

G.H. MYERS LTD

**CHANGE OF USE OF AGRICULTURAL BUILDINGS TO EMPLOYMENT USE (WITHIN THE
B1C, B2 AND B8 USE CLASSES) AT POPLAR FARM, AUSTENDYKE ROAD,
WESTON HILLS, SPALDING, LINCOLNSHIRE**

TRANSPORT STATEMENT

**September 2019
apk/19031/v1**

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Document Status – Draft

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1 INTRODUCTION

1.1 Introduction

1.1.1 This report considers the transport implications of a retrospective planning application for the change of use of agricultural buildings at Poplar Farm, Austendyke Road, Weston Hills, Spalding, to Employment Use within the B1c, B2 and B8¹ use classes. The site is situated some 5km east of Spalding, to the south of B1165 Austendyke Road, as shown in figure 1.

1.1.2 The site extends to some 1.49 hectares, with an established vehicular access to Austendyke Road, as indicated in figure 2. The site is occupied by three substantial brick buildings providing a total gross floor area of 4680sqm, with extensive concrete surfaced areas adjacent to each building for parking and servicing. The buildings were initially used primarily for the storage of onions with ancillary space for management and operation of the farm. Roller shutter doors are available to each unit to allow commercial vehicles to access the storage areas, with smaller doors available for employee access.

1.1.3 Operation of Poplar Farm has evolved such that the buildings are no longer required for uses related to agriculture. In recent years, the buildings have been occupied by a range of businesses, with uses within the B1c, B2 and B8 use classes, with the three buildings sub-divided into 17 smaller units and studios. The purpose of this report is therefore to demonstrate that the current uses of the buildings at Poplar Farm are satisfactory from a transport viewpoint and to support a retrospective planning application for these uses.

1.1.4 In pre-application liaison, Lincolnshire County Council as local highway authority have requested that a Transport Statement be provided as part of the planning application, whilst commenting that the refusal of planning permission on highway grounds is unlikely to be justified. Details of pre-application liaison with the County Council are provided as Appendix A.

¹ Use Classes B1c – Light Industry, B2 – General Industry, B8 – Storage or Distribution
 Change Of Use Of Agricultural Buildings To Employment Use (Within The B1c, B2 And B8 Use Classes) At Popl
 Farm, Austendyke Road,
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1.2 Scope of this Report

1.2.1 Subsequent sections of the report consider the following matters:

- Section Two – relevant transport policy issues
- Section Three - existing traffic conditions in the vicinity of the site
- Section Four - the transport implications of the proposed development
- Section Five – provides a summary and conclusion to the report

2 TRANSPORT POLICY CONSIDERATIONS

2.1 Introduction

2.1.1 This section of the report considers the context for this report provided by national and local policy guidance, including the National Planning Policy Framework and the South East Lincolnshire Local Plan.

2.2 National Planning Policy Framework

2.2.1 The National Planning Policy Framework (NPPF) published by Government in July 2018 establishes a presumption in favour of sustainable development (paragraph 10), advising (in paragraph 11) that for decision-taking this means:

- *approving development proposals that accord with an up-to-date development plan without delay; or*
- *where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:*
 - *the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or*
 - *any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.*

2.2.2 The site is located in a rural area east of Spalding. It is considered that the proposals for the site are supported by guidance provided in paragraphs 83 and 84 of the Framework (detailed below), which advocate a 'prosperous rural economy'. Paragraph 83 of the Framework (notably clauses 'a' and 'b') provides for the growth and expansion of rural businesses, 'through conversion of existing buildings' and the development and diversification of agricultural and other land-based rural businesses'.

2.2.3 As indicated in section one of this report, the buildings within the site are no longer required for agricultural use. Rental to other business occupiers thereby enables diversification of the business interests of GH Myers Ltd whilst also providing accommodation and opportunities for growth and expansion of the small businesses occupying the premises.

NPPF Paragraph 83: *Planning policies and decisions should enable:*

- a) the sustainable growth and expansion of all types of business in rural areas, both through conversion of existing buildings and well-designed new buildings;*
- b) the development and diversification of agricultural and other land-based rural businesses;*
- c) sustainable rural tourism and leisure developments which respect the character of the countryside; and*
- d) the retention and development of accessible local services and community facilities, such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship.*

2.2.4 Paragraph 84 of the Framework recognises that in rural areas, sites for local businesses may need to be found beyond existing settlements and in locations that are not well served by public transport. Whilst the site at Poplar Farm is not well served by public transport, subsequent sections of this report demonstrate that use of the site for business purposes generates only a modest level of trip making that is safely and adequately accommodated on the local highway network.

Paragraph 84: *Planning policies and decisions should recognise that sites to meet local business and community needs in rural areas may have to be found adjacent to or beyond existing settlements, and in locations that are not well served by public transport. In these circumstances it will be important to ensure that development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (for example by improving the scope for access on foot, by cycling or by public transport). The use of previously developed land, and sites that are physically well-related to existing settlements, should be encouraged where suitable opportunities exist.*

2.2.5 With regard to transport related matters more generally, paragraph 109 of the Framework indicates:

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

The analysis provided in section 4 of this report demonstrates that significant impacts on highway safety or operation of the road network are not anticipated, such that the refusal of planning permission for the proposed use would not be justified.

2.3 South East Lincolnshire Local Plan

2.3.1 The South East Lincolnshire Local Plan was formally adopted in March 2019 and provides a policy framework for decisions on land use and development in the South Holland and Boston local authority areas for the period to 2036. The Local Plan envisages most new development taking place in the sub-regional centres of Spalding and Boston and other main service centres, designating the site location as part of a countryside area east of Spalding.

2.3.2 Support for the proposed change of use at Poplar Farm is however provided by Policy 7 of the adopted Local Plan. The Policy recognises the potential for employment land uses outside allocated sites where the conversion or re-use of redundant buildings is proposed, subject to specified criteria including there being 'no significant adverse impact on the local highway network'. The analysis provided in section 4 of this report demonstrates that the proposed change of use at Poplar Farm satisfies this criterion.

2.4 Summary

2.4.1 The National Planning Policy Framework and the South East Lincolnshire Local Plan provide support for the proposals, recognising the potential for employment land uses in rural areas, such as Poplar Farm where the re-use of existing buildings is proposed. The support provided is subject to the caveat that that no significant adverse impact on the local highway network should arise, with subsequent sections of this report demonstrating that that the proposed change of use at Poplar Farm satisfies this criterion.

3 EXISTING CONDITIONS

3.1 Introduction

3.1.1 This section of the report considers existing conditions in the vicinity of the site.

3.2 The Local Highway Network

3.2.1 The site is located to the south of B1165 Austendyke Road; designation as a classified 'B' road being indicative of the suitability of the route for use by all categories of vehicular traffic. The B1165 route is a two-lane single carriageway, providing for access to fronting properties and the distribution of local traffic. The B1165 also provides a road link to Spalding and the A16 route, which is used for longer distance traffic movements to Peterborough to the south, Boston to the north and to locations further afield.

3.2.2 In the vicinity of the site Austendyke Road provides a 6.0 metre carriageway. The road is flanked to the nearside by a grass verge of around 5.0 metres and the Austen Dike watercourse, with a grass verge of around 3.0 metres to the farside. This section of Austendyke Road is generally flat and straight although there is a slight bend around 120 metres to the west of the site.

3.2.3 A well maintained 6.0 metre wide, concrete surfaced access to the site is available from Austendyke Road. By virtue of the wide nearside grass and the carriageway alignment, drivers exiting the site have a good perception of approaching traffic, over a distance of around 160 metres to the left and right. The access is in regular use by a cars, vans and occasional heavy goods vehicles and has been observed to provide safely and adequately for these demands. As well as providing access to the application site, the access road also serves to two dwellings which adjoin the application site to the east.

3.3 Accessibility

3.3.1 As indicated in section 2 of this report, national and local policy guidance provide qualified support for the creation of employment opportunities in rural locations where accessibility may be limited, particularly those involving beneficial re-use of an existing building. With no footway on Austendyke Road and having regard to the rural location, there is little likelihood of employees walking to and from work. Similarly, with only school buses passing the site, there is little likelihood of employees traveling to work by bus.

3.3.2 Cycling is recognised as having the potential to substitute for short car trips, particularly those under 5km (equivalent to a 20 minute cycle ride). The 5km cycling catchment is shown in figure 3 and includes parts of Spalding, the villages of Weston, Moulton, Whaplode, Weston Hills and Moulton Chapel. With generally favourable local topography and with most roads in the local area relatively lightly trafficked, cycling to and from work will be a realistic option for locally based employees.

3.4 Existing Traffic Flows

3.4.1 Manual classified peak period traffic counts were undertaken at the site access to Austendyke Road on Thursday 12 September 2019 to establish existing traffic flows. The count periods were from 07:00-09:00 and from 16:00-18:00. The results of the survey are summarised in the table below, presented diagrammatically in figure 4 and provided in full in Appendix B. It should be noted that all units at Poplar Farm were occupied on the date of the survey.

Location	Direction	Morning Peak Hour (veh)	Evening Peak Hour (veh)
Austendyke Road, west of site access	Eastbound towards the site	85	138
	Westbound towards Spalding	150	111
Austendyke Road, east of site access	Eastbound towards B1357 Hall Gate	80	143
	Westbound towards the site	151	108
Site Access	Inbound	8	11
	Outbound	2	3

Table 3.1 Existing Weekday Peak Hour Traffic

3.4.2 It can be seen that traffic flows on Austendyke Road are at a modest level, with peak two-way flows of around 250 vehicles per hour. Traffic movements into and out of the application site are at a low level, with 10 vehicle movements in the morning peak hour and 14 vehicle movements in the evening peak hour.

- 3.4.3 The count data has been further analysed to provide details of the composition of traffic flows at the site access junction. It is notable that there were no HGV movements into or out of the site during peak hours. As indicated in the table below, the majority of peak hour traffic movements on Austendyke Road were by cars and light vans with the proportion of HGV traffic at a low level.

Period	Cars and Light Vans	HGV	PSV	Motor Cycle	Pedal Cycle	Total
Morning Peak Hour	225	8	3	2	0	238
	94.5%	3.4%	1.3%	0.8%	0.0%	100.0%
Evening Peak Hour	250	4	0	3	0	257
	97.3%	1.6%	0.0%	1.2%	0.0%	100.0%

Table 3.2 Composition of Peak Hour Traffic – Site Access Junction With Austendyke Road

3.5 Road Safety

- 3.5.1 Details of road traffic accidents on the local highway network have been checked, with no accidents involving injury recorded on Austendyke Road within 200 metres of the access to Poplar Farm in the last 5 years. The site access arrangements therefore have a proven record of safe operation with no road safety issues that would justify withholding planning permission for the proposed development.

