D		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To				
		A	B	C	D	
07:45 - 08:00	From	A	0.00	0.00	25.22	4.08
		B	1.10	0.00	0.00	0.00
		C	32.34	1.10	0.00	4.08
		D	1.12	0.00	5.57	0.00

Demand (PCU/TS)

		To				
		A	B	C	D	
08:00 - 08:15	From	A	0.00	0.00	24.20	0.00
		B	0.00	0.00	0.00	1.00
		C	13.20	0.00	0.00	0.00
		D	0.00	0.00	2.00	0.00

Demand (PCU/TS)

		To				
		A	B	C	D	
08:15 - 08:30	From	A	0.00	0.00	24.00	0.20
		B	0.00	0.00	3.00	0.00
		C	10.50	0.00	0.00	1.00
		D	0.00	0.00	3.00	0.00

Demand (PCU/TS)

		To				
		A	B	C	D	
08:30 - 08:45	From	A	0.00	0.00	23.90	0.00
		B	0.00	0.00	1.00	1.50
		C	24.20	1.50	0.00	0.00
		D	1.50	0.00	2.00	0.00

Demand (PCU/TS)

08:45 - 09:00

		To			
		A	B	C	D
From	A	0.00	0.00	23.00	0.00
	B	0.00	0.00	0.00	0.00
	C	18.50	1.00	0.00	1.00
	D	0.00	0.00	3.00	0.00

Demand (PCU/TS)

09:00 - 09:15

		To			
		A	B	C	D
From	A	0.00	0.00	15.00	0.00
	B	0.00	0.00	0.00	0.00
	C	8.00	0.00	0.00	1.00
	D	0.00	1.00	1.00	0.00

Vehicle Mix

HV %s

07:45 - 08:00

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

HV %s

08:00 - 08:15

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	17	0	0	0
	D	0	0	0	0

HV %s

08:15 - 08:30

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	10	0	0	0
	D	0	0	0	0

HV %s

08:30 - 08:45

		To			
		A	B	C	D
From	A	0	0	8	0
	B	0	0	0	100
	C	4	100	0	0
	D	100	0	0	0

HV %s

08:45 - 09:00

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	6	0	0	0
	D	0	0	0	0

HV %s

09:00 - 09:15

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-ACD	0.02	8.95	0.0	A	1.27	7.60
A-B					0.00	0.00
A-C					22.55	135.32
A-D					0.71	4.28
AB-CD	0.03	10.03	0.0	B	1.32	7.92
AB-C					23.03	138.18
D-ABC	0.06	8.90	0.1	A	3.37	20.19
C-D					1.18	7.08
C-A					17.79	106.74
C-B					0.60	3.60
CD-AB	0.01	7.50	0.0	A	0.88	5.30
CD-A					18.11	108.65

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.10	1.10	101.64	0.011	1.09	0.0	0.0	8.949	A
A-B	0.00	0.00			0.00				
A-C	25.22	25.22			25.22				
A-D	4.08	4.08			4.08				
AB-CD	4.78	4.78	172.53	0.028	4.74	0.0	0.0	5.364	A
AB-C	24.52	24.52			24.52				
D-ABC	6.69	6.69	118.07	0.057	6.63	0.0	0.1	8.072	A
C-D	4.08	4.08			4.08				
C-A	32.34	32.34			32.34				
C-B	1.10	1.10			1.10				
CD-AB	1.36	1.36	173.85	0.008	1.35	0.0	0.0	5.217	A
CD-A	33.19	33.19			33.19				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.00	1.00	139.61	0.007	1.00	0.0	0.0	6.495	A
A-B	0.00	0.00			0.00				
A-C	24.20	24.20			24.20				
A-D	0.00	0.00			0.00				
AB-CD	1.15	1.15	177.48	0.007	1.18	0.0	0.0	5.110	A
AB-C	24.04	24.04			24.04				
D-ABC	2.00	2.00	118.67	0.017	2.04	0.1	0.0	7.719	A
C-D	0.00	0.00			0.00				
C-A	13.20	13.20			13.20				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	152.88	0.000	0.01	0.0	0.0	0.000	A
CD-A	13.21	13.21			13.21				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	3.00	3.00	140.10	0.021	2.99	0.0	0.0	6.563	A
A-B	0.00	0.00			0.00				
A-C	24.00	24.00			24.00				
A-D	0.20	0.20			0.20				
AB-CD	0.24	0.24	179.64	0.001	0.25	0.0	0.0	5.046	A
AB-C	26.94	26.94			26.94				
D-ABC	3.00	3.00	119.05	0.025	2.99	0.0	0.0	7.755	A
C-D	1.00	1.00			1.00				
C-A	10.50	10.50			10.50				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	152.88	0.000	0.00	0.0	0.0	0.000	A
CD-A	10.50	10.50			10.50				

08:30 - 08:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	2.50	2.50	140.17	0.018	2.50	0.0	0.0	7.546	A
A-B	0.00	0.00			0.00				
A-C	23.90	23.90			23.90				
A-D	0.00	0.00			0.00				
AB-CD	1.73	1.73	175.05	0.010	1.72	0.0	0.0	8.447	A
AB-C	24.67	24.67			24.67				
D-ABC	3.50	3.50	130.18	0.027	3.49	0.0	0.0	8.006	A
C-D	0.00	0.00			0.00				
C-A	24.20	24.20			24.20				
C-B	1.50	1.50			1.50				
CD-AB	1.77	1.77	169.91	0.010	1.75	0.0	0.0	7.073	A
CD-A	25.42	25.42			25.42				

08:45 - 09:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	140.36	0.000	0.02	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	23.00	23.00			23.00				
A-D	0.00	0.00			0.00				
AB-CD	0.01	0.01	160.21	0.000	0.03	0.0	0.0	10.029	B
AB-C	23.01	23.01			23.01				
D-ABC	3.00	3.00	117.68	0.025	3.00	0.0	0.0	8.901	A
C-D	1.00	1.00			1.00				
C-A	18.50	18.50			18.50				
C-B	1.00	1.00			1.00				
CD-AB	1.13	1.13	165.38	0.007	1.13	0.0	0.0	7.498	A
CD-A	18.39	18.39			18.39				

09:00 - 09:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	122.54	0.000	0.00	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	15.00	15.00			15.00				
A-D	0.00	0.00			0.00				
AB-CD	0.00	0.00	163.01	0.000	0.00	0.0	0.0	0.000	A
AB-C	15.00	15.00			15.00				
D-ABC	2.00	2.00	138.17	0.014	2.01	0.0	0.0	6.609	A
C-D	1.00	1.00			1.00				
C-A	8.00	8.00			8.00				
C-B	0.00	0.00			0.00				
CD-AB	1.05	1.05	160.31	0.007	1.05	0.0	0.0	5.668	A
CD-A	7.95	7.95			7.95				

2019, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sutton Road / Brick Lane / Rectory Fields	Left-Right Stagger	Two-way		0.44	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 period length (min)	Time segment length (min)	Run automatically
D2	2019	PM	DIRECT	15:45	17:15	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000
D		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

15:45 - 16:00

		To			
		A	B	C	D
From	A	0.00	0.00	25.22	4.08
	B	1.10	0.00	0.00	0.00
	C	32.34	1.10	0.00	4.08
	D	1.12	0.00	5.57	0.00

Demand (PCU/TS)

16:00 - 16:15

		To			
		A	B	C	D
From	A	0.00	0.00	23.00	0.00
	B	1.00	0.00	0.00	0.00
	C	29.50	1.00	0.00	0.00
	D	0.00	0.00	1.00	0.00

Demand (PCU/TS)

16:15 - 16:30

		To			
		A	B	C	D
From	A	0.00	0.00	19.00	0.00
	B	0.00	0.00	0.00	0.00
	C	28.40	0.00	0.00	1.00
	D	1.00	0.00	2.00	0.00

Demand (PCU/TS)

16:30 - 16:45

		To			
		A	B	C	D
From	A	0.00	0.00	17.30	2.00
	B	0.00	0.00	1.00	0.00
	C	22.00	1.00	0.00	2.00
	D	0.00	0.00	2.00	0.00

Demand (PCU/TS)

16:45 - 17:00

		To			
		A	B	C	D
From	A	0.00	0.00	16.00	1.00
	B	0.00	0.00	0.00	0.00
	C	20.00	1.00	0.00	0.00
	D	1.00	0.00	3.00	0.00

Demand (PCU/TS)

17:00 - 17:15

		To			
		A	B	C	D
From	A	0.00	0.00	7.00	0.00
	B	0.00	0.00	0.00	0.00
	C	22.40	1.00	0.00	1.00
	D	0.00	0.00	2.00	0.00

Vehicle Mix

HV %s

15:45 - 16:00

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

HV %s

16:00 - 16:15

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

HV %s

16:15 - 16:30

		To			
		A	B	C	D
From	A	0	0	12	0
	B	0	0	0	0
	C	4	0	0	0
	D	0	0	0	0

HV %s

16:30 - 16:45

		To			
		A	B	C	D
From	A	0	0	6	0
	B	0	0	0	0
	C	5	0	0	0
	D	0	0	0	0

HV %s

16:45 - 17:00

		To			
		A	B	C	D
From	A	0	0	7	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

HV %s

17:00 - 17:15

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-ACD	0.01	8.95	0.0	A	0.52	3.10
A-B					0.00	0.00
A-C					17.92	107.52
A-D					1.18	7.08
AB-CD	0.03	5.37	0.0	A	1.35	8.13
AB-C					17.91	107.47
D-ABC	0.06	8.07	0.1	A	3.12	18.69
C-D					1.35	8.08
C-A					25.77	154.64
C-B					0.85	5.10
CD-AB	0.01	5.42	0.0	A	1.00	6.01
CD-A					26.14	156.85

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.10	1.10	101.64	0.011	1.09	0.0	0.0	8.949	A
AB	0.00	0.00			0.00				
A-C	25.22	25.22			25.22				
A-D	4.08	4.08			4.08				
AB-CD	4.78	4.78	172.53	0.028	4.74	0.0	0.0	5.364	A
AB-C	24.52	24.52			24.52				
D-ABC	6.69	6.69	118.07	0.057	6.63	0.0	0.1	8.072	A
C-D	4.08	4.08			4.08				
C-A	32.34	32.34			32.34				
C-B	1.10	1.10			1.10				
CD-AB	1.36	1.36	173.85	0.008	1.35	0.0	0.0	5.282	A
CD-A	33.19	33.19			33.19				

16:00 - 16:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.00	1.00	103.42	0.010	1.00	0.0	0.0	8.787	A
AB	0.00	0.00			0.00				
A-C	23.00	23.00			23.00				
A-D	0.00	0.00			0.00				
AB-CD	0.00	0.00	172.70	0.000	0.04	0.0	0.0	5.214	A
AB-C	23.00	23.00			23.00				
D-ABC	1.00	1.00	115.35	0.009	1.05	0.1	0.0	7.877	A
C-D	0.00	0.00			0.00				
C-A	29.50	29.50			29.50				
C-B	1.00	1.00			1.00				
CD-AB	1.21	1.21	172.63	0.007	1.21	0.0	0.0	5.315	A
CD-A	29.30	29.30			29.30				

