Land North-East of Jn10 M42 Motorway, North Warwickshire

784-B033920

Transport Assessment Addendum

Hodgetts Estates

December 2023



DOCUMENT CONTROL

Document:	Transpo	ort Assessment Addend	um						
Project:	Land No	orth-East of Jn10 M42 M	lotorway, North Warwi	ckshire					
Client:	Hodgett	s Estates							
Project Number:	784-B03	784-B033920							
File Origin:	Output	\\lds-dc-vm-101\Data\Projects\784-B033920 Land NE of M42 Jn10\60 Project Output\61 Work in Progress\Draft Documents\Transport Assessment Addendum\Proposed Employment Land Northeast of M42 J10 - TAA.docx							
Revision:		0	Prepared by:	GW					
Date:		December 2023	Checked by:	NRB					
Status:		Final	Approved By:	NRB					
Description of Re	vision:								
Revision:			Prepared by:						
Date:			Checked by:						
Status:		Approved By:							
Description of Re	vision:								
Revision:			Prepared by:						
Date:			Checked by:						
Status:		Approved By:							
Description of Re	vision:		•						
Revision:			Prepared by:						
Date:			Checked by:						
Status:			Approved By:						
Description of Re	vision:		•						



TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	VISION	3
3.0	PROPOSED DEVELOPMENT	6
	Development Masterplan	6
	Highway Access	6
	Pedestrian & Cycle Connectivity	7
	Proposed Highway Improvements	8
4.0	HIGHWAY SAFETY	10
	Personal Injury Accident Data	10
	Pennine Way Roundabouts & Slip Road to the A5	10
	M42 Junction 10 Interchange	11
	A5 between M42 Junction 10 and A5/Core 42	15
	A5 from A5/ Core 42 to approximately 200m east of Dordon Roundabout	17
	Summary	18
5.0	OPERATIONAL ASSESSMENT	19
	Background	19
	2023 Baseline TRANSYT 16 Model	19
	2026 Reference Case TRANSYT 16 Model	23
	2033 Reference Case TRANSYT 16 Model	26
	2033 Local Plan TRANSYT 16 Model	28
	2033 Local Plan - Additional Mitigation	32
	Road Safety Implications	34
	Summary	35
6.0	SUMMARY AND CONCLUSIONS	36

APPENDICES

Appendix A Correspondence

Appendix B Masterplan

Appendix C TT Drawings

Appendix D Speed survey results

Appendix E Chetwood Connectivity Plan

Appendix F Accident Data

Appendix G Consolidated Modelling Note v2

Appendix H Table 5.1 2023 Transyt Modelling Results

Appendix I Flow diagrams

Appendix J Table 5.2 2026 Reference Case Modelling Results

Appendix K Table 5.3 2033 Reference Case Modelling Results

Appendix L Local Plan Associated Highway Works

Appendix M Table 5.4 2033 Local Plan Modelling Results

Appendix N Additional Mitigation Drawings

Appendix O Table 5.5 2033 Local Plan Modelling Results with Additional Mitigation

Appendix P Vision Based Travel Plan

1.0 INTRODUCTION

- 1.1 Tetra Tech (TT) were engaged by Hodgetts Estates in January 2022 to advise on transport and highway matters in relation to their proposals for a major development consisting of 100,000sqm of employment uses and a 150-space lorry park with 400sqm amenity block, located off the A5 Watling Street, north-east of the M42 Junction 10 (M42 Jn10) interchange, in Warwickshire.
- 1.2 An outline planning application for the development site was submitted to North Warwickshire Borough Council (NWBC), with details of access submitted for approval in full and all other matters reserved. The application (ref: PAP/2021/0663) was validated on 2 December 2021.
- 1.3 The application was initially supported by a Transport Assessment (TA) and Framework Travel Plan (FTP) produced by Bancroft Consulting. The 'Bancroft TA' was then superseded by a 'Revised TA', prepared by TT, dated February 2023 which was based on new traffic surveys carried out in March 2022, and, as set out in the agreed (with National Highways (NH) and Warwickshire County Council (WCC)) Modelling Strategy, a TRANSYT 16 model of the A5 between and including its junctions with the M42 (Junction 10) in the east and the junction for the Core 42 Industrial Estate in the west was used to assess the impact of the proposed development. Through subsequent discussions with Staffordshire County Council (SCC) the impact at the two Pennine Way/ A5 roundabouts was also assessed using Junctions10. The Revised TA sets out the background to the Modelling Strategy, the development of the TRANSYT 16 model, its validation and the assessment of the impact of the development on the A5, using Reference Case and Local Plan traffic flows, as well as on the A5/ Pennine Way junctions.
- 1.4 The Revised TA set out the details of a proposed traffic signal junction on the A5 to serve the development site and the TRANSYT 16 model showed that it operated within acceptable queue and delay parameters.
- 1.5 The Revised TA also set out the accessibility of the site to journeys by walking, cycling and by public transport. Significant improvements in the pedestrian, cycling and wheeling linkages between the site, Dordon and Tamworth were proposed by upgrading the facilities along the A5 and around the north side on M42 Jn10, as well as to public rights of way through the site from Birchmoor to the A5 and to Dordon. The walking and cycling provision was underpinned by a WCHAR in accordance with GG142. A public transport strategy was developed, and it was agreed with Stagecoach that the 766 Tamworth- Hinckley bus service will divert into the site to provide convenient bus access.
- 1.6 Although the March 2022 traffic surveys had been agreed with WCC and NH for use in the TA, Government guidance in December 2022 indicated that traffic flows in 2022 may be still unstable following the Covid 19 pandemic, and new traffic surveys were requested. Although the extent of the network to be assessed had been agreed with WC and NH, NH requested that the TRANSYT 16 model was extended to include the A5/ Long Street junction, 'Dordon Roundabout'. SCC requested that the two A5/ Pennine Way roundabouts were also included in the TRANSYT model.
- 1.7 WCC, based on the Government guidance, advised that the base traffic data in the A5-Atherstone Paramics model could no longer be relied upon, but that the committed development flows and proposed development traffic flows could be used. The use of development flows and committed development flows was agreed provided that the committed development flows were updated to