3.6 Operational Assessment

- 3.6.1 Weekday peak hour operation of the site access junction with Austendyke Road has been analysed using the Transport Research Laboratory (TRL) computer program PICADY. The results of this analysis are summarised in the table below and set out in full in Appendix C. The analysis indicates that traffic flows at the site access junction are well within capacity, with no discernible queues. The results of the PICADY analysis are confirmed by observations on site during which indicate site access arrangements providing safely and adequately for existing traffic with no discernible congestion or delays.

Location	MORNING PEAK HOUR		EVENING PEAK HOUR	
	Ratio of Flow to Capacity	Max. Queue (vehicles)	Ratio of Flow to Capacity	Max. Queue (vehicles)
Site Access	0.004	0.0	0.024	0.0
Austendyke Road Eastbound and right turn to Site Access	0.010	0.0	0.004	0.0

Table 3.3 2019 Existing Operation of the Site Access Junction With Austendyke Road

3.7 Summary

- 3.7.1 Traffic flows on Austendyke Road are at a modest level, with peak two-way flows of around 250 vehicles per hour. Traffic movements into and out of the site at Poplar Farm are at a low level, with 10 vehicle movements in the morning peak hour and 14 vehicle movements in the evening peak hour. Traffic flows at the site access are well within capacity, with no discernible congestion or delays. The site access arrangements have a proven record of safe operation with no road safety issues that would justify withholding planning permission for the proposed development.

4 TRANSPORT IMPLICATIONS OF THE PROPOSED DEVELOPMENT

4.1 Introduction

4.1.1 This section of the report considers the transport implications of the proposed development.

4.2 Traffic Generation

4.2.1 The site is currently fully occupied by business users within the B1b, B2 and B8 use classes. The traffic surveys detailed in section 3 of this report indicate the volume of traffic generated as being 10 vehicle movements in the morning peak hour and 14 vehicle movements in the evening peak hour. As listed in Appendix C, 16 small businesses are currently based at Poplar Farm, with a total of 39 people employed. An estimate of the volume of traffic generated has been provided by each occupier, indicating a total of 134 vehicle movements over a typical weekday.

4.2.2 The paragraphs below compare the volume of generated traffic recorded in the surveys and estimated by occupiers, with that indicated by reference to the TRICS database² (version 7.6.2). Trip rates have been obtained by reference to the 'Employment – Industrial Estate' section of TRICS by comparison with similar established sites in UK mainland locations, excluding sites in Greater London and in town centre and edge of town centre locations.

4.2.3 It is considered that the 'industrial estate' section of TRICS is an appropriate source of trip rate data. The predominant use land use within this category is B2 (General Industry), with some elements of B8 (Storage and Distribution) and B1c (Light Industry). The land uses evident in the industrial estate category of TRICS are therefore comparable with those at Poplar Farm³.

² TRICS – Trip Rate Information Computer System

³ TRICS does not include a separate category for B1c light industry. It is however normal practice to use trip rates for B2 general industry to assess trip making for light industrial uses. As B8 (Storage or Distribution) uses normally generate a lower level of trip making than B2 general industry, trip rates for 'industrial estate' are considered robust in relation to Poplar Farm.

4.2.4 Levels of traffic generated by a development of 4680sqm GFA indicated by reference to trip rates from the TRICS database are indicated in the table 4.1 below, with output from TRICS contained in Appendix D. For comparative purposes, table 4.2 indicates peak hour traffic generation recorded in the recent survey and the estimate of daily traffic generation provided by current occupiers.

4.2.5 It can be seen from tables 4.1 and 4.2 that in terms of peak hour traffic generation, the levels of traffic generation indicated by TRICS and those observed on site are closely comparable, with traffic generation at a low level. With regard to traffic generation over a full day, the estimate of traffic generation provided by current occupiers at Poplar Farm is slightly higher than that provided by TRICS. A common characteristic of the analysis is that employment use of the site at Poplar Farm generates only a small volume of traffic.

Time Range	ARRIVALS		DEPARTURES	
	Trip Rate (veh/100sqm GFA)	Vehicles	Trip Rate (veh/100sqm GFA)	Vehicles
Morning Peak Hour	0.171	8	0.072	3
Evening Peak Hour	0.069	3	0.175	8
Weekday	1.178	55	1.189	56

Table 4.1 Weekday Traffic Generation (Based on TRICS - 4680sqm GFA)

Time Range	ARRIVALS	DEPARTURES
	Vehicles	Vehicles
Morning Peak Hour	8	2
Evening Peak Hour	3	11
Weekday	67	67

Table 4.2 Weekday Traffic Generation (Based on Traffic Survey and Occupier Estimates – 4680sqm GFA)

4.3 Site Layout, Parking and Servicing

4.3.1 As may be seen in the site layout included as figure 2, the site is occupied by three substantial brick buildings with extensive concrete surfaced areas to the front, side and rear of each building available for parking and servicing. Whilst parking spaces are not formally marked out, it is clear from observations on site that ample parking space is available adjacent to the buildings for use by the 39 people currently employed at Poplar Farm (Appendix D) and occasional visitors.

- 4.3.2 The Council's parking standards for new development are set out in Appendix 6 of the adopted Local Plan. Standards for B1, B2 and B8 use classes are indicated with the B2 standard of 1 space per 65sqm considered to provide a reasonable yardstick for the development as a whole. Appendix 6 does not provide a standard for light industry, with the B1 standard of 1 space per 30sqm considered appropriate for office use (B1a) rather than light industrial uses. With B2 uses more intensive than B8 uses, for which a standard of 1 space per 150sqm is indicated, the B2 standard of 1 space per 65sqm is considered more reasonable.
- 4.3.3 Applying the B2 standard to the site as a whole indicates a demand for 72 parking spaces. Vehicles currently parked perpendicular to the building facades, avoiding roller shutter doors and entrance doors. With each building having façades of 30-50 metres in length and aisles of at least 16 metres between buildings it is clear that 72 vehicles could be readily accommodated on site, should the need arise, consistent with the Council's standard. Clearly however with 39 people currently employed at Poplar Farm existing parking demand is well below this level.
- 4.3.4 The Council's parking standards indicate a requirement for 1 cycle parking space per 200sqm GFA, equivalent to 23 cycle parking spaces. It is considered that suitable cycle parking space is available within each unit to meet the needs of cyclists.
- 4.3.5 With regard to service vehicle access, the recent traffic surveys detailed in section 3 of this report demonstrate that the majority of service vehicles attracted to the site are light vans, with no HGV movements recorded. Swept path analysis using the Autotrack computer program has however been undertaken to demonstrate that the HGV movements can be accommodated at the site access and within the site, when required.
- 4.3.6 The swept path of a 16.5 metre maximum length articulated goods vehicle is modelled in figure 5. The analysis shows the vehicle turning into and out of the site to and from Austendyke Road and also accessing with various units within the site, confirming that that suitable service vehicle access is available.

4.4 Future Traffic Flows

4.4.1 The analysis of traffic impact focusses on the weekday morning and evening peak hours as it is during these periods that any material interaction between traffic on Austendyke Road and traffic generated by use of the site at Poplar Farm may be anticipated. Consistent with recommended practice, the traffic effects of the proposed use have been considered in a 2024 assessment year, 5 years after the date of planning submission.

4.4.2 Traffic flows in the 2024 assessment year have been derived by applying a growth factor been obtained from TEMPRO (version 7.2), with local adjustment for the South Holland local authority area (dataset AF15) to existing traffic. 2019-2024 growth factors of 7.69% for the morning peak period and 7.59% for the evening peak period have been obtained in this way.

4.4.3 The analysis set out in section 4.2 above demonstrates that the traffic figures recorded in the recent survey provide an appropriate baseline for impact assessment. Peak hour traffic flows at the site access junction with Austendyke Road, factored to a 2024 level are shown in figure 6. It can be seen that traffic movements generated by the employment uses at Poplar Farm are below the 'materiality threshold' of 30 vehicle movements per hour set out in Government guidance. As such it is appropriate to conclude that traffic generated by the employment uses would not materially affect operation of the wider highway network.

4.5 Operational Assessment

4.5.1 Weekday peak hour operation of the site access junction with Austendyke Road in the 2024 assessment year has been analysed using the Transport Research Laboratory (TRL) computer program PICADY. The results of this analysis are summarised in the table below and set out in full in Appendix F. The analysis indicates that traffic flows at the site access junction remain well within capacity, with no discernible traffic queues.

Location	MORNING PEAK HOUR		EVENING PEAK HOUR	
	Ratio of Flow to Capacity	Max. Queue (vehicles)	Ratio of Flow to Capacity	Max. Queue (vehicles)
Site Access	0.004	0.0	0.027	0.0
Austendyke Road Eastbound and right turn to Site Access	0.012	0.0	0.004	0.0

Table 4.3 2024 Operation of the Site Access Junction With Austendyke Road

4.6 Summary

- 4.6.1 Employment uses of the site at Poplar Farm generate only a small volume of traffic, with generated traffic movements below the 'materiality threshold' of 30 vehicle movements per hour set out in Government guidance. As such it is appropriate to conclude that traffic generated by the employment uses would not materially affect operation of the wider highway network. The analysis provided in this report confirms that existing site access arrangements will continue to operate safely and satisfactorily in the future, with traffic flows remaining well within capacity and no discernible traffic queues.
- 4.6.2 Extensive concrete surfaced areas to the front, side and rear of the existing buildings are available for parking and servicing. Whilst parking spaces are not formally marked out, it is clear that ample parking space is available, consistent with the Council's standard. Recent traffic surveys demonstrate that the majority of service vehicles attracted to the site are light vans, with no heavy goods vehicles recorded. Swept path analysis however demonstrates that the vehicles up to the size of a 16.5 metre articulated vehicle can be accommodated, when required.

5 SUMMARY AND CONCLUSIONS

5.1 Introduction

5.1.1 This report considers the transport implications of a retrospective planning application for the change of use of agricultural buildings at Poplar Farm, Austendyke Road, Weston Hills, Spalding, to Employment Use within the B1c, B2 and B8 use classes. The site extends to some 1.49 hectares, with established vehicular access to Austendyke Road.

5.1.2 The site is occupied by three substantial brick buildings providing a total gross floor area of 4680sqm, with extensive concrete surfaced areas adjacent to each building for parking and servicing. The buildings were initially used primarily for the storage of onions with ancillary space for management and operation of the farm but are no longer required for these purposes. In recent years, the buildings have been occupied by a range of businesses, with uses within the B1c, B2 and B8 use classes.

5.2 Transport Policy Considerations

5.2.1 The National Planning Policy Framework and the South East Lincolnshire Local Plan provide support for the proposals, recognising the potential for employment land uses in rural areas, such as Poplar Farm where the re-use of existing buildings is proposed. The support provided is subject to the caveat that that no significant adverse impact on the local highway network should arise, with this report demonstrating that that the proposed change of use at Poplar Farm satisfies this criterion.