16:15 - 16:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	104.52	0.000	0.01	0.0	0.0	0.000	A
AB	0.00	0.00			0.00				
A-C	19.00	19.00			19.00				
A-D	0.00	0.00			0.00				
AB-CD	0.00	0.00	158.03	0.000	0.00	0.0	0.0	0.000	A
AB-C	19.00	19.00			19.00				
D-ABC	3.00	3.00	126.97	0.024	2.98	0.0	0.0	7.258	A
C-D	1.00	1.00			1.00				
C-A	28.40	28.40			28.40				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	154.12	0.000	0.01	0.0	0.0	0.000	A
CD-A	29.39	29.39			29.39				

16:30 - 16:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.00	1.00	141.17	0.007	0.99	0.0	0.0	6.420	A
A-B	0.00	0.00			0.00				
A-C	17.30	17.30			17.30				
A-D	2.00	2.00			2.00				
AB-CD	2.24	2.24	170.93	0.013	2.22	0.0	0.0	5.366	A
AB-C	18.05	18.05			18.05				
D-ABC	2.00	2.00	116.86	0.017	2.01	0.0	0.0	7.837	A
C-D	2.00	2.00			2.00				
C-A	22.00	22.00			22.00				
C-B	1.00	1.00			1.00				
CD-AB	1.15	1.15	168.52	0.007	1.14	0.0	0.0	5.424	A
CD-A	21.86	21.86			21.86				

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	141.67	0.000	0.01	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	16.00	16.00			16.00				
A-D	1.00	1.00			1.00				
AB-CD	1.11	1.11	170.40	0.006	1.11	0.0	0.0	5.348	A
AB-C	15.90	15.90			15.90				
D-ABC	4.00	4.00	125.96	0.032	3.99	0.0	0.0	7.378	A
C-D	0.00	0.00			0.00				
C-A	20.00	20.00			20.00				
C-B	1.00	1.00			1.00				
CD-AB	1.14	1.14	168.37	0.007	1.14	0.0	0.0	5.399	A
CD-A	20.85	20.85			20.85				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	123.05	0.000	0.00	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	7.00	7.00			7.00				
A-D	0.00	0.00			0.00				
AB-CD	0.00	0.00	159.25	0.000	0.01	0.0	0.0	0.000	A
AB-C	7.00	7.00			7.00				
D-ABC	2.00	2.00	119.05	0.017	2.02	0.0	0.0	7.692	A
C-D	1.00	1.00			1.00				
C-A	22.40	22.40			22.40				
C-B	1.00	1.00			1.00				
CD-AB	1.15	1.15	171.56	0.007	1.15	0.0	0.0	5.282	A
CD-A	22.26	22.26			22.26				

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sutton Road / Brick Lane / Rectory Fields	Left-Right Stagger	Two-way		0.68	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 period length (min)	Time segment length (min)	Run automatically
D3	2024	AM	DIRECT	07:45	09:15	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000
D		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To				
		A	B	C	D	
07:45 - 08:00	From	A	0.00	0.00	20.83	4.08
		B	0.00	0.00	0.00	0.00
		C	31.14	0.00	0.00	5.18
		D	2.21	0.00	6.66	0.00

Demand (PCU/TS)

		To				
		A	B	C	D	
08:00 - 08:15	From	A	0.00	0.00	26.47	0.00
		B	0.00	0.00	0.00	1.09
		C	14.44	0.00	0.00	0.00
		D	0.00	0.00	2.19	0.00

Demand (PCU/TS)

08:15 - 08:30

		To			
		A	B	C	D
From	A	0.00	0.00	26.25	0.22
	B	0.00	0.00	3.28	0.00
	C	11.48	0.00	0.00	1.09
	D	0.00	0.00	3.28	0.00

Demand (PCU/TS)

08:30 - 08:45

		To			
		A	B	C	D
From	A	0.00	0.00	26.14	0.00
	B	0.00	0.00	1.09	1.64
	C	26.47	1.64	0.00	0.00
	D	1.64	0.00	2.19	0.00

Demand (PCU/TS)

08:45 - 09:00

		To			
		A	B	C	D
From	A	0.00	0.00	25.16	0.00
	B	0.00	0.00	0.00	0.00
	C	20.24	1.09	0.00	1.09
	D	0.00	0.00	3.28	0.00

Demand (PCU/TS)

09:00 - 09:15

		To			
		A	B	C	D
From	A	0.00	0.00	16.41	0.00
	B	0.00	0.00	0.00	0.00
	C	8.75	0.00	0.00	1.09
	D	0.00	1.09	1.09	0.00

Vehicle Mix

HV %s

07:45 - 08:00

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

HV %s

08:00 - 08:15

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	17	0	0	0
	D	0	0	0	0

HV %s

08:15 - 08:30

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	10	0	0	0
	D	0	0	0	0

HV %s

08:30 - 08:45

		To			
		A	B	C	D
From	A	0	0	8	0
	B	0	0	0	100
	C	4	100	0	0
	D	100	0	0	0

HV %s

08:45 - 09:00

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	6	0	0	0
	D	0	0	0	0

HV %s

09:00 - 09:15

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-ACD	0.02	7.58	0.0	A	1.18	7.10
A-B					0.00	0.00
A-C					23.54	141.26
A-D					0.72	4.30
AB-CD	0.03	9.97	0.0	A	1.36	8.14
AB-C					24.09	144.52
D-ABC	0.07	8.98	0.1	A	3.94	23.63
C-D					1.41	8.45
C-A					18.75	112.52
C-B					0.46	2.73
CD-AB	0.01	9.32	0.0	A	0.73	4.35
CD-A					19.31	115.83

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	118.56	0.000	0.00	0.0	0.0	0.000	A
AB	0.00	0.00			0.00				
A-C	20.83	20.83			20.83				
A-D	4.08	4.08			4.08				
AB-CD	4.65	4.65	169.94	0.027	4.62	0.0	0.0	5.444	A
AB-C	20.26	20.26			20.26				
D-ABC	8.87	8.87	121.78	0.073	8.79	0.0	0.1	7.961	A
C-D	5.18	5.18			5.18				
C-A	31.14	31.14			31.14				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	152.71	0.000	0.00	0.0	0.0	0.000	A
CD-A	33.33	33.33			33.33				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.09	1.09	139.61	0.008	1.08	0.0	0.0	6.496	A
AB	0.00	0.00			0.00				
A-C	26.47	26.47			26.47				
A-D	0.00	0.00			0.00				
AB-CD	1.28	1.28	178.65	0.007	1.30	0.0	0.0	5.083	A
AB-C	26.28	26.28			26.28				
D-ABC	2.19	2.19	118.06	0.019	2.25	0.1	0.0	7.774	A
C-D	0.00	0.00			0.00				
C-A	14.44	14.44			14.44				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	152.34	0.000	0.00	0.0	0.0	0.000	A
CD-A	14.46	14.46			14.46				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	3.28	3.28	139.61	0.023	3.26	0.0	0.0	6.601	A
AB	0.00	0.00			0.00				
A-C	26.25	26.25			26.25				
A-D	0.22	0.22			0.22				
AB-CD	0.27	0.27	181.02	0.002	0.28	0.0	0.0	5.011	A
AB-C	29.46	29.46			29.46				
D-ABC	3.28	3.28	118.47	0.028	3.27	0.0	0.0	7.812	A
C-D	1.09	1.09			1.09				
C-A	11.48	11.48			11.48				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	152.34	0.000	0.00	0.0	0.0	0.000	A
CD-A	11.48	11.48			11.48				

08:30 - 08:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	2.73	2.73	139.68	0.020	2.73	0.0	0.0	7.581	A
A-B	0.00	0.00			0.00				
A-C	26.14	26.14			26.14				
A-D	0.00	0.00			0.00				
AB-CD	1.92	1.92	176.01	0.011	1.91	0.0	0.0	8.343	A
AB-C	26.95	26.95			26.95				
D-ABC	3.83	3.83	129.34	0.030	3.82	0.0	0.0	8.079	A
C-D	0.00	0.00			0.00				
C-A	26.47	26.47			26.47				
C-B	1.64	1.64			1.64				
CD-AB	1.96	1.96	171.00	0.011	1.94	0.0	0.0	9.318	A
CD-A	27.77	27.77			27.77				

08:45 - 09:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	139.89	0.000	0.02	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	25.16	25.16			25.16				
A-D	0.00	0.00			0.00				
AB-CD	0.01	0.01	159.74	0.000	0.03	0.0	0.0	9.967	A
AB-C	25.17	25.17			25.17				
D-ABC	3.28	3.28	116.97	0.028	3.28	0.0	0.0	8.981	A
C-D	1.09	1.09			1.09				
C-A	20.24	20.24			20.24				
C-B	1.09	1.09			1.09				
CD-AB	1.24	1.24	166.04	0.007	1.25	0.0	0.0	7.452	A
CD-A	20.10	20.10			20.10				

09:00 - 09:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	122.17	0.000	0.00	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	16.41	16.41			16.41				
A-D	0.00	0.00			0.00				
AB-CD	0.00	0.00	162.81	0.000	0.00	0.0	0.0	0.000	A
AB-C	16.41	16.41			16.41				
D-ABC	2.18	2.18	137.86	0.016	2.20	0.0	0.0	6.633	A
C-D	1.09	1.09			1.09				
C-A	8.75	8.75			8.75				
C-B	0.00	0.00			0.00				
CD-AB	1.14	1.14	160.48	0.007	1.15	0.0	0.0	5.667	A
CD-A	8.69	8.69			8.69				

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sutton Road / Brick Lane / Rectory Fields	Left-Right Stagger	Two-way		0.48	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 period length (min)	Time segment length (min)	Run automatically
D4	2024	PM	DIRECT	15:45	17:15	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000
D		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To				
		A	B	C	D	
15:45 - 16:00	From	A	0.00	0.00	18.97	6.27
		B	0.00	0.00	1.10	0.00
		C	24.12	1.10	0.00	6.27
		D	1.12	0.00	6.66	0.00

Demand (PCU/TS)

		To				
		A	B	C	D	
16:00 - 16:15	From	A	0.00	0.00	25.22	0.00
		B	1.10	0.00	0.00	0.00
		C	32.34	1.10	0.00	0.00
		D	0.00	0.00	1.10	0.00

Demand (PCU/TS)

16:15 - 16:30

		To			
		A	B	C	D
From	A	0.00	0.00	20.83	0.00
	B	0.00	0.00	0.00	0.00
	C	31.14	0.00	0.00	1.10
	D	1.10	0.00	2.19	0.00

Demand (PCU/TS)

16:30 - 16:45

		To			
		A	B	C	D
From	A	0.00	0.00	18.97	2.19
	B	0.00	0.00	1.10	0.00
	C	24.12	1.10	0.00	2.19
	D	0.00	0.00	2.19	0.00

