APPENDICES

## APPENDIX 1

Technical Note 03 dated January 2023 (TN03)

Proposed Residential Development Froghall Road, Cheadle

## **BLOOR HOMES LTD**

Technical Note 03 January 2023





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#### 1 INTRODUCTION

#### 1.1 Introduction

1.1.1 Eddisons have been instructed by Bloor Homes Ltd to produce a Technical Note to assist in the determination of a planning application for a residential development on land off the A521 Froghall Road in Cheadle. (Planning Ref: SMD/2021/0610).

#### 1.2 Scope of Report

- 1.2.1 This Technical Note has been produced in response to the comments raised by Staffordshire County Council Highways (SCC) in their email dated 12<sup>th</sup> August 2022 which is contained within **Appendix 1** of this document.
- 1.2.2 In response to these comments, additional information was submitted to SCC in an email dated the 31<sup>st</sup> August 2022. However, no formal response has been received from SCC on this additional information.
- 1.2.3 Therefore, to assist SCC with their determination of the planning application, this Technical Note will consider three outstanding highways issues relating to the planning application;
  - Section 2 Vehicular Access off Froghall Road;
  - Section 3 Accessibility by Non-car modes;
  - Section 4 Traffic Impact.





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1.2.4 It is important to note that the applicant has applied for an extension of time for the current planning application of the 16<sup>th</sup> February 2023 and that beyond this date the applicant is considering appealing the planning application on non-determination grounds.







### 2 PROPOSED ACCESS ARRANGEMENTS

#### 2.1 Introduction

2.1.1 The following section of this Technical Note will consider the proposed access arrangements for the site off the A521 Froghall Road.

#### 2.2 Vehicular Access

2.2.1 Within their email dated the 12<sup>th</sup> August 2022 the highways officers at SCC stated the following regarding the proposed site access roundabout junction;

"Your access still does not provide a safe access point commensurate with vehicle speeds and speed limit. Access needs to be designed for 6omph road. Design should be progressed adequately to demonstrate visibility in the horizontal and vertical plane.

There is no evidence that an extension to the speed limit would be possible or supported by statutory consultees.

It is impracticable to construct an access in the position indicated on the submitted plan that would allow the requisite visibility splays to be provided within land under the applicant's control."

- 2.2.2 Following receipt of the above comments, Automated Traffic Counts (ATC) were commissioned on the A521 Froghall Road between Monday August 22<sup>nd</sup> and Sunday 28<sup>th</sup> August 2022. These ATC's were undertaken in the following locations;
  - ATC1-A521 Froghall Road at approximate location of proposed site access junction;
  - ATC 2 A521 Froghall Road north of application site on approach to existing bend.





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# **Table 2.1** below summarises the recorded 85<sup>th</sup> percentile speeds for each of the 7 days counted, as well as a 7 day average, whilst the full ATC data is contained within **Appendix**

2.

Date	ΓA	TC 1	ATC 2			
	N/B	S/B	N/B	S/B		
22/08/22	44.7	41.7	42.4	41.5		
23/08/22	45.0	41.9	42.6	41.8		
24/08/22	45.0	41.6	42.3	41.5		
25/08/22	44.7	42.0	42.4	41.6		
26/08/22	45.4	42.2	42.6	41.8		
27/08/22	44.8	41.6	42.1	41.0		
28/08/22	45.1	41.9	42.5	41.5		
7 Day Average	45.0	41.8	42.4	41.5		

#### Table 2.1 – Summary of A521 Froghall Road ATC Data – August 2022

- 2.2.4 As can be seen in Table 2.1, the recorded 85th% speeds on the A521 Froghall Road in vicinity of the site, are much lower than the current 60mph speed limit.
- 2.2.5 Importantly the recorded speeds at ATC2 are lowest with the average 85th% speeds for vehicle approaching from the north being just 41.5mph and therefore substantially lower than the National Speed Limit and not much higher than the proposed 30mph speed limit even without any of the proposed traffic calming measures.





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- 2.2.6 It should be noted that the existing bend to the north of the site is constrained for a 6omph speed road. The existing road layout would benefit from a relocation of the 3omph speed limit that will serve to raise awareness of the need to reduce speeds in advance of this and also further in advance of the residential area to the south and it is therefore felt that the relocation and improvement on the gateway feature to this location would be of benefit to existing and future road users of this stretch of A521 Froghall Road.
- 2.2.7 Alongside the self-evident physical speed restraint imposed by roundabouts (as vehicles slow down to negotiate entry radii and circulatory carriageway), there is also ample documentary evidence to support the speed reducing effects of roundabouts: LTN 1-07 Traffic Calming paras 8.1 and 8.2.3 advise:-

"Roundabouts, particularly mini-roundabouts, are a useful speed-reducing measure. They have been incorporated into many traffic calming schemes, often as the first measure encountered."

"Overrun areas can be used in combination with small central islands to encourage greater deflection in the driving line for light motor vehicles. This can give greater reductions in speed whilst allowing adequate space for large vehicles to manoeuvre around the island"

2.2.8 Based on the above and the results of the speed survey it is our strong view that the proposed traffic calming measures (including the site access roundabout and street lighting) would result in speeds along this A521 Froghall Road being reduced to 30mph and therefore the design of the proposed roundabout to accord with the design standards for a 30mph road is acceptable. If deemed necessary the provision of further traffic calming measures can be discussed and agreed with SCC to further enforce the 30mph if deemed necessary.







- 2.2.9 With regards to the proposed extension of the 30mph, this is common practice for developments of this type and this proposed scheme would simply be an extension of the existing provision to the south and therefore it's difficult to see that there would any meaningful objections that would be upheld.
- 2.2.10 Within SCC comments on the access arrangement, they stated the following;

"There is still the question of constructing a footway on third party land.

Pedestrian route would be better following the service road, with the service road realigned accordingly in the interests of pedestrian safety.

We need to ensure sustainable travel options are available, footway is important."

- 2.2.11 Based on the above, the proposed access arrangement has been amended to achieve the 2 metre footway for its entirety and widening provided on the existing footway along the eastern side of the service road. This provision links with the existing pedestrian provision to the south which was deemed acceptable for the approved Persimmon site to the south.
- 2.2.12 It is also confirmed that all works associated with the propsoed vehicular access can be provided within land under the control of the applicant or within the extent of adopted highway.
- 2.2.13 The proposed access arrangement plan off the A521 Froghall Road is displayed in Plan
   1.





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#### 2.3 Access Arrangement Summary

2.3.1 The above section has considered the proposed access arrangement into the site and it is confirmed that safe and efficient access to and from the site can be provided.







## 3 ACCESSIBILITY BY NON CAR MODES

#### 3.1 Introduction

- 3.1.1 Having considered vehicular access into the application site, the following section of this Technical Note will consider the accessibility of the site by non-car modes.
- 3.1.2 The Transport Assessment Addendum submitted in April 2022 provided a detailed assessment of the sites accessibility by non-car modes and concluded that the site is accessible to local amenities, including the town centre and the sites accessibility is comparable to that of the allocated/approved Cheadle Strategic North Site.
- 3.1.3 Within the August 2022 email from SCC no comments on the sites accessibility by noncar modes other than a comment regarding cycle provision in the area, and therefore it is assumed that the officers at SCC have no further concerns regarding the accessibility of the site.

#### 3.2 Cycle Provision

3.2.1 Within the August 2022 response from SCC the following comment was raised regarding cycling;

"What cycle facilities are proposed?"

3.2.2 With regard to cycle provision, there is limited existing provision within Cheadle area that the proposed development site could link in, isolated improvements along the frontage of the site could be implemented, but its felt that these would offer limited benefit to cycling for existing or proposed users.





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3.2.3 It is therefore felt at any sustainable transport improvements should be focused on other modes to encourage sustainable transport. However, clearly if there are any future schemes in the Cheadle area that SCC are proposing we could look to assist with these.

#### 3.3 Bus Service Provision

- 3.3.1 Following submission of the Transport Assessment Addendum, the Kingfisher service which operated along Froghall Road has been withdrawn and the 32 bus service which operates along Froghall Road has been extended to service Uttoxeter and its frequency increased.
- 3.3.2 The Kingfisher service provides access to Hanley (City Centre), Cheadle town centre and Uttoxeter town centre.
- 3.3.3 The bus services to Hanley visit the stops nearest the site at o638 and o735 hours from Monday to Friday, and these services arrive in Hanley at around o716 and o80 hours respectively. The last buses to depart Hanley on a weekday are at 1545, 1755 and 1819 hours. Whilst the bus service to Uttoxeter from Monday to Friday is at o808 hours, which arrives in Uttoxeter at o851 hours. The last buses to depart Uttoxeter on a weekday are at 1804 and 1904 hours.
- 3.3.4 Based on this, in can be concluded that the local bus services provides an appropriate option for commuter trips to and from Hanley and Uttoxeter, which are likely to represent the main areas of employment for potential residents of the development and therefore provide services that would enable journeys to be undertaken by bus.
- 3.3.5 Notwithstanding the above, discussions have been held with the SCC Public Transport officer regarding the provision of a contribution of £700 per unit towards bus service improvements. This is the same level of contribution that they have agreed with other developments Staffordshire.





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3.3.6 The principle of providing a contribution has been agreed with the Public Transport officer, subject to further justification being provided. At present we are currently awaiting a formal response from SCC on this matter.

#### 3.4 Accessibility Summary

3.4.1 In light of the above, it is considered that the site is accessible and caters for needs of the development's residents and visitors. As such, this will assist in promoting a choice of travel modes other than the private car, as set out in NPPF.







### 4 TRAFFIC IMPACT ANALYSIS

#### 4.1 Introduction

4.1.1 Within their August 2022 response, the following comments were raised regarding the traffic impact analysis undertaken within the April 2022 TAA;

Your transport assessment hasn't been updated for current free flow. There are no traffic counts or speed surveys. Vissim hasn't been updated.

There are still no proposals for mitigation of the effect of the development on surrounding network.

4.1.2 The following section of this Technical Note will consider the comments raised by SCC on the traffic impact of the proposals on the local highway network.

#### 4.2 Traffic Count Data

- 4.2.1 To undertake the traffic impact analysis contained within the April 2022 TAA, traffic count data was collected on the local highway network on Thursday 17<sup>th</sup> February 2022 and Thursday 17<sup>th</sup> March 2022, between 0730 hours to 0930 hours and 1630 hours to 1830 hours. These traffic counts included queue surveys to enable validation of the junction models.
- 4.2.2 The submitted TAA discusses the validity of these traffic counts in detail and concludes that the February/March 2022 traffic count data is comparable to historic traffic count data collected in the Cheadle area and represent typical traffic conditions on the local highway network.







4.2.3 It is therefore concluded that the traffic count data used in April 2022 TAA is appropriate for assessing the impact of the development proposals on the local highway network.

#### 4.3 Capacity Assessment Methodology

- 4.3.1 Within the previously submitted TA and TAA document, the traffic impact of the proposals was undertaken using the standard industry computer programmes i.e. Junctions 9.
- 4.3.2 The junction models used for the analysis were validated using the observed queue surveys and therefore reflect the existing traffic conditions on the local highway network. Therefore, it is our strong view that the use of these models, together with use of traffic flows that include traffic growth (up to 2033) and committed development, is appropriate for assessing the traffic impact of the proposals and that there is no requirement for VISSIM modelling.

#### 4.4 Mitigation Measures

- 4.4.1 Within their August 2022 Response SCC state that 'no proposals for mitigation of the effect of the development on surrounding network' have been proposed.
- 4.4.2 The capacity analysis contained within the April TAA indicates that all of the junctions within the agreed study area are forecast to operate within capacity in the base and with development scenarios, apart from the A522 Leek Road/A521 High Street/A522 Tape Street mini-roundabout junction.
- 4.4.3 **Table 4.1** below summarises the results of the 2033 Base and With Development flow assessments of the junction as contained within the submitted TAA.







		2033 Ba	se Flows	;	2033 With Development Flows					
Arm	Weekd	ay AM	Weeko	lay PM	Weekc	lay AM	Weekday PM			
	RFC	Q	RFC	Q	RFC	Q	RFC	Q		
A522 Leek Road	1.05	30	1.10	51	1.10	44	1.12	60		
A522 Tape Street	0.54	1	0.53	1	0.55	1	0.55	1		
A521 High Street	0.49	1	0.65	2	0.50	1	0.68	2		

## Table 4.1- Summary of JUNCTIONS 9 Results for the A522 Leek Road/A521 High Street/A522Tape Street Junction – 2033 Base and With Development Flows

- 4.4.4 As can be seen in Table 4.1, the A522 Leek Road arm of the junction is forecast to operate in excess of its actual capacity in the both the Weekday periods. The other arms of the junction are forecast to operate within their theoretical capacity in both Base scenarios.
- With the addition of the development traffic in 2033 the RFC on the A522 Leek Road in both peaks is forecast to continue to exceed 1.00. On the A522 Leek Road the Mean Max
   Queue increases by up to 14 vehicles in the AM peak and by 9 vehicles in the PM peak.
- 4.4.6 In addition, when the RFC exceeds a value of 1.00 Junctions 9 provides results with exaggerated levels of queuing and it must also be noted that this analysis assumes a synthesised assessment profile (ONE HOUR) which is likely to overestimate the levels of queuing and delay as it assumes that the traffic flows at the junction peak during the middle 30 minutes of the peak hour period assessment.





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- 4.4.7 The proposed development is forecast to result in an increase of between 40-45 two-way trips at junction during the peak periods (3% increase). Whilst the increases on the A522 Leek Road arm itself are 30 vehicle and 17 vehicles in the AM and PM peak periods respectively. These increases equate to less than 1 additional vehicle per minute during the even during the peak periods, therefore, the actual increase in vehicle movements at the junction will be minimal.
- 4.4.8 Based on the above it is concluded that the proposed development will have a minimal impact on the operation of the A522 Leek Road/A521 High Street/A522 Tape Street mini-roundabout junction.
- 4.4.9 However, in response to SCC comments, the provision of mitigation at the junction has been considered and there is scope to provide a minor improvement on the A522 Leek Road arm of the junction. This improvement would include widening the approach to the junction by circa 0.5 metres to provide an approach width of 4.5 metres whilst still retaining a 2 metre footway on the eastern side of the carriageway. The potential improvement scheme is displayed in **Plan 2**.
- 4.4.10 Table 4.2 below summarises the results of the 2033 Base flows on the existing layout and the 2033 With Development flows on the proposed improvement layout. The full JUNCTIONS 9 output for the improvement scheme is contained within **Appendix 3**.







		2033 Ba	se Flows	;	2033 With Development Flows – Improvement Scheme					
Arm	Weekd	ay AM	Weeko	lay PM	Weekd	lay AM	Weekday PM			
	RFC	Q	RFC	Q	RFC	Q	RFC	Q		
A522 Leek Road	1.05	30	1.10	51	1.03	24	1.06	38		
A522 Tape Street	0.54	1	0.53	1	0.55	1	0.55	1		
A521 High Street	0.49	1	0.65	2	0.50	1	0.68	2		

## Table 4.2- Summary of JUNCTIONS 9 Results for the A522 Leek Road/A521 High Street/A522Tape Street Junction – 2033 Base and With Development Flows (Improvement Scheme)

- 4.4.11 As can be seen in Table 4.2, the proposed minor improvement on the A522 Leek Road arm of the junction will more than mitigate the impact of the development proposals kin both peak periods and will provide overall betterment when compared to the base scenarios.
- 4.4.12 It is therefore concluded that the proposed improvement will mitigate the impact of the proposed development on the A522 Leek Road/A521 High Street/A522 Tape Street junction.
- 4.4.13 However, a contribution to alternative improvements elsewhere in the Cheadle area can be provided if SCC deem them necessary, based on the cost of the improvements proposed at the A522 Leek Road/A521 High Street/A522 Tape Street junction.





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#### 4.5 Traffic Impact Summary

- 4.5.1 In summary, the capacity assessment undertaken as part of this traffic impact analysis has demonstrated the following:
  - The traffic count data used for assessing the impact of the proposed development on the local highway network is reflective of typical traffic conditions;
  - The use of standalone junction modelling programmes are appropriate for assessing the traffic impact of the proposals and that there is no requirement for VISSIM modelling.
  - The junction analysis of the A522 Leek Road/A521 High Street/A522 Tape Street mini-roundabout has demonstrated that the proposed development will have a minimal impact on the operation of the junction. However, a minor improvement can be provided on the A522 Leek Road arm of the junction, which more than mitigate the impact of the proposed development.
- 4.5.2 It is therefore concluded that the development proposals will result in a minimal impact and can be accommodated on the local highway network, but there is scope for improvements on the network is deemed necessary by SCC.







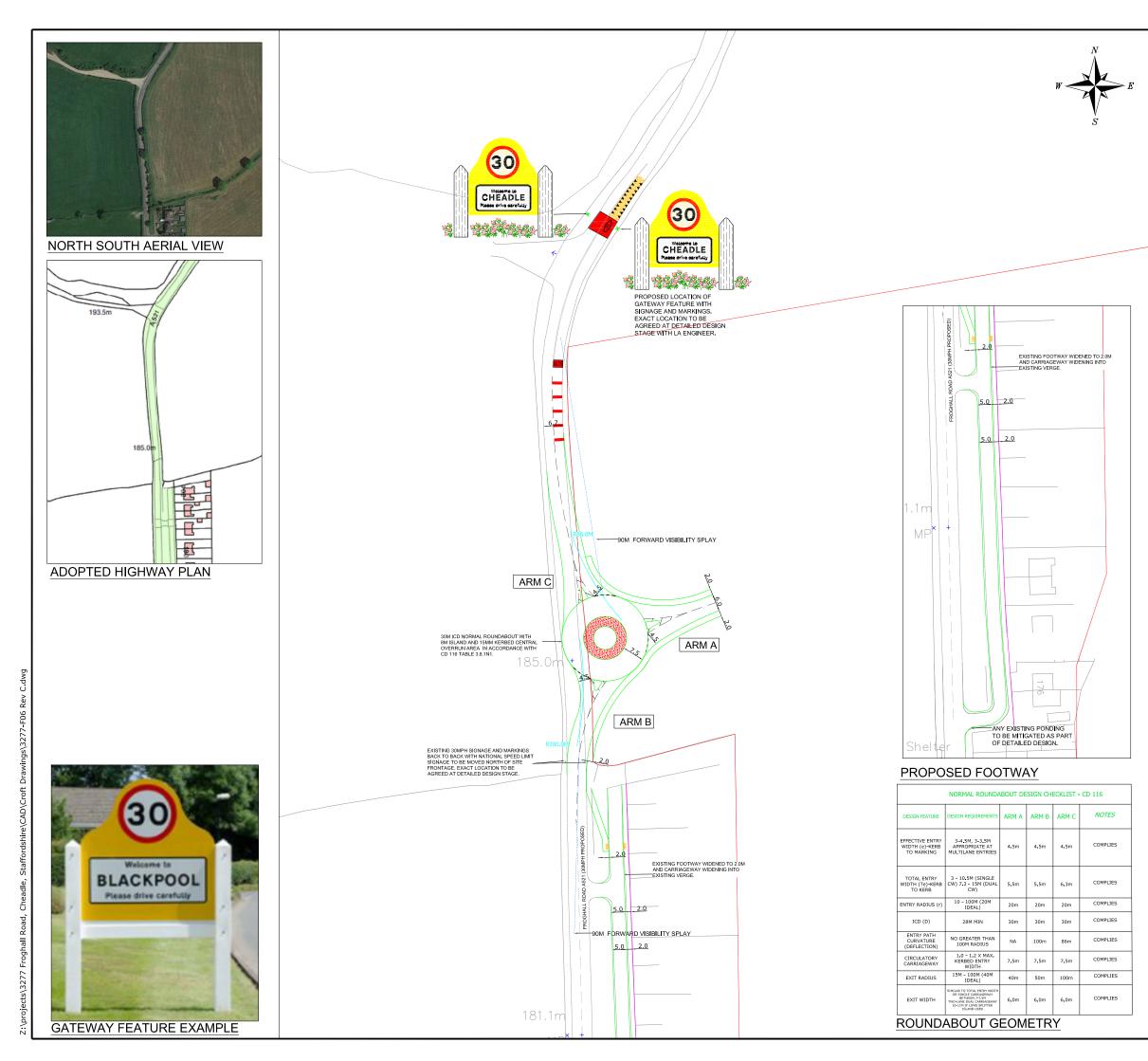
### 5 CONCLUSIONS

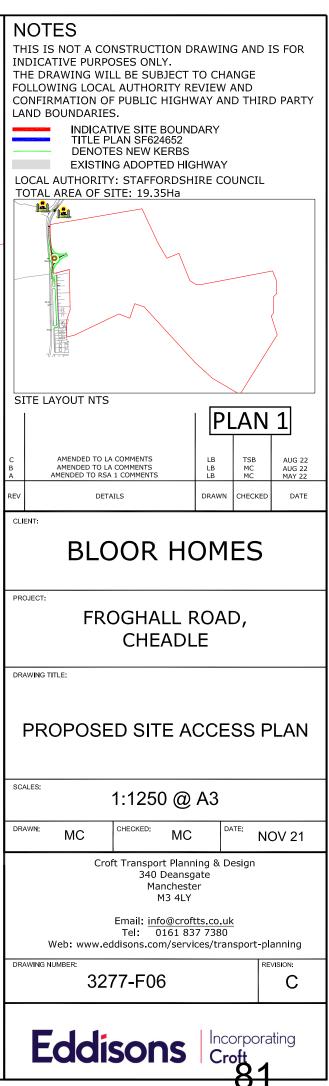
- 5.1.1 This report has considered proposals for a residential development on land to the north of the A521 Froghall Road in Cheadle.
- 5.1.2 The following conclusions have been drawn with regard to the proposed development:
  - The proposed development will be accessed by safe and efficient vehicular access arrangements;
  - The site is located within walking distance of a range of local amenities, including Cheadle Town Centre, which can be accessed via the existing and proposed footway provision in the vicinity of the site.
  - The site benefits from being located in close proximity to the bus stops located on the A521 Froghall Road which provides services that are ideally placed to cater for the needs of the development's residents, but further improvements to the existing service provision is being discussed with SCC.
  - The traffic count data and junction modelling used as part of the traffic impact analysis accurately reflect the traffic conditions on the local highway network.
  - The proposals will have a minimal impact on the local highway network. . However, if required by SCC a minor improvement can be provided at the A522 Leek Road/A521 High Street/A522 Tape Street junction which will mitigate the impact of the proposals.
- 5.1.3 In conclusion, the proposals for a residential development will provide a sustainable development in transport terms and planning permission should be granted in accordance with the Framework.