5.3 Existing Conditions

5.3.1 Traffic flows on Austendyke Road are at a modest level, with peak two-way flows of around 250 vehicles per hour. Traffic movements into and out of the site at Poplar Farm are at a low level, with 10 vehicle movements in the morning peak hour and 14 vehicle movements in the evening peak hour. Traffic flows at the site access are well within capacity, with no discernible congestion or delays. The site access arrangements have a proven record of safe operation with no road safety issues that would justify withholding planning permission for the proposed development.

5.4 Transport Implications of the Proposed Development

5.4.1 Employment uses of the site at Poplar Farm generate only a small volume of traffic, with generated traffic movements below the 'materiality threshold' of 30 vehicle movements per hour set out in Government guidance. As such it is appropriate to conclude that traffic generated by the employment uses would not materially affect operation of the wider highway network. The analysis provided in this report confirms that existing site access arrangements will continue to operate safely and satisfactorily in the future, with traffic flows remaining well within capacity and no discernible traffic queues.

5.4.2 Extensive concrete surfaced areas to the front, side and rear of the existing buildings are available for parking and servicing. Whilst parking spaces are not formally marked out, it is clear that ample parking space is available, consistent with the Council's standard. Recent traffic surveys demonstrate that the majority of service vehicles attracted to the site are light vans, with no heavy goods vehicles recorded. Swept path analysis however demonstrates that the vehicles up to the size of a 16.5 metre articulated vehicle can be accommodated, when required.

5.5 Overall Conclusion

5.5.1 Having regard to the above, it is considered that the retrospective planning application for change of use of agricultural buildings at Poplar Farm, Austendyke Road, Weston Hills, Spalding, to Employment Use within the B1c, B2 and B8 use classes, is acceptable from a transport viewpoint.

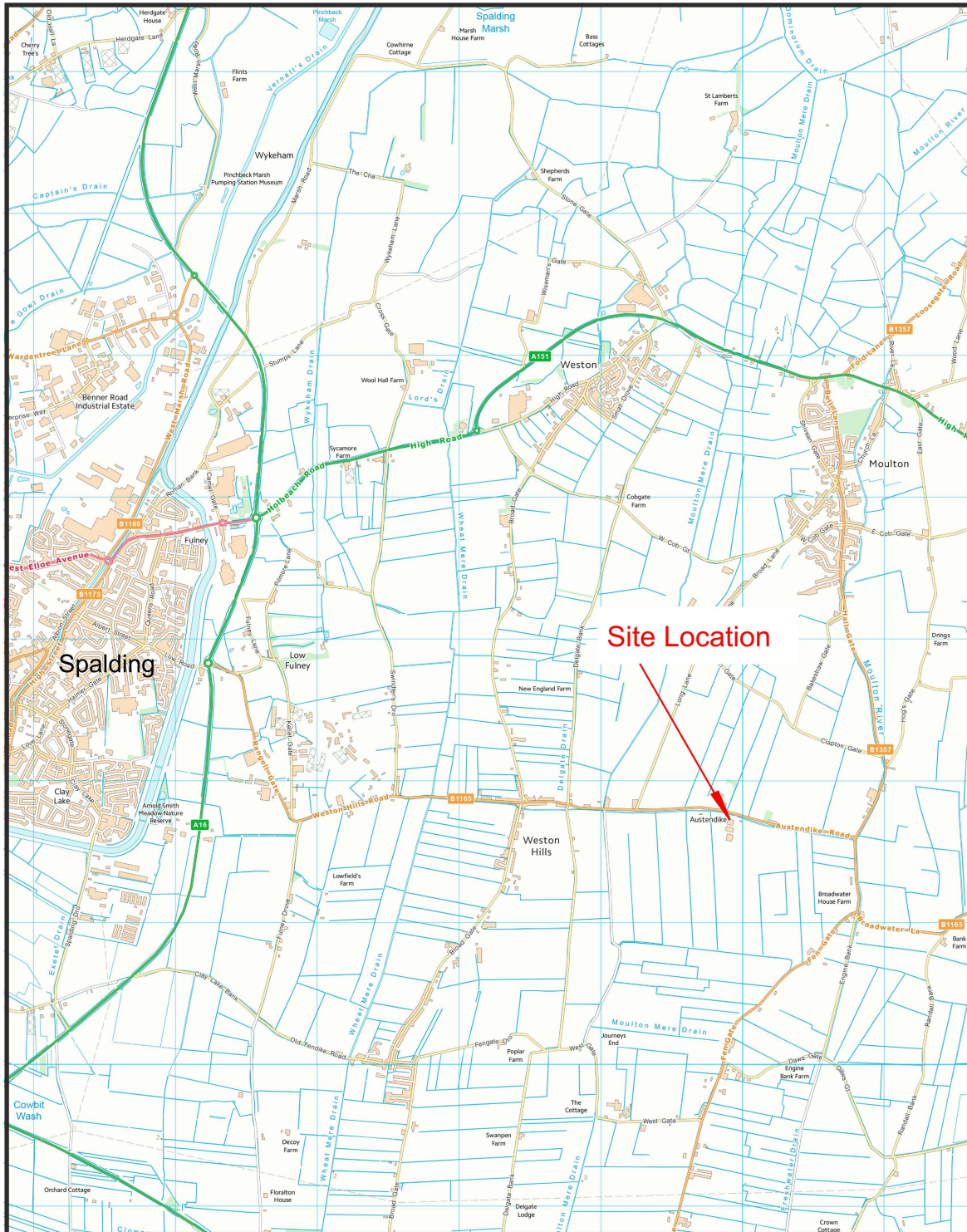


Figure 1
Site Location

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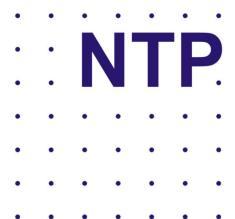
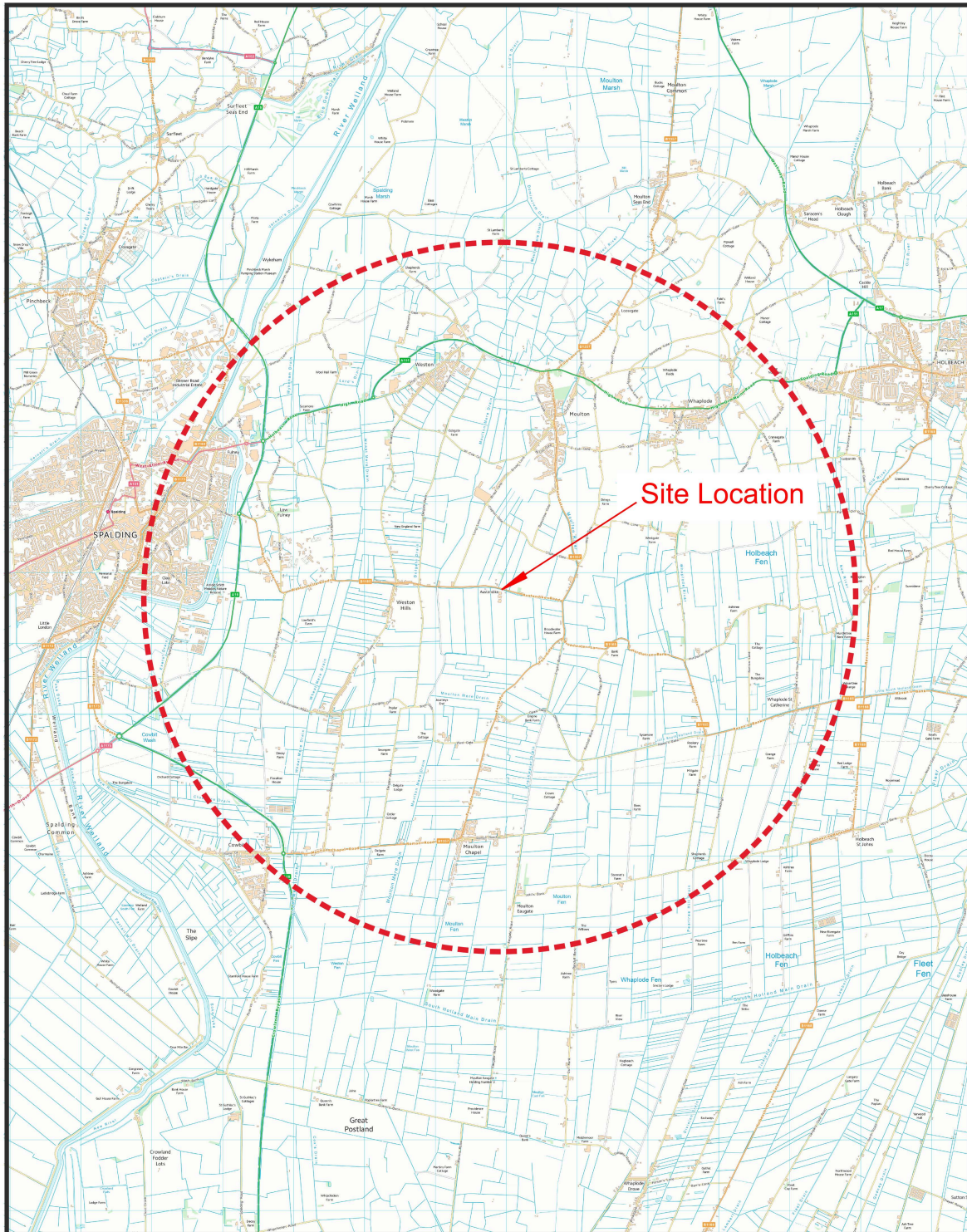


FIGURE 2

SITE OF PROPOSED
RESIDENTIAL DEVELOPMENT

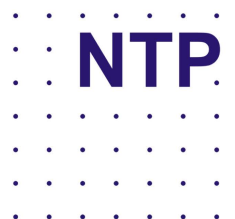
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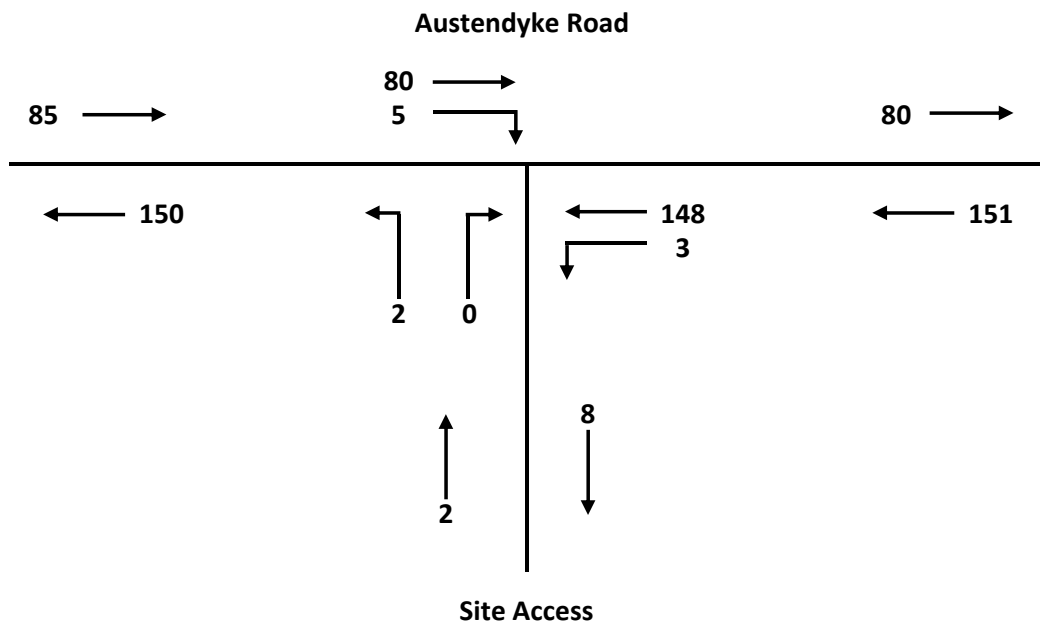
5km Cycling
Catchment