Demand (PCU/TS)

16:45 - 17:00

		To			
		A	B	C	D
From	A	0.00	0.00	17.54	1.10
	B	0.00	0.00	0.00	0.00
	C	21.93	1.10	0.00	0.00
	D	1.10	0.00	3.29	0.00

Demand (PCU/TS)

17:00 - 17:15

		To			
		A	B	C	D
From	A	0.00	0.00	7.67	0.00
	B	0.00	0.00	0.00	0.00
	C	24.56	1.10	0.00	1.10
	D	0.00	0.00	2.19	0.00

Vehicle Mix

HV %s

15:45 - 16:00

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

HV %s

16:00 - 16:15

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

HV %s

16:15 - 16:30

		To			
		A	B	C	D
From	A	0	0	12	0
	B	0	0	0	0
	C	4	0	0	0
	D	0	0	0	0

HV %s

16:30 - 16:45

		To			
		A	B	C	D
From	A	0	0	6	0
	B	0	0	0	0
	C	5	0	0	0
	D	0	0	0	0

HV %s

16:45 - 17:00

		To			
		A	B	C	D
From	A	0	0	7	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

HV %s

17:00 - 17:15

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-ACD	0.01	8.85	0.0	A	0.55	3.30
A-B					0.00	0.00
A-C					18.20	109.20
A-D					1.59	9.56
AB-CD	0.04	5.50	0.1	A	1.80	10.82
AB-C					18.36	110.14
D-ABC	0.07	8.08	0.1	A	3.49	20.94
C-D					1.78	10.66
C-A					26.37	158.21
C-B					0.92	5.50
CD-AB	0.01	5.41	0.0	A	1.08	6.49
CD-A					26.76	160.54

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.10	1.10	139.87	0.008	1.09	0.0	0.0	6.484	A
AB	0.00	0.00			0.00				
A-C	18.97	18.97			18.97				
A-D	6.27	6.27			6.27				
AB-CD	7.11	7.11	170.56	0.042	7.05	0.0	0.1	5.503	A
AB-C	19.23	19.23			19.23				
D-ABC	7.78	7.78	118.96	0.065	7.71	0.0	0.1	8.084	A
C-D	6.27	6.27			6.27				
C-A	24.12	24.12			24.12				
C-B	1.10	1.10			1.10				
CD-AB	1.29	1.29	169.31	0.008	1.28	0.0	0.0	5.407	A
CD-A	25.04	25.04			25.04				

16:00 - 16:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.10	1.10	102.79	0.011	1.10	0.0	0.0	8.850	A
AB	0.00	0.00			0.00				
A-C	25.22	25.22			25.22				
A-D	0.00	0.00			0.00				
AB-CD	0.01	0.01	173.48	0.000	0.06	0.1	0.0	5.190	A
AB-C	25.22	25.22			25.22				
D-ABC	1.10	1.10	114.39	0.010	1.16	0.1	0.0	7.953	A
C-D	0.00	0.00			0.00				
C-A	32.34	32.34			32.34				
C-B	1.10	1.10			1.10				
CD-AB	1.35	1.35	174.02	0.008	1.35	0.0	0.0	5.271	A
CD-A	32.10	32.10			32.10				

16:15 - 16:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	103.80	0.000	0.01	0.0	0.0	0.000	A
AB	0.00	0.00			0.00				
A-C	20.83	20.83			20.83				
A-D	0.00	0.00			0.00				
AB-CD	0.00	0.00	157.34	0.000	0.00	0.0	0.0	0.000	A
AB-C	20.83	20.83			20.83				
D-ABC	3.29	3.29	126.17	0.026	3.27	0.0	0.0	7.323	A
C-D	1.10	1.10			1.10				
C-A	31.14	31.14			31.14				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	153.68	0.000	0.01	0.0	0.0	0.000	A
CD-A	32.23	32.23			32.23				

16:30 - 16:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.10	1.10	140.76	0.008	1.09	0.0	0.0	6.443	A
A-B	0.00	0.00			0.00				
A-C	18.97	18.97			18.97				
A-D	2.19	2.19			2.19				
AB-CD	2.48	2.48	171.51	0.014	2.46	0.0	0.0	5.358	A
AB-C	19.77	19.77			19.77				
D-ABC	2.19	2.19	116.05	0.019	2.20	0.0	0.0	7.905	A
C-D	2.19	2.19			2.19				
C-A	24.12	24.12			24.12				
C-B	1.10	1.10			1.10				
CD-AB	1.28	1.28	169.50	0.008	1.27	0.0	0.0	5.401	A
CD-A	23.95	23.95			23.95				

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	141.31	0.000	0.01	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	17.54	17.54			17.54				
A-D	1.10	1.10			1.10				
AB-CD	1.23	1.23	170.91	0.007	1.24	0.0	0.0	5.340	A
AB-C	17.42	17.42			17.42				
D-ABC	4.39	4.39	125.32	0.035	4.37	0.0	0.0	7.441	A
C-D	0.00	0.00			0.00				
C-A	21.93	21.93			21.93				
C-B	1.10	1.10			1.10				
CD-AB	1.27	1.27	169.34	0.008	1.27	0.0	0.0	5.374	A
CD-A	22.85	22.85			22.85				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	122.71	0.000	0.00	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	7.67	7.67			7.67				
A-D	0.00	0.00			0.00				
AB-CD	0.00	0.00	158.68	0.000	0.01	0.0	0.0	0.000	A
AB-C	7.67	7.67			7.67				
D-ABC	2.19	2.19	118.45	0.018	2.21	0.0	0.0	7.743	A
C-D	1.10	1.10			1.10				
C-A	24.56	24.56			24.56				
C-B	1.10	1.10			1.10				
CD-AB	1.28	1.28	172.82	0.007	1.28	0.0	0.0	5.248	A
CD-A	24.39	24.39			24.39				

2024 with Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sutton Road / Brick Lane / Rectory Fields	Left-Right Stagger	Two-way		1.15	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 period length (min)	Time segment length (min)	Run automatically
D5	2024 with Development	AM	DIRECT	07:45	09:15	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000
D		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To				
		A	B	C	D	
07:45 - 08:00	From	A	0.00	0.00	17.54	5.18
		B	0.00	0.00	0.00	0.00
		C	21.93	1.10	0.00	4.08
		D	2.21	0.00	7.76	0.00

Demand (PCU/TS)

		To				
		A	B	C	D	
08:00 - 08:15	From	A	0.00	0.00	26.47	0.18
		B	0.00	0.00	0.00	1.09
		C	14.44	0.00	0.00	1.84
		D	0.87	0.00	7.98	0.00

Demand (PCU/TS)

08:15 - 08:30

		To			
		A	B	C	D
From	A	0.00	0.00	26.25	0.40
	B	0.00	0.00	3.28	0.00
	C	11.48	0.00	0.00	2.93
	D	0.87	0.00	9.07	0.00

Demand (PCU/TS)

08:30 - 08:45

		To			
		A	B	C	D
From	A	0.00	0.00	26.14	0.18
	B	0.00	0.00	1.09	1.64
	C	26.47	1.64	0.00	1.84
	D	2.51	0.00	7.98	0.00

Demand (PCU/TS)

08:45 - 09:00

		To			
		A	B	C	D
From	A	0.00	0.00	25.16	0.18
	B	0.00	0.00	0.00	0.00
	C	20.24	1.09	0.00	2.93
	D	0.87	0.00	9.07	0.00

Demand (PCU/TS)

09:00 - 09:15

		To			
		A	B	C	D
From	A	0.00	0.00	16.41	0.18
	B	0.00	0.00	0.00	0.00
	C	8.75	0.00	0.00	2.93
	D	0.87	1.09	6.89	0.00

Vehicle Mix

HV %s

07:45 - 08:00

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

HV %s

08:00 - 08:15

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	17	0	0	0
	D	0	0	0	0

HV %s

08:15 - 08:30

		To			
		A	B	C	D
From	A	0	0	4	0
	B	0	0	0	0
	C	10	0	0	0
	D	0	0	0	0

HV %s

08:30 - 08:45

		To			
		A	B	C	D
From	A	0	0	8	0
	B	0	0	0	100
	C	4	100	0	0
	D	100	0	0	0

HV %s

08:45 - 09:00

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	6	0	0	0
	D	0	0	0	0

HV %s

09:00 - 09:15

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-ACD	0.02	7.59	0.0	A	1.18	7.10
A-B					0.00	0.00
A-C					23.00	137.97
A-D					1.05	6.30
AB-CD	0.03	7.99	0.0	A	1.72	10.32
AB-C					23.51	141.05
D-ABC	0.09	8.81	0.1	A	9.67	58.04
C-D					2.76	16.55
C-A					17.22	103.31
C-B					0.64	3.83
CD-AB	0.01	7.43	0.0	A	0.94	5.66
CD-A					18.46	110.76

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	119.58	0.000	0.00	0.0	0.0	0.000	A
AB	0.00	0.00			0.00				
A-C	17.54	17.54			17.54				
A-D	5.18	5.18			5.18				
AB-CD	5.78	5.78	169.95	0.034	5.73	0.0	0.0	5.479	A
AB-C	16.94	16.94			16.94				
D-ABC	9.97	9.97	122.87	0.081	9.88	0.0	0.1	7.960	A
C-D	4.08	4.08			4.08				
C-A	21.93	21.93			21.93				
C-B	1.10	1.10			1.10				
CD-AB	1.28	1.28	169.14	0.008	1.27	0.0	0.0	5.361	A
CD-A	23.94	23.94			23.94				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.09	1.09	139.57	0.008	1.08	0.0	0.0	6.498	A
AB	0.00	0.00			0.00				
A-C	26.47	26.47			26.47				
A-D	0.18	0.18			0.18				
AB-CD	1.49	1.49	178.22	0.008	1.52	0.0	0.0	5.101	A
AB-C	26.24	26.24			26.24				
D-ABC	8.85	8.85	120.91	0.073	8.86	0.1	0.1	8.034	A
C-D	1.84	1.84			1.84				
C-A	14.44	14.44			14.44				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	152.30	0.000	0.01	0.0	0.0	0.000	A
CD-A	15.32	15.32			15.32				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	3.28	3.28	139.57	0.024	3.26	0.0	0.0	6.602	A
AB	0.00	0.00			0.00				
A-C	26.25	26.25			26.25				
A-D	0.40	0.40			0.40				
AB-CD	0.49	0.49	180.60	0.003	0.49	0.0	0.0	5.029	A
AB-C	29.43	29.43			29.43				
D-ABC	9.94	9.94	120.99	0.082	9.93	0.1	0.1	8.104	A
C-D	2.93	2.93			2.93				
C-A	11.48	11.48			11.48				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	152.30	0.000	0.00	0.0	0.0	0.000	A
CD-A	12.35	12.35			12.35				