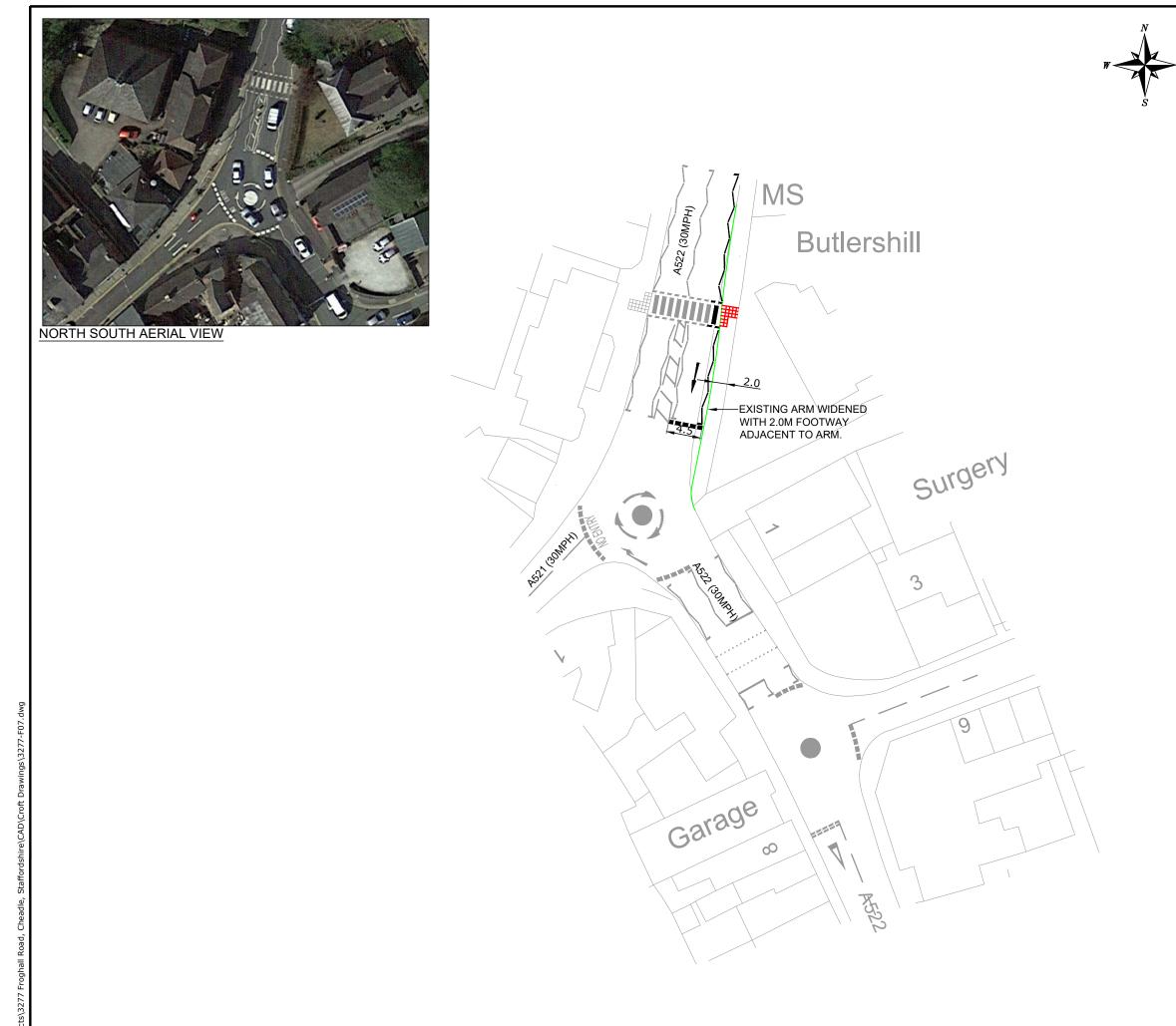




## PLANS







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	PLAN 2													
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## **APPENDICES**

## APPENDIX 1

SCC Email August 2022

From:	<u>Plant, David (E,I&amp;S)</u>
То:	Tom Bentley
Cc:	Hawe, Simon (E,I&S); Phil Wooliscroft; Jane Curley
Subject:	RE: Froghall Road, Cheadle (SMD2021/0610)
Date:	12 August 2022 17:32:54
Attachments:	image012.png
	image013.png
	image014.png
	image015.png
	image016.png
	image017.png
	image018.png
	image019.png
	image020.png
	image021.png
	image002.png

This Message originated outside your organization.

Hello Tom,

Referring to my initial response, it is disappointing that very little on that has been fundamentally addressed.

Your access still does not provide a safe access point commensurate with vehicle speeds and speed limit. Access needs to be designed for 60mph road. Design should be progressed adequately to demonstrate visibility in the horizontal and vertical plane.

There is no evidence that an extension to the speed limit would be possible or supported by statutory consultees.

Your transport assessment hasn't been updated for current free flow. There are no traffic counts or speed surveys. Vissim hasn't been updated.

There are still no proposals for mitigation of the effect of the development on surrounding network.

There is still the question of constructing a footway on third party land. Pedestrian route would be better following the service road, with the service road realigned accordingly in the interests of pedestrian safety. We need to ensure sustainable travel options are available, footway is important.

What cycle facilities are proposed?

Trust this is of use,

Dave



D R Plant IEng FIHE | Project Engineer Sustainable Development Team - Highways and Built County Third Floor, Staffordshire Place 1 Tipping Street, Stafford ST16 2DH Mobile: 01785 276702 Email: david.plant@staffordshire.gov.uk www.staffordshire.gov.uk From: Tom Bentley <tom.bentley@eddisons.com>
Sent: 11 August 2022 15:02
To: Plant, David (E,I&S) <david.plant@staffordshire.gov.uk>
Cc: Hawe, Simon (E,I&S) <simon.hawe@staffordshire.gov.uk>; Phil Wooliscroft
<Phil.Wooliscroft@eddisons.com>
Subject: RE: Froghall Road, Cheadle (SMD2021/0610)

**CAUTION:** This email originated from outside of Staffordshire County Council. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Dave/Simon

Any update on this one?

Cheers

Tom

Tom Bentley Associate Director

## Eddisons

**D.** 0161 837 7371 **M.** 07814 505828 340 Deansgate | Manchester | M3 4LY

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From: Tom Bentley
Sent: 01 August 2022 16:42
To: Plant, David (E,I&S) <<u>david.plant@staffordshire.gov.uk</u>>
Cc: Hawe, Simon (E,I&S) <<u>simon.hawe@staffordshire.gov.uk</u>>; Phil Wooliscroft
<<u>Phil.Wooliscroft@eddisons.com</u>>
Subject: DE: Example Based Cheadle (SMD2021/0C10)

Subject: RE: Froghall Road, Cheadle (SMD2021/0610)

#### Hi Dave

Following on from emails and phone message, any news on response to this application. The client is chasing hard on this one now so if we could get an update it would be much appreciated.

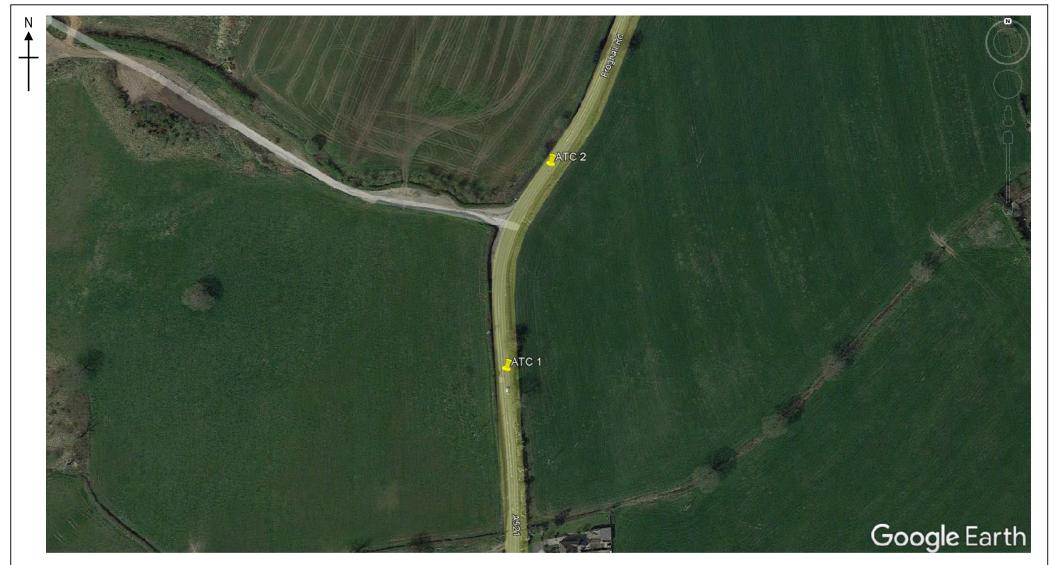
## **APPENDIX 2**

ATC Data – A521 Froghall Road

#### signal suveys

#### SURVEY CONTROL

Client:	Eddisons
Client Contact:	Tom Bentley
Survey Location:	Cheadle, Staffordshire
Date(s) of Survey:	Monday 22nd August 2022 - Sunday 28th August 2022
Natara	
Notes:	
On Site Supervisor(s):	Neil Harley
Data Checking:	David Cheng
Survey Reference:	2.082 Cheadle Staffordshire ATCs
Status:	Final
Date of Issue:	29th August 2022



DRAWING TITLE	Transport Data			
JOB TITLE	Specialists Ltd W: www.transportds.co.uk E: enquiries@transportds.co.uk T: 0777 625 2475 T: 0794 007 1260			
DRAWN BY	DATE	SCALE	REF	
DC	AUG 2022	NTS	FIGURE 1	
				89

#### Default

Globals Report Id CustomList-211 **Descriptor** Default Created by MetroCount Traffic Executive Creation Time (UTC) 2022-08-29T01:38:49 Legal Copyright (c)1997 - 2019 MetroCount Graphic Language English Country United Kingdom Time UTC + 60 min Create Version 5.0.8.0 Metric Part metric Speed Unit mph Length Unit metre Mass Unit tonne Dataset Site Name Cheadle, Staff Site Attribute ATC1 File Name D:\TDS\2022 - 2023\22.082 Cheadle Staffordshire ATCs\Cheadle, Staff1 0 2022-08-29 0228.EC0 File Type Plus Algorithm Factory default axle Description ^ Lane 0 Direction 7 Direction Text 7 - North bound A]B, South bound B]A. Layout Text Axle sensors - Paired (Class/Speed/Count) Setup Time 2022-08-21T08:32:05 Start Time 2022-08-21T08:32:05 Finish Time 2022-08-29T02:28:05 Operator DC Configuration 80 00 14 6a 6a 00 00 00 00 00 Profile Name Default Profile Title MetroCount Traffic Executive Graphic Logo Header Footer Percentile 1 85 Percentile 2 95 **Pace** 10 Filter Start 2022-08-22T00:00:00 Filter End 2022-08-29T00:00:00 Class Scheme ARX F Cls(1-12) Dir(N) Sp(0,100) Headway(]0) Span(0 - 100) Lane(0-16) Low Speed 0 High Speed 100 Posted Limit 40 Speed Limits 40 40 40 40 40 40 40 40 40 40 40 Separation 0.000 Separation Type Headway **Direction** North **Encoded Direction 1** Column

Time [--24-hour time (0000 - 2359) Total Number in time step Cls 1 Class totals Class totals Cls 2 Cls 3 Class totals Cls 4 Class totals Cls 5 Class totals Class totals CIs 6 Cls 7 Class totals Cls 8 Class totals Class totals Cls 9 Cls 10 Class totals Cls 11 Class totals Cls 12 Class totals Mean Average speed Percentile speed Vpp 85

#### Monday, 22 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
(			-	3	-	J	Ū	'	Ů	3	10		12		00
0000	4	0	4	0	0	0	0	0	0	0	0	0	0	43.7	-
0100	2	0	2	0	0	0	0	0	0	0	0	0	0	47.3	-
0200	1	0	1	0	0	0	0	0	0	0	0	0	0	43.9	-
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	40.5	-
0400	9	0	5	0	2	0	1	0	1	0	0	0	0	40.3	-
0500	18	0	12	1	3	0	1	0	1	0	0	0	0	38.7	45.3
0600	26	0	24	0	2	0	0	0	0	0	0	0	0	41.4	46.2
0700	65	0	52	1	6	0	2	0	3	1	0	0	0	42.2	48
0800	101	0	85	3	8	0	2	0	0	2	1	0	0	39.4	45.4
0900	120	0	100	1	17	0	1	0	0	0	1	0	0	39	43.5
1000	120	1	104	1	13	0	1	0	0	0	0	0	0	38	43.6
1100	121	1	105	2	12	0	0	0	0	0	1	0	0	38.6	43.7
1200	134	2	114	6	10	1	0	0	0	0	1	0	0	39	43
1300	114	1	99	0	10	0	2	1	0	1	0	0	0	38.8	44.3
1400	135	1	118	1	13	0	1	0	0	0	1	0	0	38.8	43.6
1500	122	0	106	2	14	0	0	0	0	0	0	0	0	38.6	43.3
1600	183	0	162	3	18	0	0	0	0	0	0	0	0	39.8	44.6
1700	198	0	179	1	18	0	0	0	0	0	0	0	0	39.6	44.9
1800	122	0	112	0	10	0	0	0	0	0	0	0	0	40.2	45.7
1900	87	0	74	1	11	0	0	0	1	0	0	0	0	40.1	45.9
2000	48	0	48	0	0	0	0	0	0	0	0	0	0	39.9	45.2
2100	33	1	32	0	0	0	0	0	0	0	0	0	0	38.3	42.9
2200	29	0	29	0	0	0	0	0	0	0	0	0	0	41	46.2
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	38.5	
07-19	1535	6	1336	21	149	1	9	1	3	4	5	0	0	39.3	44.4
06-22	1729	7	1514	22	162	1	9	1	4	4	5	0	0	39.3	44.6
06-00	1760	7	1545	22	162	1	9	1	4	4	5	0	0	39.4	44.6
00-00	1795	7	1569	23	168	1	11	1	6	4	5	0	0	39.4	44.7

#### Tuesday, 23 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
L		•	2	3	-	5	0	'	0	3	10		12		05
0000	6	0	5	0	1	0	0	0	0	0	0	0	0	45.7	-
0100	3	0	2	0	1	0	0	0	0	0	0	0	0	43.3	-
0200	2	0	2	0	0	0	0	0	0	0	0	0	0	30.9	-
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	46	-
0400	6	0	6	0	0	0	0	0	0	0	0	0	0	41.2	-
0500	16	0	12	0	1	0	2	0	1	0	0	0	0	38.8	45.1
0600	41	0	36	0	2	1	1	0	1	0	0	0	0	42.4	48
0700	65	0	55	0	7	1	1	0	0	1	0	0	0	41.2	46.1
0800	107	0	93	1	12	1	0	0	0	0	0	0	0	40.6	45.9
0900	118	1	98	0	19	0	0	0	0	0	0	0	0	38.9	44.2
1000	128	0	111	0	13	2	2	0	0	0	0	0	0	38.9	43.1
1100	97	2	80	0	14	0	1	0	0	0	0	0	0	39	45.6
1200	128	3	113	1	10	0	0	0	0	0	1	0	0	38.7	43.8
1300	122	3	105	0	12	0	1	0	1	0	0	0	0	38.9	44.3
1400	132	3	111	2	15	0	1	0	0	0	0	0	0	38.9	43
1500	139	0	119	2	15	1	2	0	0	0	0	0	0	40.2	45
1600	163	0	137	1	25	0	0	0	0	0	0	0	0	40.3	44.9
1700	212	4	193	1	14	0	0	0	0	0	0	0	0	40.3	46.1
1800	142	1	133	0	8	0	0	0	0	0	0	0	0	39.9	45.6
1900	83	2	76	0	5	0	0	0	0	0	0	0	0	39.8	44.6
2000	72	0	72	0	0	0	0	0	0	0	0	0	0	40.7	45.9
2100	49	2	47	0	0	0	0	0	0	0	0	0	0	39.3	44.9
2200	29	2	27	0	0	0	0	0	0	0	0	0	0	39.9	46.2
2300	8	0	7	0	0	0	1	0	0	0	0	0	0	41.4	
07-19	1553	17	1348	8	164	5	8	0	1	1	1	0	0	39.7	44.9
06-22	1798	21	1579	8	171	6	9	0	2	1	1	0	0	39.8	45
06-00	1835	23	1613	8	171	6	10	0	2	1	1	0	0	39.8	45
00-00	1869	23	1640	8	175	6	12	0	3	1	1	0	0	39.8	45

#### Wednesday, 24 August 2022

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
[			2	3	4	5	0	'	0	9	10		12		65
0000	4	0	4	0	0	0	0	0	0	0	0	0	0	36.5	-
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	44.1	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	33.6	-
0400	10	0	7	0	2	0	0	0	1	0	0	0	0	40.9	-
0500	12	0	9	0	1	0	2	0	0	0	0	0	0	40.2	47.9
0600	45	0	37	1	4	0	2	0	0	1	0	0	0	40.9	46.8
0700	70	0	56	0	12	0	1	0	0	1	0	0	0	40.6	46.1
0800	98	0	86	1	8	0	2	0	0	1	0	0	0	40.2	44.9
0900	112	1	92	1	13	0	4	0	0	1	0	0	0	38.5	44.1
1000	117	0	97	0	15	2	3	0	0	0	0	0	0	37.7	43.7
1100	126	0	113	0	12	0	1	0	0	0	0	0	0	38.4	43.2
1200	126	0	111	2	10	0	2	1	0	0	0	0	0	39.1	44.6
1300	125	2	103	4	16	0	0	0	0	0	0	0	0	38.4	44
1400	133	3	122	1	3	0	1	0	2	1	0	0	0	39.5	44.3
1500	137	2	116	2	16	0	0	0	0	0	1	0	0	40	44.9
1600	179	3	158	2	16	0	0	0	0	0	0	0	0	40.3	45.3
1700	192	2	159	1	27	0	1	0	1	1	0	0	0	40.8	45.9
1800	113	0	106	1	5	0	1	0	0	0	0	0	0	41.3	46.2
1900	117	0	109	1	7	0	0	0	0	0	0	0	0	39.6	46.3
2000	70	0	65	0	4	0	0	0	0	1	0	0	0	38.6	43.8
2100	51	0	49	0	2	0	0	0	0	0	0	0	0	39.8	48.3
2200	15	0	15	0	0	0	0	0	0	0	0	0	0	38.9	42.8
2300	11	0	11	0	0	0	0	0	0	0	0	0	0	41.2	50.7
07-19	1528	13	1319	15	153	2	16	1	3	5	1	0	0	39.6	45
06-22	1811	13	1579	17	170	2	18	1	3	7	1	0	0	39.6	45
06-00	1837	13	1605	17	170	2	18	1	3	7	1	0	0	39.6	45
00-00	1867	13	1628	17	174	2	20	1	4	7	1	0	0	39.6	45