Figure 3
Cycling Catchment

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MORNING PEAK HOUR (08:00-09:00)



EVENING PEAK HOUR (16:45-17:45)

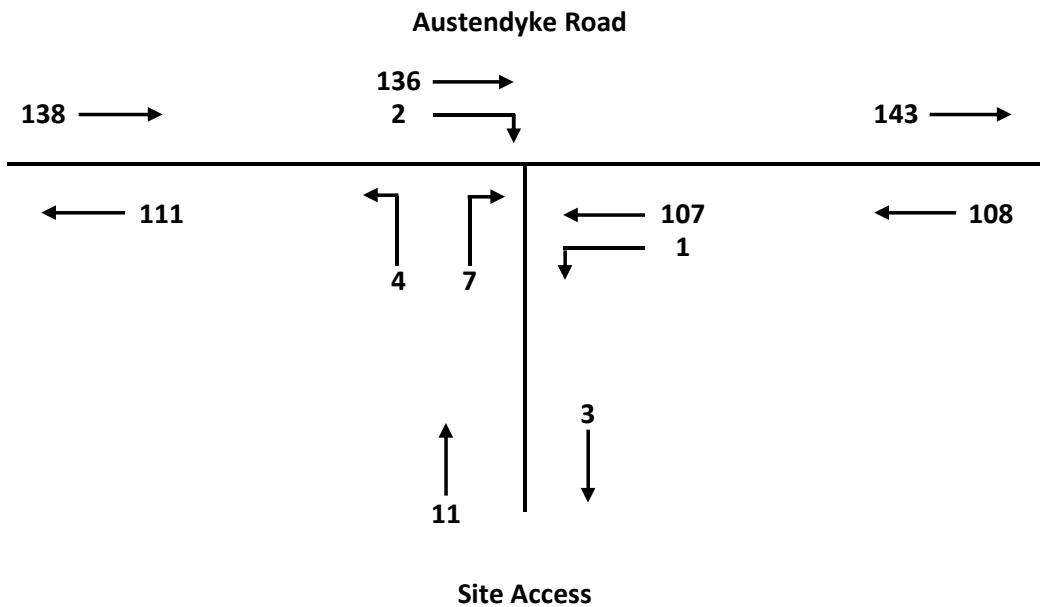
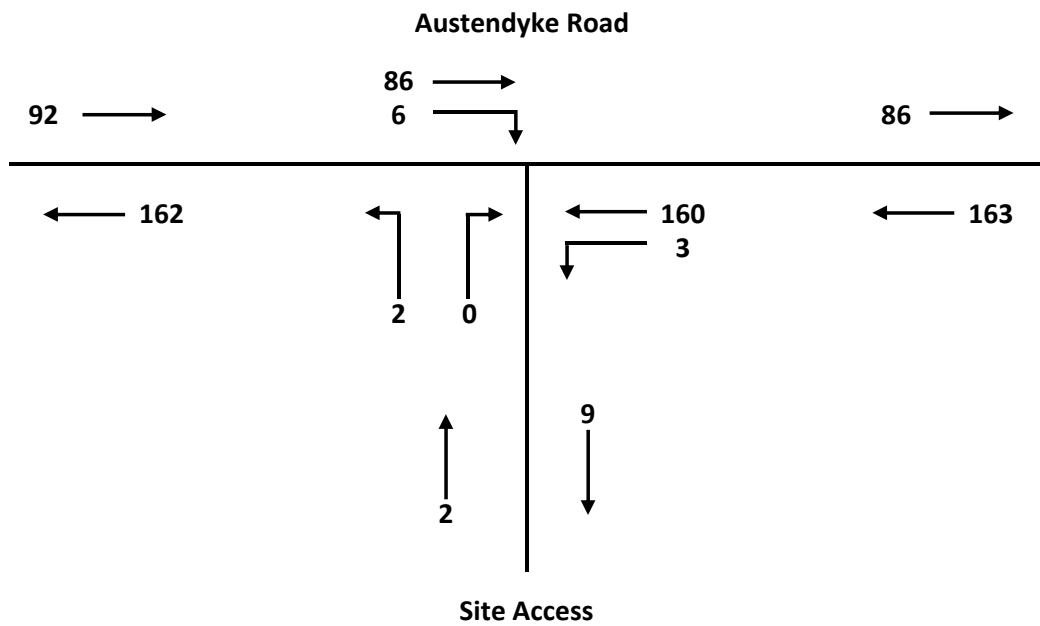


Figure 4
Existing Peak Hour Traffic

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MORNING PEAK HOUR (08:00-09:00)



EVENING PEAK HOUR (16:45-17:45)

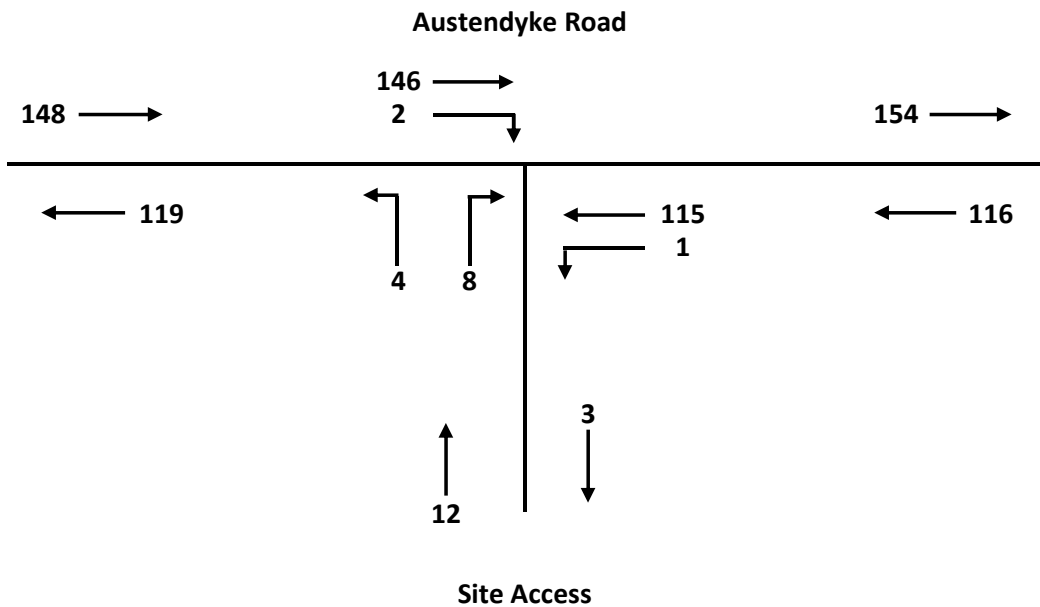


Figure 6
2024 Peak Hour Traffic

Northern Transport Planning Ltd
T 01924 367460
E mail@ntpconsultants.co.uk
W www.ntpconsultants.co.uk



Appendix A

Andy Kirby

Subject: FW: Poplar Farm, Austendyke Road, Weston Hills, Spalding, Lincs, PE12 6BZ

From: Jon Sharpe [REDACTED]
Sent: 07 August 2019 16:19
To: [tim.3dplanning](#) [REDACTED]
Cc: [DGedney](#) [REDACTED]
Subject: RE: Poplar Farm, Austendyke Road, Weston Hills, Spalding, Lincs, PE12 6BZ

Sorry Tim, your e-mail got buried under all the other in-coming when I was on holiday back in June. I have looked at this site for such use several times in the past. The site is not particularly accessible on foot but a mixed B1, B2 and B8 use would not be expected to result in a severe cumulative transportation impact or unacceptably harm highway safety. I think it would be helpful for any Application to be supported by a simple Transport Statement but I do not believe there is sufficient cause to withhold the grant of consent for a B1,B2 and B8 use on highway grounds.

Regards,
Jon.
Jon Sharpe
Principal Development Management Officer
LCC Place Directorate

From: [tim.3dplanning](#) [REDACTED]
Sent: 07 August 2019 13:27
To: Jon Sharpe
Cc: [DGedney](#) [REDACTED]
Subject: FW: Poplar Farm, Austendyke Road, Weston Hills, Spalding, Lincs, PE12 6BZ

Morning Jon
I wonder if you are able to respond to my email below?
I'm happy to talk it through with you if that would be quicker/ easier for you.
Best regards Tim

From: tim Slater <[tim.3dplanning](#)> [REDACTED]
Sent: 24 June 2019 10:54
To: [jon.sharpe](#) [REDACTED]
Subject: Poplar Farm, Austendyke Road, Weston Hills, Spalding, Lincs, PE12 6BZ

Morning Jon
I hope that you are well.
I have been asked to seek retrospective planning permission for the COU of the above from intensive agriculture to the current mix of low intensity B1 (b) and B2 with one unit remaining agricultural B8 (cold store for Onions).
I'm in informal pre app discussion with Dave Gedney and he has suggested I contact you in relation to transport requirements.

A previous application for all B8 was withdrawn H13-0898-06. Link to previous plans below.

https://planning.sholland.gov.uk/OcellaWeb/viewDocument?file=dv_pl_files%5CH13-0898-06%5CH13-0898-06-Plans+272269.pdf&module=pl

the total floorspace on site is approx. 4680 M2.

The site has a good access 5+ m wide and good vis onto Austendyke Rd and thereafter good access to the A16.

Please can you confirm if you require a transport statement or any specific supporting material to accompany the application?

Many thanks

Tim Slater

BA (Hons) DMS MRTPI
3D Planning Ltd.