08:30 - 08:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	2.73	2.73	139.64	0.020	2.73	0.0	0.0	7.586	A
A-B	0.00	0.00			0.00				
A-C	26.14	26.14			26.14				
A-D	0.18	0.18			0.18				
AB-CD	2.14	2.14	175.58	0.012	2.12	0.0	0.0	7.620	A
AB-C	26.91	26.91			26.91				
D-ABC	10.49	10.49	122.27	0.086	10.48	0.1	0.1	8.530	A
C-D	1.84	1.84			1.84				
C-A	26.47	26.47			26.47				
C-B	1.64	1.64			1.64				
CD-AB	1.97	1.97	171.53	0.012	1.96	0.0	0.0	7.152	A
CD-A	28.63	28.63			28.63				

08:45 - 09:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	139.85	0.000	0.02	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	25.16	25.16			25.16				
A-D	0.18	0.18			0.18				
AB-CD	0.23	0.23	175.55	0.001	0.24	0.0	0.0	7.992	A
AB-C	25.14	25.14			25.14				
D-ABC	9.94	9.94	119.44	0.083	9.94	0.1	0.1	8.809	A
C-D	2.93	2.93			2.93				
C-A	20.24	20.24			20.24				
C-B	1.09	1.09			1.09				
CD-AB	1.25	1.25	166.57	0.008	1.26	0.0	0.0	7.426	A
CD-A	20.97	20.97			20.97				

09:00 - 09:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	122.06	0.000	0.00	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	16.41	16.41			16.41				
A-D	0.18	0.18			0.18				
AB-CD	0.20	0.20	172.85	0.001	0.20	0.0	0.0	5.301	A
AB-C	16.39	16.39			16.39				
D-ABC	8.85	8.85	127.69	0.069	8.87	0.1	0.1	7.574	A
C-D	2.93	2.93			2.93				
C-A	8.75	8.75			8.75				
C-B	0.00	0.00			0.00				
CD-AB	1.15	1.15	161.01	0.007	1.15	0.0	0.0	5.649	A
CD-A	9.55	9.55			9.55				

2024 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Sutton Road / Brick Lane / Rectory Fields	Left-Right Stagger	Two-way		0.96	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 period length (min)	Time segment length (min)	Run automatically
D6	2024 with Development	PM	DIRECT	15:45	17:15	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000
D		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To				
		A	B	C	D	
15:45 - 16:00	From	A	0.00	0.00	7.67	4.08
		B	0.00	0.00	0.00	0.00
		C	24.56	1.10	0.00	5.18
		D	1.12	0.00	6.66	0.00

Demand (PCU/TS)

		To				
		A	B	C	D	
16:00 - 16:15	From	A	0.00	0.00	25.22	4.30
		B	1.10	0.00	0.00	0.00
		C	32.34	1.10	0.00	4.30
		D	1.18	0.00	5.81	0.00

Demand (PCU/TS)

16:15 - 16:30

		To			
		A	B	C	D
From	A	0.00	0.00	20.83	4.30
	B	0.00	0.00	0.00	0.00
	C	31.14	0.00	0.00	5.40
	D	2.27	0.00	6.91	0.00

Demand (PCU/TS)

16:30 - 16:45

		To			
		A	B	C	D
From	A	0.00	0.00	18.97	6.50
	B	0.00	0.00	1.10	0.00
	C	24.12	1.10	0.00	6.50
	D	1.18	0.00	6.91	0.00

Demand (PCU/TS)

16:45 - 17:00

		To			
		A	B	C	D
From	A	0.00	0.00	17.54	5.40
	B	0.00	0.00	0.00	0.00
	C	21.93	1.10	0.00	4.30
	D	2.27	0.00	8.00	0.00

Demand (PCU/TS)

17:00 - 17:15

		To			
		A	B	C	D
From	A	0.00	0.00	7.67	4.30
	B	0.00	0.00	0.00	0.00
	C	24.56	1.10	0.00	5.40
	D	1.18	0.00	6.91	0.00

Vehicle Mix

HV %s

15:45 - 16:00

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

HV %s

16:00 - 16:15

		To			
		A	B	C	D
From	A	0	0	0	0
	B	0	0	0	0
	C	7	0	0	0
	D	0	0	0	0

HV %s

16:15 - 16:30

		To			
		A	B	C	D
From	A	0	0	12	0
	B	0	0	0	0
	C	4	0	0	0
	D	0	0	0	0

HV %s

16:30 - 16:45

		To			
		A	B	C	D
From	A	0	0	6	0
	B	0	0	0	0
	C	5	0	0	0
	D	0	0	0	0

HV %s

16:45 - 17:00

		To			
		A	B	C	D
From	A	0	0	7	0
	B	0	0	0	0
	C	0	0	0	0
	D	0	0	0	0

HV %s

17:00 - 17:15

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-ACD	0.01	8.95	0.0	A	0.37	2.20
A-B					0.00	0.00
A-C					16.32	97.90
A-D					4.81	28.88
AB-CD	0.04	5.72	0.1	A	5.36	32.14
AB-C					15.96	95.74
D-ABC	0.08	8.12	0.1	A	8.40	50.40
C-D					5.18	31.08
C-A					26.44	158.65
C-B					0.92	5.50
CD-AB	0.01	5.41	0.0	A	1.09	6.53
CD-A					27.80	166.81

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	121.76	0.000	0.00	0.0	0.0	0.000	A
AB	0.00	0.00			0.00				
A-C	7.67	7.67			7.67				
A-D	4.08	4.08			4.08				
AB-CD	4.28	4.28	162.66	0.026	4.25	0.0	0.0	5.681	A
AB-C	7.47	7.47			7.47				
D-ABC	7.78	7.78	121.18	0.064	7.71	0.0	0.1	7.926	A
C-D	5.18	5.18			5.18				
C-A	24.56	24.56			24.56				
C-B	1.10	1.10			1.10				
CD-AB	1.29	1.29	172.62	0.007	1.28	0.0	0.0	5.302	A
CD-A	25.48	25.48			25.48				

16:00 - 16:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.10	1.10	101.59	0.011	1.09	0.0	0.0	8.954	A
AB	0.00	0.00			0.00				
A-C	25.22	25.22			25.22				
A-D	4.30	4.30			4.30				
AB-CD	5.04	5.04	172.48	0.029	5.03	0.0	0.0	5.374	A
AB-C	24.48	24.48			24.48				
D-ABC	6.99	6.99	118.02	0.059	6.99	0.1	0.1	8.107	A
C-D	4.30	4.30			4.30				
C-A	32.34	32.34			32.34				
C-B	1.10	1.10			1.10				
CD-AB	1.36	1.36	173.84	0.008	1.36	0.0	0.0	5.277	A
CD-A	33.25	33.25			33.25				

16:15 - 16:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	102.79	0.000	0.01	0.0	0.0	0.000	A
AB	0.00	0.00			0.00				
A-C	20.83	20.83			20.83				
A-D	4.30	4.30			4.30				
AB-CD	4.91	4.91	169.89	0.029	4.91	0.0	0.0	5.491	A
AB-C	20.22	20.22			20.22				
D-ABC	9.18	9.18	121.63	0.075	9.16	0.1	0.1	8.001	A
C-D	5.40	5.40			5.40				
C-A	31.14	31.14			31.14				
C-B	0.00	0.00			0.00				
CD-AB	0.00	0.00	152.66	0.000	0.01	0.0	0.0	0.000	A
CD-A	33.40	33.40			33.40				

16:30 - 16:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	1.10	1.10	139.82	0.008	1.09	0.0	0.0	6.486	A
A-B	0.00	0.00			0.00				
A-C	18.97	18.97			18.97				
A-D	6.50	6.50			6.50				
AB-CD	7.37	7.37	170.51	0.043	7.35	0.0	0.1	5.567	A
AB-C	19.19	19.19			19.19				
D-ABC	8.09	8.09	118.93	0.068	8.10	0.1	0.1	8.120	A
C-D	6.50	6.50			6.50				
C-A	24.12	24.12			24.12				
C-B	1.10	1.10			1.10				
CD-AB	1.29	1.29	169.31	0.008	1.29	0.0	0.0	5.407	A
CD-A	25.12	25.12			25.12				

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	140.38	0.000	0.01	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	17.54	17.54			17.54				
A-D	5.40	5.40			5.40				
AB-CD	6.03	6.03	169.91	0.035	6.04	0.1	0.0	5.530	A
AB-C	16.92	16.92			16.92				
D-ABC	10.27	10.27	122.75	0.084	10.25	0.1	0.1	7.999	A
C-D	4.30	4.30			4.30				
C-A	21.93	21.93			21.93				
C-B	1.10	1.10			1.10				
CD-AB	1.28	1.28	169.14	0.008	1.28	0.0	0.0	5.378	A
CD-A	24.01	24.01			24.01				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0.00	0.00	121.71	0.000	0.00	0.0	0.0	0.000	A
A-B	0.00	0.00			0.00				
A-C	7.67	7.67			7.67				
A-D	4.30	4.30			4.30				
AB-CD	4.51	4.51	162.61	0.028	4.53	0.0	0.0	5.717	A
AB-C	7.46	7.46			7.46				
D-ABC	8.09	8.09	121.14	0.067	8.11	0.1	0.1	7.964	A
C-D	5.40	5.40			5.40				
C-A	24.56	24.56			24.56				
C-B	1.10	1.10			1.10				
CD-AB	1.29	1.29	172.62	0.008	1.29	0.0	0.0	5.254	A
CD-A	25.56	25.56			25.56				

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: A142-Sutton Road.j9
Path: O:\49000 - Engineering\49500\49533 - Land off Brick Lane, Mepal\Calculations\Transport\Models
Report generation date: 12/09/2019 17:36:42

- »2019, AM
- »2019, PM
- »2024, AM
- »2024, PM
- »2024 with Development, AM
- »2024 with Development, PM

Summary of junction performance

	AM				PM			
	Set ID	Q (PCU)	RFC	Junction Delay (s)	Set ID	Q (PCU)	RFC	Junction Delay (s)
2019								
Stream B-C	D1	0.2	0.15	0.73	D2	0.2	0.13	0.72
Stream B-A		0.2	0.18			0.1	0.11	
Stream C-AB		0.1	0.11			0.2	0.19	
2024								
Stream B-C	D3	0.2	0.17	0.82	D4	0.2	0.15	0.78
Stream B-A		0.3	0.22			0.2	0.13	
Stream C-AB		0.2	0.13			0.3	0.21	
2024 with Development								
Stream B-C	D5	0.2	0.20	1.05	D6	0.2	0.17	0.94
Stream B-A		0.4	0.26			0.2	0.15	
Stream C-AB		0.2	0.13			0.3	0.23	

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

File summary

File Description

Title	A142 / Sutton Road
Location	
Site number	
Date	21/01/2019
Version	
Status	TA
Identifier	
Client	
Jobnumber	
Enumerator	D Palmer
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perTimeSegment	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				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 period length (min)	Time segment length (min)	Run automatically
D1	2019	AM	DIRECT	07:00	08:30	90	15	✓
D2	2019	PM	DIRECT	16:15	17:45	90	15	✓
D3	2024	AM	DIRECT	07:00	08:30	90	15	✓
D4	2024	PM	DIRECT	16:15	17:45	90	15	✓
D5	2024 with Development	AM	DIRECT	07:00	08:30	90	15	✓
D6	2024 with Development	PM	DIRECT	16:15	17:45	90	15	✓