#### Thursday, 25 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
L			-	Ŭ	-	Ŭ	Ŭ		Ŭ	Ŭ					
0000	2	0	2	0	0	0	0	0	0	0	0	0	0	36.3	-
0100	3	0	2	0	1	0	0	0	0	0	0	0	0	45.9	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	0	0	1	0	0	0	0	0	0	0	0	0	42.6	-
0400	9	0	8	0	1	0	0	0	0	0	0	0	0	41.3	-
0500	16	0	13	0	0	0	2	0	1	0	0	0	0	40.7	48.4
0600	41	0	35	0	3	0	1	0	0	2	0	0	0	41.9	46
0700	61	0	51	2	5	0	2	0	0	1	0	0	0	40.1	44.7
0800	110	2	94	2	10	0	1	0	1	0	0	0	0	41	45.8
0900	119	1	99	0	16	0	2	0	1	0	0	0	0	37.6	44.2
1000	148	1	128	1	17	0	1	0	0	0	0	0	0	37.3	42.2
1100	113	0	96	0	14	1	0	0	1	1	0	0	0	36.6	41.9
1200	137	0	117	1	17	0	1	0	0	0	1	0	0	38.4	43.1
1300	120	0	105	2	10	0	3	0	0	0	0	0	0	38.2	43.3
1400	112	0	96	1	11	0	3	0	1	0	0	0	0	39.3	45.4
1500	129	3	111	0	14	0	1	0	0	0	0	0	0	40.3	45.5
1600	170	1	148	0	20	0	0	0	1	0	0	0	0	39.6	43.6
1700	201	7	174	4	16	0	0	0	0	0	0	0	0	41	46.1
1800	135	1	121	1	12	0	0	0	0	0	0	0	0	40	45
1900	108	6	91	1	10	0	0	0	0	0	0	0	0	40	47
2000	64	3	58	0	3	0	0	0	0	0	0	0	0	41.9	47.1
2100	53	1	46	0	6	0	0	0	0	0	0	0	0	40.5	45.2
2200	27	1	25	0	1	0	0	0	0	0	0	0	0	39.3	46.9
2300	9	0	9	0	0	0	0	0	0	0	0	0	0	38.1	-
07-19	1555	16	1340	14	162	1	14	0	5	2	1	0	0	39.2	44.5
06-22	1821	26	1570	15	184	1	15	0	5	4	1	0	0	39.4	44.7
06-00	1857	27	1604	15	185	1	15	0	5	4	1	0	0	39.4	44.7
00-00	1888	27	1629	16	187	1	17	0	6	4	1	0	0	39.4	44.7

#### Friday, 26 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
•								-							
0000	6	0	6	0	0	0	0	0	0	0	0	0	0	39	-
0100	5	0	4	0	0	0	0	0	0	0	1	0	0	41.2	-
0200	3	0	3	0	0	0	0	0	0	0	0	0	0	37.8	-
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	42.7	-
0400	4	0	3	0	1	0	0	0	0	0	0	0	0	45.4	-
0500	21	0	18	0	1	0	2	0	0	0	0	0	0	41.1	47.5
0600	35	0	29	0	5	0	0	0	0	0	1	0	0	41.4	46.8
0700	56	0	44	1	6	0	3	0	0	1	1	0	0	40.5	46.6
0800	108	0	86	0	15	1	5	0	0	1	0	0	0	39.6	45.5
0900	145	2	117	2	21	0	2	0	0	1	0	0	0	39.7	45.2
1000	159	3	138	3	10	2	2	1	0	0	0	0	0	39.7	45.2
1100	153	0	131	3	15	0	2	0	0	1	1	0	0	39.2	44.4
1200	163	3	139	1	14	0	3	1	0	1	1	0	0	37.9	43.1
1300	163	5	138	1	16	1	2	0	0	0	0	0	0	39.9	45.9
1400	150	0	121	2	20	1	3	0	2	0	1	0	0	39	45.7
1500	148	3	127	1	15	0	2	0	0	0	0	0	0	39.8	45.7
1600	187	0	169	5	12	0	1	0	0	0	0	0	0	38.6	45.3
1700	178	1	162	1	13	0	0	0	0	1	0	0	0	40.9	45.9
1800	137	6	121	1	7	0	0	2	0	0	0	0	0	41.6	47.3
1900	110	3	99	1	6	1	0	0	0	0	0	0	0	40.3	45.7
2000	82	1	75	0	6	0	0	0	0	0	0	0	0	39.3	44.3
2100	53	0	50	0	3	0	0	0	0	0	0	0	0	39.9	45.1
2200	25	0	24	0	1	0	0	0	0	0	0	0	0	39.8	45.1
2300	23	0	22	0	1	0	0	0	0	0	0	0	0	39	44.3
07-19	1747	23	1493	21	164	5	25	4	2	6	4	0	0	39.6	45.4
06-22	2027	27	1746	22	184	6	25	4	2	6	5	0	0	39.7	45.4
06-00	2075	27	1792	22	186	6	25	4	2	6	5	0	0	39.7	45.4
00-00	2115	27	1827	22	188	6	27	4	2	6	6	0	0	39.7	45.4

#### Saturday, 27 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
L		-	-	Ū	-		•		Ū	•					
0000	13	0	13	0	0	0	0	0	0	0	0	0	0	37.3	44.4
0100	10	1	7	0	2	0	0	0	0	0	0	0	0	37.6	-
0200	4	0	3	0	1	0	0	0	0	0	0	0	0	44	-
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	38.2	-
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	44.9	-
0500	4	0	4	0	0	0	0	0	0	0	0	0	0	43.5	-
0600	12	1	9	0	2	0	0	0	0	0	0	0	0	36.4	49
0700	41	2	31	2	5	0	0	0	1	0	0	0	0	40.1	45.9
0800	107	0	88	7	9	0	1	0	2	0	0	0	0	37.9	43.7
0900	175	5	154	3	10	1	2	0	0	0	0	0	0	36	44.3
1000	199	4	185	1	7	0	1	0	1	0	0	0	0	39	44.1
1100	220	3	201	1	14	0	0	0	1	0	0	0	0	39.8	45.1
1200	216	7	196	3	9	0	0	0	1	0	0	0	0	40	45
1300	201	2	182	0	16	0	1	0	0	0	0	0	0	39.1	44.1
1400	122	4	109	0	9	0	0	0	0	0	0	0	0	39.6	45.6
1500	146	8	134	0	4	0	0	0	0	0	0	0	0	38.9	45.9
1600	111	1	101	0	9	0	0	0	0	0	0	0	0	39.5	44.3
1700	100	3	93	0	4	0	0	0	0	0	0	0	0	40.5	45.3
1800	125	1	119	0	5	0	0	0	0	0	0	0	0	39.2	44.6
1900	91	0	84	0	7	0	0	0	0	0	0	0	0	39.1	44
2000	70	1	69	0	0	0	0	0	0	0	0	0	0	39.3	47.1
2100	54	1	51	0	2	0	0	0	0	0	0	0	0	38.4	44.2
2200	32	0	31	1	0	0	0	0	0	0	0	0	0	39.8	46.2
2300	18	0	17	0	1	0	0	0	0	0	0	0	0	39.6	45.9
07-19	1763	40	1593	17	101	1	5	0	6	0	0	0	0	39.1	44.7
06-22	1990	43	1806	17	112	1	5	0	6	0	0	0	0	39	44.7
06-00	2040	43	1854	18	113	1	5	0	6	0	0	0	0	39.1	44.7
00-00	2074	44	1884	18	116	1	5	0	6	0	0	0	0	39.1	44.8

#### Sunday, 28 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
•															
0000	16	0	15	0	0	0	1	0	0	0	0	0	0	38.4	43.1
0100	13	0	13	0	0	0	0	0	0	0	0	0	0	43.2	49.2
0200	5	0	5	0	0	0	0	0	0	0	0	0	0	44.9	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0		-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0		-
0500	5	0	5	0	0	0	0	0	0	0	0	0	0	40.3	-
0600	14	2	12	0	0	0	0	0	0	0	0	0	0	41.9	54.8
0700	17	0	17	0	0	0	0	0	0	0	0	0	0	40.3	45.4
0800	44	0	41	0	3	0	0	0	0	0	0	0	0	38.8	45.7
0900	101	9	86	0	6	0	0	0	0	0	0	0	0	39.5	46.4
1000	142	5	128	0	8	0	1	0	0	0	0	0	0	39.8	44.8
1100	150	7	133	2	8	0	0	0	0	0	0	0	0	39	44.9
1200	142	8	124	2	7	0	0	0	1	0	0	0	0	38.9	44.1
1300	139	3	126	2	7	0	0	0	1	0	0	0	0	39.8	45.3
1400	98	5	87	3	3	0	0	0	0	0	0	0	0	40.2	44.8
1500	138	1	127	2	6	0	1	0	1	0	0	0	0	38.3	43.2
1600	69	2	63	0	4	0	0	0	0	0	0	0	0	40.8	46.1
1700	72	3	63	0	6	0	0	0	0	0	0	0	0	40.6	46
1800	85	3	78	0	4	0	0	0	0	0	0	0	0	40.2	45.5
1900	59	3	54	0	2	0	0	0	0	0	0	0	0	39.8	44.7
2000	55	0	54	0	1	0	0	0	0	0	0	0	0	39.2	43.6
2100	38	0	37	0	1	0	0	0	0	0	0	0	0	40.7	46
2200	20	0	19	1	0	0	0	0	0	0	0	0	0	41.5	47.7
2300	15	0	15	0	0	0	0	0	0	0	0	0	0	44.8	52.5
07-19	1197	46	1073	11	62	0	2	0	3	0	0	0	0	39.5	45
06-22	1363	51	1230	11	66	0	2	0	3	0	0	0	0	39.6	44.9
06-00	1398	51	1264	12	66	0	2	0	3	0	0	0	0	39.7	45.1
00-00	1437	51	1302	12	66	0	3	0	3	0	0	0	0	39.7	45.1

#### Default

Globals Report Id CustomList-212 **Descriptor** Default Created by MetroCount Traffic Executive Creation Time (UTC) 2022-08-29T01:38:13 Legal Copyright (c)1997 - 2019 MetroCount Graphic Language English Country United Kingdom Time UTC + 60 min Create Version 5.0.8.0 Metric Part metric Speed Unit mph Length Unit metre Mass Unit tonne Dataset Site Name Cheadle, Staff Site Attribute ATC1 File Name D:\TDS\2022 - 2023\22.082 Cheadle Staffordshire ATCs\Cheadle, Staff1 0 2022-08-29 0228.EC0 File Type Plus Algorithm Factory default axle Description ^ Lane 0 Direction 7 Direction Text 7 - North bound A]B, South bound B]A. Layout Text Axle sensors - Paired (Class/Speed/Count) Setup Time 2022-08-21T08:32:05 Start Time 2022-08-21T08:32:05 Finish Time 2022-08-29T02:28:05 **Operator** DC Configuration 80 00 14 6a 6a 00 00 00 00 00 Profile Name Default Profile Title MetroCount Traffic Executive Graphic Logo Header Footer Percentile 1 85 Percentile 2 95 **Pace** 10 Filter Start 2022-08-22T00:00:00 Filter End 2022-08-29T00:00:00 Class Scheme ARX F Cls(1-12) Dir(S) Sp(0,100) Headway(]0) Span(0 - 100) Lane(0-16) Low Speed 0 High Speed 100 Posted Limit 40 Speed Limits 40 40 40 40 40 40 40 40 40 40 40 Separation 0.000 Separation Type Headway **Direction** South **Encoded Direction 4** Column

Time [--24-hour time (0000 - 2359) Total Number in time step Cls 1 Class totals Class totals Cls 2 Cls 3 Class totals Cls 4 Class totals Class totals Cls 5 Class totals CIs 6 Cls 7 Class totals Cls 8 Class totals Class totals Cls 9 Cls 10 Class totals Cls 11 Class totals Cls 12 Class totals Mean Average speed Percentile speed Vpp 85

#### Monday, 22 August 2022

Time	Total	Cls	Cls	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls	Cls 11	Cls	Mean	Vpp 85
[		1	2	3	4	Э	o	'	8	9	10	TI	12		80
0000	6	0	6	0	0	0	0	0	0	0	0	0	0	38.6	-
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	42	-
0200	3	0	2	0	1	0	0	0	0	0	0	0	0	40.7	-
0300	4	0	1	0	3	0	0	0	0	0	0	0	0	37.8	-
0400	4	0	4	0	0	0	0	0	0	0	0	0	0	38.2	-
0500	32	0	28	0	2	0	2	0	0	0	0	0	0	38	42.8
0600	49	2	41	0	6	0	0	0	0	0	0	0	0	41.5	46.8
0700	120	1	104	4	10	0	0	0	0	1	0	0	0	39.7	44.3
0800	119	1	104	2	12	0	0	0	0	0	0	0	0	37.2	41.7
0900	114	1	91	1	19	0	1	0	0	1	0	0	0	36.4	41.1
1000	120	0	105	1	11	0	1	0	0	1	1	0	0	36.2	39.7
1100	112	0	98	2	11	1	0	0	0	0	0	0	0	35.2	40.4
1200	101	2	85	3	9	0	0	1	0	1	0	0	0	36.2	39.3
1300	104	1	93	1	8	1	0	0	0	0	0	0	0	35.7	41
1400	132	5	109	2	12	0	1	0	1	1	1	0	0	35.7	40.8
1500	137	0	117	3	15	0	0	1	0	0	1	0	0	36.3	40.4
1600	133	1	123	1	8	0	0	0	0	0	0	0	0	36.7	41
1700	154	0	146	1	6	0	0	0	1	0	0	0	0	36.7	41.3
1800	102	1	96	0	5	0	0	0	0	0	0	0	0	38	43.6
1900	67	0	63	1	3	0	0	0	0	0	0	0	0	37.3	41.5
2000	44	0	41	0	3	0	0	0	0	0	0	0	0	36.8	42.3
2100	24	0	22	0	1	0	0	1	0	0	0	0	0	34.6	38.1
2200	16	0	15	0	1	0	0	0	0	0	0	0	0	41.8	51.6
2300	6	0	6	0	0	0	0	0	0	0	0	0	0	35.4	
07-19	1448	13	1271	21	126	2	3	2	2	5	3	0	0	36.7	41.3
06-22	1632	15	1438	22	139	2	3	3	2	5	3	0	0	36.8	41.5
06-00	1654	15	1459	22	140	2	3	3	2	5	3	0	0	36.9	41.6
00-00	1706	15	1503	22	146	2	5	3	2	5	3	0	0	36.9	41.7

#### Tuesday, 23 August 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp
[		1	2	3	4	5	6	7	8	9	10	11	12		85
0000	5	0	4	0	1	0	0	0	0	0	0	0	0	38.3	_
0100	1	0	4	0	1	0	0	0	0	0	0	0	0	32.8	
0200	6	0	4	0	2	0	0	0	0	0	0	0	0	37.7	
0300	2	0	- 0	0	2	0	0	0	0	0	0	0	0	38.9	
0400	6	0	6	0	0	0	0	0	0	0	0	0	0	37.7	
0500	25	1	23	0	1	0	0	0	0	0	0	0	0	39.3	45
0600	49	0	40	0	8	0	0	0	0	0	1	0	0	40.8	45.6
0700	118	1	105	1	11	0	Ő	0	0	0	0	Ő	0	39.4	44.7
0800	132	0	118	1	11	0	1	0	0	0	1	0	0	37.4	42.8
0900	99	0	86	1	10	1	1	0	0	0	0	0	0	37.7	41.8
1000	102	2	90	0	9	0	1	0	0	0	0	0	0	36	39.4
1100	121	1	108	2	9	0	0	0	0	0	1	0	0	36.1	40.1
1200	113	6	95	0	11	0	1	0	0	0	0	0	0	35.6	40.4
1300	118	3	98	1	14	0	1	0	1	0	0	0	0	36.1	40.2
1400	137	2	119	1	11	0	1	0	0	0	3	0	0	34.7	38.8
1500	138	1	118	1	16	0	0	0	0	0	2	0	0	36.6	40.2
1600	128	1	114	0	10	0	0	1	1	1	0	0	0	38	42.9
1700	149	1	139	1	8	0	0	0	0	0	0	0	0	37.8	41.7
1800	124	4	109	1	9	1	0	0	0	0	0	0	0	38.5	44
1900	75	3	70	0	2	0	0	0	0	0	0	0	0	39.3	45.4
2000	63	0	58	0	5	0	0	0	0	0	0	0	0	37.5	42.7
2100	27	1	24	0	2	0	0	0	0	0	0	0	0	36.7	41.1
2200	22	0	22	0	0	0	0	0	0	0	0	0	0	38.6	42.3
2300	15	0	15	0	0	0	0	0	0	0	0	0	0	40.2	50
07-19	1479	22	1299	10	129	2	6	1	2	1	7	0	0	37	41.6
06-22	1693	26	1491	10	146	2	6	1	2	1	8	0	0	37.2	41.9
06-00	1730	26	1528	10	146	2	6	1	2	1	8	0	0	37.3	41.9
00-00	1775	27	1565	10	153	2	6	1	2	1	8	0	0	37.3	41.9

#### Wednesday, 24 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
L.			-	J	-	ÿ	Ŭ		Ŭ	Ĵ	10		12		00
0000	4	0	3	0	1	0	0	0	0	0	0	0	0	36.5	-
0100	2	0	1	0	1	0	0	0	0	0	0	0	0	44.1	-
0200	2	0	2	0	0	0	0	0	0	0	0	0	0	36	-
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	47.7	-
0400	4	0	4	0	0	0	0	0	0	0	0	0	0	38	-
0500	35	2	27	0	6	0	0	0	0	0	0	0	0	39	44.4
0600	53	1	47	0	5	0	0	0	0	0	0	0	0	39.9	44.9
0700	114	1	96	1	14	0	1	0	0	0	1	0	0	38.6	43.8
0800	114	1	96	1	12	1	2	0	0	1	0	0	0	36.4	40.8
0900	102	0	93	0	5	1	2	0	0	0	1	0	0	35.4	39.7
1000	111	2	89	1	16	2	1	0	0	0	0	0	0	36.2	41.3
1100	110	0	97	2	6	0	2	0	0	3	0	0	0	35.5	41.1
1200	109	3	97	0	8	0	1	0	0	0	0	0	0	35.3	40.6
1300	92	0	79	0	11	0	0	0	0	1	1	0	0	35.8	39.6
1400	120	2	106	2	9	0	0	0	0	0	1	0	0	35.9	39.7
1500	134	1	118	1	13	0	0	0	0	0	1	0	0	36.8	42.3
1600	131	0	122	1	8	0	0	0	0	0	0	0	0	37.4	42.2
1700	142	3	125	0	11	1	2	0	0	0	0	0	0	38.3	42.5
1800	115	4	102	1	7	0	0	0	0	0	1	0	0	37.5	41.3
1900	74	0	66	1	6	0	0	0	0	0	1	0	0	37.7	41.6
2000	53	0	50	0	3	0	0	0	0	0	0	0	0	37.5	42.2
2100	50	0	49	0	0	0	0	0	1	0	0	0	0	37.8	41.3
2200	23	0	23	0	0	0	0	0	0	0	0	0	0	36.4	44.9
2300	11	0	11	0	0	0	0	0	0	0	0	0	0	40.3	43.3
07-19	1394	17	1220	10	120	5	11	0	0	5	6	0	0	36.7	41.5
06-22	1624	18	1432	11	134	5	11	0	1	5	7	0	0	36.9	41.5
06-00	1658	18	1466	11	134	5	11	0	1	5	7	0	0	36.9	41.6
00-00	1707	20	1505	11	142	5	11	0	1	5	7	0	0	36.9	41.6

#### Thursday, 25 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
		•	-	•	-	•	Ţ		•	· ·					
0000	5	0	5	0	0	0	0	0	0	0	0	0	0	44.8	-
0100	1	0	0	0	1	0	0	0	0	0	0	0	0	36.5	-
0200	4	0	3	0	1	0	0	0	0	0	0	0	0	36.4	-
0300	2	0	1	1	0	0	0	0	0	0	0	0	0	37.5	-
0400	7	0	7	0	0	0	0	0	0	0	0	0	0	42.3	-
0500	35	1	29	0	4	0	1	0	0	0	0	0	0	38.9	45.4
0600	56	1	47	0	7	0	0	0	0	0	1	0	0	40.8	45.6
0700	108	0	93	1	12	0	2	0	0	0	0	0	0	38	42.8
0800	119	1	99	0	15	0	2	0	1	1	0	0	0	36.3	41.2
0900	128	0	117	1	9	0	0	0	1	0	0	0	0	36.1	41
1000	127	0	115	0	10	1	1	0	0	0	0	0	0	35	39.8
1100	125	0	108	1	13	0	1	0	0	2	0	0	0	34.5	38.6
1200	117	3	98	0	12	2	1	0	0	0	1	0	0	34.7	39.6
1300	116	0	105	1	9	0	1	0	0	0	0	0	0	36.8	41.7
1400	116	1	103	1	10	0	1	0	0	0	0	0	0	35.7	40.5
1500	132	0	116	0	12	0	1	0	1	0	2	0	0	36.8	40.9
1600	144	4	126	0	12	0	1	0	0	0	1	0	0	37.1	41.5
1700	132	3	119	2	7	1	0	0	0	0	0	0	0	38.1	43.5
1800	107	1	99	1	6	0	0	0	0	0	0	0	0	37.7	42.1
1900	69	5	58	0	5	1	0	0	0	0	0	0	0	37.7	43.5
2000	70	8	57	0	5	0	0	0	0	0	0	0	0	38.6	45.5
2100	37	0	35	0	2	0	0	0	0	0	0	0	0	39.2	44.2
2200	14	0	13	0	1	0	0	0	0	0	0	0	0	38.3	42.4
2300	17	1	16	0	0	0	0	0	0	0	0	0	0	38	45.9
07-19	1471	13	1298	8	127	4	11	0	3	3	4	0	0	36.4	41.4
06-22	1703	27	1495	8	146	5	11	0	3	3	5	0	0	36.7	41.8
06-00	1734	28	1524	8	147	5	11	0	3	3	5	0	0	36.8	41.8
00-00	1788	29	1569	9	153	5	12	0	3	3	5	0	0	36.8	42