- 2023 in accordance with the survey data. WCC advised that they had commenced the development of an A5 Paramics model which included the section between M42 Jn10 and M69 Jn1.
- 1.8 A Consolidated Modelling Note was prepared which set out the approach to TRANSYT modelling, the extent of the network to be assessed, the traffic survey data required, and the derivation of the committed development traffic flows to be used in the assessment. The Modelling Note has been agreed by WCC (25 July 2023, attached at Appendix A1), NH (27 November 2023, attached at Appendix A2) and SCC (30 November 2023, attached at Appendix A3).
- 1.9 Traffic surveys were originally scheduled for March 2023, however extensive road works on the A5 meant that the earliest that the surveys could be undertaken was 4 July 2023. The date of the survey and the survey results have been agreed with WCC, NH and SCC, and Appendices A4 to A6 refer.
- 1.10 The 2022 validated TRANSYT 16 model was extended to include the two A5/ Pennine Way roundabouts, and Dordon Roundabout and was revalidated. A Baseline TRANSYT Validation Report was issued to WCC, NH and SCC in August 2023. At the time of writing the Validation report is agreed by NH, with the exception of the A5/ Core 42 signal timings. Because WCC and SCC do not operate TRANSYT 16, NH is taking the lead on the validation and once agreed with NH, it will be reviewed by WCC and SCC.
- 1.11 In late December 2022, Department for Transport Circular 01/2022 "Strategic Network and the Delivery of Sustainable Development" was published. NH advised that although the application was lodged prior to the Circular coming into force, because the transport modelling was being revised, the provisions of the new Circular would apply. To comply with the Circular a Vision was developed for the site and was agreed with NH as part of the Vision Based Travel Plan. As required by the Circular this Transport Assessment Addendum (TAA) commences with the Vision.
- 1.12 Circular 01/2022 requires that the residual traffic impacts of a development are assessed. The residual impacts being those which include for the effects of the travel plan and other sustainable transport measures aimed at reducing vehicular traffic. A Vision Based Led Travel Plan was produced. It is agreed with SCC and is close to being agreed with NH. Since the residual traffic flows were very similar to the agreed vehicular trip generation, NH agreed that the TRANSYT modelling should be based on the agreed vehicular trip generation.

1.13 This TAA report:

- updates and extends the Road Safety assessment to include the extended network and to include recent accident data up to 23 October 2023,
- updates the site access junction visibility based on the 2023 85th percentile surveyed traffic speeds and predicted queuing from the updated TRANSYT 16 assessment,
- updates the Operational Assessment using the updated TRANSYT 16 assessment.
- 1.14 The other sections of the Revised TA dated February 2023 remain unchanged.
- 1.15 A Trigger Report, as required by Circular 01/2022 will be submitted under separate cover.

2.0 VISION

- 2.1 In accordance with Circular 01/2022, a vision for the proposed development at Land NE of M42 Jn10 has been prepared together with a Vision Based Travel Plan which sets out how the vision can be achieved, includes suitable multi-modal (person) trip rates, clear targets and commitments to manage down the traffic impact of development and maximise the accessibility of the site by walking, wheeling, cycling, public transport and shared travel.
- 2.2 The Vision Based Travel Plan (VBTP) was submitted to NH, WCC and SCC on 18 September 2023 and a copy is attached at Appendix P.
- 2.3 The vision for Land NE of M42 Jn10 is to create:

"The Greenest Business Park in the West Midlands"

- 2.4 The vision is derived from Hodgetts Estates' commitment to achieving the highest possible level of sustainability and design and to mitigate possible climate change impacts. The vision will be achieved through:
 - Sustainability Strategy
 - Sustainable Transport & Highways
- 2.5 The details of these are within the VBTP document, as well as the broader submission (e.g., the Design Guide and Zero-Emission Goods Vehicles Statement). From a transport perspective the main threads are:
 - Proximity to the SRN logistics, manufacturing and lorry parks are SRN dependent developments.
 - Walking and Cycling Connectivity the proposed development includes significant enhancements to connectivity between the site, Tamworth, Polesworth, Dordon and the cluster of surrounding business park at M42 Jn10 and Birch Coppice which will assist people travelling to and from the development site, as well as to and from other nearby major employment sites.
 - Public Transport Connectivity the extension of the Stagecoach 766/767 Tamworth and Nuneaton services from the A5 into the proposed development has been agreed with Stagecoach and WCC.
 - Rail Served Site The development site is located close enough to Birmingham Intermodal Freight Terminal (BIFT) at Birch Coppice to be classed as a 'rail served' site, allowing long distance freight to and from the site to be conveniently moved by rail, rather than by road.
 - Electric Vehicles SMART charging points to 20% of all car, motorcycle and light goods vehicle (LGV) parking spaces and 10% of HGV parking spaces and/or loading docks will be provided. In addition, ducting to all remaining car, motorcycle, LGV and HGV parking spaces and loading docks for easy future conversion will be provided. As such, the proposals would facilitate the possible future conversion of the site to an 'all-electric business park'.

Hydrogen – in addition, various measures have been incorporated into the proposals to enable easy future transition to hydrogen being the primary UK fuel for long-distance freight haulage, including demarked service channels left clear for future hydrogen mains supply to all premises and hydrogen tanking (bunkers) to be provided to all premises, subject to occupier requirements. The package of measures above would ensure the scheme is 'net-zero ready' at the point of delivery.

Travel Plan – a travel plan will be implemented at the site and will actively promote sustainable travel choices, and a will monitor travel patterns to check progress to travel reduction targets.

2.6 The VBTP includes targets to reduced car trip generation, based on advice from TAG Unit M5.2 which suggests a reduction of 18% in car driver mode share for employment sites. The VBTP Targets are summrised below in Table 2.1.

Table 2.1: Current and Target Mode Share, Employment

Mode of Travel	Residential				
	Current	Target			
Car Driver	78%	64%			
Car Passenger	11%	16% (+5%)			
Bus	2%	7% (+5%)			
Cycle	3%	5% (+2%)			
Walk (inc. Wheeling)	5%	7% (+2%)			
Motorcycle	1%	1%			

2.7 Table 2.2 below, extracted from the VBTP, shows the current mode shares for the proposed development, the future mode shares and residual travel volumes with the successful implementation of the Travel Plan.

Table 2.2: Current and Target Multi Modal Trips

	Arrivals			Departures					
Time Period	Current	Target	Difference	Current	Target	Difference			
	Car Driver/ Light Vehicles								
Weekday AM Peak 08:00 to 09:00	126	104	-22	34	28	-6			
Weekday PM Peak 17:00 to 18:00	40	33	-7	150	122	-28			
		Car P	assenger						
Weekday AM Peak 08:00 to 09:00	18	26	+8	5	7	+2			
Weekday PM Peak 17:00 to 18:00	6	8	+2	21	31	+10			
			Bus						
Weekday AM Peak 08:00 to 09:00	3	11	+8	1	3	+2			
Weekday PM Peak 17:00 to 18:00	1	4	+3	4	14	+10			

Motorcycle						
Weekday AM Peak 08:00 to 09:00	2	2	0	0	0	0
Weekday PM Peak 17:00 to 18:00	1	1	0	2	2	0
	•	C	ycle			
Weekday AM Peak 08:00 to 09:00	5	8	+3	1	2	+1
Weekday PM Peak 17:00 to 18:00	2	3	+1	6	10	+4
		1	Walk			
Weekday AM Peak 08:00 to 09:00	8	11	+3	2	3	+1
Weekday PM Peak 17:00 to 18:00	3	4	+1	10	14	+4
	•		HGV			
Weekday AM Peak 08:00 to 09:00	50	45	-5	52	47	-5
Weekday PM Peak 17:00 to 18:00	52	47	-5	28	25	-3

Note: No change in total HGV movement at the site access, the reduction of trips on the wider network going to/from BIFT at Birch Coppice.