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Appendix B

Junction of Austendyke Road and Site Access
Thursday 12 September 2019

0700-0715 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	16	0	0	0	0	16	
Austendyke Road right to Site Access	1	0	0	0	0	1	
Site Access left to Austendyke Road	1	0	0	0	0	1	
Site Access right to Austendyke Road	1	0	0	0	0	1	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	21	0	0	0	0	21	40
0715-0730 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	20	0	0	0	0	20	
Austendyke Road right to Site Access	0	0	0	0	0	0	
Site Access left to Austendyke Road	0	0	0	0	0	0	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	2	0	0	0	0	2	
Austendyke Road ahead towards Spalding	21	0	0	0	0	21	43
0730-0745 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	25	0	0	0	0	25	
Austendyke Road right to Site Access	2	0	0	0	0	2	
Site Access left to Austendyke Road	2	0	0	0	0	2	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	24	0	0	0	0	24	53
0745-0800 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	15	0	0	0	0	15	
Austendyke Road right to Site Access	0	0	0	0	0	0	
Site Access left to Austendyke Road	0	0	0	0	0	0	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	20	0	0	0	1	21	36
0800-0815 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	24	0	0	0	0	24	
Austendyke Road right to Site Access	1	0	0	0	0	1	
Site Access left to Austendyke Road	1	0	0	0	0	1	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	2	0	0	0	0	2	
Austendyke Road ahead towards Spalding	42	0	0	0	0	42	70
0815-0830 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	13	2	0	0	0	15	
Austendyke Road right to Site Access	0	0	0	0	0	0	
Site Access left to Austendyke Road	1	0	0	0	0	1	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	39	1	2	0	0	42	58
0830-0845 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	14	0	1	0	0	15	
Austendyke Road right to Site Access	2	0	0	1	0	3	
Site Access left to Austendyke Road	0	0	0	0	0	0	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	1	0	0	0	0	1	
Austendyke Road ahead towards Spalding	33	3	0	0	0	36	55
0845-0900 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	24	1	0	1	0	26	
Austendyke Road right to Site Access	1	0	0	0	0	1	
Site Access left to Austendyke Road	0	0	0	0	0	0	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	27	1	0	0	0	28	55
Peak Hour 0800-0900 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	75	3	1	1	0	80	
Austendyke Road right to Site Access	4	0	0	1	0	5	
Site Access left to Austendyke Road	2	0	0	0	0	2	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	3	0	0	0	0	3	
Austendyke Road ahead towards Spalding	141	5	2	0	0	148	
0800-0900 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Total Peak Hour Vehicles	225	8	3	2	0	238	
	94.5%	3.4%	1.3%	0.8%	0.0%	100.0%	

Junction of Austendyke Road and Site Access
Thursday 12 September 2019

1600-1615 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	28	0	2	0	0	30	
Austendyke Road right to Site Access	0	0	0	0	0	0	
Site Access left to Austendyke Road	0	0	0	0	0	0	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	32	0	0	0	0	32	62
1615-1630 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	34	0	0	1	0	35	
Austendyke Road right to Site Access	2	0	0	0	0	2	
Site Access left to Austendyke Road	0	0	0	0	0	0	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	20	0	0	0	0	20	57
1630-1645 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	31	0	0	0	0	31	
Austendyke Road right to Site Access	0	0	0	0	0	0	
Site Access left to Austendyke Road	1	0	0	0	0	1	
Site Access right to Austendyke Road	1	0	0	0	0	1	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	25	1	0	0	0	26	59
1645-1700 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	30	0	0	0	0	30	
Austendyke Road right to Site Access	0	0	0	0	0	0	
Site Access left to Austendyke Road	3	0	0	0	0	3	
Site Access right to Austendyke Road	1	0	0	0	0	1	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	27	1	0	0	0	28	62
1700-1715 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	45	0	0	0	0	45	
Austendyke Road right to Site Access	1	0	0	0	0	1	
Site Access left to Austendyke Road	0	0	0	1	0	1	
Site Access right to Austendyke Road	1	0	0	0	0	1	
Austendyke Road left to Site Access	1	0	0	0	0	1	
Austendyke Road ahead towards Spalding	23	1	0	0	0	24	73
1715-1730 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	27	0	0	1	0	28	
Austendyke Road right to Site Access	0	0	0	0	0	0	
Site Access left to Austendyke Road	1	0	0	0	0	1	
Site Access right to Austendyke Road	0	0	0	0	0	0	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	25	1	0	0	0	26	55
1730-1745 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	33	0	0	0	0	33	
Austendyke Road right to Site Access	1	0	0	0	0	1	
Site Access left to Austendyke Road	2	0	0	0	0	2	
Site Access right to Austendyke Road	1	0	0	1	0	2	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	28	1	0	0	0	29	67
1745-1800 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	29	0	0	0	0	29	
Austendyke Road right to Site Access	1	0	0	0	0	1	
Site Access left to Austendyke Road	2	0	0	0	0	2	
Site Access right to Austendyke Road	1	0	0	0	0	1	
Austendyke Road left to Site Access	0	0	0	0	0	0	
Austendyke Road ahead towards Spalding	26	0	0	0	0	26	59
Peak Hour 1645-1745 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Austendyke Road ahead Eastbound	135	0	0	1	0	136	
Austendyke Road right to Site Access	2	0	0	0	0	2	
Site Access left to Austendyke Road	6	0	0	1	0	7	
Site Access right to Austendyke Road	3	0	0	1	0	4	
Austendyke Road left to Site Access	1	0	0	0	0	1	
Austendyke Road ahead towards Spalding	103	4	0	0	0	107	
1645-1745 hours	Cars and Light Vans	HGV	PSV	MC	PC	TOT	
Total Peak Hour Vehicles	250	4	0	3	0	257	
	97.3%	1.6%	0.0%	1.2%	0.0%	100.0%	

Appendix C

TRANSPORT RESEARCH LABORATORY

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

Visual PICADY 4 ANALYSIS PROGRAM
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Run with file:- "c:\Program Files (x86)\Junction\PICADY4\adyke exam.vpi" at 15:16:25 on Thursday, 19 September 2019

RUN TITLE

Austendyke Road Site Access - Existing AM

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)
I
I
I
I
I
I
MINOR ROAD (ARM B)

ARM A IS Austendyke Road East
ARM B IS Site Access
ARM C IS Austendyke Road West

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I (W)	6.00 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR)	0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	2.20 M.	I
I	- VISIBILITY	I (VC-B)	200.0 M.	I
I	- BLOCKS TRAFFIC	I	YES	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	100.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	100.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	3.10 M.	I
I	- LANE 2 WIDTH	I (WB-A)	0.00 M.	I

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

			NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
I	ARM	I	I FLOW STARTS	I TOP OF PEAK	I FLOW STOPS	I BEFORE	I AT TOP	I AFTER
I	I	I	I TO RISE	I IS REACHED	I FALLING	I PEAK	I OF PEAK	I PEAK
I	ARM A	I	15.00	I 45.00	I 75.00	I 1.89	I 2.83	I 1.89
I	ARM B	I	15.00	I 45.00	I 75.00	I 0.03	I 0.04	I 0.03
I	ARM C	I	15.00	I 45.00	I 75.00	I 1.06	I 1.59	I 1.06

		TURNING PROPORTIONS					
		TURNING COUNTS (VEH/HR)					
		(PERCENTAGE OF H.V.S)					
TIME		FROM/TO	ARM A	ARM B	ARM C		
07.45 - 09.15		ARM A	0.000	0.020	0.980		
			0.0	3.0	148.0		
			(0.0)	(10.0)	(10.0)		
		ARM B	0.000	0.000	1.000		
			0.0	0.0	2.0		
			(10.0)	(0.0)	(10.0)		
		ARM C	0.941	0.059	0.000		
			80.0	5.0	0.0		
			(10.0)	(10.0)	(0.0)		

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
07.45-08.00								
B-AC	0.03	10.01	0.002		0.0	0.0	0.0	
C-AB	0.07	10.58	0.007		0.0	0.0	0.1	
C-A	0.99							
A-B	0.04							
A-C	1.85							

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
08.00-08.15								
B-AC	0.03	9.91	0.003		0.0	0.0	0.0	
C-AB	0.08	10.61	0.008		0.0	0.0	0.1	
C-A	1.18							
A-B	0.04							
A-C	2.21							

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.15-08.30									I
I	B-AC	0.04	9.78	0.004		0.0	0.0	0.1		I
I	C-AB	0.11	10.65	0.010		0.0	0.0	0.2		I
I	C-A	1.45								I
I	A-B	0.05								I
I	A-C	2.71								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.30-08.45									I
I	B-AC	0.04	9.78	0.004		0.0	0.0	0.1		I
I	C-AB	0.11	10.65	0.010		0.0	0.0	0.2		I
I	C-A	1.45								I
I	A-B	0.05								I
I	A-C	2.71								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.45-09.00									I
I	B-AC	0.03	9.91	0.003		0.0	0.0	0.0		I
I	C-AB	0.08	10.61	0.008		0.0	0.0	0.1		I
I	C-A	1.18								I
I	A-B	0.04								I
I	A-C	2.21								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	09.00-09.15									I
I	B-AC	0.03	10.01	0.002		0.0	0.0	0.0		I
I	C-AB	0.07	10.58	0.007		0.0	0.0	0.1		I
I	C-A	0.99								I
I	A-B	0.04								I
I	A-C	1.85								I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING *		* INCLUSIVE QUEUEING *	
			* DELAY *		* DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	2.7	1.8	0.3	0.10	0.3	0.10
C-AB	7.8	5.2	0.8	0.10	0.8	0.10
C-A	108.8	72.5				
A-B	4.1	2.7				
A-C	202.9	135.3				
ALL	326.3	217.6	1.1	0.00	1.1	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

===== end of file =====

[Printed at 15:21:35 on 19/09/2019]

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

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RUN TITLE

Austendyke Road Site Access - Existing PM

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)
I
I
I
I
I
I
MINOR ROAD (ARM B)

ARM A IS Austendyke Road East
ARM B IS Site Access
ARM C IS Austendyke Road West

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I (W)	6.00 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR)	0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	2.20 M.	I
I	- VISIBILITY	I (VC-B)	200.0 M.	I
I	- BLOCKS TRAFFIC	I	YES	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	100.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	100.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	3.10 M.	I
I	- LANE 2 WIDTH	I (WB-A)	0.00 M.	I

TRAFFIC DEMAND DATA

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I I I I	I I I	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
		I FLOW STARTS	I TOP OF PEAK	I FLOW STOPS	I BEFORE	I AT TOP	I AFTER
I	I	TO RISE			PEAK		
		I IS REACHED	I FALLING	I	I	I	I
I ARM A	I	15.00	I 45.00	I 75.00	I 1.35	I 2.03	I 1.35
I ARM B	I	15.00	I 45.00	I 75.00	I 0.14	I 0.21	I 0.14
I ARM C	I	15.00	I 45.00	I 75.00	I 1.73	I 2.59	I 1.73

I I I I I I	I I I I	TURNING PROPORTIONS				I I I I
		TURNING COUNTS (VEH/HR)				
		(PERCENTAGE OF H.V.S)				
TIME		FROM/TO	ARM A	ARM B	ARM C	
16.30 - 18.00						
	ARM A	0.000	0.009	0.991		
		0.0	1.0	107.0		
		(0.0)	(10.0)	(10.0)		
	ARM B	0.636	0.000	0.364		
		7.0	0.0	4.0		
		(10.0)	(0.0)	(10.0)		
	ARM C	0.986	0.014	0.000		
		136.0	2.0	0.0		
		(10.0)	(10.0)	(0.0)		