#### Friday, 26 August 2022

Time	Total	Cls	Cls	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls	Cls 11	Cls	Mean	Vpp 85
[		1	2	3	4	Э	0	'	8	э	10	11	12		80
0000	5	0	5	0	0	0	0	0	0	0	0	0	0	39.8	-
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	43.1	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	3	0	1	0	2	0	0	0	0	0	0	0	0	32.8	-
0400	5	0	5	0	0	0	0	0	0	0	0	0	0	42.6	-
0500	42	1	36	0	5	0	0	0	0	0	0	0	0	39.1	44.5
0600	41	0	36	0	4	0	0	0	1	0	0	0	0	38.6	43.3
0700	94	2	82	1	8	0	0	0	0	0	1	0	0	38.7	43.7
0800	125	1	112	0	10	0	1	0	0	1	0	0	0	38.8	45
0900	127	1	106	2	11	1	4	0	1	0	1	0	0	37	41.1
1000	122	1	103	0	13	1	2	0	1	0	1	0	0	35.7	39.8
1100	139	5	118	0	15	0	0	0	1	0	0	0	0	35.7	41.4
1200	110	4	89	1	12	0	3	0	0	1	0	0	0	36.4	42
1300	132	6	101	1	19	0	1	0	1	2	1	0	0	35.5	40
1400	152	3	132	1	15	0	0	0	0	1	0	0	0	35.7	41
1500	147	3	128	2	13	0	0	0	0	0	1	0	0	36.4	41.6
1600	159	5	140	1	12	0	0	0	0	0	1	0	0	37.3	41.9
1700	154	8	135	2	8	1	0	0	0	0	0	0	0	38.1	43.1
1800	104	2	94	3	3	1	0	0	0	1	0	0	0	37.1	41.9
1900	101	1	97	0	3	0	0	0	0	0	0	0	0	37.9	43.1
2000	74	6	65	0	3	0	0	0	0	0	0	0	0	38.4	44.2
2100	41	1	37	0	2	0	1	0	0	0	0	0	0	38.3	44.2
2200	31	0	28	0	3	0	0	0	0	0	0	0	0	39	43.3
2300	16	2	14	0	0	0	0	0	0	0	0	0	0	39.4	44.7
07-19	1565	41	1340	14	139	4	11	0	4	6	6	0	0	36.8	41.9
06-22	1822	49	1575	14	151	4	12	0	5	6	6	0	0	37	42.1
06-00	1869	51	1617	14	154	4	12	0	5	6	6	0	0	37.1	42.1
00-00	1927	52	1667	14	161	4	12	0	5	6	6	0	0	37.2	42.2

#### Saturday, 27 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
•															
0000	13	0	13	0	0	0	0	0	0	0	0	0	0	37.6	42.1
0100	6	0	3	0	3	0	0	0	0	0	0	0	0	38.4	-
0200	3	0	1	0	2	0	0	0	0	0	0	0	0	38.4	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	4	0	4	0	0	0	0	0	0	0	0	0	0	40.7	-
0500	14	0	11	0	3	0	0	0	0	0	0	0	0	37.8	44.5
0600	11	0	9	0	2	0	0	0	0	0	0	0	0	38.3	43.1
0700	55	2	49	0	4	0	0	0	0	0	0	0	0	38.7	44.7
0800	64	0	56	3	5	0	0	0	0	0	0	0	0	36.9	41.2
0900	115	2	103	1	9	0	0	0	0	0	0	0	0	37.3	41.7
1000	104	2	95	0	7	0	0	0	0	0	0	0	0	38.2	43.3
1100	114	0	104	1	9	0	0	0	0	0	0	0	0	37.3	41.6
1200	136	4	120	2	8	0	0	1	1	0	0	0	0	36.9	42.2
1300	145	2	141	0	2	0	0	0	0	0	0	0	0	35.8	40.9
1400	173	8	153	3	9	0	0	0	0	0	0	0	0	36.6	41.2
1500	190	5	176	0	8	0	1	0	0	0	0	0	0	34.9	40.3
1600	223	1	201	9	9	2	1	0	0	0	0	0	0	32.3	39
1700	149	1	139	1	7	0	0	1	0	0	0	0	0	35.9	40.9
1800	135	3	118	4	10	0	0	0	0	0	0	0	0	36.9	42.4
1900	93	1	86	0	6	0	0	0	0	0	0	0	0	37.8	43.6
2000	82	1	74	0	7	0	0	0	0	0	0	0	0	36	41.5
2100	57	1	55	1	0	0	0	0	0	0	0	0	0	35.7	42.9
2200	38	0	36	0	2	0	0	0	0	0	0	0	0	37.8	43.1
2300	20	0	19	0	1	0	0	0	0	0	0	0	0	36.9	43.8
07-19	1603	30	1455	24	87	2	2	2	1	0	0	0	0	36	41.4
06-22	1846	33	1679	25	102	2	2	2	1	0	0	0	0	36.1	41.5
06-00	1904	33	1734	25	105	2	2	2	1	0	0	0	0	36.1	41.5
00-00	1944	33	1766	25	113	2	2	2	1	0	0	0	0	36.2	41.6

#### Sunday, 28 August 2022

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
[		1	2	3	4	Э	0	'	ð	9	10	11	12		80
0000	10	0	10	0	0	0	0	0	0	0	0	0	0	38.4	-
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	40.4	
0200	7	0	7	0	0	0	0	0	0	0	0	0	0	39.3	-
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	39.8	-
0400	2	0	1	0	1	0	0	0	0	0	0	0	0	39.4	-
0500	8	0	8	0	0	0	0	0	0	0	0	0	0	40.6	-
0600	8	0	5	0	2	0	1	0	0	0	0	0	0	35	-
0700	23	0	23	0	0	0	0	0	0	0	0	0	0	39.1	45.1
0800	25	2	22	0	1	0	0	0	0	0	0	0	0	37.8	45.9
0900	69	2	66	0	1	0	0	0	0	0	0	0	0	38	42.2
1000	115	3	110	0	2	0	0	0	0	0	0	0	0	37.6	42.4
1100	124	5	111	2	6	0	0	0	0	0	0	0	0	36.9	41.7
1200	123	8	104	1	8	0	0	1	1	0	0	0	0	36.9	41.5
1300	127	5	115	0	5	0	1	0	1	0	0	0	0	37.4	42.6
1400	120	2	112	1	4	1	0	0	0	0	0	0	0	36.9	41
1500	148	12	125	3	8	0	0	0	0	0	0	0	0	36.7	40.3
1600	111	14	90	0	7	0	0	0	0	0	0	0	0	38.1	42.1
1700	127	1	122	0	4	0	0	0	0	0	0	0	0	37.2	41.4
1800	86	6	76	0	4	0	0	0	0	0	0	0	0	38.3	43.5
1900	67	3	61	1	2	0	0	0	0	0	0	0	0	37.7	44.5
2000	64	2	61	0	1	0	0	0	0	0	0	0	0	36.6	42.5
2100	37	2	31	0	4	0	0	0	0	0	0	0	0	37.5	42.4
2200	29	0	29	0	0	0	0	0	0	0	0	0	0	39.1	42.8
2300	11	0	11	0	0	0	0	0	0	0	0	0	0	39	43.2
07-19 06-22	1198	60	1076	7	50	1	1	1	2	0	0	0	0	37.4	41.8
06-22	1374 1414	67 67	1234 1274	8	59 59	1	2	1	2	0	0	0	0	37.3 37.4	41.9 41.9
		67	1274	8 8	59 60	1	2	1	2	0	0	0	0	37.4	
00-00	1446	0/	1305	8	00	1	2	1	2	U	0	U	U	37.4	41.9

#### Default

Globals Report Id CustomList-213 **Descriptor** Default Created by MetroCount Traffic Executive Creation Time (UTC) 2022-08-29T01:38:21 Legal Copyright (c)1997 - 2019 MetroCount Graphic Language English Country United Kingdom Time UTC + 60 min Create Version 5.0.8.0 Metric Part metric Speed Unit mph Length Unit metre Mass Unit tonne Dataset Site Name Cheadle, Staff Site Attribute ATC 2 File Name D:\TDS\2022 - 2023\22.082 Cheadle Staffordshire ATCs\Cheadle, Staff2 0 2022-08-29 0225.EC0 File Type Plus Algorithm Factory default axle Description Northern ATC of Froghall Road Lane 0 Direction 7 Direction Text 7 - North bound A]B, South bound B]A. Layout Text Axle sensors - Paired (Class/Speed/Count) Setup Time 2022-08-21T08:37:18 Start Time 2022-08-21T08:37:18 Finish Time 2022-08-29T02:25:18 **Operator** DC Configuration 80 00 14 6a 6a 00 00 00 00 00 Profile Name Default Profile Title MetroCount Traffic Executive Graphic Logo Header Footer Percentile 1 85 Percentile 2 95 **Pace** 10 Filter Start 2022-08-22T00:00:00 Filter End 2022-08-29T00:00:00 Class Scheme ARX F Cls(1-12) Dir(N) Sp(0,100) Headway(]0) Span(0 - 100) Lane(0-16) Low Speed 0 High Speed 100 Posted Limit 40 Speed Limits 40 40 40 40 40 40 40 40 40 40 40 Separation 0.000 Separation Type Headway **Direction** North Encoded Direction 1 Column

Time [	24-hour time (0000 - 2359)
Total	Number in time step
Cls 1	Class totals
Cls 2	Class totals
Cls 3	Class totals
Cls 4	Class totals
Cls 5	Class totals
Cls 6	Class totals
Cls 7	Class totals
Cls 8	Class totals
Cls 9	Class totals
Cls 10	Class totals
Cls 11	Class totals
Cls 12	Class totals
Mean	Average speed
Vpp 85	Percentile speed

#### Monday, 22 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
0000	4	0	4	0	0	0	0	0	0	0	0	0	0	45.5	
0100	2	0	2	0	0	0	0	0	0	0	0	0	0	40.7	
0200	1	0	1	0	0	0	0	0	0	0	0	0	0	41	
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	37.6	
0400	9	0	5	0	2	0	1	0	1	0	0	0	0	39.1	
0500	18	0	13	1	2	0	1	0	1	0	0	0	0	36.1	41.5
0600	26	0	24	0	2	0	0	0	0	0	0	0	0	39.6	43.3
0700	64	0	51	1	6	0	2	0	3	1	0	0	0	40.6	45.3
0800	102	0	86	2	8	0	3	0	0	2	1	0	0	38	43.8
0900	120	0	103	1	14	0	1	0	0	0	1	0	0	37.9	42.8
1000	121	1	104	0	14	0	2	0	0	0	0	0	0	36.9	41.3
1100	121	1	104	3	13	0	0	0	0	0	0	0	0	37.3	41.7
1200	135	2	117	5	9	1	0	0	0	0	1	0	0	37.6	42.1
1300	114	1	99	0	10	0	2	1	0	1	0	0	0	37.1	41.2
1400	136	1	119	2	12	0	1	0	0	0	1	0	0	37.1	41.3
1500	122	0	107	3	12	0	0	0	0	0	0	0	0	36.6	40.8
1600	182	0	162	3	17	0	0	0	0	0	0	0	0	38.2	42.2
1700	199	1	182	2	14	0	0	0	0	0	0	0	0	37.8	42.7
1800	122	0	113	0	9	0	0	0	0	0	0	0	0	38.1	41.8
1900	89	0	77	1	10	0	0	0	1	0	0	0	0	38.1	43.9
2000	48	0	48	0	0	0	0	0	0	0	0	0	0	37.9	41.4
2100	33	1	32	0	0	0	0	0	0	0	0	0	0	36	42.3
2200	29	0	29	0	0	0	0	0	0	0	0	0	0	40.1	45.7
2300	2	0	2	0	0	0	0	0	0	0	0	0	0	36.7	-
07-19	1538	7	1347	22	138	1	11	1	3	4	4	0	0	37.7	42.3
06-22	1734	8	1528	23	150	1	11	1	4	4	4	0	0	37.7	42.3
06-00	1765	8	1559	23	150	1	11	1	4	4	4	0	0	37.7	42.4
00-00	1800	8	1584	24	155	1	13	1	6	4	4	0	0	37.7	42.4

#### Tuesday, 23 August 2022

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
[			2	3	-	5	0	'	0	3	10		12		05
0000	6	0	5	0	1	0	0	0	0	0	0	0	0	43	-
0100	3	0	2	0	1	0	0	0	0	0	0	0	0	41.3	
0200	2	0	2	0	0	0	0	0	0	0	0	0	0	32.5	
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	44.9	-
0400	6	0	6	0	0	0	0	0	0	0	0	0	0	39.5	-
0500	15	0	11	0	1	0	2	0	1	0	0	0	0	35.8	41.6
0600	42	0	37	0	2	1	1	0	1	0	0	0	0	40.1	45.8
0700	63	0	55	0	5	1	1	0	0	1	0	0	0	40.1	43.9
0800	108	0	94	0	12	1	1	0	0	0	0	0	0	39.2	43.5
0900	118	1	100	0	17	0	0	0	0	0	0	0	0	37.3	41.6
1000	130	0	112	1	13	2	2	0	0	0	0	0	0	36.9	40.6
1100	101	2	84	0	14	0	1	0	0	0	0	0	0	37.2	42
1200	130	3	115	1	10	0	0	0	0	0	1	0	0	37	41.3
1300	123	4	104	0	13	0	0	0	1	0	1	0	0	37.2	41.4
1400	131	3	108	2	17	0	1	0	0	0	0	0	0	37.1	41
1500	139	0	121	3	14	0	1	0	0	0	0	0	0	38.5	42.3
1600	162	0	140	1	21	0	0	0	0	0	0	0	0	38.8	42.6
1700	216	4	199	1	11	0	0	0	1	0	0	0	0	38.9	43.6
1800	142	1	132	0	9	0	0	0	0	0	0	0	0	38.8	43.5
1900	83	2	76	0	5	0	0	0	0	0	0	0	0	38.6	42.9
2000	72	0	72	0	0	0	0	0	0	0	0	0	0	38.9	43.3
2100	47	1	46	0	0	0	0	0	0	0	0	0	0	38.4	43.6
2200	29	2	27	0	0	0	0	0	0	0	0	0	0	38.7	44.6
2300	8	0	7	0	0	0	1	0	0	0	0	0	0	40.1	
07-19	1563	18	1364	9	156	4	7	0	2	1	2	0	0	38.1	42.5
06-22	1807	21	1595	9	163	5	8	0	3	1	2	0	0	38.2	42.6
06-00	1844	23	1629	9	163	5	9	0	3	1	2	0	0	38.2	42.6
00-00	1877	23	1655	9	167	5	11	0	4	1	2	0	0	38.2	42.6

#### Wednesday, 24 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
L <sup></sup>			-	J.	-	Ŭ	Ŭ		Ŭ	Ĵ	10		12		00
0000	4	0	4	0	0	0	0	0	0	0	0	0	0	34.3	-
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	41.1	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	31.6	-
0400	10	0	7	0	2	0	0	0	1	0	0	0	0	39.4	-
0500	13	0	11	0	1	0	1	0	0	0	0	0	0	38.4	45.6
0600	44	0	37	1	3	0	2	0	0	1	0	0	0	38.2	43.6
0700	68	0	55	0	11	0	1	0	0	1	0	0	0	39.4	43.3
0800	100	0	88	0	8	0	2	0	1	1	0	0	0	38.3	42.1
0900	114	1	95	1	12	0	4	0	0	0	1	0	0	37	41.3
1000	119	0	101	0	13	2	3	0	0	0	0	0	0	36.2	40.9
1100	126	0	113	0	12	0	1	0	0	0	0	0	0	36.8	41.7
1200	125	0	111	1	10	0	3	0	0	0	0	0	0	37.9	42.1
1300	125	2	103	4	16	0	0	0	0	0	0	0	0	37.1	41.4
1400	133	3	122	1	3	0	1	0	1	1	0	1	0	37.9	43.3
1500	137	2	118	2	14	0	0	0	0	0	1	0	0	38.3	42.8
1600	181	4	162	1	14	0	0	0	0	0	0	0	0	38.5	42.1
1700	195	2	167	0	25	0	0	0	0	0	1	0	0	38.6	42.9
1800	113	0	107	1	4	0	1	0	0	0	0	0	0	39.1	43.3
1900	118	0	109	2	7	0	0	0	0	0	0	0	0	37.6	42.5
2000	69	0	64	0	4	0	0	0	0	1	0	0	0	37.7	41.4
2100	51	1	47	0	3	0	0	0	0	0	0	0	0	38.3	45.3
2200	15	0	15	0	0	0	0	0	0	0	0	0	0	37.9	40.4
2300	11	0	11	0	0	0	0	0	0	0	0	0	0	39.1	46.1
07-19	1536	14	1342	11	142	2	16	0	2	3	3	1	0	37.9	42.3
06-22	1818	15	1599	14	159	2	18	0	2	5	3	1	0	37.9	42.3
06-00	1844	15	1625	14	159	2	18	0	2	5	3	1	0	37.9	42.3
00-00	1875	15	1650	14	163	2	19	0	3	5	3	1	0	37.9	42.3

#### Thursday, 25 August 2022

Time	Total	Cls 1	Cls 2	Cls 3	Cls	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
[		1	2	3	4	Э	0	'	8	9	10	11	12		80
0000	2	0	2	0	0	0	0	0	0	0	0	0	0	34	-
0100	3	0	2	0	1	0	0	0	0 0	0 0	0	0	0	41.8	
0200	0	0	0	0	0	0	Ő	0	0	0	Ő	0	0		-
0300	1	0	0	1	0	0	0	0	0	0	0	0	0	38.8	-
0400	9	0	8	0	1	0	0	0	0	0	0	0	0	39.1	
0500	16	0	13	0	0	0	2	0	1	0	0	0	0	37	44
0600	40	0	34	0	3	0	1	0	0	2	0	0	0	39.2	45.1
0700	60	0	52	1	3	0	3	0	0	1	0	0	0	38.8	42.9
0800	110	2	93	1	10	0	2	0	1	1	0	0	0	38.9	43.2
0900	116	1	96	0	16	0	2	0	1	0	0	0	0	36.5	41.3
1000	147	1	131	0	14	0	1	0	0	0	0	0	0	36.2	40.7
1100	114	0	97	1	13	1	0	0	1	1	0	0	0	35.2	40
1200	138	0	120	1	15	0	1	0	0	0	1	0	0	36.3	40.8
1300	119	0	107	1	8	0	2	0	1	0	0	0	0	37.1	41.3
1400	111	0	95	0	11	1	3	0	1	0	0	0	0	37.5	42.8
1500	131	3	113	0	14	0	1	0	0	0	0	0	0	38.8	43.6
1600	169	0	149	0	19	0	0	1	0	0	0	0	0	38.4	42.3
1700	201	6	178	3	13	0	0	0	0	0	1	0	0	39.3	43
1800	134	1	122	1	10	0	0	0	0	0	0	0	0	38.4	42.5
1900	108	6	92	1	9	0	0	0	0	0	0	0	0	38.5	43.4
2000	66	3	60	0	3	0	0	0	0	0	0	0	0	40.1	44.6
2100	53	1	48	0	4	0	0	0	0	0	0	0	0	38.8	43.7
2200	27	1	25	0	1	0	0	0	0	0	0	0	0	38.4	42.3
2300	9	0	9	0	0	0	0	0	0	0	0	0	0	37.7	
07-19	1550	14	1353	9	146	2	15	1	5	3	2	0	0	37.7	41.9
06-22	1817	24	1587	10	165	2	16	1	5	5	2	0	0	37.9	42.4
06-00	1853	25	1621	10	166	2	16	1	5	5	2	0	0	37.9	42.4
00-00	1884	25	1646	11	168	2	18	1	6	5	2	0	0	37.9	42.4