2.8 The VBTP was approved by SCC on 26 October 2023. Comments of a minor nature were received from NH on 9 October 2023 (attached at Appendix A7), and at the time of writing are being addressed. No comments have been received from WCC since its submission on 18 September 2023. In NH's 9th October email it was confirmed that, because there is only a small difference between the agreed trip generation and the residual trip generation, that the assessment of the traffic impacts arising from the proposed development should use the agreed trip generation.

3.0 PROPOSED DEVELOPMENT

Development Masterplan

3.1 The application is in outline for up to 100,000sqm of B8 use, of which up to 10,000sqm (10%) could be flexible E(g)(iii)/B2/B8 use, and a 150 space lorry park and associated 400sqm amenity block, with all matters reserved apart from access. A copy of the latest illustrative masterplan is shown at Chetwoods Drawing 4263-CA-00-00-DR-A-00090-SK5 attached at Appendix B.

Highway Access

- 3.2 The proposed site access arrangement is shown in drawings 784-B033920-TTE-00-ZZ-PL-H-0002-P02 attached in Appendix C1. The proposed layout has been prepared in accordance with the requirements of CD123 "Geometric Design of At-Grade Priority and Signal-Controlled Junctions". It comprises a new signalised junction from the A5 and includes widening on the A5 to provide 3 lanes on the eastern approach, and 3 on the western approach. Fully signalised pedestrian and cycle crossing of the site access arm is provided as well as a fully signal controlled pedestrians crossing of the A5. In addition, there are pedestrian and cycle improvements along the A5 which are discussed in more detail below.
- 3.3 There is a 0.7m level difference between the A5 eastbound and westbound carriageways. To form the junction, it will be necessary to raise the level of eastbound carriageway to that of the westbound lane. The necessary vertical alignment of the eastbound carriageway has been assessed and confirmed that the carriageway can be reprofiled in accordance with CD109 Highway Link Design based on a 120kph design speed.
- 3.4 Paragraph 2.27 of CD123 states that where "the 85th percentile speed on the approach roads is greater than or equal to 104kph (65mph), a signal-controlled junction shall not be provided". Radar speed surveys were carried on the A5 eastbound and westbound movements immediately to the west of the proposed site access junction from Wednesday 12 July to Tuesday 18 July 2023. The results are attached at Appendix D. The 7-day 85th percentile eastbound speed was 74.0kph (46.0mph) and the westbound speed was 78.1kph (48.5mph). Therefore, based on the observed 85th percentile speeds signals are appropriate, although the national speed limit of 70mph applies. As part of the mitigation measures discussion in Section 5 below, it is proposed to extend the existing 50mph speed limit (which commences some 220m east of the site access junction, westwards along the A5 to approximately 120m west of the Pennine Way overbridge. TT Drawings 784-B033920-TTE-00-ZZ-PL-H-0002-P02 and 784-B033920-TTE-00-ZZ-SK-H-0001-P04 both attached in Appendix C1 and C3 respectively show the proposed relocated speed limits.
- 3.5 Based on the observed 85th percentile speeds for eastbound traffic (74.0kph) the appropriate stopping sight distance (SSD) from CD109 Highway Link Design is 160m. The 160m SSD can be provided to the signal heads for approaching traffic exiting from M42 Jn10, and to the back of the maximum predicted queue of 17pcu (see Chapter 5). The A5 eastbound approach to the junction would include both nearside and off-side primary signal heads and a minimum of two signals would be visible from each stop line.

- 3.6 Based on the observed 85th percentile speeds for westbound traffic (78.1kph), 160m SSD is also required and can be provided to the signal heads for approaching traffic from the A5/ Birch Coppice junction, and to the back of the maximum predicted queue of 4pcu (see Chapter 5). The A5 westbound approach to the junction would include both nearside and off-side primary signal heads and a minimum of two signals would be visible from each stop line.
- 3.7 The proposed layout shows that the required Junction Intervisibility Zone can be achieved throughout the layout, with a minimum 2.5m setback from each stop line. In accordance with paragraph 7.6 of CD123 the proposed layout has been designed to include 3.5m lane widths throughout (minimum of 3m required).
- 3.8 All tapers within the proposed layout are provided in accordance with the minimum requirement for 1 in 5m, set out within paragraph 7.8 of CD123. All storage lanes for turning traffic have been designed with consideration of the potential demand for turning traffic. The proposed layout requires the A5 eastbound offside approach lane to merge with the middle lane as it passes through the junction and the return taper complies with the requirements of CD123.
- 3.9 As required by paragraph 7.16.2 of CD123 the proposed right turn from the A5 (westbound) arm into the site would be separately controlled within the overall staging sequence.
- 3.10 The proposed access junction will require the removal of the two laybys on the A5 which are mainly used by HGVs. The development proposals include a designated lorry parking area for up to 150 HGVs within the site and will more than off-set the loss of the existing parking laybys which have a maximum capacity of around 7 to 8 lorries.
- 3.11 As part of the access design the existing eastbound bus layby east of the site frontage has been relocated and redesigned/upgraded in accordance with CD169 'The Design of Lay-Bys, Maintenance Hardstandings, Rest Areas, Service Areas and Observation Platforms',
- 3.12 The access road has a 7.3m wide carriageway with 3m foot/cycleways. At the junction, there are two 3.5m right-turn lanes and one 4m left-turn lane. Along the A5, the foot-cycleway is increased to 3m with a 2m separation strip in compliance with CD143 "Designing For Walking, Cycling And Horse-Riding".
- 3.13 To address any concerns regarding the suitability of the proposed layout to accommodate all likely turning manoeuvres, TT Drawings 784-B033920-TTE-00-ZZ-PL-H-0002-P01 sheet 2 attached in Appendix C1 shows how a 16.5m articulated lorry could satisfactorily manoeuvre between each arm of the junction.