Analysis Set Details

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

2019, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A142 / Sutton Road	T-Junction	Two-way		0.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A142		Major
B	Sutton Road		Minor
C	A142		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	7.60		✓	3.50	0.0	✓	13.00

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	10.00	9.52	7.80	6.68	✓	3.00	49	107

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/TS)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	149.679	0.101	0.256	0.161	0.366
B-C	204.655	0.117	0.295	-	-
C-B	163.793	0.236	0.236	-	-

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 period length (min)	Time segment length (min)	Run automatically
D1	2019	AM	DIRECT	07:00	08:30	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

		To			
		A	B	C	
07:00 - 07:15	From	A	0.00	5.50	278.90
		B	4.00	0.00	7.00
		C	98.50	2.00	0.00

Demand (PCU/TS)

		To			
		A	B	C	
07:15 - 07:30	From	A	0.00	3.00	250.10
		B	12.00	0.00	11.50
		C	118.00	5.00	0.00

Demand (PCU/TS)

		To			
		A	B	C	
07:30 - 07:45	From	A	0.00	20.00	226.50
		B	6.00	0.00	8.40
		C	109.60	5.00	0.00

Demand (PCU/TS)

		To			
		A	B	C	
07:45 - 08:00	From	A	0.00	17.00	224.40
		B	7.00	0.00	13.00
		C	145.40	5.00	0.00

Demand (PCU/TS)

		To			
		A	B	C	
08:00 - 08:15	From	A	0.00	11.00	222.00
		B	6.00	0.00	17.00
		C	134.10	12.00	0.00

Demand (PCU/TS)

08:15 - 08:30

		To		
		A	B	C
From	A	0.00	12.50	208.20
	B	2.00	0.00	21.00
	C	130.30	9.00	0.00

Vehicle Mix

HV %s

07:00 - 07:15

		To		
		A	B	C
From	A	0	20	6
	B	0	0	0
	C	8	0	0

HV %s

07:15 - 07:30

		To		
		A	B	C
From	A	0	0	6
	B	9	0	20
	C	13	0	0

HV %s

07:30 - 07:45

		To		
		A	B	C
From	A	0	5	10
	B	0	0	13
	C	15	0	0

HV %s

07:45 - 08:00

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	13	0	0

HV %s

08:00 - 08:15

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	13	9	0

HV %s

08:15 - 08:30

		To		
		A	B	C
From	A	0	8	11
	B	0	0	0
	C	13	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.15	9.23	0.2	A	12.98	77.90
B-A	0.18	17.20	0.2	C	6.17	37.00
C-AB	0.11	9.84	0.1	A	6.33	38.00
C-A					122.65	735.90
A-B					11.50	69.00
A-C					235.02	1410.10

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.00	7.00	119.71	0.058	6.94	0.0	0.1	7.976	A
B-A	4.00	4.00	60.97	0.066	3.93	0.0	0.1	15.759	C
C-AB	2.00	2.00	96.62	0.021	1.98	0.0	0.0	9.507	A
C-A	98.50	98.50			98.50				
A-B	5.50	5.50			5.50				
A-C	278.90	278.90			278.90				

07:15 - 07:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11.50	11.50	119.41	0.096	11.44	0.1	0.1	9.228	A
B-A	12.00	12.00	67.27	0.178	11.84	0.1	0.2	17.196	C
C-AB	5.00	5.00	104.02	0.048	4.97	0.0	0.0	9.085	A
C-A	118.00	118.00			118.00				
A-B	3.00	3.00			3.00				
A-C	250.10	250.10			250.10				

07:30 - 07:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8.40	8.40	130.61	0.064	8.44	0.1	0.1	8.621	A
B-A	6.00	6.00	71.12	0.084	6.13	0.2	0.1	14.763	B
C-AB	5.00	5.00	105.57	0.047	5.00	0.0	0.0	8.949	A
C-A	109.60	109.60			109.60				
A-B	20.00	20.00			20.00				
A-C	226.50	226.50			226.50				

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13.00	13.00	132.98	0.098	12.97	0.1	0.1	7.877	A
B-A	7.00	7.00	64.96	0.108	6.98	0.1	0.1	15.516	C
C-AB	5.00	5.00	106.78	0.047	5.00	0.0	0.0	8.844	A
C-A	145.40	145.40			145.40				
A-B	17.00	17.00			17.00				
A-C	224.40	224.40			224.40				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17.00	17.00	136.21	0.125	16.97	0.1	0.1	7.545	A
B-A	6.00	6.00	64.74	0.093	6.01	0.1	0.1	15.330	C
C-AB	12.00	12.00	108.76	0.110	11.92	0.0	0.1	9.836	A
C-A	134.10	134.10			134.10				
AB	11.00	11.00			11.00				
AC	222.00	222.00			222.00				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21.00	21.00	142.55	0.147	20.97	0.1	0.2	7.400	A
B-A	2.00	2.00	69.63	0.029	2.07	0.1	0.0	13.337	B
C-AB	9.00	9.00	111.67	0.081	9.04	0.1	0.1	9.249	A
C-A	130.30	130.30			130.30				
AB	12.50	12.50			12.50				
AC	208.20	208.20			208.20				

2019, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A142 / Sutton Road	T-Junction	Two-way		0.72	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 period length (min)	Time segment length (min)	Run automatically
D2	2019	PM	DIRECT	16:15	17:45	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

16:15 - 16:30

		To		
		A	B	C
From	A	0.00	8.00	118.10
	B	8.00	0.00	11.00
	C	234.70	21.00	0.00

Demand (PCU/TS)

16:30 - 16:45

		To		
		A	B	C
From	A	0.00	5.00	119.80
	B	4.00	0.00	22.30
	C	236.50	22.00	0.00

Demand (PCU/TS)

16:45 - 17:00

		To		
		A	B	C
From	A	0.00	7.00	122.20
	B	1.00	0.00	11.00
	C	301.20	10.00	0.00

Demand (PCU/TS)

17:00 - 17:15

		To		
		A	B	C
From	A	0.00	7.00	103.10
	B	0.00	0.00	5.00
	C	263.10	16.00	0.00

Demand (PCU/TS)

17:15 - 17:30

		To		
		A	B	C
From	A	0.00	9.00	135.70
	B	5.00	0.00	13.00
	C	275.40	24.00	0.00

Demand (PCU/TS)

17:30 - 17:45

		To		
		A	B	C
From	A	0.00	6.00	104.90
	B	6.00	0.00	3.00
	C	240.60	18.00	0.00

Vehicle Mix

HV %s

16:15 - 16:30

		To		
		A	B	C
From	A	0	14	6
	B	14	0	10
	C	7	5	0

HV %s

16:30 - 16:45

		To		
		A	B	C
From	A	0	0	11
	B	0	0	5
	C	6	5	0

HV %s

16:45 - 17:00

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	7	0	0

HV %s

17:00 - 17:15

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	7	0

HV %s

17:15 - 17:30

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	4	0	0

HV %s

17:30 - 17:45

		To		
		A	B	C
From	A	0	20	3
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.13	6.56	0.2	A	10.88	65.30
B-A	0.11	16.31	0.1	C	4.00	24.00
C-AB	0.19	8.77	0.2	A	18.50	111.00
C-A					258.58	1551.50
A-B					7.00	42.00
A-C					117.30	703.80

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11.00	11.00	162.00	0.068	10.92	0.0	0.1	6.550	A
B-A	8.00	8.00	74.13	0.108	7.86	0.0	0.1	15.491	C
C-AB	21.00	21.00	134.01	0.157	20.81	0.0	0.2	8.333	A
C-A	234.70	234.70			234.70				
A-B	8.00	8.00			8.00				
A-C	118.10	118.10			118.10				

16:30 - 16:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22.30	22.30	168.47	0.132	22.22	0.1	0.2	6.560	A
B-A	4.00	4.00	71.13	0.056	4.07	0.1	0.1	14.733	B
C-AB	22.00	22.00	134.32	0.164	21.99	0.2	0.2	8.403	A
C-A	236.50	236.50			236.50				
A-B	5.00	5.00			5.00				
A-C	119.80	119.80			119.80				

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11.00	11.00	169.30	0.065	11.09	0.2	0.1	5.884	A
B-A	1.00	1.00	64.36	0.016	1.05	0.1	0.0	14.228	B
C-AB	10.00	10.00	133.28	0.075	10.12	0.2	0.1	7.571	A
C-A	301.20	301.20			301.20				
A-B	7.00	7.00			7.00				
A-C	122.20	122.20			122.20				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5.00	5.00	175.71	0.028	5.04	0.1	0.0	5.276	A
B-A	0.00	0.00	73.12	0.000	0.02	0.0	0.0	0.000	A
C-AB	16.00	16.00	137.79	0.116	15.95	0.1	0.1	7.656	A
C-A	263.10	263.10			263.10				
A-B	7.00	7.00			7.00				
A-C	103.10	103.10			103.10				

17:15 - 17:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13.00	13.00	161.81	0.080	12.94	0.0	0.1	6.046	A
B-A	5.00	5.00	60.01	0.083	4.91	0.0	0.1	16.308	C
C-AB	24.00	24.00	129.62	0.185	23.90	0.1	0.2	8.773	A
C-A	275.40	275.40			275.40				
A-B	9.00	9.00			9.00				
A-C	135.70	135.70			135.70				

17:30 - 17:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.00	3.00	156.49	0.019	3.07	0.1	0.0	5.867	A
B-A	6.00	6.00	83.18	0.072	6.01	0.1	0.1	11.665	B
C-AB	18.00	18.00	137.60	0.131	18.08	0.2	0.2	7.537	A
C-A	240.60	240.60			240.60				
A-B	6.00	6.00			6.00				
A-C	104.90	104.90			104.90				

2024, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A142 / Sutton Road	T-Junction	Two-way		0.82	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 period length (min)	Time segment length (min)	Run automatically
D3	2024	AM	DIRECT	07:00	08:30	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

07:00 - 07:15

		To		
		A	B	C
From	A	0.00	6.02	305.06
	B	4.38	0.00	7.66
	C	107.74	2.19	0.00

Demand (PCU/TS)

07:15 - 07:30

		To		
		A	B	C
From	A	0.00	3.28	273.56
	B	13.13	0.00	12.58
	C	129.07	5.47	0.00

Demand (PCU/TS)

07:30 - 07:45

		To		
		A	B	C
From	A	0.00	21.88	247.75
	B	6.56	0.00	9.19
	C	119.88	5.47	0.00

Demand (PCU/TS)

07:45 - 08:00

		To		
		A	B	C
From	A	0.00	18.59	245.45
	B	7.66	0.00	14.22
	C	159.04	5.47	0.00

Demand (PCU/TS)