#### Friday, 26 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
L=-			-	J	-	J	Ŭ		Ŭ	Ĵ	10		12		00
0000	6	0	6	0	0	0	0	0	0	0	0	0	0	36.5	-
0100	5	0	4	0	0	0	0	0	0	0	1	0	0	38.4	-
0200	3	0	3	0	0	0	0	0	0	0	0	0	0	38.3	-
0300	1	0	1	0	0	0	0	0	0	0	0	0	0	40.9	-
0400	4	0	3	0	1	0	0	0	0	0	0	0	0	43.6	-
0500	21	0	18	0	1	0	2	0	0	0	0	0	0	38.5	44
0600	35	0	30	0	4	0	0	0	0	0	1	0	0	38.5	44.8
0700	52	0	41	0	7	0	3	0	0	1	0	0	0	39.3	44.2
0800	109	0	88	3	12	0	5	0	0	1	0	0	0	37.8	43.9
0900	146	2	119	1	20	1	2	0	0	1	0	0	0	38	41.4
1000	159	3	140	4	10	1	1	0	0	0	0	0	0	37.9	41.7
1100	156	0	133	2	16	1	2	0	0	1	1	0	0	37.1	41
1200	160	4	134	2	15	0	2	1	0	1	1	0	0	36.1	41
1300	165	5	142	1	15	0	2	0	0	0	0	0	0	38.2	43.1
1400	146	0	119	2	19	0	3	1	2	0	0	0	0	37.3	41.4
1500	148	4	127	1	14	0	2	0	0	0	0	0	0	37.7	42.6
1600	188	0	168	5	12	0	2	0	0	0	1	0	0	37	42.7
1700	179	1	164	1	12	0	0	0	0	1	0	0	0	39.1	43.5
1800	137	6	122	1	6	0	0	1	1	0	0	0	0	39.6	42.9
1900	109	3	99	0	5	2	0	0	0	0	0	0	0	38.1	42.7
2000	82	1	75	0	6	0	0	0	0	0	0	0	0	37.4	41.8
2100	54	0	51	0	3	0	0	0	0	0	0	0	0	38.6	44
2200	25	0	24	0	1	0	0	0	0	0	0	0	0	37.2	41.5
2300	23	0	22	0	1	0	0	0	0	0	0	0	0	37.4	42
07-19	1745	25	1497	23	158	3	24	3	3	6	3	0	0	37.8	42.5
06-22	2025	29	1752	23	176	5	24	3	3	6	4	0	0	37.9	42.6
06-00	2073	29	1798	23	178	5	24	3	3	6	4	0	0	37.9	42.5
00-00	2113	29	1833	23	180	5	26	3	3	6	5	0	0	37.9	42.6

#### Saturday, 27 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
L			-	J	-	3	Ŭ	'	Ů	3	10		12		00
0000	13	0	13	0	0	0	0	0	0	0	0	0	0	36.8	44.7
0100	10	1	7	0	1	1	0	0	0	0	0	0	0	34.5	-
0200	4	0	3	0	1	0	0	0	0	0	0	0	0	40.1	-
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	36.2	-
0400	1	0	1	0	0	0	0	0	0	0	0	0	0	43.2	-
0500	4	0	4	0	0	0	0	0	0	0	0	0	0	40	-
0600	12	1	10	0	1	0	0	0	0	0	0	0	0	35.5	43
0700	41	2	33	2	3	0	0	0	1	0	0	0	0	37.7	42.1
0800	107	0	93	7	5	0	0	0	2	0	0	0	0	36.2	41.7
0900	172	4	158	1	6	1	2	0	0	0	0	0	0	34.7	42.1
1000	199	4	183	1	8	2	1	0	0	0	0	0	0	37.4	41.4
1100	218	2	202	1	11	1	0	0	0	1	0	0	0	37.6	41.7
1200	214	7	194	3	9	0	0	0	1	0	0	0	0	38.3	42.1
1300	201	2	181	0	15	2	1	0	0	0	0	0	0	37.6	41.9
1400	120	4	107	0	9	0	0	0	0	0	0	0	0	37.9	42
1500	145	6	133	0	6	0	0	0	0	0	0	0	0	37.4	42.9
1600	112	1	103	0	8	0	0	0	0	0	0	0	0	38.2	42.4
1700	99	3	92	0	4	0	0	0	0	0	0	0	0	38.7	43.2
1800	124	1	118	0	5	0	0	0	0	0	0	0	0	37.9	42
1900	88	0	80	1	7	0	0	0	0	0	0	0	0	37.6	41.9
2000	70	1	67	0	1	1	0	0	0	0	0	0	0	37.4	42.9
2100	53	1	51	0	1	0	0	0	0	0	0	0	0	37.6	43.7
2200	32	0	31	1	0	0	0	0	0	0	0	0	0	38.4	43.2
2300	18	0	17	0	1	0	0	0	0	0	0	0	0	37.3	40.2
07-19	1752	36	1597	15	89	6	4	0	4	1	0	0	0	37.4	42.1
06-22	1975	39	1805	16	99	7	4	0	4	1	0	0	0	37.4	42.1
06-00	2025	39	1853	17	100	7	4	0	4	1	0	0	0	37.4	42.1
00-00	2059	40	1883	17	102	8	4	0	4	1	0	0	0	37.4	42.1

#### Sunday, 28 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
		•	-	Ŭ	-	Ŭ	Ŭ		Ŭ	Ŭ					
0000	16	0	15	0	0	0	1	0	0	0	0	0	0	37.2	41.4
0100	13	0	13	0	0	0	0	0	0	0	0	0	0	40.1	44.4
0200	5	0	5	0	0	0	0	0	0	0	0	0	0	40.9	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	5	0	5	0	0	0	0	0	0	0	0	0	0	38.8	-
0600	14	2	12	0	0	0	0	0	0	0	0	0	0	40.6	50
0700	17	0	17	0	0	0	0	0	0	0	0	0	0	38.6	43
0800	44	0	42	0	2	0	0	0	0	0	0	0	0	37.3	41.5
0900	101	9	86	0	6	0	0	0	0	0	0	0	0	38.3	43.6
1000	141	4	127	0	9	0	1	0	0	0	0	0	0	37.9	42.3
1100	152	7	136	2	7	0	0	0	0	0	0	0	0	37.4	42.1
1200	143	8	126	1	7	0	0	0	1	0	0	0	0	37.4	41.2
1300	138	2	125	3	7	0	0	0	1	0	0	0	0	38.4	42.8
1400	101	7	88	3	3	0	0	0	0	0	0	0	0	38.3	42.6
1500	137	1	125	2	7	0	1	0	1	0	0	0	0	36.6	40.6
1600	69	2	63	1	3	0	0	0	0	0	0	0	0	38.2	43.6
1700	73	4	63	0	6	0	0	0	0	0	0	0	0	38.6	42.5
1800	85	3	77	0	5	0	0	0	0	0	0	0	0	38.1	42.6
1900	59	3	54	0	2	0	0	0	0	0	0	0	0	38.3	43.1
2000	56	1	54	0	1	0	0	0	0	0	0	0	0	37	41
2100	38	0	37	0	1	0	0	0	0	0	0	0	0	39.4	45.1
2200	20	0	19	1	0	0	0	0	0	0	0	0	0	41.5	49.9
2300	15	1	14	0	0	0	0	0	0	0	0	0	0	43.4	50.9
07-19	1201	47	1075	12	62	0	2	0	3	0	0	0	0	37.8	42.3
06-22	1368	53	1232	12	66	0	2	0	3	0	0	0	0	37.9	42.3
06-00	1403	54	1265	13	66	0	2	0	3	0	0	0	0	38	42.5
00-00	1442	54	1303	13	66	0	3	0	3	0	0	0	0	38	42.5

#### Default

Globals	
	CustomList-214
Descriptor	
	MetroCount Traffic Executive
	2022-08-29T01:38:35
	Copyright (c)1997 - 2019 MetroCount
Graphic	
Language	
	United Kingdom
Create Version	UTC + 60 min
	Part metric
Speed Unit	
Length Unit	
Mass Unit	
Dataset	
Site Name	Cheadle, Staff
Site Attribute	ATC 2
File Name	D:\TDS\2022 - 2023\22.082 Cheadle Staffordshire ATCs\Cheadle, Staff2 0 2022-08-29 0225.EC0
File Type	Plus
	Factory default axle
	Northern ATC of Froghall Road
Lane	
Direction	
	7 - North bound A]B, South bound B]A.
	Axle sensors - Paired (Class/Speed/Count)
	2022-08-21T08:37:18 2022-08-21T08:37:18
	2022-08-29T02:25:18
Operator	
	80 00 14 6a 6a 00 00 00 00 00
Profile	
	Default Profile
Title	MetroCount Traffic Executive
Graphic Logo	
Header	
Footer	
Percentile 1	
Percentile 2	
Pace	
	2022-08-22T00:00:00 2022-08-29T00:00:00
Class Scheme	
	Cls(1-12) Dir(S) Sp(0,100) Headway(]0) Span(0 - 100) Lane(0-16)
Low Speed	
High Speed	
Posted Limit	
Speed Limits	40 40 40 40 40 40 40 40 40 40
Separation	0.000
Separation Type	
Direction	
Encoded Direction	4
Column	
Column Time [	24-hour time (0000 - 2359)
Total	Number in time step
Cls 1	Class totals
Cls 2	Class totals
Cls 3	Class totals
Cls 4	Class totals
Cls 5	Class totals
Cls 6	Class totals
Cls 7	Class totals
CIs 8	Class totals

013 2	01033 101013
Cls 3	Class totals
Cls 4	Class totals
Cls 5	Class totals
Cls 6	Class totals
Cls 7	Class totals
Cls 8	Class totals
Cls 9	Class totals
Cls 10	Class totals
Cls 11	Class totals
Cls 12	Class totals
Mean	Average speed
Vpp 85	Percentile speed

#### Monday, 22 August 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp
[		1	2	3	4	5	6	7	8	9	10	11	12		85
0000	6	0	6	0	0	0	0	0	0	0	0	0	0	38.3	-
0100	3	0	2	0	1	0	0	0	0	0	0	0	0	41.7	-
0200	3	0	2	0	1	0	0	0	0	0	0	0	0	39.4	-
0300	4	0	1	0	3	0	0	0	0	0	0	0	0	38.5	-
0400	4	0	4	0	0	0	0	0	0	0	0	0	0	38.1	-
0500	32	0	27	0	3	0	2	0	0	0	0	0	0	37.9	44.1
0600	49	2	42	0	5	0	0	0	0	0	0	0	0	41.1	47
0700	120	1	103	4	11	0	0	0	0	1	0	0	0	39.8	43.8
0800	120	1	107	1	11	0	0	0	0	0	0	0	0	37.4	41.5
0900	113	1	91	1	18	0	0	0	0	1	1	0	0	36.2	40.8
1000	119	0	104	0	12	0	1	0	0	1	1	0	0	36	39.8
1100	113	0	99	3	11	0	0	0	0	0	0	0	0	35.1	40.5
1200	101	2	86	3	8	0	0	0	1	1	0	0	0	36.8	41.1
1300	104	1	93	1	8	1	0	0	0	0	0	0	0	35.9	41.2
1400	133	6	109	2	12	0	1	0	0	1	2	0	0	35.6	39.8
1500	134	0	114	3	15	0	0	0	1	0	1	0	0	35.6	39.1
1600	133	1	122	1	9	0	0	0	0	0	0	0	0	36.7	41.5
1700	152	0	143	1	7	0	0	0	1	0	0	0	0	36.6	41.5
1800	102	1	96	0	5	0	0	0	0	0	0	0	0	37.7	42.1
1900	68	0	62	0	6	0	0	0	0	0	0	0	0	37.1	41.5
2000	43	0	41	0	2	0	0	0	0	0	0	0	0	35.7	40.4
2100	24	0	22	0	1	0	0	1	0	0	0	0	0	34.2	39.3
2200	16	0	16	0	0	0	0	0	0	0	0	0	0	40.4	47.7
2300	6	0	6	0	0	0	0	0	0	0	0	0	0	34.2	
07-19	1444	14	1267	20	127	1	2	0	3	5	5	0	0	36.6	41.3
06-22	1628	16	1434	20	141	1	2	1	3	5	5	0	0	36.7	41.4
06-00	1650	16	1456	20	141	1	2	1	3	5	5	0	0	36.7	41.4
00-00	1702	16	1498	20	149	1	4	1	3	5	5	0	0	36.8	41.5

#### Tuesday, 23 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
0000	5	0	4	0	1	0	0	0	0	0	0	0	0	39	
0100	1	0	0	0	1	0	0	0	0	0	0	0	0	32.5	
0200	6	0	5	0	1	0	0	0	0	0	0	0	0	38.1	
0300	2	0	1	0	1	0	0	0	0	0	0	0	0	38.9	
0400	6	0	6	0	0	0	0	0	0	0	0	0	0	39.3	
0500	25	1	23	0	1	0	0	0	0	0	0	0	0	39.9	45.4
0600	48	0	39	0	8	0	0	0	0	0	1	0	0	40.2	44.3
0700	118	2	103	1	12	0	0	0	0	0	0	0	0	38.8	44
0800	132	0	117	1	12	0	1	0	0	0	1	0	0	37	42.6
0900	99	0	86	1	10	1	1	0	0	0	0	0	0	37	41.4
1000	101	2	92	0	7	0	0	0	0	0	0	0	0	36.5	40.1
1100	123	1	113	1	8	0	0	0	0	0	0	0	0	35.9	40
1200	114	6	96	0	11	0	1	0	0	0	0	0	0	35.2	40.1
1300	117	3	98	0	14	0	1	0	1	0	0	0	0	35.2	40
1400	140	2	122	2	10	0	1	0	0	0	1	2	0	34.5	39.6
1500	136	1	117	1	15	0	0	0	0	0	2	0	0	36.2	39.8
1600	130	1	117	0	10	0	0	0	1	1	0	0	0	37.4	43
1700	150	2	139	1	8	0	0	0	0	0	0	0	0	37.6	41.9
1800	124	5	112	0	7	0	0	0	0	0	0	0	0	38.1	43.2
1900	74	1	69	0	3	0	1	0	0	0	0	0	0	38.1	44.2
2000	63	0	60	0	3	0	0	0	0	0	0	0	0	37.6	43
2100	27	1	24	0	2	0	0	0	0	0	0	0	0	36.6	40.6
2200	22	0	22	0	0	0	0	0	0	0	0	0	0	38.4	42.5
2300	15	0	15	0	0	0	0	0	0	0	0	0	0	39.7	45.9
07-19	1484	25	1312	8	124	1	5	0	2	1	4	2	0	36.6	41.4
06-22	1696	27	1504	8	140	1	6	0	2	1	5	2	0	36.8	41.8
06-00	1733	27	1541	8	140	1	6	0	2	1	5	2	0	36.9	41.8
00-00	1778	28	1580	8	145	1	6	0	2	1	5	2	0	36.9	41.8

#### Wednesday, 24 August 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp
[		1	2	3	4	5	6	7	8	9	10	11	12		85
0000	4	0	4	0	0	0	0	0	0	0	0	0	0	35.6	-
0100	2	0	2	0	0	0	0	0	0	0	0	0	0	41.9	-
0200	2	0	2	0	0	0	0	0	0	0	0	0	0	36.6	-
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	48.4	-
0400	4	0	4	0	0	0	0	0	0	0	0	0	0	38.6	-
0500	36	2	28	0	6	0	0	0	0	0	0	0	0	39.1	44.4
0600	53	1	47	0	5	0	0	0	0	0	0	0	0	39.3	43.2
0700	114	1	95	1	15	0	1	0	0	0	1	0	0	38.5	42.7
0800	116	1	99	1	12	0	2	0	0	0	0	1	0	36.1	40.9
0900	102	0	95	0	4	1	1	0	0	0	1	0	0	35.6	40.7
1000	111	2	92	1	15	0	1	0	0	0	0	0	0	36.1	40.9
1100	110	0	98	1	5	0	2	1	0	3	0	0	0	35.2	39.6
1200	111	4	97	0	9	0	1	0	0	0	0	0	0	35.4	40.2
1300	92	0	77	1	13	0	0	0	0	0	1	0	0	35.7	40.2
1400	120	2	105	2	10	0	0	0	0	0	1	0	0	35.6	40.1
1500	133	1	118	2	11	0	0	0	0	0	1	0	0	36.5	42.3
1600	132	0	124	1	7	0	0	0	0	0	0	0	0	37.2	41.8
1700	146	4	131	0	10	0	1	0	0	0	0	0	0	38.2	42.4
1800	116	4	104	1	6	0	0	0	0	0	1	0	0	37.5	41.8
1900	72	0	66	1	5	0	0	0	0	0	0	0	0	37.2	41.3
2000	52	0	49	0	3	0	0	0	0	0	0	0	0	37	41.7
2100	50	0	47	0	2	0	0	0	1	0	0	0	0	38.3	42.5
2200	23	0	22	0	1	0	0	0	0	0	0	0	0	36.3	44.4
2300	11	0	11	0	0	0	0	0	0	0	0	0	0	40.2	41.9
07-19	1403	19	1235	11	117	1	9	1	0	3	6	1	0	36.5	41.3
06-22	1630	20	1444	12	132	1	9	1	1	3	6	1	0	36.7	41.4
06-00	1664	20	1477	12	133	1	9	1	1	3	6	1	0	36.7	41.4
00-00	1714	22	1519	12	139	1	9	1	1	3	6	1	0	36.8	41.5

#### Thursday, 25 August 2022

Time [	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Mean	Vpp 85
0000	5	0	5	0	0	0	0	0	0	0	0	0	0	44	
0100	1	0	0	0	1	0	0	0	0	0	0	0	0	35.6	
0200	4	0	3	0	1	0	0	0	0	0	0	0	0	37.3	
0300	2	0	1	1	0	0	0	0	0	0	0	0	0	38.4	
0400	7	0	7	0	0	0	0	0	0	0	0	0	0	40.8	
0500	35	1	29	0	4	0	1	0	0	0	0	0	0	38.3	43
0600	56	1	47	0	7	0	0	0	0	0	1	0	0	40.2	44.3
0700	108	0	93	1	12	0	2	0	0	0	0	0	0	38.2	43.5
0800	119	1	100	0	14	0	2	0	1	1	0	0	0	36.7	41.3
0900	127	0	113	3	9	1	0	0	1	0	0	0	0	35.7	40.5
1000	129	0	113	1	13	1	1	0	0	0	0	0	0	34.5	38.8
1100	126	0	110	0	13	0	1	0	0	2	0	0	0	34.7	38.9
1200	117	3	98	0	12	1	1	1	0	0	1	0	0	34.2	39.1
1300	116	0	104	2	9	0	1	0	0	0	0	0	0	36.6	42.2
1400	117	1	103	1	11	0	1	0	0	0	0	0	0	36.3	39.8
1500	132	0	116	0	12	0	1	0	1	0	2	0	0	36.6	40.4
1600	143	4	126	0	11	0	1	0	0	0	1	0	0	36.9	41.9
1700	130	2	118	2	7	1	0	0	0	0	0	0	0	37.8	42.2
1800	105	1	100	0	4	0	0	0	0	0	0	0	0	37.1	41.4
1900	69	6	56	0	7	0	0	0	0	0	0	0	0	37.2	42.6
2000	69	6	57	0	6	0	0	0	0	0	0	0	0	37.3	42.4
2100	38	0	36	0	2	0	0	0	0	0	0	0	0	38.9	44
2200	14	0	13	0	1	0	0	0	0	0	0	0	0	38.9	43.7
2300	17	1	16	0	0	0	0	0	0	0	0	0	0	36.6	44.7
07-19	1469	12	1294	10	127	4	11	1	3	3	4	0	0	36.2	41.2
06-22	1701	25	1490	10	149	4	11	1	3	3	5	0	0	36.5	41.4
06-00	1732	26	1519	10	150	4	11	1	3	3	5	0	0	36.5	41.5
00-00	1786	27	1564	11	156	4	12	1	3	3	5	0	0	36.6	41.6