Pedestrian & Cycle Connectivity

- 3.14 Throughout the site, 3m wide shared foot/cycleways will be provided. Fully signalised pedestrian/cycle crossings will be provided across the mouth of the proposed access junction with the A5 and a fully-signalised pedestrian crossing of the A5 carriageway is to be introduced.
- 3.15 Externally, enhancements will be made to the pedestrian/ cycle path on the A5 eastbound carriageway together with improving the pedestrian and cycle facilities on the northern part of the M42 Jn10 as shown at TT Drawings 784-B033920-TTE-00-ZZ-PL-H-0003-P02, 784-B033920-TTE-00-ZZ-PL-H-0004-P02 and 784-B033920-TTE-00-ZZ-PL-H-0005-P02 at Appendix C2. Signalised

- crossings will replace uncontrolled crossings on the north facing slips and also on Green Lane. From Green Lane to the A5/ Pennine Way north roundabout the existing narrow footway/ cycleway will be widened and improved providing a key link into Stoneydelph and onwards to Tamworth.
- 3.16 The site will provide connections onto the existing Public Bridleways and Public Footpaths adjacent to the site (AE45, AE46 and AE48). In addition these ways will also be upgraded to make them wider and with higher quality surfaces, providing excellent connectivity from the site to/ from Birchmoor, with connections to Tamworth, and to/ from Polesworth and Dordon. Footpath AE46 will be upgraded and diverted to provide a more direct route between Birchmoor / Polesworth / Tamworth and the A5 opposite the entrance to Birch Coppice Business Park. There will also be new footpaths/ cycleways (new Public Rights of Way), running parallel with the A5 between the site (at Footpath AE46) and Dordon (at Barn Close) and between Footpath AE46 and the A5 opposite the entrance to Core 42 Business Park. All of these will significantly enhance the sustainable routes available to both local residents in the area and also employees of both the development site and surrounding employment centres as shown on the Chetwoods drawings 00801/P3, 00802/P3 and 00803/P6 attached in Appendix E.
- 3.17 All of the new and improved existing Public Footpaths, Bridleways, cycleways and pavements will be designed to be the Equalities Act 2010 compliant, to provide access to all (subject to the agreement of WCC Rights of Way Team).
- 3.18 To encourage walking, wheeling and cycling, showers and changing facilities will be provided to all employment units. In addition, communal cycle parking, showers and changing facilities will also be provided at the ancillary Hub Office, available to the employees of all site occupiers and the general public including staff from neighbouring business parks.

Proposed Highway Improvements

3.19 As set out in the Revised TA dated February 2023 highway improvements at M42 Jn10 and the A5 eastbound approach were required to mitigate the impact of the proposed development. These are shown at 784-B033920-TTE-00-ZZ-PL-H-0001-P04, attached at Appendix C3, as well as the drawings in Appendix C2 and Appendix E. Based on the updated TRANSYT 16 results reported in the Operational Assessment chapter below, these off-site highway works are still required. The highway improvements, including the accessibility improvements, comprise:

Widening the A5 eastbound approach to M42 Jn10 to provide 3 lanes.

Widening the M42 Jn10 circulatory carriageway on the approach to the Green Lane signals to 4 lanes.

Signal controlled pedestrian and cycle crossing of the Green Lane approach.

Signal controlled pedestrian and cycle crossing of the M42 northbound on-slip.

Signal controlled pedestrian and cycle crossing of the M42 southbound off slip.

Signal controlled pedestrian crossing of the A5 at the proposed site access junction.

Signal controlled pedestrian and cycle crossing of the proposed site access junction.

Extended 4 lane flared section on the A5 westbound approach to M42 Jn10.

- Improved shared foot/cycleway on the north side of the A5 between the site access and the Pennine Way north roundabout, including the northern part of Jn10.
- A new separate 3.0m wide offline shared foot/cycleway between the site access and the A5 near to Browns Lane, Dordon.
- 50mph speed limit on the A5 from a point 120m west of the Pennine Way overbridge to the existing 50mph speed limit east of the site.
- A foot-cycle connection is proposed to Bridleway AE45 and to Footpath AE46, both of which lie on the eastern boundary of the site.
- A new footpath/bridleway is proposed to connect from AE46 to Barn Close in Dordon.
- A new footpath/bridleway is proposed to connect from AE46 to the A5 at the entrance to Core 42 Business Park.
- A diversion to AE46 is proposed to provide a more direct route between Tamworth/Birchmoor and the entrance to Birch Coppice Business Park.
- 3.20 The development proposals have been subject to a WCHAR assessment in line with GG142 "Walking, cycling and Horse-riding Assessment and Review", and following agreements to the modelling results and proposed highway mitigation works, the WCHAR will be revised.
- 3.21 Following agreements to the modelling results a Stage 1 RSA will be undertaken in accordance with GG119 "Road Safety Audit" on the proposed access arrangement and off-site improvements. In addition, a Safety Risk Assessment will be undertaken, in accordance with GG104. The Audits will submitted under separate cover.

4.0 HIGHWAY SAFETY

Personal Injury Accident Data

- 4.1 The Revised TA reported accidents between 2017 and 2019 inclusive, and excluded data from 2020 and 2021 because during those years traffic patterns had been affected by the Covid Pandemic. More recent accident data is available which is up to 23 September 2023. For this TAA the accident data for 1 January 2018 to 31 December 2019 and from 1 January 2022 to 23 September 2023 is presented. Accidents which have occurred in 2020 and 2021 have again been excluded because of the effects of the Covid-19 pandemic. The accident data presented covers 3 years and 10 months.
- 4.2 Road traffic collision records have been obtained from SCC and from WCC. The study area comprises the two Pennine Way/ A5 roundabouts, the A5 from Pennine Way to the A5/ Dordon roundabout and includes the M42 Jn10 and proposed site access location.
- 4.3 Summary details of the accidents are given below (from west to east), and copies of the collision records are attached in Appendix F and include accident location plans. It should be noted that WCC's records do not specify the factors involved in the accident, so this information is interpreted from the incident descriptions where possible.

Pennine Way Roundabouts & Slip Road to the A5.

4.4 In the assessment period 6 accidents were reported at the Pennine Way roundabouts and slip roads to the A5 Fazeley-Two Gates-Wilnecote Bypass. The accidents are summarised in Table 4.1 below. Of the 6 accidents, 2 occurred at the Pennine Way South roundabout, 2 at the Pennine Way north roundabout, and 2 occurred at the Pennine Way/ A5 slip roads. There were no accidents at the other locations, such as the Pennine Way overbridge.

Table 4.1: Pennine Way Roundabouts and A5 Bypass up to Junction 10

Reference/ Date	Location	Lighting	Dry/ Wet	Severity	Casualties	
Pennine Way South Roundabout						
18322469 02/07/18	On roundabout near junction with Centurion Way	Daylight	Dry	Slight	1 cyclist and 1 car driver	

A car and a bicycle have been traveling in the same direction (from A5 slip on southeast to Quarry Hill) entering the roundabout. The cyclist has unexpectedly entered the carriageway from the footway, to go ahead and the car failed to stop in time and collided with the cyclist, causing slight injury.