08:00 - 08:15

		To		
		A	B	C
From	A	0.00	12.03	242.82
	B	6.56	0.00	18.59
	C	146.68	13.13	0.00

Demand (PCU/TS)

08:15 - 08:30

		To		
		A	B	C
From	A	0.00	13.67	227.73
	B	2.19	0.00	22.97
	C	142.52	9.84	0.00

Vehicle Mix

HV %s

07:00 - 07:15

		To		
		A	B	C
From	A	0	20	6
	B	0	0	0
	C	8	0	0

HV %s

07:15 - 07:30

		To		
		A	B	C
From	A	0	0	6
	B	9	0	20
	C	13	0	0

HV %s

07:30 - 07:45

		To		
		A	B	C
From	A	0	5	10
	B	0	0	13
	C	15	0	0

HV %s

07:45 - 08:00

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	13	0	0

HV %s

08:00 - 08:15

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	13	9	0

HV %s

08:15 - 08:30

		To		
		A	B	C
From	A	0	8	11
	B	0	0	0
	C	13	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.17	10.03	0.2	B	14.20	85.21
B-A	0.22	20.67	0.3	C	6.75	40.48
C-AB	0.13	10.51	0.2	B	6.93	41.57
C-A					134.16	804.93
A-B					12.58	75.47
A-C					257.06	1542.37

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.66	7.66	111.56	0.069	7.59	0.0	0.1	8.650	A
B-A	4.38	4.38	52.65	0.083	4.29	0.0	0.1	18.577	C
C-AB	2.19	2.19	90.32	0.024	2.17	0.0	0.0	10.207	B
C-A	107.74	107.74			107.74				
A-B	6.02	6.02			6.02				
A-C	305.06	305.06			305.06				

07:15 - 07:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12.58	12.58	111.67	0.113	12.51	0.1	0.1	10.034	B
B-A	13.13	13.13	58.90	0.223	12.92	0.1	0.3	20.667	C
C-AB	5.47	5.47	98.41	0.056	5.44	0.0	0.1	9.677	A
C-A	129.07	129.07			129.07				
A-B	3.28	3.28			3.28				
A-C	273.56	273.56			273.56				

07:30 - 07:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9.19	9.19	123.67	0.074	9.23	0.1	0.1	9.209	A
B-A	6.56	6.56	63.55	0.103	6.73	0.3	0.1	16.924	C
C-AB	5.47	5.47	100.11	0.055	5.47	0.1	0.1	9.511	A
C-A	119.88	119.88			119.88				
A-B	21.88	21.88			21.88				
A-C	247.75	247.75			247.75				

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14.22	14.22	125.85	0.113	14.18	0.1	0.1	8.472	A
B-A	7.66	7.66	57.05	0.134	7.63	0.1	0.2	18.206	C
C-AB	5.47	5.47	101.43	0.054	5.47	0.1	0.1	9.378	A
C-A	159.04	159.04			159.04				
A-B	18.59	18.59			18.59				
A-C	245.45	245.45			245.45				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18.59	18.59	129.23	0.144	18.56	0.1	0.2	8.129	A
B-A	6.56	6.56	56.95	0.115	6.58	0.2	0.1	17.876	C
C-AB	13.13	13.13	103.60	0.127	13.04	0.1	0.2	10.510	B
C-A	146.68	146.68			146.68				
A-B	12.03	12.03			12.03				
A-C	242.82	242.82			242.82				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22.97	22.97	136.38	0.168	22.94	0.2	0.2	7.931	A
B-A	2.19	2.19	62.32	0.035	2.29	0.1	0.0	15.015	C
C-AB	9.84	9.84	106.78	0.092	9.88	0.2	0.1	9.804	A
C-A	142.52	142.52			142.52				
A-B	13.67	13.67			13.67				
A-C	227.73	227.73			227.73				

2024, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A142 / Sutton Road	T-Junction	Two-way		0.78	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 period length (min)	Time segment length (min)	Run automatically
D4	2024	PM	DIRECT	16:15	17:45	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

16:15 - 16:30

		To		
		A	B	C
From	A	0.00	8.77	129.48
	B	8.77	0.00	12.06
	C	257.33	23.02	0.00

Demand (PCU/TS)

16:30 - 16:45

		To		
		A	B	C
From	A	0.00	5.48	131.35
	B	4.39	0.00	24.45
	C	259.30	24.12	0.00

Demand (PCU/TS)

16:45 - 17:00

		To		
		A	B	C
From	A	0.00	7.67	133.98
	B	1.10	0.00	12.06
	C	330.24	10.96	0.00

Demand (PCU/TS)

17:00 - 17:15

		To		
		A	B	C
From	A	0.00	7.67	113.04
	B	0.00	0.00	5.48
	C	288.46	17.54	0.00

Demand (PCU/TS)

17:15 - 17:30

		To		
		A	B	C
From	A	0.00	9.87	148.78
	B	5.48	0.00	14.25
	C	301.95	26.31	0.00

Demand (PCU/TS)

17:30 - 17:45

		To		
		A	B	C
From	A	0.00	6.58	115.01
	B	6.58	0.00	3.29
	C	263.79	19.74	0.00

Vehicle Mix

HV %s

16:15 - 16:30

		To		
		A	B	C
From	A	0	14	6
	B	14	0	10
	C	7	5	0

HV %s

16:30 - 16:45

		To		
		A	B	C
From	A	0	0	11
	B	0	0	5
	C	6	5	0

HV %s

16:45 - 17:00

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	7	0	0

HV %s

17:00 - 17:15

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	7	0

HV %s

17:15 - 17:30

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	4	0	0

HV %s

17:30 - 17:45

		To		
		A	B	C
From	A	0	20	3
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.15	6.85	0.2	A	11.93	71.59
B-A	0.13	19.45	0.2	C	4.39	26.32
C-AB	0.21	9.27	0.3	A	20.28	121.69
C-A					283.51	1701.07
A-B					7.67	46.04
A-C					128.61	771.64

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12.06	12.06	157.73	0.076	11.97	0.0	0.1	6.787	A
B-A	8.77	8.77	66.63	0.132	8.60	0.0	0.2	17.676	C
C-AB	23.02	23.02	131.14	0.176	22.80	0.0	0.2	8.705	A
C-A	257.33	257.33			257.33				
A-B	8.77	8.77			8.77				
A-C	129.48	129.48			129.48				

16:30 - 16:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24.45	24.45	164.45	0.149	24.36	0.1	0.2	6.852	A
B-A	4.39	4.39	63.75	0.069	4.48	0.2	0.1	16.691	C
C-AB	24.12	24.12	131.48	0.183	24.11	0.2	0.2	8.792	A
C-A	259.30	259.30			259.30				
A-B	5.48	5.48			5.48				
A-C	131.35	131.35			131.35				

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12.06	12.06	165.53	0.073	12.16	0.2	0.1	6.072	A
B-A	1.10	1.10	56.34	0.020	1.16	0.1	0.0	16.327	C
C-AB	10.96	10.96	130.34	0.084	11.10	0.2	0.1	7.822	A
C-A	330.24	330.24			330.24				
A-B	7.67	7.67			7.67				
A-C	133.98	133.98			133.98				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5.48	5.48	172.65	0.032	5.53	0.1	0.0	5.388	A
B-A	0.00	0.00	65.95	0.000	0.02	0.0	0.0	0.000	A
C-AB	17.54	17.54	135.28	0.130	17.48	0.1	0.2	7.913	A
C-A	288.46	288.46			288.46				
A-B	7.67	7.67			7.67				
A-C	113.04	113.04			113.04				

17:15 - 17:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14.25	14.25	156.96	0.091	14.18	0.0	0.1	6.300	A
B-A	5.48	5.48	51.53	0.106	5.36	0.0	0.1	19.448	C
C-AB	26.31	26.31	126.32	0.208	26.19	0.2	0.3	9.268	A
C-A	301.95	301.95			301.95				
A-B	9.87	9.87			9.87				
A-C	148.78	148.78			148.78				

17:30 - 17:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3.29	3.29	153.12	0.021	3.37	0.1	0.0	6.014	A
B-A	6.58	6.58	75.55	0.087	6.60	0.1	0.1	13.059	B
C-AB	19.74	19.74	135.08	0.146	19.84	0.3	0.2	7.815	A
C-A	263.79	263.79			263.79				
A-B	6.58	6.58			6.58				
A-C	115.01	115.01			115.01				

2024 with Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A142 / Sutton Road	T-Junction	Two-way		1.05	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 period length (min)	Time segment length (min)	Run automatically
D5	2024 with Development	AM	DIRECT	07:00	08:30	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

07:00 - 07:15

		To		
		A	B	C
From	A	0.00	7.22	305.06
	B	6.59	0.00	11.23
	C	107.74	2.82	0.00

Demand (PCU/TS)

07:15 - 07:30

		To		
		A	B	C
From	A	0.00	4.48	273.56
	B	15.34	0.00	16.15
	C	129.07	6.10	0.00

Demand (PCU/TS)

07:30 - 07:45

		To		
		A	B	C
From	A	0.00	23.08	247.75
	B	8.78	0.00	12.76
	C	119.88	6.10	0.00

Demand (PCU/TS)

07:45 - 08:00

		To		
		A	B	C
From	A	0.00	19.80	245.45
	B	9.88	0.00	17.79
	C	159.04	6.10	0.00

Demand (PCU/TS)

08:00 - 08:15

		To		
		A	B	C
From	A	0.00	13.23	242.82
	B	8.78	0.00	22.17
	C	146.68	13.76	0.00

Demand (PCU/TS)

08:15 - 08:30

		To		
		A	B	C
From	A	0.00	14.87	227.73
	B	4.41	0.00	26.54
	C	142.52	10.48	0.00

Vehicle Mix

HV %s

07:00 - 07:15

		To		
		A	B	C
From	A	0	20	6
	B	0	0	0
	C	8	0	0

HV %s

07:15 - 07:30

		To		
		A	B	C
From	A	0	0	6
	B	9	0	20
	C	13	0	0

HV %s

07:30 - 07:45

		To		
		A	B	C
From	A	0	5	10
	B	0	0	13
	C	15	0	0

HV %s

07:45 - 08:00

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	13	0	0

HV %s

08:00 - 08:15

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	13	9	0

HV %s

08:15 - 08:30

		To		
		A	B	C
From	A	0	8	11
	B	0	0	0
	C	13	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.20	10.35	0.2	B	17.77	106.64
B-A	0.26	22.00	0.4	C	8.96	53.78
C-AB	0.13	10.60	0.2	B	7.56	45.36
C-A					134.16	804.93
A-B					13.78	82.68
A-C					257.06	1542.37

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11.23	11.23	110.04	0.102	11.12	0.0	0.1	9.088	A
B-A	6.59	6.59	52.39	0.126	6.45	0.0	0.1	19.537	C
C-AB	2.82	2.82	90.04	0.031	2.79	0.0	0.0	10.312	B
C-A	107.74	107.74			107.74				
A-B	7.22	7.22			7.22				
A-C	305.06	305.06			305.06				