#### Friday, 26 August 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls 11	Cls	Mean	Vpp
[		1	2	3	4	5	6	7	8	9	10	11	12		85
0000	5	0	5	0	0	0	0	0	0	0	0	0	0	39.3	-
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	41.5	-
0200	1	0	1	0	0	0	0	0	0	0	0	0	0	20.9	-
0300	3	0	2	0	1	0	0	0	0	0	0	0	0	33.7	-
0400	5	0	5	0	0	0	0	0	0	0	0	0	0	42.7	-
0500	42	1	36	0	5	0	0	0	0	0	0	0	0	39	44
0600	41	0	36	0	4	0	0	0	1	0	0	0	0	38.6	42.7
0700	96	2	85	1	8	0	0	0	0	0	0	0	0	38.6	43.3
0800	120	1	108	1	8	0	1	0	0	1	0	0	0	38.5	43.9
0900	131	1	112	1	12	0	4	0	1	0	0	0	0	36.6	41.1
1000	122	0	101	3	13	1	2	0	1	0	1	0	0	36	40.3
1100	140	4	119	1	16	0	0	0	0	0	0	0	0	36.2	41.1
1200	111	4	87	2	13	0	4	0	0	1	0	0	0	36.1	41.1
1300	132	6	100	0	20	0	2	0	0	2	2	0	0	34.8	39.2
1400	151	3	129	2	15	0	0	0	0	0	2	0	0	35.3	40.8
1500	149	4	132	1	11	0	0	0	0	0	1	0	0	36.4	41.5
1600	159	4	142	0	12	0	0	0	0	0	1	0	0	37	41.5
1700	154	6	137	1	8	1	1	0	0	0	0	0	0	37.8	42.9
1800	101	2	91	3	3	1	0	0	0	1	0	0	0	37	41.5
1900	102	1	96	0	3	1	0	0	0	1	0	0	0	37.6	41.8
2000	75	6	67	0	2	0	0	0	0	0	0	0	0	37.1	42.6
2100	42	1	41	0	0	0	0	0	0	0	0	0	0	38.4	42.4
2200	31	0	28	0	3	0	0	0	0	0	0	0	0	37.7	44.4
2300	16	2	14	0	0	0	0	0	0	0	0	0	0	38.3	42.7
07-19	1566	37	1343	16	139	3	14	0	2	5	7	0	0	36.6	41.7
06-22	1826	45	1583	16	148	4	14	0	3	6	7	0	0	36.8	41.7
06-00	1873	47	1625	16	151	4	14	0	3	6	7	0	0	36.8	41.7
00-00	1932	48	1677	16	157	4	14	0	3	6	7	0	0	36.9	41.8

#### Saturday, 27 August 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp
[		1	2	3	4	5	6	7	8	9	10	11	12		85
0000	13	0	13	0	0	0	0	0	0	0	0	0	0	37.1	43.3
0100	6	0	4	0	2	0	0	0	0	0	0	0	0	37.3	-
0200	3	0	1	0	2	0	0	0	0	0	0	0	0	38.4	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	4	0	4	0	0	0	0	0	0	0	0	0	0	38.3	-
0500	14	0	11	0	3	0	0	0	0	0	0	0	0	37.1	42.3
0600	11	0	9	0	2	0	0	0	0	0	0	0	0	40.1	47.7
0700	57	2	51	0	4	0	0	0	0	0	0	0	0	38.3	45.2
0800	66	1	59	2	4	0	0	0	0	0	0	0	0	36.3	40.9
0900	115	2	105	1	7	0	0	0	0	0	0	0	0	37.4	41.6
1000	105	3	97	0	5	0	0	0	0	0	0	0	0	37.4	42
1100	116	0	106	1	8	0	1	0	0	0	0	0	0	37.2	41.4
1200	136	4	122	2	6	0	0	0	2	0	0	0	0	36.2	41.9
1300	143	2	137	0	4	0	0	0	0	0	0	0	0	34.7	40.9
1400	173	8	152	4	9	0	0	0	0	0	0	0	0	35.9	40.3
1500	193	5	180	0	7	0	1	0	0	0	0	0	0	33.9	39.1
1600	224	2	204	8	8	1	1	0	0	0	0	0	0	32	39
1700	150	1	139	2	7	0	0	1	0	0	0	0	0	35.7	40.5
1800	137	3	119	4	11	0	0	0	0	0	0	0	0	36.1	42.3
1900	89	1	82	1	5	0	0	0	0	0	0	0	0	37	41.3
2000	82	1	75	0	5	0	0	0	1	0	0	0	0	35.6	40.8
2100	59	3	55	1	0	0	0	0	0	0	0	0	0	35.1	41.7
2200	38	0	36	0	2	0	0	0	0	0	0	0	0	37.4	43.4
2300	20	0	19	0	1	0	0	0	0	0	0	0	0	36.2	42.1
07-19	1615	33	1471	24	80	1	3	1	2	0	0	0	0	35.4	40.9
06-22	1856	38	1692	26	92	1	3	1	3	0	0	0	0	35.5	40.9
06-00	1914	38	1747	26	95	1	3	1	3	0	0	0	0	35.6	41
00-00	1954	38	1780	26	102	1	3	1	3	0	0	0	0	35.6	41

#### Sunday, 28 August 2022

Time	Total	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Cls	Mean	Vpp
[		1	2	3	4	5	6	7	8	9	10	11	12		85
0000	10	0	10	0	0	0	0	0	0	0	0	0	0	38.2	-
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	37.4	-
0200	7	0	7	0	0	0	0	0	0	0	0	0	0	39.3	-
0300	2	0	2	0	0	0	0	0	0	0	0	0	0	40.2	-
0400	2	0	1	0	1	0	0	0	0	0	0	0	0	38.2	-
0500	8	0	8	0	0	0	0	0	0	0	0	0	0	40.9	-
0600	8	0	6	0	1	0	1	0	0	0	0	0	0	34.5	-
0700	24	0	24	0	0	0	0	0	0	0	0	0	0	38.7	42.8
0800	24	2	22	0	0	0	0	0	0	0	0	0	0	37.7	45.7
0900	69	2	65	0	2	0	0	0	0	0	0	0	0	38	42.7
1000	115	3	109	0	2	0	0	0	1	0	0	0	0	37.2	42.1
1100	128	5	118	1	4	0	0	0	0	0	0	0	0	36.2	40.7
1200	125	8	105	3	8	0	0	0	1	0	0	0	0	36.4	41.5
1300	126	6	114	0	4	0	1	0	1	0	0	0	0	37	42.2
1400	125	5	116	0	4	0	0	0	0	0	0	0	0	36.2	40.3
1500	146	12	125	2	7	0	0	0	0	0	0	0	0	36.3	40.3
1600	111	14	91	0	6	0	0	0	0	0	0	0	0	37.3	42.2
1700	127	1	122	0	4	0	0	0	0	0	0	0	0	36.6	40.9
1800	87	7	78	0	2	0	0	0	0	0	0	0	0	37.4	42.4
1900	66	2	61	1	2	0	0	0	0	0	0	0	0	36.7	42.8
2000	64	2	61	0	1	0	0	0	0	0	0	0	0	35.9	40.6
2100	37	2	31	0	4	0	0	0	0	0	0	0	0	38.3	43.8
2200	29	0	29	0	0	0	0	0	0	0	0	0	0	38.8	43.1
2300	11	0	11	0	0	0	0	0	0	0	0	0	0	39.1	43.3
07-19	1207	65	1089	6	43	0	1	0	3	0	0	0	0	36.8	41.4
06-22	1382	71	1248	7	51	0	2	0	3	0	0	0	0	36.8	41.4
06-00	1422	71	1288	7	51	0	2	0	3	0	0	0	0	36.9	41.5
00-00	1454	71	1319	7	52	0	2	0	3	0	0	0	0	36.9	41.5

## **APPENDIX 3**

Junctions 9 Output - A522 Leek Road/A521 High Street/A522 Tape Street Junction – Improvement Scheme





Filename: High Street - Leek Road - Tape Street - Validated AM Peak - Dec 22.j9 Path: Z:\projects\3277 Froghall Road, Cheadle, Staffordshire\Arcady\December 22 Report generation date: 21/12/2022 15:07:15

#### «2033 With Development, AM

»Junction Network »Arms »Traffic Demand »Origin-Destination Data »Vehicle Mix »Results

#### Summary of junction performance

	AM								
	Queue (PCU)	Delay (s)	RFC	LOS					
	2033 Wit	th Develo	pme	nt					
Arm 1	24.4	116.23	1.03	F					
Arm 2	1.2	10.34	0.55	В					
Arm 3	1.0	8.77	0.50	А					

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

#### File summary

#### **File Description**

Title	High Street - Leek Road - Tape Street
Location	Cheadle
Site number	
Date	11/04/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	3277
Enumerator	EDD
Description	Validated Model - Based on Eddisons Drawing 3277-F07

#### Units

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

and to account

1



## Analysis Options

Mini-roundabout	Vehicle	Calculate Queue	Calculate detailed	Calculate residual	RFC	Average Delay	Queue threshold
model	length (m)	Percentiles	queueing delay	capacity	Threshold	threshold (s)	(PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

## Analysis Set Details

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





## 2033 With Development, AM

#### Data Errors and Warnings

No errors or warnings

## Junction Network

#### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	60.13	F

#### Junction Network Options

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

#### Arms

#### Arms

Arm	Name	Description
1	Leek Road	
2	Tape Street	
3	A521 High Street	

#### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.50	3.50	4.50	4.9	19.80	5.00	0.0	2
2	3.30	3.30	4.00	1.7	13.90	9.00	0.0	S
3	5.40	5.40	7.50	2.7	19.00	15.00	0.0	

#### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.632	965
2	0.614	766
3	0.729	1122

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

#### Arm Capacity Adjustments

Arm	Туре	Reason	Direct capacity adjustment (PCU/hr)
1	Direct		-125

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2033 With Development	AM	ONE HOUR	08:00	09:30	15	~

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
1	1	HV Percentages	2.00



#### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	~	675	100.000
2	3	ONE HOUR	1	380	100.000
3	С	ONE HOUR	1	369	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		Т	o	
		1	2	3
_	1	0	675	0
From	2	380	0	0
	3	204	165	0

## Vehicle Mix

Heavy Vehicle Percentages

		To 1 2 3 0 0 0						
		1	2	3				
From	1	0	0	0				
	2	0	0	0				
	3	0	0	0				

## Results

#### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	elay (s) Max Queue (PCU) Max LOS (PCU/hr)		Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1.03	116.23	24.4	F	619	929
2	0.55	10.34	1.2	В	349	523
3	0.50	8.77	1.0	A	339	508

#### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	508	127	123	762	0.667	501	438	0.0	1.9	13.421	В
2	286	72	0	766	0.373	284	624	0.0	0.6	7.423	A
3	278	69	284	915	0.304	276	0	0.0	0.4	5.624	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	607	152	148	748	0.813	599	524	1.9	3.9	23.279	С
2	342	85	0	766	0.446	341	747	0.6	0.8	8.440	A
3	332	83	341	873	0.380	331	0	0.4	0.6	6.634	A



#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	743	186	181	725	1.025	693	641	3.9	16.3	68.006	F
2	418	105	0	766	0.548	417	874	0.8	1.2	10.251	В
3	408	102	417	818	0.497	405	0	0.6	1.0	8.689	A

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	743	186	182	725	1.025	711	643	16.3	24.4	116.233	F
2	418	105	0	766	0.546	418	892	1.2	1.2	10.336	в
3	408	102	418	817	0.497	406	0	1.0	1.0	8.772	A

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	607	152	149	746	0.814	683	527	24.4	5.4	69.948	F
2	342	85	0	766	0.446	343	832	1.2	0.8	8.534	A
3	332	83	343	872	0.381	333	0	1.0	0.6	6.705	A

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	508	127	125	761	0.668	521	441	5.4	2.1	15.751	C
2	286	72	0	766	0.373	287	646	0.8	0.6	7.523	A
3	278	69	287	913	0.304	279	0	0.6	0.4	5.686	A





Filename: High Street - Leek Road - Tape Street - Validated PM Peak - Dec 22.j9 Path: Z:\projects\3277 Froghall Road, Cheadle, Staffordshire\Arcady\December 22 Report generation date: 21/12/2022 15:07:18

#### «2033 With Development, PM

»Junction Network »Arms »Traffic Demand »Origin-Destination Data »Vehicle Mix »Results

#### Summary of junction performance

	РМ							
	Queue (PCU)	RFC	LOS					
	2033 With Development							
Arm 1	37.8	138.74	1.06	F				
Arm 2	1.2	7.80	0.55	Α				
Arm 3	2.1	15.78	0.68	С				

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

#### File summary

#### **File Description**

Title	High Street - Leek Road - Tape Street
Location	Cheadle
Site number	10000000
Date	11/04/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	3277
Enumerator	EDD
Description	Validated Model - Based on Eddisons Drawing 3277-F07

#### Units

m kah PCII PCII parkaur a Min parkin	Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
ni kpi PCO PCO periodi s -will pelwill	m	kph	PCU	PCU	perHour	s	-Min	perMin

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## Analysis Options

Mini-roundabout	Vehicle	Calculate Queue	Calculate detailed	Calculate residual	RFC	Average Delay	Queue threshold
model	length (m)	Percentiles	queueing delay	capacity	Threshold	threshold (s)	(PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

## Analysis Set Details

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





## 2033 With Development, PM

#### Data Errors and Warnings

No errors or warnings

## Junction Network

#### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	70.73	F

#### Junction Network Options

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

#### Arms

#### Arms

Arm	Name	Description
1	Leek Road	
2	Tape Street	Ĵ.
3	A521 High Street	

#### Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.50	3.50	4.50	4.9	19.80	5.00	0.0	
2	3.30	3.30	4.00	1.7	13.90	9.00	0.0	
3	5.40	5.40	7.50	2.7	19.00	15.00	0.0	

#### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.632	965
2	0.614	766
3	0.729	1122

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

#### Arm Capacity Adjustments

Arm	Туре	Reason	Direct capacity adjustment (PCU/hr)
1	Direct		40
2	Direct	· · · · ·	250

## **Traffic Demand**

#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4 20	033 With Development	PM	ONE HOUR	16:30	18:00	15	1



Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
~	1	HV Percentages	2.00

#### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	3	ONE HOUR	1	851	100.000
2		ONE HOUR	1	504	100.000
3		ONE HOUR	1	445	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		1	2	3				
_	1	0	851	0				
From	2	504	0	0				
	3	276	169	0				

## Vehicle Mix

**Heavy Vehicle Percentages** 

		Т	0	
		1	2	3
-	1	0	0	0
From	2	0	0	0
	3	0	0	0

## Results

#### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1.06	138.74	37.8	F	781	1171
2	0.55	7.80	1.2	A	462	694
3	0.68	15.78	2.1	C	408	613

#### Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	641	160	126	925	0.693	632	583	0.0	2.2	11.965	В
2	379	95	0	1016	0.373	377	758	0.0	0.6	5.611	A
3	335	84	377	847	0.396	332	0	0.0	0.6	6.964	A



#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	765	191	151	909	0.842	755	700	2.2	4.6	22.046	С
2	453	113	0	1016	0.446	452	907	0.6	0.8	6.372	A
3	400	100	452	792	0.505	399	0	0.6	1.0	9.117	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	937	234	184	888	1.055	862	855	4.6	23.3	72.673	F
2	555	139	0	1016	0.546	553	1047	0.8	1.2	7.748	A
3	490	122	553	718	0.682	486	0	1.0	2.0	15.213	C

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	937	234	186	887	1.056	879	859	23.3	37.8	136.740	F
2	555	139	0	1016	0.546	555	1065	1.2	1.2	7.798	A
3	490	122	555	717	0.683	490	0	2.0	2.1	15.783	С

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	765	191	154	908	0.843	883	705	37.8	8.1	100.688	F
2	453	113	0	1016	0.446	455	1037	1.2	0.8	6.426	A
3	400	100	455	790	0.506	404	0	2.1	1.0	9.422	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	641	160	128	924	0.693	664	589	8.1	2.4	14.947	В
2	379	95	0	1016	0.373	380	792	0.8	0.6	5.668	A
3	335	84	380	844	0.397	337	0	1.0	0.7	7.107	A



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## **APPENDIX 2**

Technical Note 04 dated February 2023 (TN04)



# PROPOSED RESIDENTIAL DEVELOPMENT, LAND OFF FROGHALL ROAD, CHEADLE (PLANNING REF: SMD2021/0610) – TECHNICAL NOTE 04 (3866)

#### Introduction

Eddisons have been instructed by Bloor Homes Ltd to produce a Technical Note to assist in the determination of a planning application for a residential development on land off the A521 Froghall Road in Cheadle. (Planning Ref: SMD/2021/0610).

This Technical Note 04 (TN04) has been produced following on from the meeting held with Staffordshire County Council Highways (SCC) on Monday 23<sup>rd</sup> January 2023. The note will consider the following highways issues as discussed during the meeting;

- Vehicular Access off the A521 Froghall Road;
- Traffic Impact;
- Improvements to Pedestrian Infrastructure.

#### Vehicular Access off the A521 Froghall Road

As detailed previously, the proposed site access roundabout junction off the A521 Froghall Road has been designed to accord with required design standards for a 30mph road.

The speed surveys on the A521 Froghall Road which submitted within TN03 (January 2023) indicated that 85<sup>th</sup> percentile dry weather speeds were between 41-42mph on the southbound approach to the roundabout and therefore even in the absence of traffic calming measures the speeds area substantially lower than the existing National Speed Limit,.

As detailed in previous correspondence, the forward visibility on the existing bend on the A521 Froghall Road to the north of the site is constrained for a 60mph speed road. Therefore, the existing road layout would benefit from a relocation of the 30mph speed limit, which will serve to raise awareness of the need to reduce speeds in advance of this and also further in advance of the residential area to the south. Based on this, the relocation and improvement on the gateway feature to this location would be of benefit to existing and future road users of this stretch of A521 Froghall Road.

Alongside the self-evident physical speed restraint imposed by roundabouts (as vehicles slow down to negotiate entry radii and circulatory carriageway), there is also ample documentary evidence to support the speed reducing effects of roundabouts: LTN 1-07 Traffic Calming paras 8.1 and 8.2.3 advise:-

"Roundabouts, particularly mini-roundabouts, are a useful speed-reducing measure. They have been incorporated into many traffic calming schemes, often as the first measure encountered."



"Overrun areas can be used in combination with small central islands to encourage greater deflection in the driving line for light motor vehicles. This can give greater reductions in speed whilst allowing adequate space for large vehicles to manoeuvre around the island"

Designing a proposed junction in line with the proposed design speed is widely accepted nationally by local highway authorities. As way of demonstration, two examples have been summarised below;

- Outline Planning Application for up to 130 residential units off Stafford Road, Eccleshall, Staffordshire (Planning Ref: 14/20665/OUT)
- Full Planning Application for 240 Residential Dwellings and Associated Works off Catterick Road, Catterick Garrison, Richmondshire (Planning Ref: 21/00529)

Details on these planning applications are contained within **Appendix 1**. With regard to the site in Eccleshall, the local highway authority stated the following;

"A roundabout junction will have sufficient capacity to accommodate the existing traffic and any future development traffic but more importantly will have a positive effect on reducing the speeds on Stafford Road. This proposal will also be complimented by the relocation of the speed limit and gateway features."

There have been no material changes to highway design or speed limit guidance since this planning application was considered in 2014 and this access arrangement has now been constructed and the speed limit change implemented.

With regard to the Catterick site in the NYCC consultation response dated the 2<sup>nd</sup> December 2021, the following was stated regarding the provision of a roundabout junction instead of the previously proposed ghost island right-turn arrangement;

"The LHA therefore request that the application considered the construction of a roundabout, being a recommendation that the LHA have already suggested to the applicant during pre-app discussions. A roundabout would act as a natural gateway into Coburn and the wider community, providing a physical speed check as opposed to relying on passive speed control measures."

As part of the proposals the roundabout was designed to accord with the proposed 40 mph speed limit, changed from 60mph.

Both of the examples detailed above, highlight that it is widely accepted that roundabouts can reduce existing speeds and that the designing of roundabouts to accord with the proposed speed limit is appropriate.

# Eddisons

Notwithstanding the above, as requested by the officers at SCC further consideration has been given to the existing speeds limits on the A521 Froghall Road to the north of the proposed access, and whether amendments are required to control vehicle speeds on this approach. With this in mind consideration has been given to the guidance contained within the DfT Circular 01/2013 'Setting Local Speed Limit's' document.

Consideration of the existing speed limits on the A521 Froghall Road indicates that the 1.2 kilometre section between Kingsley Holt to the north and Cheadle boundary to the site is subject to the National Speed Limit. As result of the change in speed limit as part of the proposed access arrangements this would reduce to circa 1km, this distance is in excess of the guidance contained within Circular 01/2013 which states;

"The minimum length of a speed limit should generally be not less than 600 metres to avoid too many changes of speed limit along the route."

However, consideration of the existing alignment of the A521 Froghall Road has indicated there are numerous bends between the application site and Kingsley Holt, and it is therefore felt that there would be highway safety benefits to extending the existing 40mph speed limit from Kingsley Holt to the 30mph gateway feature proposed as part of the site access arrangements. The extension of the 40mph limit would be supplemented with 40mph repeater signs and as stated previously, the observed speeds along this section of the A521 Froghall Road was 42mph even without any traffic calming measures.

The revised vehicular access arrangement with the amendments to the speed limits on the A521 Froghall Road is displayed in **Drawing 3277-F06-D**.

Based on the above, it is concluded that the proposed traffic calming measures (including the site access roundabout and street lighting) would result in speeds along this A521 Froghall Road being reduced to 30mph. In addition, the extension of the 30mph and 40mph speed limits to the north of the site would also provide overall highway safety improvements to the A521 Froghall Road.

Therefore, the design of the proposed roundabout to accord with the design standards for a 30mph road is acceptable and the proposed access arrangements will provide safe and efficient access into the site as well as providing overall highway safety improvements to the wider highway network.