Factors: Illegal turn or direction of travel, Cyclist entering road from pavement.

18338615	On roundabout near	Daylight	Dry	Slight	1 car driver
25/09/18	junction with Centurion				
	Way				

Two cars were traveling in the same direction (north-east Pennine Way north roundabout to Quarry Hill northwest) and one of the vehicles stopped mid turn. The rear car failed to stop in time and caused a collision. Factors: Failed to look properly.

Pennine Way North Roundabout						
221139087 21/01/22	Approx. 60m from Pennine North Roundabout, at junction with Pennymore Road	Daylight	Dry	Slight	1 car driver	

A car was turning left out of Pennymoor Road onto Pennine Way heading south and has misjudged the speed of a goods vehicles heading northbound along Pennine Way. The two vehicles have collided.

Factors: N/A

2211950	45 At Pennine N	orth Daylight	Dry	Slight	1 car driver
11/04/2	22 Roundabout nea	r A5 slip			
	on				

A car was heading onto the A5 slip road from Pennine Way (North) when another car also heading to the A5 slip road from the south west entered the roundabout and collided. Factors: Following too close, Sudden braking

A5/ Pennine Way Slips						
19868172 On A5 north-east bound Daylight Dry Slight 1 motorcyclist 18/07/2019 at off slip junction						
A motorcyclist was traveling northwest along A5. For unknown/ unrecorded reasons, the rider has sustained a slight injury. Factors: Dazzling sun, Swerved.						
18299447 21/04/18	On Slip towards roundabout, approx. 20m from roundabout.	Daylight	Wet/ Damp	Slight	1 car driver	

A car driver was heading westbound along the slip road onto the south Pennine Way roundabout, and has lost control of the vehicle and crashed.

Factors: Poor turn or manoeuvre, Sudden braking, Loss of control

4.5 The number of accidents reported at the two Pennine Way roundabouts and the A5 slip roads is low. There are no particular clusters or common factors, and the report descriptions describe driver or cyclist error rather than poor junction design.

M42 Junction 10 Interchange

4.6 In the assessment period 28 accidents were reported at the M42 Jn10 interchange and its approach roads. The accidents are summarised in Table 4.2 below. In the table the accidents have been grouped by approach arm and the adjacent section of the circulatory carriageway.

Table 4.2: M42 Junction 10 Interchange							
Reference/ Date	Location	Lighting	Dry/ Wet	Severity	Casualties		
A5 West and Circulatory c/w							
19400169 28/05/2019	A5 north -west arm on north-west bound side	Daylight	Dry	Slight	1 motorcyclist		
A motorcyclis Dazzling sun.	st heading north west from t	he interchang	e has, for unclear	reasons, suffered	d a slight injury. Factors,		
19887971 07/09/2019	From A5 north west heading towards interchange	Daylight	Dry	Slight	1 car passenger		
stationary ca	from the accident record, bury waiting on the A5 south easy wing too closely, Failed to lo	stbound to joi	n the interchange	2.			
221241676 09/11/22	A5 north west arm on north east bound side	Darkness - Street Lit	Dry	Slight	1 car driver		
	gnorth west from the interch r. Factors: N/A	ange along th	e a5 has failed to	stop in time and	collided with the rear		
901455 12/10/19	A5 north west arm on eastbound side	Daylight	Wet/ Damp	Slight	4 casualties		
	iting at the traffic lights wait with the rear of the stationa		circulatory when	another car has f	failed to stop in time		
	C	ireen Lane an	d circulatory c/v	v			
845291 04/04/19	On circulatory near junction with Green Lane	Daylight	We/Damp	Slight	1 casualty		
_	A car changed lanes last moment to try and avoid traffic, causing a car behind to brake suddenly. This has caused a moped behind the braking car to collide with the rear of the braking car.						
296034 13/05/18	A5 north west arm on eastbound side	Daylight	Dry	Serious	2 casualties		

A car was waiting at the traffic lights to the roundabout from Tamworth. When the car has attempted to move forward it has stalled. A car in the queue behind the stalled car has gone to maneuver into the offside lane and overtake the queue of traffic caused by the stalled car, and when attempting to move back into the nearside lane to use the M42 slip road, has traveled into the path of an ongoing vehicle and collided.

M42 Northbound on-slip and mainline						
283565 03/04/18	On M42 northbound	Daylight	Dry	Slight	1 casualty	
Approaching the M42 roundabout on-slip merge, a car has braked causing a HGV behind to collide with the rear of the braking car.						
1197723 08/07/22	At M42 on-slip merge	Daylight	Dry	Serious	2 casualties	

A car was traveling along the on-slip onto the M42. The car fails to judge the distance of an oncoming HGV along the M42. The HGV collides with the rear of the car when the car moves over into the main flow traffic. 1160685 At M42 just after on-slip Daylight Dry Slight 1 casualty 26/03/22 merge A dog was loose on the M42 causing a build up of traffic. A car has picked up speed in the queueing but had to slow down again. Another car behind has failed to slow in time and collided with the rear of the slowing car. M42 Southbound off slip and mainline 298660 At traffic lights at off-slip Daylight Dry slight 2 casualties 02/06/18 onto roundabout A car has failed to brake in time and collided with a car waiting at the traffic lights. 323746 At traffic lights at off-slip Daylight Dry slight 2 casualties 01/09/19 at roundabout An ambulance is going around the roundabout on the circulatory with sirens on. A car traveling around the roundabout moved and slowed to allow the ambulance to pass, however a car traveling behind has not braked in time and collided with the rear of the slowing car. A5 East and circulatory c/w 1356753 At junction with Watling Daylight Dry Serious 1 casualty 23/09/23 Street A motorcycle and a car were traveling on the roundabout heading south east. The motorcyclist became frustrated at how near the car is traveling along side them, and decided to punch the wing mirror. 861055 At junction with Watling Daylight Slight 2 casualties Dry 23/07/19 Street Two motorcyclists were traveling around the roundabout and both gone to leave at the Watling Street exit. When leaving the roundabouts, the riders have collided causing them both to fall from the motorbikes. 297756 A5 near junction with **Darkness** Slight 2 casualties Dry 18/0/18 roundabout - Street lit Two cars have been approaching the roundabout from the east, when the rear car has failed to stop in time, and collided with the rear of the car in front. The car which collided with the rear of the car fled the scene. 1176610 A5 near junction with Daylight Slight 2 casualties Dry 12/05/22 roundabout Approaching the roundabout from the A5, a car has been intending to go straight ahead in the middle lane. A goods vehicle has veered across from the left and collided with the car and has then failed to stop. 340418 A5 near junction with Daylight Wet/Damp Slight 1 casualty 29/10/18 roundabout A car is stationary in traffic when another car fails to stop in time and collides with the rear of the stationary car 869960 A5 near junction with Daylight Serious 1 casualty Fine 24/05/19 roundabout A motorbike was filtering through traffic and was heading towards the traffic lights (which were not working at the time with signs showing this) The biker has then stopped at the stop line, but has been hit from behind from a car causing injury to the rider.