07:15 - 07:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16.15	16.15	111.29	0.145	16.08	0.1	0.2	10.348	B
B-A	15.34	15.34	57.96	0.265	15.11	0.1	0.4	22.001	C
C-AB	6.10	6.10	98.13	0.062	6.07	0.0	0.1	9.773	A
C-A	129.07	129.07			129.07				
A-B	4.48	4.48			4.48				
A-C	273.56	273.56			273.56				

07:30 - 07:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12.76	12.76	122.63	0.104	12.81	0.2	0.1	9.596	A
B-A	8.78	8.78	63.03	0.139	8.97	0.4	0.2	17.786	C
C-AB	6.10	6.10	99.83	0.061	6.10	0.1	0.1	9.603	A
C-A	119.88	119.88			119.88				
A-B	23.08	23.08			23.08				
A-C	247.75	247.75			247.75				

07:45 - 08:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17.79	17.79	124.27	0.143	17.75	0.1	0.2	8.927	A
B-A	9.88	9.88	56.74	0.174	9.85	0.2	0.2	19.179	C
C-AB	6.10	6.10	101.15	0.060	6.10	0.1	0.1	9.470	A
C-A	159.04	159.04			159.04				
A-B	19.80	19.80			19.80				
A-C	245.45	245.45			245.45				

08:00 - 08:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22.17	22.17	127.42	0.174	22.14	0.2	0.2	8.545	A
B-A	8.78	8.78	56.76	0.155	8.80	0.2	0.2	18.777	C
C-AB	13.76	13.76	103.32	0.133	13.66	0.1	0.2	10.601	B
C-A	146.68	146.68			146.68				
A-B	13.23	13.23			13.23				
A-C	242.82	242.82			242.82				

08:15 - 08:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26.54	26.54	134.97	0.197	26.51	0.2	0.2	8.295	A
B-A	4.41	4.41	61.96	0.071	4.52	0.2	0.1	15.696	C
C-AB	10.48	10.48	106.50	0.098	10.52	0.2	0.1	9.900	A
C-A	142.52	142.52			142.52				
A-B	14.87	14.87			14.87				
A-C	227.73	227.73			227.73				

2024 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A142 / Sutton Road	T-Junction	Two-way		0.94	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 period length (min)	Time segment length (min)	Run automatically
D6	2024 with Development	PM	DIRECT	16:15	17:45	90	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A		DIRECT	✓	100.000
B		DIRECT	✓	100.000
C		DIRECT	✓	100.000

Origin-Destination Data

Demand (PCU/TS)

16:15 - 16:30

		To		
		A	B	C
From	A	0.00	9.91	129.48
	B	9.50	0.00	15.80
	C	257.33	25.96	0.00

Demand (PCU/TS)

16:30 - 16:45

		To		
		A	B	C
From	A	0.00	6.62	131.35
	B	5.11	0.00	28.19
	C	259.30	27.06	0.00

Demand (PCU/TS)

16:45 - 17:00

		To		
		A	B	C
From	A	0.00	8.82	133.98
	B	1.83	0.00	15.80
	C	330.24	13.90	0.00

Demand (PCU/TS)

17:00 - 17:15

		To		
		A	B	C
From	A	0.00	8.82	113.04
	B	0.73	0.00	9.22
	C	288.46	20.48	0.00

Demand (PCU/TS)

17:15 - 17:30

		To		
		A	B	C
From	A	0.00	11.01	148.78
	B	6.21	0.00	17.99
	C	301.95	29.25	0.00

Demand (PCU/TS)

17:30 - 17:45

		To		
		A	B	C
From	A	0.00	7.72	115.01
	B	7.31	0.00	7.03
	C	263.79	22.67	0.00

Vehicle Mix

HV %s

16:15 - 16:30

		To		
		A	B	C
From	A	0	14	6
	B	14	0	10
	C	7	5	0

HV %s

16:30 - 16:45

		To		
		A	B	C
From	A	0	0	11
	B	0	0	5
	C	6	5	0

HV %s

16:45 - 17:00

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	7	0	0

HV %s

17:00 - 17:15

		To		
		A	B	C
From	A	0	0	4
	B	0	0	0
	C	4	7	0

HV %s

17:15 - 17:30

		To		
		A	B	C
From	A	0	0	7
	B	0	0	0
	C	4	0	0

HV %s

17:30 - 17:45

		To		
		A	B	C
From	A	0	20	3
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/TS)	Total Junction Arrivals (PCU)
B-C	0.17	7.09	0.2	A	15.67	94.03
B-A	0.15	20.34	0.2	C	5.12	30.69
C-AB	0.23	9.59	0.3	A	23.22	139.32
C-A					283.51	1701.07
A-B					8.82	52.90
A-C					128.61	771.64

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15.80	15.80	158.74	0.100	15.68	0.0	0.1	6.914	A
B-A	9.50	9.50	64.64	0.147	9.31	0.0	0.2	18.527	C
C-AB	25.96	25.96	130.87	0.198	25.70	0.0	0.3	8.964	A
C-A	257.33	257.33			257.33				
A-B	9.91	9.91			9.91				
A-C	129.48	129.48			129.48				

16:30 - 16:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28.19	28.19	163.77	0.172	28.09	0.1	0.2	7.089	A
B-A	5.11	5.11	62.56	0.082	5.20	0.2	0.1	17.230	C
C-AB	27.06	27.06	131.21	0.206	27.05	0.3	0.3	9.063	A
C-A	259.30	259.30			259.30				
A-B	6.62	6.62			6.62				
A-C	131.35	131.35			131.35				

16:45 - 17:00

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15.80	15.80	164.81	0.096	15.91	0.2	0.1	6.248	A
B-A	1.83	1.83	55.15	0.033	1.89	0.1	0.0	16.918	C
C-AB	13.90	13.90	130.07	0.107	14.04	0.3	0.1	8.035	A
C-A	330.24	330.24			330.24				
A-B	8.82	8.82			8.82				
A-C	133.98	133.98			133.98				

17:00 - 17:15

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9.22	9.22	172.02	0.054	9.27	0.1	0.1	5.533	A
B-A	0.73	0.73	64.77	0.011	0.75	0.0	0.0	14.066	B
C-AB	20.48	20.48	135.01	0.152	20.42	0.1	0.2	8.117	A
C-A	288.46	288.46			288.46				
A-B	8.82	8.82			8.82				
A-C	113.04	113.04			113.04				

17:15 - 17:30

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17.99	17.99	156.49	0.115	17.92	0.1	0.1	6.492	A
B-A	6.21	6.21	50.21	0.124	6.08	0.0	0.1	20.340	C
C-AB	29.25	29.25	126.05	0.232	29.12	0.2	0.3	9.592	A
C-A	301.95	301.95			301.95				
A-B	11.01	11.01			11.01				
A-C	148.78	148.78			148.78				

17:30 - 17:45

Stream	Total Demand (PCU/TS)	Junction Arrivals (PCU)	Capacity (PCU/TS)	RFC	Throughput (PCU/TS)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7.03	7.03	158.54	0.044	7.11	0.1	0.0	5.948	A
B-A	7.31	7.31	71.49	0.102	7.33	0.1	0.1	14.032	B
C-AB	22.67	22.67	134.81	0.168	22.77	0.3	0.2	8.042	A
C-A	263.79	263.79			263.79				
A-B	7.72	7.72			7.72				
A-C	115.01	115.01			115.01				

Appendix J

Brick Lane, Mepal**20/00630/FUM - ECDC 2037****TRANSPORT STATEMENT COMMENTS****PREPARED BY: Transport Assessment Team****AUTHOR: Hannah Seymour-Shove****DATE: 8th June 2020****Background**

These comments regard the Transport Statement dated December 2019 submitted by Richard Jackson Ltd for the full planning application concerning the erection of 55 dwellings on the land to the south of Brick Lane, Mepal.

Transport Statement Review**Sustainable Travel Provision**

The development is located within suitable walking and cycling distance to local facilities and amenities.

The pedestrian and cycle audit is acceptable for use within this assessment. The surrounding pedestrian and cycle facilities are suitable to accommodate the development.

The public transport audit is acceptable for use within this assessment.

Accident Data

The accident data submitted is out of date. The latest 60 months accident data should be provided for the Highway Authority to review. The developer should obtain and provide an analysis of the latest available data from the County Council via: Business.Intelligence@cambridgeshire.gov.uk.

Traffic Data

The traffic survey data used within this assessment is acceptable for use.

Development Proposals

The development is proposed to be served via a new access off Brick Lane. Site access details should be agreed with Highways Development Management who will provide separate comments.

It is noted car and cycle parking provision will accord to parking standards listed within ECDC Local Plan.

A new footway is proposed to be delivered along the northern site frontage. A dropped kerb crossing with tactile paving is also proposed to be delivered northeast of the site to connect the site to the existing pedestrian network in Mepal.

Development Trip Generation

The TEMPRO growth factors used within this assessment are acceptable for use.

Vehicle trip generation for the development should be calculated as vehicle trips rather than PCUs for CCC to review. Furthermore, the applicant is advised to undertake a TRICS assessment to calculate vehicle trip generation for the proposed development for comparison purposes.

Trip Distribution

Distribution of development traffic has been based on the observed turning proportions obtained from the traffic surveys. This is agreed.