#### **Traffic Impact**

#### Queuing on A522 Leek Road

During the weekday peak periods of the February 2022 traffic count surveys, rolling queues were observed on the A522 Leek Road in the vicinity of the A522 Leek Road/A521 Froghall Road junction during the following periods time periods;

- Between 0825 to 0855 hours rolling queue up to and beyond A522 Leek Road/A521 Froghall Road junction.
- Between 1650 to 1720 hours rolling queue up to and beyond A522 Leek Road/A521 Froghall Road junction.

The impact of this queuing on the A522 Leek Road was considered within the junction modelling undertaken within the April 2022 Transport Assessment Addendum and the junction models were validated to reflect the queuing that occurs on the A521 Froghall Road as a result of this rolling queue.

However, as requested by the highways officers, check counts have been undertaken on the A522 Leek Road in the vicinity of the junction, to ascertain whether the 2022 traffic counts reflect current traffic conditions on the network. Video cameras were located on the A522 Leek Road in the vicinity of the A522 Leek Road/A521 Froghall Road on Wednesday 25<sup>th</sup> and Thursday 26<sup>th</sup> January 2023 to cover the weekday peak periods, the location of these cameras is displayed in the **Appendix 2**.

These video recordings have been interrogated and a summary is provided below;

- Wednesday 25<sup>th</sup> January 2023 no observed queuing on A522 Leek Road between 0730 and 0930 hours.
- Wednesday 25<sup>th</sup> January 2023 rolling queue observed on A522 Leek Road between 1656 and 1721 hours (this queuing does not occur up to junction for entire survey period).
- Thursday 26<sup>th</sup> January 2023 no observed queuing on A522 Leek Road between 0730 and 0930 hours.
- Thursday 26<sup>th</sup> January 2023 rolling queue observed on A522 Leek Road between 1654 and 1722 hours (this queuing does not occur up to junction for entire survey period).

It is important to note that these surveys indicate that although there are rolling queues on the A522 Leek Road, this doesn't necessarily result in queuing on the A521 Froghall Road arm of the junction, as drivers on the A522 Leek Road allow vehicles to exit from the A521 Froghall Road. It is felt that this arrangement could be further enforced through the provision of 'Keep Clear' on the A522 Leek Road arm of the junction as shown on **Drawing 3277\_F08.** 



Based on the above, the 2022 traffic count surveys reflect the current traffic conditions on the A522 Leek Road. In fact the Weekday AM peak periods assessment contained within the April 2022 Transport Assessment Addendum, which include queuing on the A522 Leek Road provide an onerous assessment of the impact of the development proposals when compared to the January 2023 surveys.

#### Impact on Operation of A522 Leek Road/A521 High Street/A522 Tape Street

Within the recently submitted Technical Note 04 (January 2023) a potential mitigation scheme at the above junction was proposed.

This scheme provided minor amendments to the A522 Leek Road north approach to the miniroundabout i.e. widening the approach and the capacity assessments of the mitigation scheme indicated that the proposed minor improvement on the A522 Leek Road arm of the junction would mitigate the impact of the development proposals in both peak periods, and will provide overall betterment when compared to the base scenarios.

However, during the discussions with the officers at SCC, concerns were raised regarding whether the proposed mitigation scheme would offer any operational improvement on the ground, as it would still be a single approach mini-roundabout junction. The comments are noted and although the assessments using the standard industry assessment programmes have shown that the scheme will mitigate the impact at the junction, further consideration of potential mitigation schemes have been undertaken.

Prior to considering the potential mitigation schemes, it is important to make note of the proposed impact of the development proposals on the junction. The proposed development is forecast to result in an increase of between 40-45 two-way trips at junction during the peak periods (3% increase).

The increases on the A522 Leek Road arm itself are 30 vehicle and 17 vehicles in the AM and PM peak periods respectively. These increases equate to 1 additional vehicle around every 2 minutes during the peak periods, therefore, the actual increase in vehicle movements at the junction will be minimal.

These minimal increases in vehicle movements are reflected within the capacity assessments which forecast that the A522 Leek Road arm will operate with RFC's over 1.00 in the Base and With Dev scenarios and that the Mean Max Queue increases by up to 14 vehicles in the AM peak and by just 9 vehicles in the PM peak. Therefore, the development proposals, especially in the PM peak, cannot be deemed to result in a severe impact on the local highway network.

Given the layout of the mini-roundabout junction, the forecast increases in traffic as a result of the development proposals on the A521 High Street and A522 Tape Street arms of the roundabout will have little or no impact on the operation of the A522 Leek Road arm, as traffic on this arm does not have to give-way to these particular arms.



On-site observations at the time of the 2022 traffic counts indicated that the existing Zebra crossing to the north of the mini-roundabout is used frequently, especially during the weekday AM peak. Due to it being a zebra crossing, vehicles have to give-way to pedestrians, which in turn results in increased queuing on the A522 Leek Road. As detailed previously, queuing occurred on the A522 Leek Road during both peak periods in the 2022 traffic counts.

To ascertain the levels of pedestrians using the zebra crossing, a pedestrian survey was undertaken at the zebra crossing on the A522 Leek Road on Wednesday 25<sup>th</sup> January 2023 between 0730 to 0930 hours and 1630 to 1830 hours.

**Table 1** below summarises the results of this survey for the weekday AM peak period (0815-0915), whilst **Table 2** details the pedestrian demand for the weekday PM peak (1630-1730) the full data is contained **Appendix 2**.

# Eddisons

Time	Weeko	day AM Peak
	W/B	E/B
08:17:15	1	
08:22:04	1	
08:22:59	3	
08:23:40	1	
08:25:50	2	
08:26:41	1	
08:28:26	1	
08:29:21	3	
08:30:36	3	
08:31:35	2	
08:33:33	3	
08:33:46	1	
08:37:20	1	
08:41:32		1
08:42:47	3	
08:43:24	1	
08:45:04	1	
08:46:40	1	
08:51:01		1
08:55:17		1
08:58:03	1	
09:04:43		3
09:09:41	1	
09:12:56		1

Table 1 – Summary of Pedestrian Counts at A522 Leek Road Zebra Crossing (AM Peak)

# Eddisons

Time	Weekday PM Peak	
	W/B	E/B
16:33.34		1
16:41:43	1	
16:41:53		1
16:45:26		2
16:46:09	1	
16:54:29	2	
17:00:13	1	
17:00:47	1	
17:01:15	1	
17:01:50		1
17:04:24	3	
17.08.22		1
17:09:02	1	
17:09:16	1	
17:10:25		1
17:17:22	2	
17:18.02		1
17:18:09	1	
17:27:34	1	
17:27:6	1	
17:29:17	2	

#### Table 2 – Summary of Pedestrian Counts at A522 Leek Road Zebra Crossing (PM Peak)

As can be seen in Table 1, pedestrians use the zebra crossing on 24 separate occasions during the Weekday AM peak, with 9 individual crossings occurring between the 10 minute between 0823 and 0833 and further 5 separate crossings in the 5 minute period between 0841 and 0846.

In the Weekday PM peak, there are fewer recorded pedestrian crossings during the peak hour, but there are still a total of 22 separate crossings during the peak period. It should be noted that between 1654 and 1720, when queuing back to the A521 Froghall Road junction occurs, a total of 13 separate crossings occurred at the zebra crossing, with 4 separate crossings occurring in the 2 minute period between 1700 and 1702.

# Eddisons

As previously stated, unlike a signalised crossing, a zebra crossing operates on the basis of vehicles giving way to pedestrians. The ad hoc calling of a zebra therefore results in increased instances where vehicles are stopped, which in turn results in increases delays and queuing on the A522 Leek Road.

It is therefore considered that a potential improvement to the operation of the A522 Leek Road could be achieved through the conversion of the existing zebra crossing to a signal controlled crossing. The provision of the signalised crossing would reduce delays for vehicles on the A522 Leek Road by reducing the instances where vehicles are stopped for pedestrians.

If, for robustness, a cycle time of 30 seconds was assumed for the crossing, between 1700 and 1702 this would potentially reduce the instances where vehicles are stopped by half, if not more, and in turn reduce delays/queuing on the A522 Leek Road. Similar reductions in vehicles stopping at the existing crossing would occur throughout the peak periods as the pedestrian surveys indicate that pedestrians crossings tend to be grouped together.

In addition to the improvements to the operation of the A522 Leek Road, the provision of a signalised crossing in this location would provide pedestrian safety benefits, as such controlled crossing arrangements benefit visual and mobility impaired users by ensuring the stoppage of traffic.

Based on the above, capacity and highway safety improvements to the operation of the A522 Leek Road corridor could be provided through the signalisation of the existing zebra crossing on the A522 Leek Road. These improvements could be provided either separately or in conjunction with the previously submitted mitigation scheme at the A522 Leek Road/A521 High Street/A522 Tape Street mini-roundabout.

The provision of one or both of these schemes, would mitigate the impact of the proposed development on the local highway network. Clearly, further discussions can be held with the highways officers regarding these proposed mitigation schemes. The proposed mitigation schemes are displayed on **Drawing 3277\_F07\_A**.

It is therefore concluded that the traffic impact analysis submitted as part of the April 2022 provides a robust consideration of traffic impact which can, nevertheless, be appropriately mitigated.

#### Improvements to Pedestrian Infrastructure

In addition to measures to mitigate the traffic impact of the development proposals, consideration has also been given to potential measures to improve pedestrian provision between the application site and Cheadle town centre via the A521 Froghall Road and A522 Leek Road.

As part of the proposed vehicular access works, it is proposed to provide a 2 metre pedestrian on the eastern side of the service road located adjacent to the A521 Froghall Road. This provision is shown on **Drawing 3277-F06-D** and links with the existing provision on the A521 Froghall Road.

# Eddisons

Notwithstanding the above improvements, an audit has been undertaken along the pedestrian route between the site and the town centre. on the A521 Froghall Road/A522 Leek Road to determine whether there are any deficiencies which can be addressed as part of the development proposals.

This audit has indicated that although footways with widths of at least 1.8 metres are provided between the site and the town centre (zebra crossing on A522 Leek Road) are provided. There are deficiencies in crossing facilities at the junctions located along the pedestrian route. **Table 3** below provides a summary of the audit of these junctions and proposed improvements which can be provided as part of the planning application.

Location/Junction	Existing Facilities	Proposed Improvement			
A521 Froghall Road/Foxfield Close	Dropped kerbs	Dropped kerbs and tactile paving			
A521 Froghall Road/Thorpe Rise	Dropped kerbs	Dropped kerbs and tactile paving			
A521 Froghall Road/Pottery Gardens	Dropped kerbs and tactile paving	No Improvement required			
A521 Froghall Road/Ness Grove	Dropped kerbs	Dropped kerbs and tactile paving			
A521 Froghall Road/Churchill Road	Dropped kerbs	Dropped kerbs and tactile paving			
A522 Leek Road/Harborne Road	Dropped kerbs	Dropped kerbs and tactile paving			

#### Table 3 - Audit of Pedestrian Facilities and Proposed Improvements

As can be seen in Table 3 above, the audit has indicated that improvement to pedestrian facilities can be provided at all of the existing junctions apart from the recently constructed access for the Pottery Fields development. The provision of tactile paving together with dropped kerbs will provide an improvement for all pedestrians.

It is therefore concluded that the provision of the improvements detailed above together with the proposed signalised crossing on the A522 Leek Road will substantially improve pedestrian movements between the site and the town centre.



#### Summary

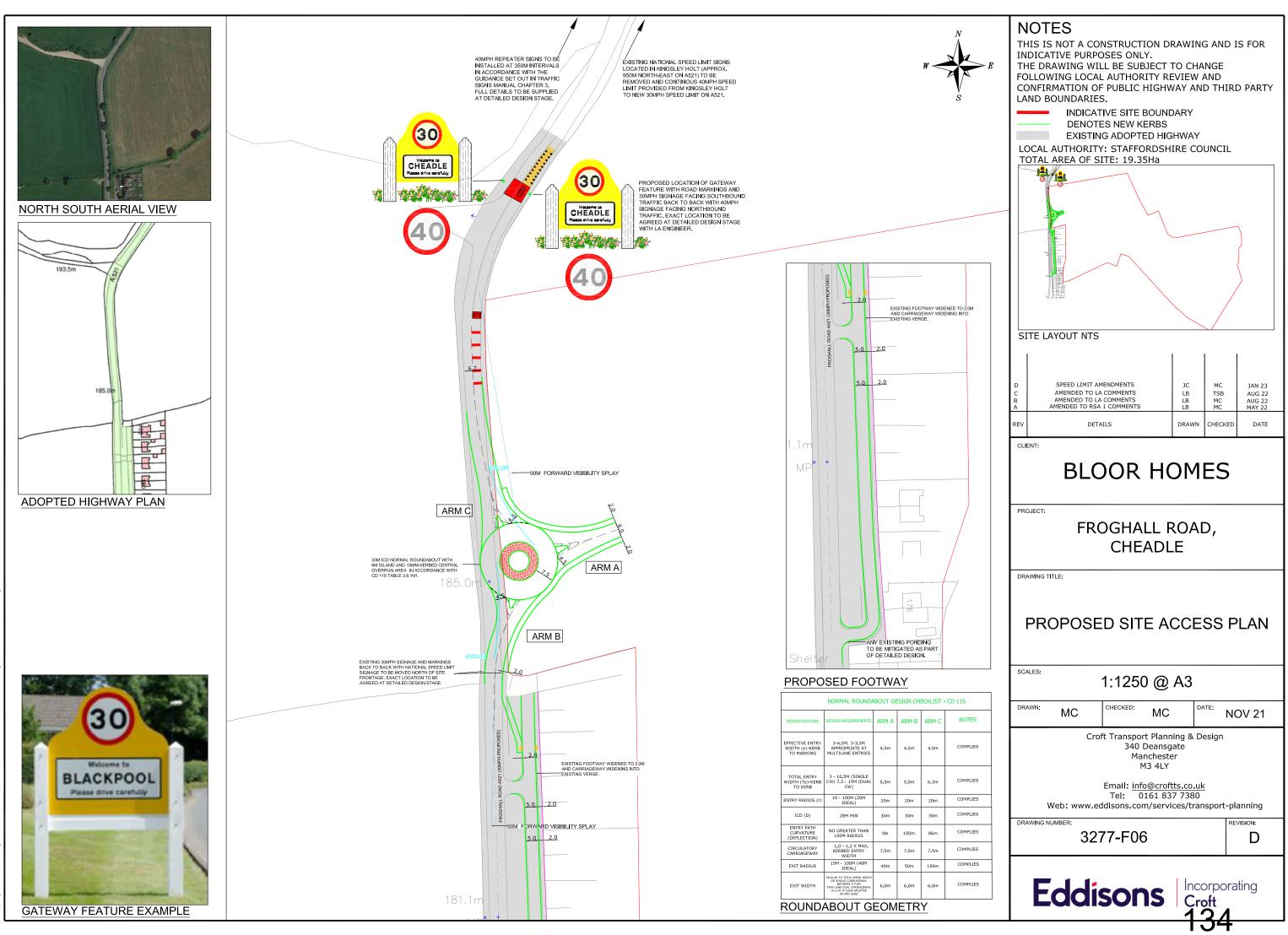
This Technical Note has considered proposals for a residential development on land to the north of the A521 Froghall Road in Cheadle and in particular provided additional information following discussions with the highways officers at SCC.

The following conclusions have been drawn with regard to the proposed development:

- The proposed development will be accessed by safe and efficient vehicular access arrangements;
- The traffic count data and junction modelling used as part of the traffic impact analysis provides a robust consideration of the traffic conditions on the local highway network.
- The proposals will have a minimal impact on the local highway network. However, if required, improvements to the local highway network can be provided by the provision of one or both of the following;
  - Provision of minor carriageway on the A522 Leek Road arm of the A522 Leek Road/A521 High Street/A522 Tape Street mini-roundabout;
  - Conversion of existing zebra crossing on A522 Leek Road to a signal controlled junction.
- The proposed development will include improvements to the pedestrian infrastructure between the application site and the town centre.

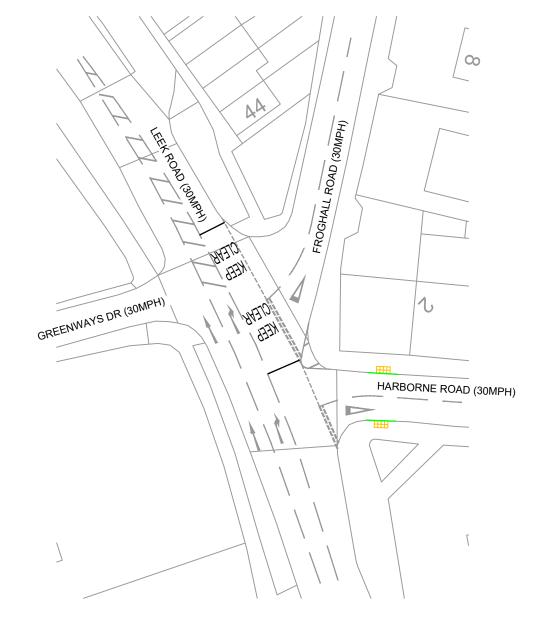
In conclusion, the proposals for a residential development will provide a sustainable development in transport terms and planning permission should be granted in accordance with the Framework.

### DRAWINGS





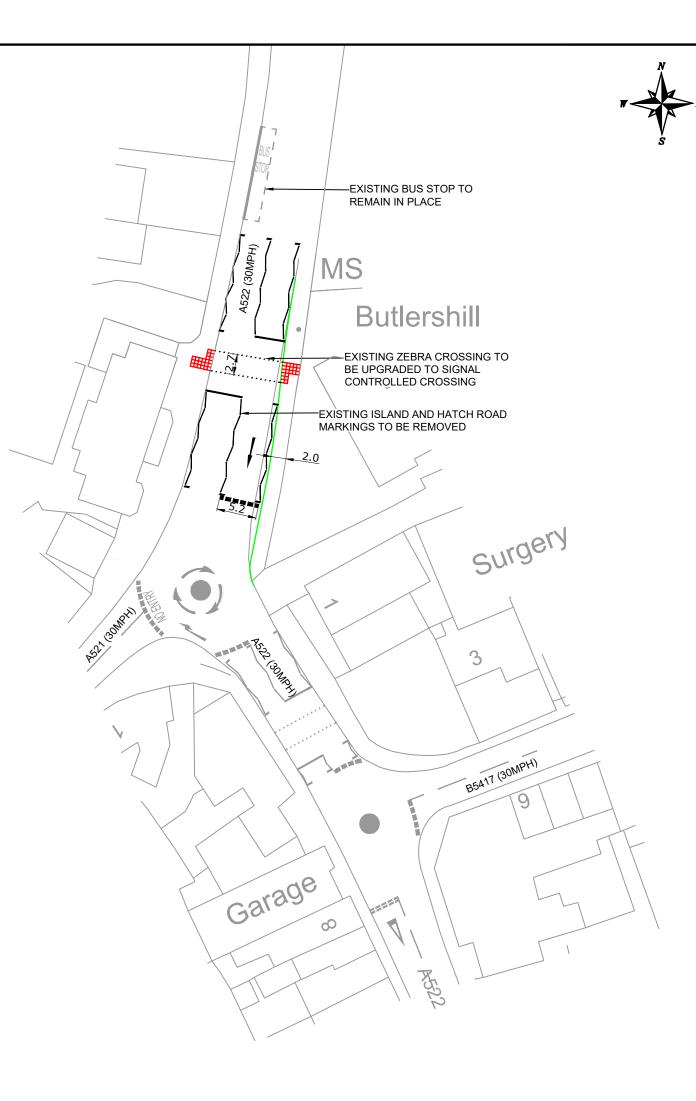
NORTH SOUTH AERIAL VIEW



NOTES THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY. THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES. LOCAL AUTHORITY: STAFFORDSHIRE COUNCIL DENOTES NEW KERBS EXISTING ROAD MARKINGS PROPOSED ROAD MARKINGS									
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1:500 @ A3									
Eddisons 340 Deansgate Manchester M3 4LY									
Email: <u>info@croftts.co.uk</u> Tel: 0161 837 7380 Web: www.eddisons.com/services/transport-planning									
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NORTH SOUTH AERIAL VIEW



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## **APPENDICES**

### **APPENDIX 1**

Roundabout Access Examples



To: Stafford Borough, DCM Stafford Borough Council Civic Offices Riverside Stafford ST16 3AQ

Application Type: OUTLINE

Application Number: S1420665

Date Received: 26-JUN-2014

Road Number: A5013

Particulars of Development:

RESIDENTIAL DEVELOPMENT UP TO A MAXIMUM OF 130 DWELLINGS, PUBLIC OPEN SPACE, GREEN INFRASTRUCTURE AND ASSOCIATED WORKS

**Staffordshire County Council** 

Town and Country Planning Act, 1990

Applicant: MR JONATHAN BLOOR

BIRMINGHAM

Officer: Paul Hurdus

Date: 21-JUL-2014

Address: RICHBOROUGH ESTATES LTD

20 WATERLOO STREET

**Development Management Procedure Order 2010** 

THIRD FLOOR, WATERLOO HOUSE

#### Location of Development: LAND AT STAFFORD ROAD, ECCLESHALL

CONDITIONAL:

**Recommendations:** There are no objections on Highway grounds to the proposed development subject to the following conditions being included on any approval:-

This is a proposal for a residential development on land off Stafford Road (the A5013), the applicants have submitted an outline application with all matters reserved except access.