Trinity Way and circulatory						
863408 12/07/19	On circulatory next to Trinity Way arm	Daylight	Fine	Slight	1 casualty	

A car was traveling in lane 1 of the roundabout towards the south on slip, when the car has veered out of lane 1 and into lane 2 where another car was already going around the circulatory. The car veering into the second lane has caused a collision.

815904	On circulatory next to	Dark –	Wet / Damp	Slight	1 bicyclist
06/02/19	Trinity Way arm	Street lit			

A bicyclist was cycling around the roundabout when a goods vehicle has veered into the path of the cyclist and bumped their arm.

831674	On circulatory next to	Dark –	Dry	Slight	1 bicyclist
06/02/19	Trinity Way arm	Street Lit			

A bicyclist has been traveling on the A5 towards the roundabout junction. Crossing the roundabout, the cyclist has been struck by a recovery vehicle and has caused a collision injuring the cyclist.

298692	On Trinity Way arm near	Daylight	Dry	Slight	3 casualties
25/05/18	roundabout				

A car has existed the M42 and driven onto Trinity Way, and on the gradual right hand bend, the driver has decided to change into the opposite lane and collided head on with an oncoming vehicle.

M42 Southbound on-slip and mainline						
316792 14/07/18	On southbound on slip	Dark – Street lit	Dry	Slight	2 casualties	
A HGV has taken the M42 slip road towards the south however has cut across a car heading in the same direction, collided, and caused the car to spin around.						
1271765 25/01/23	On M42 southbound	Daylight	Dry	Slight	2 casualties	
A van was traveling southbound on the M42 and has failed to stop in time and collided with slowing traffic. The collision has caused a domino effect with multiple collisions.						
1234610	On M42 southbound	Daylight	Wet/Damp	Slight	3 casualties	

1234610 On M42 southbound Daylight Wet/Damp Slight 3 casualties 22/10/22

A car was heading southbound on the M42 and has lost control of the vehicle, potentially due to aquaplaning and hit another vehicle, and has flipped onto its roof as a result of the collision.

M42 Northbound off-slip and mainline						
288480	On M42 just past off slip	Daylight	Wet/ Damp	Slight	1 casualty	
28/04/18	diverge to roundabout					

A car was traveling northbound on the M42 and has aquaplaned on water, causing the vehicle to collide with the central reserve barrier before rebounding across the carriageway and colliding with another barrier.

1189699	On M42 just past off slip	Daylight	Wet/Damp	Slight	1 casualty
18/06/22	diverge to roundabout				

Another road traffic accident has caused a queue on the motorway. A car has failed to stop in time and collided with the rear of a vehicle.

1190478	On M42 northbound	Daylight	Wet/Damp	Slight	1 casualty
18/06/22					

A car was traveling northbound on the M42 and has aquaplaned on water, lost control of the vehicle, and collided with the central barrier.

400169	On off-slip with junction	Daylight	Dry	Slight	1 casualty
28/05/19	with roundabout				

A rider has existed the island from the M42 onto the A5 and the low sun has caused a lack of visibility. The rider has lost control of the motorcycle, collided with a junction marker, and fell off the motorcycle.

- 4.7 Four of the 28 accidents at M42 Jn10 resulted in serious injury with the remaining 34 resulting in slight injury. Five accidents occurred during the hours of darkness; the proportion of these accident types is not sufficiently high to be a cause for concern. In eight accidents, a wet/ damp road was recorded, that is 29%, however there were no common locations. Nine of the 28 accidents occurred on the circulatory carriageway but occurred at a range of different locations across the interchange, two occurred near to Green Lane and four occurred between the M42 southbound off slip and exit to A5 east. At the A5 eastern arm four accidents were reported.
- 4.8 Two cycle accidents were reported in the study period, both traveling on the circulatory and have been struck by a vehicle, potentially as a result of vehicle drivers not looking properly rather than junction design.
- 4.9 The main causes of accidents appear to be driver error: a vehicle pulling into the path of another vehicle and rear end shunts and changing lanes. These occurred at a number of different locations. The number and type of accidents are typical at a large grade separated junction, which carry high volumes of daily traffic.

A5 between M42 Junction 10 and A5/Core 42

4.10 In the assessment period seven accidents were reported on the A5 between the M42 Jn10 and A5/Core 42 junction. This section includes the traffic signal junction for Birch Coppice as well as several other minor accesses. The accident data is summarised in Table 4.3 below. For ease of reference, accidents have been grouped as involving either eastbound or westbound traffic.

Table 4 3.	Δ5 hetween	M42 lunction	10 and Core 42
I able 7.3.	. AJ DELWEEH	MTZ JUILLIUII	TO allu Cole 72

Reference/ Date	Location	Lighting	Dry/ Wet	Severity	Casualties		
		A5 E	astbound				
1257748 23/12/22	A5 at Danny Morson Way	Dark – Street lit	Wet/Damp	Slight	1 casualty		
	Two cars were traveling in opposite directions along the A5. One of the vehicles has gone through a red light, and crossed into the path of the other car, causing a collision.						
274607 01/03/18	A5 at Danny Morson Way	Dark – Street lit	Frost/ Ice	Slight	1 casualty		
still on green	A car was traveling along the A5 and approaching the traffic lights. At the same time, while the traffic lights were still on green for vehicles, a pedestrian cyclist has gone to cross the road and the car has failed to stop in time, causing a collision.						

1265189 A5 at Danny Morson Way Dark - Wet/Damp Serious 1 casualty
18/01/23 Street lit

A cyclist was traveling eastbound from the roundabout, and a car has also been traveling in the same direction behind the cyclist. At the lights, the cyclist has intended to turn right into the industrial estate, but has gone across the eastbound traffic, and into the path of a car.

A5 Westbound							
1175238 28/04/22	Watling Street A5	Daylight	Dry	Serious	1 casualty		

Two cars were heading towards the [M42 Jn10] roundabout. Attempting to move into the offside lane, the ahead car slows down, however the following car does not stop in time and collides with the rear of the vehicle.

312805	Watling Street A5	Daylight	Dry	Serious	2 casualties
06/07/18					

A car has been on the inside lane on the A5 heading westbound towards the [M42 Jn10] roundabout. Another vehicle has been in the offside lane going past. The vehicle in the inside lane has intended to move into the offside lane, but has not seen the other car going past and they have collided.