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

I I I I I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I
I	I	I	I	I	I	I	I	I	I
I 16.30-16.45	I	I	I	I	I	I	I	I	I
I B-AC	I	I 0.14	I 8.63	I 0.016	I	I 0.0	I 0.0	I 0.2	I
I C-AB	I	I 0.03	I 11.16	I 0.003	I	I 0.0	I 0.0	I 0.0	I
I C-A	I	I 1.70	I	I	I	I	I	I	I
I A-B	I	I 0.01	I	I	I	I	I	I	I
I A-C	I	I 1.34	I	I	I	I	I	I	I

I I I I I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I	I I I
I	I	I	I	I	I	I	I	I	I
I 16.45-17.00	I	I	I	I	I	I	I	I	I
I B-AC	I	I 0.16	I 8.51	I 0.019	I	I 0.0	I 0.0	I 0.3	I
I C-AB	I	I 0.04	I 11.30	I 0.003	I	I 0.0	I 0.0	I 0.0	I
I C-A	I	I 2.02	I	I	I	I	I	I	I
I A-B	I	I 0.01	I	I	I	I	I	I	I
I A-C	I	I 1.60	I	I	I	I	I	I	I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.00-17.15									I
I	B-AC	0.20	8.36	0.024		0.0	0.0	0.4		I
I	C-AB	0.05	11.49	0.004		0.0	0.0	0.1		I
I	C-A	2.48								I
I	A-B	0.02								I
I	A-C	1.96								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.15-17.30									I
I	B-AC	0.20	8.36	0.024		0.0	0.0	0.4		I
I	C-AB	0.05	11.49	0.004		0.0	0.0	0.1		I
I	C-A	2.48								I
I	A-B	0.02								I
I	A-C	1.96								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.30-17.45									I
I	B-AC	0.16	8.51	0.019		0.0	0.0	0.3		I
I	C-AB	0.04	11.30	0.003		0.0	0.0	0.0		I
I	C-A	2.02								I
I	A-B	0.01								I
I	A-C	1.60								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.45-18.00									I
I	B-AC	0.14	8.63	0.016		0.0	0.0	0.2		I
I	C-AB	0.03	11.16	0.003		0.0	0.0	0.0		I
I	C-A	1.70								I
I	A-B	0.01								I
I	A-C	1.34								I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * * DELAY *		* INCLUSIVE QUEUEING * * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	15.1	10.1	1.8	0.12	1.8	0.12
C-AB	3.4	2.2	0.3	0.09	0.3	0.09
C-A	185.9	123.9				
A-B	1.4	0.9				
A-C	146.7	97.8				
ALL	352.4	234.9	2.1	0.01	2.1	0.01

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

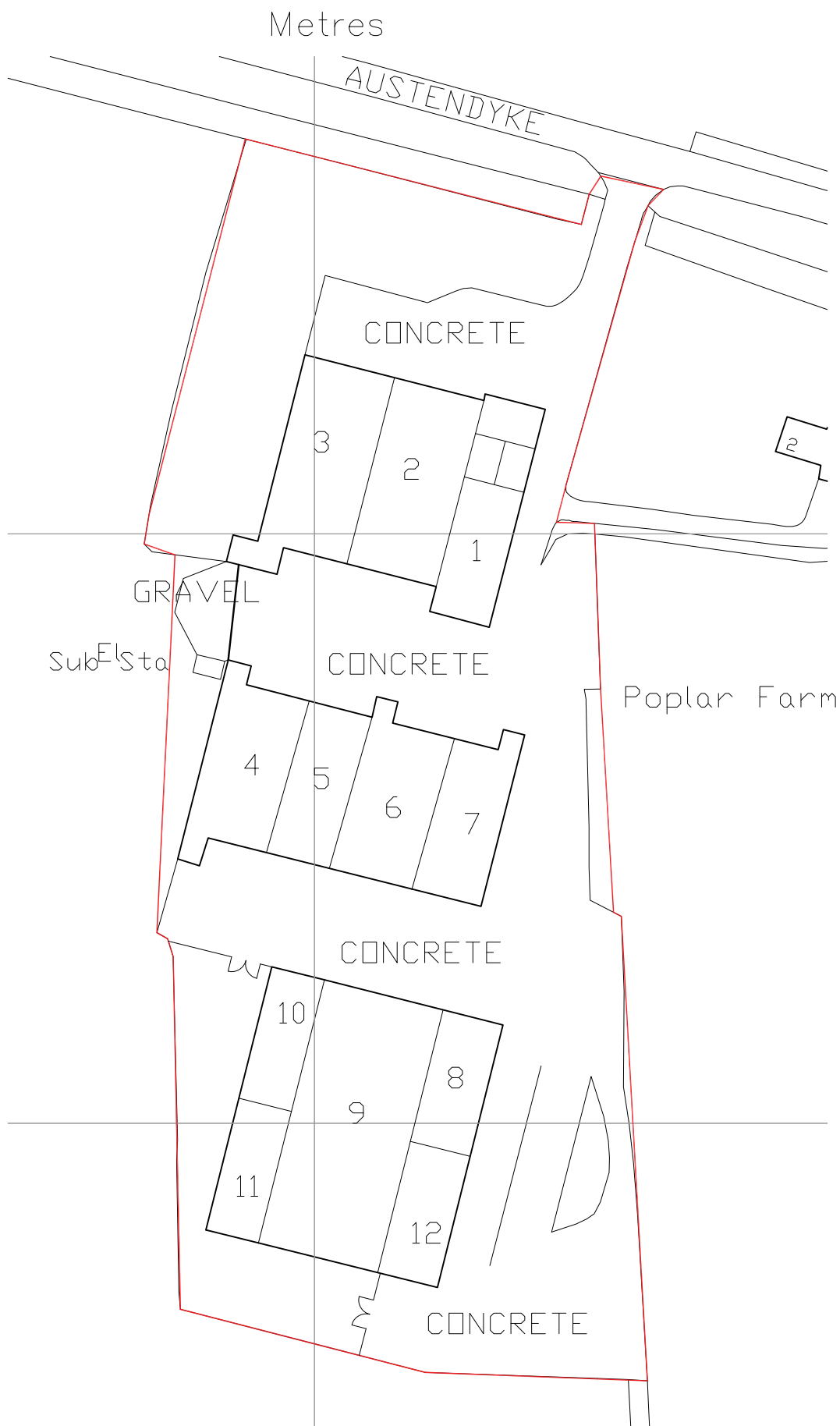
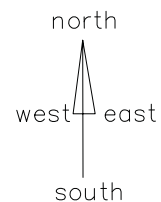
===== end of file =====

[Printed at 15:31:26 on 19/09/2019]

Appendix D

G H Myers Ltd Poplar Farm Industrial Tenants

Poplar Farm Unit	Company	Contact	Nature of Business	No. of Employees	Hours of Operation	Estimated Average Vehicle Movements per Day In and Out
Studio 1		Lizzi Myers	Jewellery Making	1	11am - 9pm Mon -Sun	2
Studio 2		Polly Myers	Fashion Studio	1	11am - 9pm Mon -Sun	2
Studio 3	G H Myers Ltd	Holt Myers	Farm Office	1	7am - 11pm Mon - Sun	8
Unit 1	D Barnett and Sons Ltd	John Barnett	Plumbers	5	7am - 5.30pm Mon - Fri	22
2	R G Laser and Cubit Engineering	Tony Milsom	Metal Cutting and Engineering	6	8am - 5.30pm Mon - Fri	26
3	Oldershaws	John Grimwood	Onion Storage	1	7am - 8pm Mon - Sun	2
4, 5, 6	South Lincs Foundry	David Harriman	Mould Shape Storage	1	9am - 5.30pm Mon - Fri	2
7		Nigel Fox	Car Restoring	1	9am - 5.30pm Mon- Sat	2
8		Adam and Tom Cox	Private Car Repairs	2	3pm - 10pm Fri - Sun	4
9	Hollyoak Landscapes	Andrew Surman	Landscaping	9	6am - 5.30pm Mon - Sat	24
10		Brian Prater	Man Cave	2	3pm - 10pm Fri - Sun	2
11	East Anglian Civils	Jethro Rawlin	Groundworks	4	7am - 5.30pm Mon - Fri	20
12	Laburnum Logs	Michael Powell	Log Drying	1	8am - 5pm Mon Fri	6
13		Richard Fountain	Log Drying	1	8am - 5pm Mon - Fri	4
14	G Kitchen Plumbing and Heating	George Kitchen	Plumber	3	8am - 5.30pm Mon - Fri	6
Hard Standing	James Stamp Rental	James Stamp	Portable Building Storage	0	9am - 5pm Mon - Fri	2
				39		134



A 30/7/19	
REVISIONS	
Rev	Date
Holt Myres Design Ltd	
25-29 Mowbray Road, Peterborough PE2 7JE	
Tel: 01753 390181	
www.holtmyres.co.uk	
Client: HOLT MYRES	
Job Title: POPULAR FARM, AUSTENDYKE RD, WESTON HILLS, SPALDING, PE12 6BZ	
Scale: 1:500 @ A2	Date: 15/07/19
Drawing Title: EXISTING SITE PLAN	
Drawing No: 349SK02	Revision: A
All dimensions are the copyright of Holt Myres	

Appendix E

Table E1. Traffic Generation (from TRICS database)

TRICS 7.6.2

Trip Rate Parameter:

Gross floor area

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE

Calculation Factor: 100 sqm

Count Type: VEHICLES

Time Range	ARRIVALS		DEPARTURES	
	Trip Rate	4680sqm (veh)	Trip Rate	4680sqm (veh)
00:00-00:30				
00:30-01:00				
01:00-01:30				
01:30-02:00				
02:00-02:30				
02:30-03:00				
03:00-03:30				
03:30-04:00				
04:00-04:30				
04:30-05:00				
05:00-05:30				
05:30-06:00				
06:00-06:30				
06:30-07:00				
07:00-07:30	0.045	2	0.018	1
07:30-08:00	0.093	4	0.024	1
08:00-08:30	0.094	4	0.036	2
08:30-09:00	0.077	4	0.036	2
09:00-09:30	0.067	3	0.041	2
09:30-10:00	0.055	3	0.041	2
10:00-10:30	0.049	2	0.046	2
10:30-11:00	0.047	2	0.039	2
11:00-11:30	0.049	2	0.045	2
11:30-12:00	0.051	2	0.052	2
12:00-12:30	0.047	2	0.056	3
12:30-13:00	0.050	2	0.055	3
13:00-13:30	0.055	3	0.054	3
13:30-14:00	0.062	3	0.051	2
14:00-14:30	0.048	2	0.062	3
14:30-15:00	0.041	2	0.050	2
15:00-15:30	0.039	2	0.057	3
15:30-16:00	0.042	2	0.054	3
16:00-16:30	0.041	2	0.071	3
16:30-17:00	0.044	2	0.072	3
17:00-17:30	0.025	1	0.103	5
17:30-18:00	0.023	1	0.063	3
18:00-18:30	0.015	1	0.039	2
18:30-19:00	0.019	1	0.024	1
19:00-19:30				
19:30-20:00				
20:00-20:30				
20:30-21:00				
21:00-21:30				
21:30-22:00				
22:00-22:30				
22:30-23:00				
23:00-23:30				
23:30-24:00				
Daily Trip Rates:	1.178	55	1.189	56