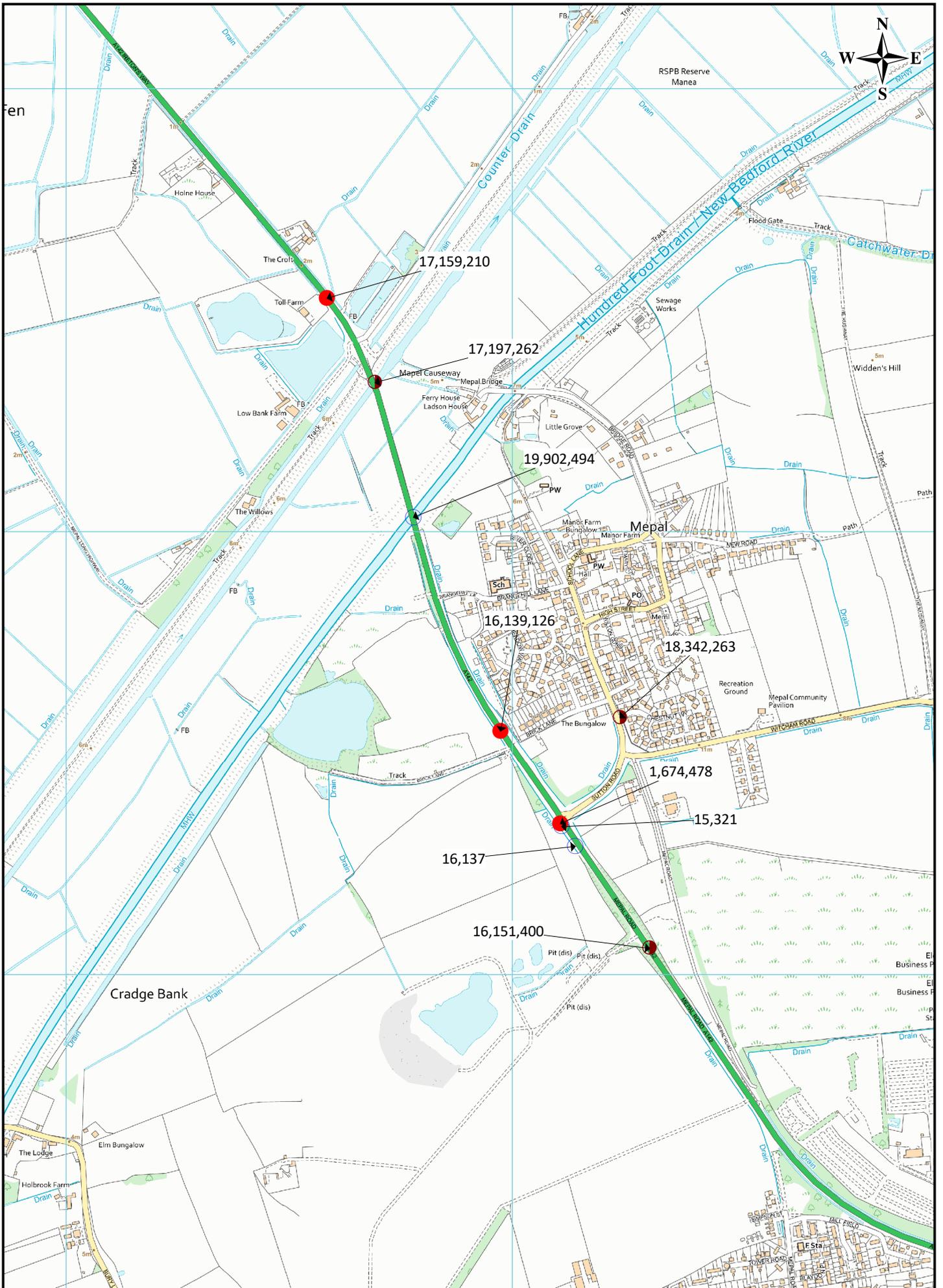
Highway Capacity

The junction capacity assessments cannot be reviewed until such a time as the development vehicle trip generation is agreed.

Conclusion

The application as submitted does not include sufficient information to properly determine the highway impact of the proposed development. Were the above issues addressed the Highway Authority would reconsider the application.

CCC therefore requests that this application not be determined until such time as the additional information above has been submitted and reviewed.



Date	Police_ref	Easting	Northing	Severity	Road_con	Visibility	Casualties	Pedestrian	Cycles	P2W	OAPs	Children	Manoeuvr	Time	Vehicles	Roadclass:Roadnum!	Road_Typ	Speed_Lin	Junct_det	Junct_ctrl	Roadclass:Roadnum!	Cross_ctrl	Cross_fac	Weather	SpCond	Carr_haz	Day	Location	Local_Autl	Reported#	Parish
20150228	15321	544109	280335	3. Slight	1. Dry	1. Daylight	3	0	0	0	0	3	0 2. Right tu	15:46	2 3. A	142 6. Single c		60 3. T & Stag	4. Give wa	5. C	328 0. None	0. None w	4. Fine wit	4 0. None	7. Saturda	A142 IRET	E0700000!	1. Yes	211		
20160121	16137	544140	280290	3. Slight	4. Frost/ic	1. Daylight	1	0	0	0	0	0 0. No turn	07:27	4 3. A	142 6. Single c		60 0. Not witl	. Not appli	. Not appli	0 0. None	0. None w	7. Fog or n	0 3. Inv with	5. Thursda	A142 50M	E0700000!	1. Yes	211			
20160608	1674478	544106	280341	1. Fatal	1. Dry	1. Daylight	1	0	0	1	0	0 2. Right tu	07:27	2 3. A	142 6. Single c		60 3. T & Stag	4. Give wa	6. Unclassi	0 0. None	0. None w	1. Fine wit	4 0. None	4. Wednes	MEPAL RCE	E0700000!	1. Yes	211			
20161022	16151400	544306	280060	2. Serious	1. Dry	1. Daylight	1	0	1	0	1	0 0. No turn	10:17	2 3. A	142 6. Single c		60 0. Not witl	. Not appli	. Not appli	0 0. None	0. None w	1. Fine wit	0 0. None	7. Saturda	MEPAL RCE	E0700000!	1. Yes	211			
20161220	16139126	543972	280550	1. Fatal	1. Dry	4. Darknes	4	0	0	0	1	0 0. No turn	06:01	5 3. A	142 6. Single c		60 3. T & Stag	4. Give wa	6. Unclassi	0 0. None	0. None w	1. Fine wit	4 0. None	3. Tuesday	WESTBOU	E0700000!	1. Yes	211			
20170227	17159210	543583	281528	1. Fatal	1. Dry	1. Daylight	4	0	0	0	2	0 0. No turn	17:05	2 3. A	142 6. Single c		60 0. Not witl	. Not appli	. Not appli	0 0. None	0. None w	1. Fine wit	0 0. None	2. Monday	IRETONS V	E0700000!	1. Yes	0			
20170623	17197262	543691	281337	2. Serious	1. Dry	1. Daylight	1	0	0	0	0	0 0. No turn	17:35	2 3. A	142 6. Single c		60 0. Not witl	. Not appli	. Not appli	0 0. None	0. None w	1. Fine wit	0 0. None	6. Friday	IRETONS V	E0700000!	1. Yes	159			
20181019	18342263	544240	280580	2. Serious	1. Dry	1. Daylight	1	0	0	0	0	0 2. Right tu	17:24	2 6. Unclassi	0 6. Single c		30 3. T & Stag	4. Give wa	6. Unclassi	0 0. None	0. None w	1. Fine wit	0 0. None	6. Friday	SUTTON R	E0700000!	1. Yes	0			
20191114	19902494	543777	281033	3. Slight	1. Dry	1. Daylight	3	0	0	0	2	1 0. No turn	15:39	2 3. A	142 6. Single c		60 0. Not witl	. Not appli	. Not appli	0 0. None	0. None w	1. Fine wit	0 0. None	5. Thursda	CHATTER!	E0700000!	1. Yes	0			

Calculation Reference: AUDIT-738101-200625-0618

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	KC KENT	2 days
	SC SURREY	1 days
	WS WEST SUSSEX	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	2 days
	SF SUFFOLK	3 days
05	EAST MIDLANDS	
	LE LEICESTERSHIRE	1 days
	LN LINCOLNSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 7 to 99 (units:)
 Range Selected by User: 7 to 100 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/11/19

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

Selected survey days:

Monday	2 days
Tuesday	3 days
Wednesday	2 days
Thursday	4 days
Friday	2 days

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

Selected survey types:

Manual count	13 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	6
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	9
Village	4

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

Secondary Filtering selection:

Use Class:

C3 13 days

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

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	2 days
5,001 to 10,000	3 days
10,001 to 15,000	2 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days

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

Population within 5 miles:

25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days
125,001 to 250,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	7 days
1.6 to 2.0	2 days

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

Travel Plan:

No 13 days

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

PTAL Rating:

No PTAL Present 13 days

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

LIST OF SITES relevant to selection parameters

1	CA-03-A-05 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES	CAMBRI DGESHI RE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 <i>Survey date: MONDAY 17/10/16</i>		<i>Survey Type: MANUAL</i>
2	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 99 <i>Survey date: WEDNESDAY 05/06/19</i>		<i>Survey Type: MANUAL</i>
3	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH	MIXED HOUSES & FLATS	KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 51 <i>Survey date: THURSDAY 14/07/16</i>		<i>Survey Type: MANUAL</i>
4	KC-03-A-05 ROCHESTER ROAD NEAR CHATHAM BURHAM	DETACHED & SEMI -DETACHED	KENT
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 8 <i>Survey date: FRIDAY 22/09/17</i>		<i>Survey Type: MANUAL</i>
5	LE-03-A-02 MELBOURNE ROAD IBSTOCK	DETACHED & OTHERS	LEICESTERSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 85 <i>Survey date: THURSDAY 28/06/18</i>		<i>Survey Type: MANUAL</i>
6	LN-03-A-03 ROOKERY LANE LINCOLN BOULTHAM	SEMI DETACHED	LINCOLNSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 22 <i>Survey date: TUESDAY 18/09/12</i>		<i>Survey Type: MANUAL</i>
7	NF-03-A-01 YARMOUTH ROAD CAISTER-ON-SEA	SEMI DET. & BUNGALOWS	NORFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 27 <i>Survey date: TUESDAY 16/10/12</i>		<i>Survey Type: MANUAL</i>
8	NF-03-A-02 DEREHAM ROAD NORWICH	HOUSES & FLATS	NORFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 98 <i>Survey date: MONDAY 22/10/12</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	SC-03-A-04 HIGH ROAD BYFLEET	DETACHED & TERRACED	SURREY
	Edge of Town Residential Zone Total No of Dwellings: 71 <i>Survey date: THURSDAY 23/01/14</i>		<i>Survey Type: MANUAL</i>
10	SF-03-A-04 NORMANSTON DRIVE LOWESTOFT	DETACHED & BUNGALOWS	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 7 <i>Survey date: TUESDAY 23/10/12</i>		<i>Survey Type: MANUAL</i>
11	SF-03-A-05 VALE LANE BURY ST EDMUNDS	DETACHED HOUSES	SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings: 18 <i>Survey date: WEDNESDAY 09/09/15</i>		<i>Survey Type: MANUAL</i>
12	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI-DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 38 <i>Survey date: FRIDAY 22/09/17</i>		<i>Survey Type: MANUAL</i>
13	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS	WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 <i>Survey date: THURSDAY 19/10/17</i>		<i>Survey Type: MANUAL</i>

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
EX-03-A-02	Has rail
NF-03-A-03	Has rail

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

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	13	47	0.067	13	47	0.294	13	47	0.361
08:00 - 09:00	13	47	0.136	13	47	0.368	13	47	0.504
09:00 - 10:00	13	47	0.133	13	47	0.169	13	47	0.302
10:00 - 11:00	13	47	0.122	13	47	0.186	13	47	0.308
11:00 - 12:00	13	47	0.159	13	47	0.144	13	47	0.303
12:00 - 13:00	13	47	0.161	13	47	0.167	13	47	0.328
13:00 - 14:00	13	47	0.179	13	47	0.205	13	47	0.384
14:00 - 15:00	13	47	0.172	13	47	0.177	13	47	0.349
15:00 - 16:00	13	47	0.248	13	47	0.177	13	47	0.425
16:00 - 17:00	13	47	0.292	13	47	0.192	13	47	0.484
17:00 - 18:00	13	47	0.323	13	47	0.158	13	47	0.481
18:00 - 19:00	13	47	0.263	13	47	0.163	13	47	0.426
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.255			2.400			4.655

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

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

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Parameter summary

Trip rate parameter range selected: 7 - 99 (units:)
Survey date range: 01/01/12 - 19/11/19
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: 2

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



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