1149096	Near Danny Morson Way	Daylight	Wet/Damp	Slight	1 casualty
28/02/22					

Two cars heading westbound along the A5 come up to the traffic lights at Danny Morson Way. The front car slows down however the rear car failed to stop in time and causes a collision with the slowing car.

- 4.11 The number of accidents reported on this 1.3km section of the A5 including 2 signal controlled junctions is low. There were no accidents at the A5/ Core 42 junction.
- 4.12 In the eastbound direction the three accidents occurred at the A5/ Danny Morson Way, the Birch Coppice junction. All three accidents occurred during the hours of darkness, and wet/ damp or frosty road surface conditions were noted in all accidents. It is suggested that NH review the lighting and road surface conditions for eastbound traffic at this junction.
- 4.13 In the westbound direction there are two accidents approaching M42 Jn10, but are reasonably well separated and of different types, and 1 accident on the approach to the A5/ Danny Morson Way junction. Two of the accidents resulted in serious injuries and 1 in a slight injury.

4.14 In the westbound direction there are no particular clusters or common factors. The main factors appear to be misjudgement rather than highway design.

A5 from A5/ Core 42 to approximately 200m east of Dordon Roundabout

- 4.15 This section of the A5 commences to the east of the A5/ Core 42 junction and ends at a point some 200m to the east of Dordon Roundabout. This section includes Dordon Roundabout as well as a number of minor junctions and accesses.
- 4.16 In the assessment period four accidents were reported on this section of the A5 from east of Core 42 junction to the east of the Dordon Roundabout. The accident data is summarised in Table 4.4 below. For ease of reference, accidents have been grouped as occurring either west, at, or east of Dordon Roundabout.

Table 4.4: East of Core 42 junction to approximately 200m east of Dordon Roundabout

Reference/ Date	Location	Lighting	Dry/ Wet	Severity	Casualties		
A5 West of Dordon Roundabout							
324359 24/07/18	Near to Vicarage Close	Daylight	Dry	Slight	1 casualty		

A car has been heading towards the M42 roundabout but decided to turn around at the gap in the central reservation opposite Vicarage Close. The driver has done this without regard for another car coming the other way which then had to take evasive action to avoid the turning vehicles. The cars did not collide but the car heading eastbound hit the kerb resulting in a damaged wheel and exhaust.

At Dordon Roundabout						
1249150 01/12/22	Long St nr junction with Watling St	Darkness – Street Lit	Dry	Slight	2 casualties	

A car has been waiting to use the roundabout at the north arm, when another car has failed to stop in time and collided with the rear of the stopped vehicle.

A5 East of Dordon Roundabout							
326291 09/09/18	Watling Street A5	Daylight	Dry	Slight	2 casualties		
Two cars have been traveling in slow moving traffic. When the front car has slowed to approach the roundabout, the rear vehicle has failed to stop in time and collided with the rear of the slowing vehicle.							
845299 30/05/19	Watling Street A5	Daylight	Dry	Slight	2 casualties		
A car was stationary waiting to turn towards Dordon. The car misjudged the turn, clipped a stationary car causing it to flip onto its side.							

4.17 The number of accidents reported on this section of the A5 from east of Core 42 junction to the east of the Dordon Roundabout is low. There are no particular clusters or common factors, and the report descriptions describe driver error rather than poor junction design.

Summary

- 4.18 The accident records between 1 January 2018 and 23 September 2023, excluding 2020 and 2021, have been assessed for the study area which comprising the two Pennine Way/ A5 roundabouts, the A5 from Pennine Way to the A5/ Dordon roundabout, and including M42 Jn10, A5/ Danny Morson Way and A5/ Core 42 junction. The data was provided by SCC and WCC.
- 4.19 The assessment has shown there were:
 - 6 accidents on the two Pennine Way roundabouts and the A5 slip roads. There were no significant clusters and contributory factors appear to be driver error rather than inadequate highway design.
 - 28 accidents occurred at M42 Jn10 or on the approach roads. There were no significant clusters and contributory factors appear to be driver error rather than inadequate highway design.
 - 6 accidents on the A5 east of Jn10 up to and including A5/ Core 42 junction. There was a cluster of 3 accidents all of which occurred on the eastbound carriageway at the A5/ Danny Morson Way (Birch Coppice) junction. All three accidents occurred in the dark and on a wet/ damp or icy road surface. It is considered that NH should review the lighting and road surface at this location. There were no significant clusters on the westbound carriageway and contributory factors appear to be driver error rather than inadequate highway design.
 - 4 accidents on the section of road from the east of the A5/ Core 42 junction, to approximately 200m east of the Dordon roundabout, including Dordon Roundabout and the Long Street and Gypsy Lane approaches. There were no clusters of accidents or common factors, and the accidents could be attributed to driver error rather than junction design.
- 4.20 It can be concluded that the road network operates within acceptable levels of road safety and that mitigation measures for safety reasons as a result of development are not required. It is considered that NH should review the lighting at the A5/ Danny Morson Way junction.
- 4.21 The proposed highway improvements discussed at Chapter 5 below (A5 speed limit reduced to 50mph, improved pedestrian/ cycle facilities and crossings offer a safety betterment to all road users. It is therefore expected that the increase in traffic due to the proposed development will not pose an unacceptable highway safety risk, and there may be some betterment to some use classes.

5.0 OPERATIONAL ASSESSMENT

Background

- 5.1 There have been extensive discussions on highway matters with NH, WCC and SCC through regular meetings facilitated by NWBC.
- 5.2 The extent of the assessment agreed with NH, WCC and SCC comprises the following junctions:

B5080 Pennine Way North/ A5 Eastbound on/ off slip road, 3-arm roundabout junction

B5080 Pennine Way South/ A5 Westbound on/ off slip road/ Centurion Way/ Quarry Hill, 4-arm roundabout junction

M42 Junction 10, 6-arm grade-separated signalised interchange

A5/ Proposed site access, 3-arm signalised junction

A5/ Danny Morson Way (Birch Coppice), 4-arm signalised junction

A5/ Meridian Drive (Core 42), 3-arm signalised junction

A5/Long Street/Gypsy Lane, 4-arm roundabout (Dordon Roundabout)

5.3 A Consolidated Modelling Strategy Note, dated 7 June 2023 was approved by WCC in July 2023. NH and SCC provided some minor comments to the Note, therefore a v2 Consolidated Modelling Strategy Note, dated 1 November 2023 was submitted and has been approved by SCC and NH. A copy is attached at Appendix G. As set out in the v2 Consolidated Modelling note, based on previous modelling work undertaken in 2022, it has been agreed that impacts of the proposed development requires a mitigation scheme at Junction 10 to address increases in queues and delays. The proposed mitigation scheme also provides foot/ cycle improvements. Because the need for mitigation has already been accepted, the analysis in this TAA does not include an assessment of the With Development traffic flows on the existing network. The With Development assessments all include the Junction 10 improvement scheme shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0001 Rev P04 attached in Appendix C3.