Calculation Reference: AUDIT-640801-190919-0915

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
 Category : D - INDUSTRIAL ESTATE
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	EX ESSEX	3 days
	KC KENT	1 days
03	SOUTH WEST	
	CW CORNWALL	1 days
	DC DORSET	1 days
	DV DEVON	2 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NR NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	2 days
	WM WEST MIDLANDS	1 days
	WO WORCESTERSHIRE	3 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	5 days
08	NORTH WEST	
	LC LANCASHIRE	2 days
09	NORTH	
	NB NORTHUMBERLAND	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	VG VALE OF GLAMORGAN	1 days
11	SCOTLAND	
	AG ANGUS	1 days
	FI FIFE	1 days

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

Secondary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 1775 to 974258 (units: sqm)
 Range Selected by User: 552 to 974258 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 12/03/19

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	9 days
Tuesday	7 days
Wednesday	5 days
Thursday	4 days
Friday	6 days

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

Selected survey types:

Manual count	31 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town	27
Neighbourhood Centre (PPS6 Local Centre)	2
Free Standing (PPS6 Out of Town)	2

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

Selected Location Sub Categories:

Industrial Zone	12
Commercial Zone	1
Development Zone	1
Residential Zone	7
Village	2
Out of Town	4
No Sub Category	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:

n/a	1 days
Not Known	4 days
B1	8 days
B2	14 days
B8	3 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	3 days
1,001 to 5,000	2 days
5,001 to 10,000	7 days
10,001 to 15,000	7 days
15,001 to 20,000	4 days
20,001 to 25,000	3 days
25,001 to 50,000	5 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	5 days
50,001 to 75,000	2 days
75,001 to 100,000	4 days
100,001 to 125,000	3 days
125,001 to 250,000	13 days
250,001 to 500,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	9 days
1.1 to 1.5	21 days
1.6 to 2.0	1 days

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

Travel Plan:

No	31 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	31 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	AG-02-D-02 A933 WESTWAY ARBROATH HOSPITALFIELD Edge of Town No Sub Category Total Gross floor area: 78500 sqm Survey date: TUESDAY 25/04/17	INDUSTRIAL ESTATE	ANGUS	Survey Type: MANUAL
2	CW-02-D-03 LONG ROCK ROAD NEAR PENZANCE LONG ROCK Neighbourhood Centre (PPS6 Local Centre) Village Total Gross floor area: 36500 sqm Survey date: MONDAY 03/10/11	IND. ESTATE	CORNWALL	Survey Type: MANUAL
3	DC-02-D-20 OLD BARN FARM ROAD NEAR BOURNEMOUTH THREE LEGGED CROSS Free Standing (PPS6 Out of Town) Out of Town Total Gross floor area: 70000 sqm Survey date: MONDAY 24/03/14	INDUSTRIAL ESTATE	DORSET	Survey Type: MANUAL
4	DV-02-D-06 ST MODWEN ROAD PLYMOUTH Edge of Town Industrial Zone Total Gross floor area: 1775 sqm Survey date: TUESDAY 17/07/12	INDUSTRIAL ESTATE	DEVON	Survey Type: MANUAL
5	DV-02-D-07 BITTERN ROAD EXETER SOWTON IND. ESTATE Edge of Town Industrial Zone Total Gross floor area: 3600 sqm Survey date: MONDAY 03/07/17	INDUSTRIAL ESTATE	DEVON	Survey Type: MANUAL
6	ES-02-D-06 COURTLANDS ROAD EASTBOURNE Edge of Town Residential Zone Total Gross floor area: 7525 sqm Survey date: MONDAY 21/10/13	INDUSTRIAL ESTATE	EAST SUSSEX	Survey Type: MANUAL
7	EX-02-D-03 WYNCOLLS ROAD COLCHESTER SEVERALLS INDUSTRIAL PK Edge of Town Industrial Zone Total Gross floor area: 4876 sqm Survey date: FRIDAY 18/05/18	INDUSTRIAL ESTATE	ESSEX	Survey Type: MANUAL
8	EX-02-D-04 PASTURE ROAD WITHAM Edge of Town Industrial Zone Total Gross floor area: 37130 sqm Survey date: THURSDAY 10/05/18	INDUSTRIAL ESTATE	ESSEX	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	EX-02-D-05	INDUSTRIAL ESTATE	ESSEX
	HECKWORTH CLOSE		
	COLCHESTER		
	SEVERALLS INDUSTRIAL PK		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	7280 sqm	
	Survey date: FRIDAY	18/05/18	Survey Type: MANUAL
10	FI-02-D-01	INDUSTRIAL ESTATE	FIFE
	DICKSON STREET		
	DUNFERMLINE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	7850 sqm	
	Survey date: THURSDAY	21/05/15	Survey Type: MANUAL
11	KC-02-D-02	INDUSTRIAL ESTATE	KENT
	SOUTHWELL ROAD		
	DEAL		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	10715 sqm	
	Survey date: WEDNESDAY	28/11/12	Survey Type: MANUAL
12	LC-02-D-07	INDUSTRIAL ESTATE	LANCASHIRE
	CHAIN CAUL WAY		
	PRESTON		
	ASHTON-ON-RIBBLE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4700 sqm	
	Survey date: FRIDAY	17/11/17	Survey Type: MANUAL
13	LC-02-D-08	INDUSTRIAL ESTATE	LANCASHIRE
	NOOK LANE		
	BAMBER BRIDGE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4000 sqm	
	Survey date: TUESDAY	06/11/18	Survey Type: MANUAL
14	LN-02-D-02	INDUSTRIAL ESTATE	LINCOLNSHIRE
	STATION ROAD		
	NEAR BOSTON		
	SWINESHEAD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Gross floor area:	4600 sqm	
	Survey date: TUESDAY	11/12/12	Survey Type: MANUAL
15	NB-02-D-02	INDUSTRIAL ESTATE	NORTHUMBERLAND
	OLDSTONE ROAD		
	NEAR CRAMLINGTON		
	EAST CRAMLINGTON		
	Free Standing (PPS6 Out of Town)		
	Out of Town		
	Total Gross floor area:	5500 sqm	
	Survey date: FRIDAY	16/11/12	Survey Type: MANUAL
16	NF-02-D-03	INDUSTRIAL ESTATE	NORFOLK
	BIDEWELL CLOSE		
	NORWICH		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	6000 sqm	
	Survey date: MONDAY	08/10/12	Survey Type: MANUAL
17	NR-02-D-01	INDUSTRIAL ESTATE	NORTHAMPTONSHIRE
	ROBINSON WAY		
	KETTERING		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	12900 sqm	
	Survey date: THURSDAY	23/10/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

18	NY-02-D-02	INDUSTRIAL ESTATE	NORTH YORKSHIRE
	RACECOURSE ROAD		
	RICHMOND		
	Edge of Town		
	Out of Town		
	Total Gross floor area:	35183 sqm	
	Survey date: TUESDAY	12/03/19	Survey Type: MANUAL
19	TW-02-D-07	INDUSTRIAL ESTATE	TYNE & WEAR
	SWALWELL BANK		
	GATESHEAD		
	WHICKHAM		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	6800 sqm	
	Survey date: FRIDAY	04/10/13	Survey Type: MANUAL
20	VG-02-D-01	INDUSTRIAL ESTATE	VALE OF GLAMORGAN
	ARTHUR STREET		
	BARRY		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	13091 sqm	
	Survey date: MONDAY	08/05/17	Survey Type: MANUAL
21	WK-02-D-01	INDUSTRIAL ESTATE	WARWICKSHIRE
	CASTLE MOUND WAY		
	RUGBY		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	150564 sqm	
	Survey date: WEDNESDAY	27/06/18	Survey Type: MANUAL
22	WK-02-D-02	INDUSTRIAL ESTATE	WARWICKSHIRE
	OVERVIEW WAY		
	RUGBY		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	974258 sqm	
	Survey date: WEDNESDAY	27/06/18	Survey Type: MANUAL
23	WM-02-D-02	INDUSTRIAL ESTATE	WEST MIDLANDS
	DUNLOP WAY		
	BIRMINGHAM		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	23480 sqm	
	Survey date: WEDNESDAY	07/11/12	Survey Type: MANUAL
24	WO-02-D-01	INDUSTRIAL ESTATE	WORCESTERSHIRE
	SANDY LANE		
	STOURPORT-ON-SEVERN		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	2758 sqm	
	Survey date: FRIDAY	23/05/14	Survey Type: MANUAL
25	WO-02-D-02	INDUSTRIAL ESTATE	WORCESTERSHIRE
	WEIR LANE		
	WORCESTER		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	9500 sqm	
	Survey date: MONDAY	14/11/16	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

26	WO-02-D-03	INDUSTRIAL ESTATE	WORCESTERSHIRE
	MILLENNIUM WAY		
	EVESHAM		
	Edge of Town		
	Out of Town		
	Total Gross floor area:	84575 sqm	
	Survey date: TUESDAY	26/06/18	Survey Type: MANUAL
27	WY-02-D-04	INDUSTRIAL ESTATE	WEST YORKSHIRE
	LAW STREET		
	CLECKHEATON		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	23226 sqm	
	Survey date: THURSDAY	15/09/16	Survey Type: MANUAL
28	WY-02-D-05	INDUSTRIAL ESTATE	WEST YORKSHIRE
	CARR WOOD ROAD		
	CASTLEFORD		
	Edge of Town		
	Development Zone		
	Total Gross floor area:	1776 sqm	
	Survey date: MONDAY	22/05/17	Survey Type: MANUAL
29	WY-02-D-06	INDUSTRIAL ESTATE (PART)	WEST YORKSHIRE
	PIONEER WAY		
	CASTLEFORD		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	4328 sqm	
	Survey date: TUESDAY	23/05/17	Survey Type: MANUAL
30	WY-02-D-07	INDUSTRIAL ESTATE	WEST YORKSHIRE
	THUNDERHEAD RIDGE RD		
	CASTLEFORD		
	GLASSHOUGHTON		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	3191 sqm	
	Survey date: MONDAY	15/05/17	Survey Type: MANUAL
31	WY-02-D-08	INDUSTRIAL ESTATE	WEST YORKSHIRE
	MILL LANE		
	HALIFAX		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	11305 sqm	
	Survey date: WEDNESDAY	17/10/18	Survey Type: MANUAL