The applicants have submitted a full detailed Transport Assessment (TA) in support of the application following on from pre-application discussions. The TA deals in detail with the access to the site from Stafford Road and also considers other relevant details such as highway safety, impact on the surrounding highway network and sustainability.

Concerns were raised in early discussions with the applicants over the access and the speed of vehicles on Stafford Road. As a result they are proposing to access the site via a three arm roundabout junction on Stafford Road located approximately where the speed limit changes. A roundabout junction will have sufficient capacity to accommodate the existing traffic and any future development traffic but more importantly will have a positive effect on reducing the speeds on Stafford Road. This proposal will also be complimented by the relocation of the speed limit and gateway features.

The TA has also analysed the local network and how the development could impact on highway users. The data collected on the surrounding network has been used to inform the potential traffic patterns from any new development. The main junctions for scrutiny were the two mini roundabouts at either end of Stafford Street.

To support the modelling of these junctions the applicant has also carried out a queue length survey for the morning and evening peaks. There were times when queues at these junctions did exceed those predicted in the modelling programme. This short term queuing was generally however as a result of increased use of a nearby crossing at school opening times and due to vehicles manoeuvring into parking laybys located on Stafford Street adjacent to retail premises. These queues were not visible on every time segment surveyed.

The modelling of these roundabouts shows that the A519 / A5013 roundabout will operate within its practical capacity during peak hours in future years with the development traffic added.

The junction of the A519 / B5026 will however be on or just above its practical capacity in future years. The additional traffic from the development if constructed is unlikely to be noticeable, however, with a maximum increase in delay of six seconds per vehicle predicted on the busiest arm of this junction (A519 northern arm).

The site is well located in terms of walking distances to most of the services within the town centre and there are no physical barriers to prevent future residents from walking into the town. The development will have good pedestrian permeability with four separate pedestrian accesses shown, two on Badgers Croft and two on Stafford Road. The TA also recommends hard surfacing part of the existing grass verge on Stafford Road which will be helpful to pedestrians who want to access the bus boarding facility on Stafford Road and / or the local primary school.

The existing bus services on Stafford Road are reasonable and would allow access to nearby high schools and larger towns. These towns also provide access to the national rail lines. The applicant is also proposing to improve the existing bus boarding facilities to modern bus shelters.

To further enhance the sustainability of the site the applicant is proposing a residential travel plan. The applicant will be required to provide £2200 towards the monitoring of the travel plan and to enable further discussion and targets to be set.

The TA includes an appraisal of the accident history on the surrounding highway network. This appraisal highlights that there are no parts of the network with a high volume of accidents which would be exacerbated by the development.

The TA submitted by the applicant is very thorough and demonstrates that the development if granted consent can be accommodated on the highway network and would not be detrimental to highway safety or contrary to highway policy. The Highway Authority would have no objection to the proposal subject to the following agreements and conditions being included on any permission granted.

#### Conditions

1. The dwellings hereby approved shall not be occupied until the access to the site has been completed.

2. The development hereby permitted shall not be commenced until details of the following off-site highway works have been submitted to and approved in writing by the Local Planning Authority:-

The construction of a new roundabout junction on Stafford Road (the A5013) at the access point to the site;

The provision of two cantilever bus shelters with seating and timetable information on Stafford Road adjacent to the site;

The construction of a new pedestrian footway on the southern side of Stafford Road from the junction of Green Lane to the eastern boundary of 13 Stafford Road.

The off-site highway works shall thereafter be constructed in accordance with the approved details prior to the development being first brought into use.

3. No development (including works of demolition) shall take place including any works of demolition, until a Highways Construction Method Statement has been submitted to and approved in writing by the Local Planning Authority. The approved Statement shall be adhered to throughout the construction period. The statement shall provide for :-

- A site compound with associated temporary buildings
- The parking of vehicles of site operatives and visitors
- · Loading and unloading of plant and materials
- Storage of plant and materials used in constructing the development
- Wheel wash facilities

4. Prior to first occupation of the development hereby approved, all private parking and vehicle access areas, shall be hard surfaced in a porous material and drained in accordance with a scheme to be first submitted to, and approved in writing by, the Local Planning Authority. The approved scheme shall thereafter be retained for such purposes in perpetuity.

5. No part of the development permitted by this consent shall be occupied until a Travel Plan has been submitted to and approved in writing by the Local Planning Authority. The Travel Plan shall set out proposals (including a timetable) to promote travel by sustainable modes which are acceptable to the Local Planning Authority. The Travel Plan shall be implemented in accordance with the timetable set out in that plan unless otherwise agreed in writing by the Local Planning Authority. Reports demonstrating progress in promoting sustainable transport measures shall be submitted annually on each anniversary, for a period of five years, from first occupation of the development permitted by this consent.

Reasons

1 -5. In the interests of highway safety and in accordance with the aims and objectives of the National Planning Policy Framework (2012).

1-5. To comply with The Plan for Stafford Borough (2014) Policies T1 & T2

4. To ensure the adequate provision and retention of car parking facilities; the safety of users of the development and to reduce the risk of flooding in accordance with guidance in the National Planning Policy Framework 2012.

4. To ensure the provision of a sustainable means of drainage and to prevent water flowing onto the public highway in the interests of highway safety.

5. In the interests of sustainability and to reduce the dependency on the motor vehicle.

Important Informative to be Included on the Decision Notice

i) The conditions requiring off-site highway works shall require a Major Works Agreement with Staffordshire County Council and the applicant is therefore requested to contact Staffordshire County Council in respect of securing the Agreement. The link below provides a further link to a Major Works Information Pack and an application form for the Major Works Agreement . Please complete and send to the address indicated on the application fom which is Staffordshire County Council at Network Management Unit, Staffordshire Place 1, Wedgwood Building, Tipping Street, STAFFORD, Staffordshire ST16 2DH. (or email to nmu@staffordshire.gov.uk)

http://www.staffordshire.gov.uk/transport/staffshighways/licences/

ii) This consent will require approval under Section 7 of the Staffordshire Act 1983 and will require a Section 38 of the Highways Act 1980. Please contact Staffordshire County Council to ensure that approvals and agreements are secured before commencement of works.

Note to Planning Officer

A Section 106 agreement will be required to secure the travel plan with outcomes and measures and a monitoring fee of £2,200.

for Director of Development Services on behalf of the County Council



Your ref: 21/00529

### **Transport and Development**

East Block County Hall Northallerton North Yorkshire DL7 8AH Tel: 01609 780 780 e-mail: development.control@northyorks.g ov.uk www.northyorks.gov.uk

Our ref:

Contact: Gareth Roberts

10 September 2021

Dear Sirs

**Proposal:** Full Planning Application for 240 Residential Dwellings and Associated Works **Location:** Land North Of, Catterick Road, Catterick Garrison **Applicant:** Miller Homes Limited

Thank you for your consultation on the above application.

The following documents are noted:

- 3224 Catterick Speed Survey Note
- 3224 GS992 S278 Catterick Stage 1 RSA (With Designer's Responses)
- 3224-F01 Rev J Potential Site Access Plan
- 23.08.2021 Design & Access Statement 21.00529
- Transport Assessment, Eddisons, May 2021.
- Proposed Clour Plan, Blake Hopkins Architecture Design, Ref R2-10-RES777-BHA-ST-XX-DR-A-1205, Rev P13, 05/03/21.

The submitted documents for an application made in FULL are limited and the LHA recommends that the applicant provides further information before any planning permission is granted by the LPA. The following should be submitted and approved by the Local Planning Authority;

### Introduction:

The proposed development forms part of Richmondshire Local Plan, identified under the Strategic Housing & Employment Land Availability Assessment Site Reference 128.

The proposed site is situated to the north of Catterick Road, Brough with St Giles, near Colburn, with plans to accommodate 240 dwellings. The proposed development site is located on the edge of an established residential area with numerous amenities within the vicinity and reasonable access links east and west via the A6136.

The A6136 is subject to the National Speed Limit along the majority of the site frontage, with a 30mph speed limit, commencing a distance of 60m in advance of the A6136 Catterick Road/Cookson Way roundabout approach.

The site is bordered to the north-west by a proposed housing estate located off Cookson Way (107 dwellings), which has Outline planning permission (Ref - 17/00628/OUT) and is subject to an emerging reserve matters application –(19/00757/AORM). To the north and east boundaries of the site is agricultural land and St Giles Farm.

To the east an unadopted road forms a boundary to the site which provides access to agricultural land-uses to the north. There is also a watercourse along the eastern boundary, which will need to be factored into any design proposal, with early contact recommended with the LLFA to better understand any design considerations and potential barriers.

#### 1. Access

#### a. Site Access off the A6136 (Catterick Road)

Primary access to site is proposed in the form a new priority junction off the A6136 Catterick Road, located approximately 90 metres east of the A6136 Catterick Road/Cookson Way roundabout junction. The A6136 is the main corridor for vehicles (including military vehicles) traveling East/West forming a gateway into Catterick Garrison and the surrounding areas.

The proposed vehicular access into site will incorporate a protected right-turn lane in the form of a Ghost Island arrangement onto the A6136; Catterick Road. This will require widening of the A6136 Catterick Road into the site frontage but will not require the acquisition of third party land to implement; as all land required forming the junction is either adopted public highway or land within the control of the Applicant. The running lanes on the A6136 Catterick Road have been designed at 3.5 metres wide with a 3 metre wide right turn pocket required to meet with the requirement of DMRB – CD123 standards; the details of which will be discussed later on in this section.

As part of the vehicular access arrangements, the applicant is proposing that the existing 60mph speed limit be replaced with a 40mph speed limit, with additional speed reduction measures proposed in the form of a gateway feature at the proposed commencement of the 40mph speed limit, to include; dragons teeth, 50m of anti-skid, slow roundels, red bar markings, illuminated traffic islands with bollards and a system of new street-lighting.

### Assessment for the Site Access off the A6136 (Catterick Road):

#### Stage 1 – Road Safety Audit:

A Stage 1 Road Safety Audit has been undertaken which highlights (Problem 1) that excessive vehicle speeds could increase the risk of collisions and the proposed speed reduction features may not be effective in reducing vehicle speeds sufficiently. Whilst we acknowledge the designers response on this point, the LHA remain concerned that the erection of new speed limit signs and road markings alone will not

guarantee that drivers will observe the new speed limit set, potentially increasing the risk of collisions and frequency of injuries.

#### North Yorkshire Police Comments:

Given the significance of the development and strategic importance of the A6136 corridor, North Yorkshire Police Traffic Management Unit have been consulted on the proposal (01/09/21). NY Police highlight that the A6136 in the vicinity of the application site carries a significant volume of mixed traffic, and outside of peak periods, vehicle speeds are known to be high. The expectation is that vehicle speeds would likely remain unchecked without a physical speed constraint and where the frontage development properties remain concealed from view because of hedging etc, the driver's perception and behaviour would not significantly alter as would normally be expected when entering a residential built-up environment.

NY Police are concerned that this along with the significant increase in traffic movements and the proposed single point of access in the form of a ghost island protected right turn lane would result in the junction becoming congested at peak turn leading to tailbacks on the A6136. Furthermore, the ghost island arrangement could be seen as an overtaking opportunity, as a result of cars being stuck behind slower moving vehicles, again increasing the risk of collisions and injuries. From a road safety perspective, NY Police have stressed the need for a roundabout, highlighting that it would create a physical gateway to the expanded Colburn residential area, as the current roundabout arrangement does, and ensure that traffic speeds are mitigated and safe access is provided into the development.

The LHA therefore request that the application considered the construction of a roundabout, being a recommendation that the LHA have already suggested to the applicant during pre-app discussions. A roundabout would act as a natural gateway into Coburn and the wider community, providing a physical speed check as opposed to relying on passive speed control measures.

#### **Ghost Island Provision - Review in Accordance with DMRB CD123:**

Whilst the LHA recognise that DMRB is specifically designed for motorways and trunk roads, it remains best practice guidance to be applied to busy 'A' Classification roads as is the case with the A6136 Catterick Road. As such designs for new road layouts should aim to satisfy DMRB standards.

**Speed Surveys** After reviewing the speed survey details, submitted to the LHA as part of a technical note and enabling works, the 85<sup>th</sup> percentile speed was observed along Catterick Road was recorded as 45 mph. It was noted that the survey only covered a 5 day period as opposed to the 7 days, which were previous requested. It is therefore requested that an additional speed survey is carried out to include the full 7 days.

**Radius:** The existing radius of the A6136 Catterick Road at the location of the proposed new junction access is believed to be circa 510m. Based on the assumption that the superelevation on the A6136 Catterick Road carriageway is 3.5%, the siting of a ghost island junction within this section of road is acceptable. However, if the

superelevation of the A6136 Catterick Road carriageway is less than 3.5% then the parameters of CD123 would not be satisified for a priority junction ghost island junction arrangement.

CD 123 also states that a priority junction should only be located on level ground or where any approach that is on a downhill gradient does not exceed 2% over the applicable desirable minimum stopping sight distance (SSD). This would need to be clarified by topographical survey levels.

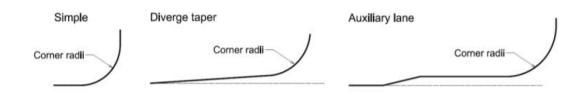
**Junction Visibility (Site Access):** It is observed that to the east of the site access there are the following features with the potential of obstructing the visibility:

- Stationary buses parked in the proposed bus layby
- Existing trees (unknown if these are to be retained)

DMRB - CD 123 states 'Ghost islands shall only be used where major road traffic flows allow traffic turning right out of the minor road to do so in one manoeuvre'. Stationary buses parked in the lay-by would impinge on the ability of the right turning traffic out of the site access to do so in one manoeuvre. This arrangement may lead to right turning traffic having to make the manoeuvre in multiple stages. With regards to the visibility splay to the west of the access, it is noted that that a visibility splay of 120m is not achievable due to the proximity of the roundabout. The roundabout exit taper is located circa 90m from the site access. DMRB - CD 123 goes on to advise that 'New priority junctions shall not be sited where they encroach on the visibility requirements of adjacent priority junctions on major roads with:

- 1) a speed limit of greater than 40 mph; or
- 2) a speed limit of 40 mph or less, where the minor road forms part of a through route

**Corner Radii: DMRB-** CD 123 states "at all priority junctions, corner radii shall be provided where the edge of the carriageway or kerb lines of the major and minor road intersect at each corner where turning movements need to be accommodated". The illustration below shows corner radii arrangements for simple priority junctions, and priority junctions with merge / diverge tapers or auxiliary lanes.



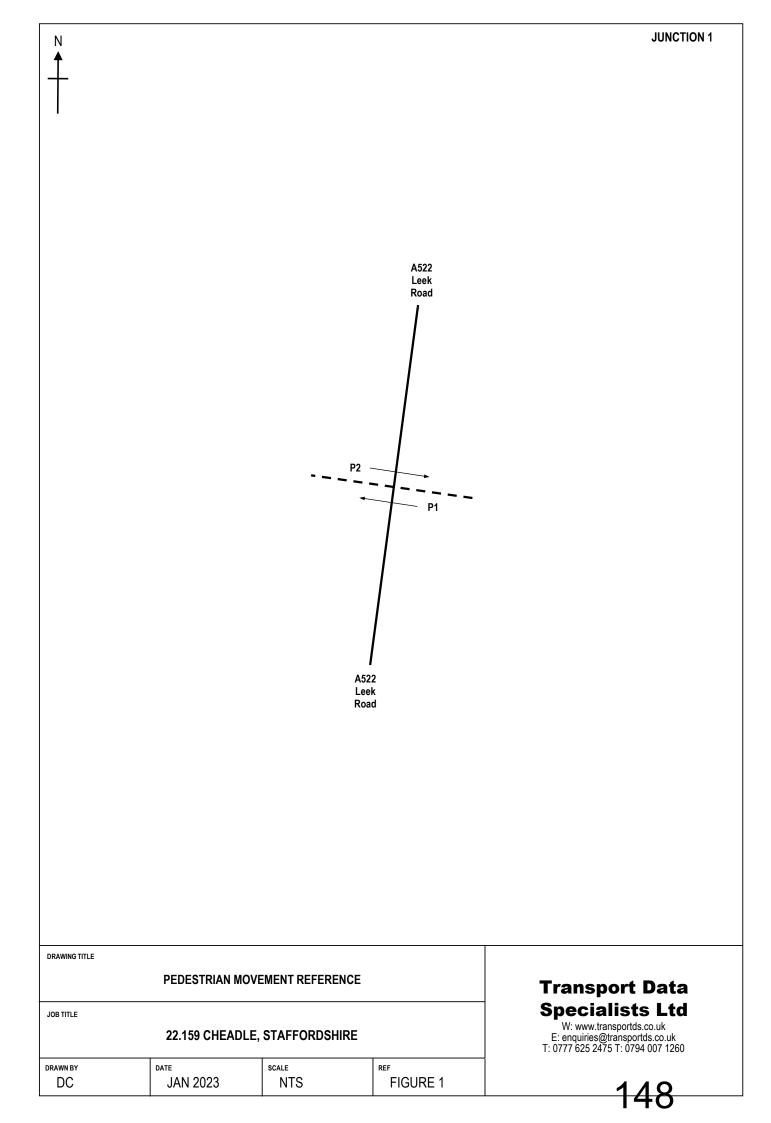
In the proposed scenario, no diverge tapers or auxiliary lanes have been provided. A 'simple' corner radii arrangement above has been used by the designer. DMRB-CD 123 states that "at ghost island junctions where no diverge or merge tapers are provided the corner radii should be 15 meters followed by a corner taper of 1:6 over a distance of 30 meters". In the proposed scenario, corner radii of 10 meters has been used and corner tapers have not been provided.

### **APPENDIX 2**

Pedestrian Survey A522 Leek Road

### SURVEY CONTROL

Client:	Eddisons
Client Contact:	Tom Bentley
Survey Location:	Cheadle, Staffordshire
Date(s) of Survey:	Wednesday 25th January 2023
Notes:	
On Site Supervisor:	Rachel Wong
Data Checking:	David Cheng
J	
Survey Reference:	22.159 Cheadle, Staffordshire
Status:	Final
Date of Issue:	30th January 2023





DRAWING TITLE	Transport Data			
JOB TITLE	Specialists Ltd W: www.transportds.co.uk E: enquiries@transportds.co.uk T: 0777 625 2475 T: 0794 007 1260			
drawn by DC	JAN 2023	scale NTS	FIGURE 2	4 4 6
	·	·		145

Time Beginning	Pedestrians, A522 Leek Road - Wednesday 25th January 2023	Time Beginning	Pedestrians, A522 Leek Road - Wednesday 25th January 2023	Time Beginning	Pedestrians, A522 Leek Road - Wednesday 25th January 2023	Time Beginning	Pedestrians, A522 Leek Road - Wednesday 25th January 2023
	P1		P2		P1		P2
	Pedestrians		Pedestrians		Pedestrians		Pedestrians
07:30:37	1	07:59:07	1	16:41:43	1	16:33:34	1
07:37:10	1	08:41:32	1	16:46:09	1	16:41:53	1
07:38:47	1	08:51:01	3	16:54:29	2	16:45:26	2
08:06:48	2	08:55:17	1	17:00:13	1	17:01:50	1
08:14:31	1	09:04:43	3	17:00:47	1	17:08:22	2
08:17:15	1	09:12:56	1	17:01:15	1	17:10:25	1
08:22:04	1	09:22:44	1	17:04:24	3	17:18:02	2
08:22:59	3	09:26:14	1	17:09:02	1	17:48:40	1
08:23:40	1			17:09:16	1	17:59:02	1
08:25:50	2			17:17:22	2	18:10:28	3
08:26:41	1			17:18:09	1	18:16:24	1
08:28:26	1			17:27:34	1	18:17:09	1
08:29:21	3			17:27:6	1	18:23:49	1
08:30:36	3			17:29:17	2		
08:31:35	2			17:31:31	1		
08:33:33	3			17:35:35	1		
08:33:46	1			17:52:13	2		
08:37:20	1			17:57:36	1		
08:42:47	3			17:58:29	1		
08:43:24	1			18:00:30	2		
08:45:04	1			18:02:39	1		
08:46:40	1			18:06:23	3		
08:58:03	1			18:15:21	1		
09:09:41	1					L	

## **APPENDIX 3**

Drawing 3277-Fo6 Revision G