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

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	31	53145	0.045	31	53145	0.018	31	53145	0.063
07:30 - 08:00	31	53145	0.093	31	53145	0.024	31	53145	0.117
08:00 - 08:30	31	53145	0.094	31	53145	0.036	31	53145	0.130
08:30 - 09:00	31	53145	0.077	31	53145	0.036	31	53145	0.113
09:00 - 09:30	31	53145	0.067	31	53145	0.041	31	53145	0.108
09:30 - 10:00	31	53145	0.055	31	53145	0.041	31	53145	0.096
10:00 - 10:30	31	53145	0.049	31	53145	0.046	31	53145	0.095
10:30 - 11:00	31	53145	0.047	31	53145	0.039	31	53145	0.086
11:00 - 11:30	31	53145	0.049	31	53145	0.045	31	53145	0.094
11:30 - 12:00	31	53145	0.051	31	53145	0.052	31	53145	0.103
12:00 - 12:30	31	53145	0.047	31	53145	0.056	31	53145	0.103
12:30 - 13:00	31	53145	0.050	31	53145	0.055	31	53145	0.105
13:00 - 13:30	31	53145	0.055	31	53145	0.054	31	53145	0.109
13:30 - 14:00	31	53145	0.062	31	53145	0.051	31	53145	0.113
14:00 - 14:30	31	53145	0.048	31	53145	0.062	31	53145	0.110
14:30 - 15:00	31	53145	0.041	31	53145	0.050	31	53145	0.091
15:00 - 15:30	31	53145	0.039	31	53145	0.057	31	53145	0.096
15:30 - 16:00	31	53145	0.042	31	53145	0.054	31	53145	0.096
16:00 - 16:30	31	53145	0.041	31	53145	0.071	31	53145	0.112
16:30 - 17:00	31	53145	0.044	31	53145	0.072	31	53145	0.116
17:00 - 17:30	31	53145	0.025	31	53145	0.103	31	53145	0.128
17:30 - 18:00	31	53145	0.023	31	53145	0.063	31	53145	0.086
18:00 - 18:30	31	53145	0.015	31	53145	0.039	31	53145	0.054
18:30 - 19:00	31	53145	0.019	31	53145	0.024	31	53145	0.043
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.178			1.189			2.367

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:	1775 - 974258 (units: sqm)
Survey date date range:	01/01/11 - 12/03/19
Number of weekdays (Monday-Friday):	31
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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

Appendix F

TRANSPORT RESEARCH LABORATORY

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

Visual PICADY 4 ANALYSIS PROGRAM
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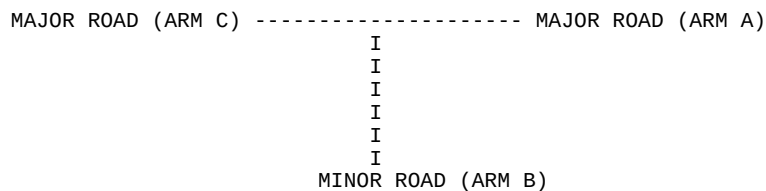
Run with file:- "c:\Program Files (x86)\Junction\PICADY4\adyke 2024am.vpi" at 15:22:57 on Thursday, 19 September 2019

RUN TITLE

Austendyke Road Site Access - 2024 AM

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Austendyke Road East
ARM B IS Site Access
ARM C IS Austendyke Road West

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B

STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C

ETC.

GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I (W)	6.00 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR)	0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	2.20 M.	I
I	- VISIBILITY	I (VC-B)	200.0 M.	I
I	- BLOCKS TRAFFIC	I	YES	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	100.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	100.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	3.10 M.	I
I	- LANE 2 WIDTH	I (WB-A)	0.00 M.	I

TRAFFIC DEMAND DATA

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I			NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
I	ARM	I	I FLOW STARTS	I TOP OF PEAK	I FLOW STOPS	I BEFORE	I AT TOP	I AFTER
I	I	I	I TO RISE	I IS REACHED	I FALLING	I PEAK	I OF PEAK	I PEAK
I	ARM A	I	15.00	I 45.00	I 75.00	I 2.04	I 3.06	I 2.04
I	ARM B	I	15.00	I 45.00	I 75.00	I 0.03	I 0.04	I 0.03
I	ARM C	I	15.00	I 45.00	I 75.00	I 1.15	I 1.72	I 1.15

I I I I I	I I I	TURNING PROPORTIONS						I I I
		TURNING COUNTS (VEH/HR)						
		(PERCENTAGE OF H.V.S)						
TIME		FROM/TO	ARM A	ARM B	ARM C			
07.45 - 09.15								
	ARM A		0.000	0.018	0.982			
			0.0	3.0	160.0			
		(0.0)	(10.0)	(10.0)				
	ARM B		0.000	0.000	1.000			
			0.0	0.0	2.0			
		(10.0)	(0.0)	(10.0)				
	ARM C		0.935	0.065	0.000			
			86.0	6.0	0.0			
		(10.0)	(10.0)	(0.0)				

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
07.45-08.00								
B-AC	0.03	9.97	0.003		0.0	0.0	0.0	
C-AB	0.08	10.59	0.008		0.0	0.0	0.1	
C-A	1.07							
A-B	0.04							
A-C	2.00							

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)
08.00-08.15								
B-AC	0.03	9.86	0.003		0.0	0.0	0.0	
C-AB	0.10	10.62	0.010		0.0	0.0	0.2	
C-A	1.27							
A-B	0.04							
A-C	2.39							

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.15-08.30									I
I	B-AC	0.04	9.72	0.004		0.0	0.0	0.1		I
I	C-AB	0.13	10.67	0.012		0.0	0.0	0.2		I
I	C-A	1.55								I
I	A-B	0.05								I
I	A-C	2.92								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.30-08.45									I
I	B-AC	0.04	9.72	0.004		0.0	0.0	0.1		I
I	C-AB	0.13	10.67	0.012		0.0	0.0	0.2		I
I	C-A	1.55								I
I	A-B	0.05								I
I	A-C	2.92								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	08.45-09.00									I
I	B-AC	0.03	9.86	0.003		0.0	0.0	0.0		I
I	C-AB	0.10	10.62	0.010		0.0	0.0	0.2		I
I	C-A	1.27								I
I	A-B	0.04								I
I	A-C	2.39								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	09.00-09.15									I
I	B-AC	0.03	9.97	0.003		0.0	0.0	0.0		I
I	C-AB	0.08	10.59	0.008		0.0	0.0	0.1		I
I	C-A	1.07								I
I	A-B	0.04								I
I	A-C	2.00								I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND		I	* QUEUEING *		I	* INCLUSIVE QUEUEING *		I
						* DELAY *			* DELAY *		
I		I			I			I			I
			(VEH)	(VEH/H)		(MIN)	(MIN/VEH)		(MIN)	(MIN/VEH)	
I	B-AC	I	2.7	I 1.8	I	0.3	I 0.10	I	0.3	I 0.10	I
I	C-AB	I	9.4	I 6.3	I	1.0	I 0.10	I	1.0	I 0.10	I
I	C-A	I	116.8	I 77.8	I			I			I
I	A-B	I	4.1	I 2.7	I			I			I
I	A-C	I	219.4	I 146.3	I			I			I
I	ALL	I	352.4	I 234.9	I	1.3	I 0.00	I	1.3	I 0.00	I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

===== end of file =====

[Printed at 15:24:48 on 19/09/2019]

TRANSPORT RESEARCH LABORATORY

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

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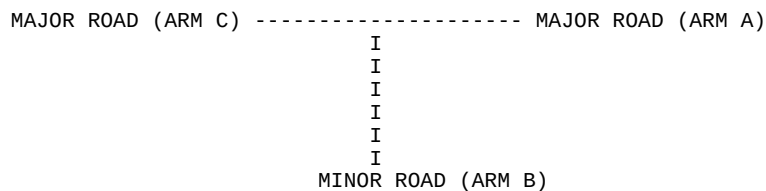
Run with file:- "c:\Program Files (x86)\Junction\PICADY4\adyke 2024pm.vpi" at 15:27:27 on Thursday, 19 September 2019

RUN TITLE

Austendyke Road Site Access - 2024 PM

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Austendyke Road East
ARM B IS Site Access
ARM C IS Austendyke Road West

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B

STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C

ETC.

GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I (W)	6.00 M.	I
I	CENTRAL RESERVE WIDTH	I (WCR)	0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I (WC-B)	2.20 M.	I
I	- VISIBILITY	I (VC-B)	200.0 M.	I
I	- BLOCKS TRAFFIC	I	YES	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I (VB-C)	100.0 M.	I
I	- VISIBILITY TO RIGHT	I (VB-A)	100.0 M.	I
I	- LANE 1 WIDTH	I (WB-C)	3.10 M.	I
I	- LANE 2 WIDTH	I (WB-A)	0.00 M.	I

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH. MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH. MIN/ TIME SEGMENT)
16.45-17.00								
B-AC	0.18	8.40	0.021		0.0	0.0	0.3	
C-AB	0.04	11.36	0.003		0.0	0.0	0.0	
C-A	2.17							
A-B	0.01							
A-C	1.72							

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.00-17.15									I
I	B-AC	0.22	8.23	0.027		0.0	0.0	0.4		I
I	C-AB	0.05	11.57	0.004		0.0	0.0	0.1		I
I	C-A	2.66								I
I	A-B	0.02								I
I	A-C	2.10								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.15-17.30									I
I	B-AC	0.22	8.23	0.027		0.0	0.0	0.4		I
I	C-AB	0.05	11.57	0.004		0.0	0.0	0.1		I
I	C-A	2.66								I
I	A-B	0.02								I
I	A-C	2.10								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.30-17.45									I
I	B-AC	0.18	8.40	0.021		0.0	0.0	0.3		I
I	C-AB	0.04	11.36	0.003		0.0	0.0	0.1		I
I	C-A	2.17								I
I	A-B	0.01								I
I	A-C	1.72								I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	I
I	17.45-18.00									I
I	B-AC	0.15	8.52	0.018		0.0	0.0	0.3		I
I	C-AB	0.03	11.21	0.003		0.0	0.0	0.0		I
I	C-A	1.82								I
I	A-B	0.01								I
I	A-C	1.44								I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND		I	* QUEUEING *		I	* INCLUSIVE QUEUEING *		I
						* DELAY *			* DELAY *		
I		I			I			I			I
			(VEH)	(VEH/H)		(MIN)	(MIN/VEH)		(MIN)	(MIN/VEH)	
I	B-AC	I	16.5	I 11.0	I	2.0	I 0.12	I	2.0	I 0.12	I
I	C-AB	I	3.4	I 2.3	I	0.3	I 0.09	I	0.3	I 0.09	I
I	C-A	I	199.5	I 133.0	I			I			I
I	A-B	I	1.4	I 0.9	I			I			I
I	A-C	I	157.7	I 105.1	I			I			I
I	ALL	I	378.5	I 252.3	I	2.3	I 0.01	I	2.3	I 0.01	I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD .
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

===== end of file =====

[Printed at 15:28:50 on 19/09/2019]