2023 Baseline TRANSYT 16 Model

- 5.4 A TRANSYT 16 model of the road network and junctions listed above was prepared following the methodology in the Consolidated Modelling Strategy Note. Using the July 2023 traffic survey data a validated model was prepared. The model validation was reported in the TRANSYT 2023 Baseline Validation Report, dated 21 August 2023. The report and model was submitted to NH, SCC and WCC. On 21st September, NH provided comments on the Validation report and TT produced a response to those comments, dated 9 October 2023. On 26 October 2023, NH confirmed that all matters had been addressed and closed, with the exception of the stage sequence, signal timings and frequency of the demand dependant stages at the A5/ Core 42 junction. TT provided a revised validated model and results to NH on 30th November, addressing the A5/ Core 42 alterations. At the time of writing a response is awaited from NH.
- 5.5 It is anticipated that the proposed changes to the A5/ Core 42 junction will be acceptable, therefore the changes have been made and updated modelling results (as issued on 30 November 2023) are attached at Table 5.1a in Appendix H. The updated validation model results are summarised below.

2023 AM Peak Summary Results

- 5.6 The Pennine Way roundabouts validate well, with most queuing observed on the Pennine Way
 North arm with an observed average queue of 5pcu and the modelled queue is 4pcu. The modelled
 queues are very similar to those observed on all approaches at the two roundabouts.
- 5.7 The most notable queues and delays are experienced on the A5 eastbound approach to the M42 Jn10 with the queue extending west beyond the Pennine Way overbridge for about half of the peak hour period. The majority of traffic is in the nearside lane in order to be in the correct lane at the stop line for circulating the roundabout. The modelled queues in the nearside lane are similar to those observed (63pcu vs 47pcu respectively) whilst the offside lane modelled queue is also more than the observed queue (46pcu vs 32cpu respectively). The observed average queue on the eastbound merge lane is 4pcu and the modelled queue is 9pcu. Upon review of the videos the queue on the slip road is predominantly a moving queue and thus the recorded queue is under reported. The modelled queues presented at Table 5.1a in Appendix H are considered a fair representation of the existing conditions.
- 5.8 All other approaches and circulatory lanes on Junction 10 validate well and have modelled queues which are a reasonable match to the observed. There are instances in the model when the queuing does extend back momentarily from one stop line to the upstream junction, slightly affecting the performance of the upstream link, and this is considered an accurate representation of on-street conditions based upon review of the survey videos.
- 5.9 The A5/ Birch Coppice junction validates well with most queueing on the westbound approaches. The modelled queues are considered a good match to the observed queues.
- 5.10 Likewise the A5/ Core 42 junction validates well, and the modelled queues are considered a good match to the observed queues. Whilst the modelled queues validate well against observed, the delays in the model for the Core 42 right turn to the A5 eastbound are notably higher. This results from the infrequent call of Core 42 right turn stage as observed on site (13% in the AM peak, i.e., once every 8 cycles on average). In the TRANSYT model the stage frequency is averaged across the hour, as is the traffic flow leading the longer delays. In reality the A5/ Core 42 signals are vehicle actuated and when a vehicle is detected the Core 42 stage is called and the actual delays are much less.
- 5.11 The A5/ Dordon roundabout validates well with the modelled queues closely matching the observed.
- 5.12 The 2023 AM peak model is considered a good base to use and amend for the future 2026/ 2033 Reference Case and 2033 Local Plan scenarios.

2023 PM Peak Summary Results

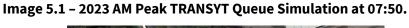
- 5.13 The Pennine Way roundabouts validate well with the most queuing observed on the Quarry Hill approach with a queue of 6pcu and the modelled queue is also 6pcu. The modelled queues are very similar to those observed on all approaches at the two roundabouts.
- 5.14 The PM peak operates in a similar manner to the AM peak with the most notable queues and delays experienced on the M42 Jn10 northbound off slip, the two circulating lanes at the south overbridge. The M42 northbound off-slip has an average observed queue of 15pcu in the nearside lane and the

- model reflects this with a queue of 18pcu. The M42 northbound nearside circulating lane has a modelled queue of 24pcu, longer than the observed average queue of 16pcu, whilst the offside circulating lane has a modelled queue of 15pcu and the observed average queue of 14pcu. Although the modelled queue is longer on the nearside lane it is considered reasonable to retain.
- 5.15 There was also some queueing on the A5 eastbound approach to the M42 Jn10, although much less than in the AM peak hour. The modelled queues are similar to those observed and it is considered a fair representation of the existing conditions. For consistency, the correction made to the eastbound merge from Pennine Way was also applied to the PM peak hour and resulted in a close match between the observed and modelled queue.
- 5.16 On all the other approaches and circulatory lanes at M42 Jn10 the lanes validate well, and the modelled queues are considered a good match with the observed. There are instances in the model when the queuing momentarily extends back from one stop line to the previous, slightly affecting the performance of the upstream junction and this is considered accurate upon observation of the survey videos.
- 5.17 The A5/ Birch Coppice junction validates well with most queueing on the westbound approaches. The modelled queues are considered a good match to the observed queues. As expected, there is slightly more queuing on the Birch Coppice exit approach as a result of the workforce finishing for the day.
- 5.18 Likewise the A5/ Core 42 junction validates well, and the modelled queues are considered a good match to the observed queues. As noted above, the modelled delays for the Core 42 right turn to the A5 eastbound are higher, and results for the infrequent call of Core 42 right turn stage, 24% in the PM, i.e., once every 4 cycles.
- 5.19 The A5/ Dordon roundabout validates well with the modelled queues closely matching the observed.
- 5.20 The 2023 PM peak model is considered a good base to use and amend for the future 2026/ 2033 Reference Case and 2033 Local Plan scenarios.

Further Validation Adjustment

- 5.21 When assessing the 2033 Reference Case assessments, particularly in the No Development scenarios (see further below), the validated model produced very long queues on the Pennine Way North arm and upon closer inspection, these stem from the initial validation of this approach.
- 5.22 Our initial validation reduced the intercept of this approach to 630pcu/hr, so that the modelled queues equalled the average observed queue of 5pcu. However, this did not take into account the effect of blocking back from the A5 slip road which results in longer queues that would otherwise be the case with a free flow exit from the roundabout. Upon review of the survey video, it was clear that there was no blocking back from the slip road to the roundabout from 07:30 to 07:52 and 07:55 to 07:58. The average queue on Pennine Way North during this time period was only 1pcu in each lane. From 07:53 to 07:54 and 07:59 to 08:30 the queue from the slip road blocks back to the roundabout, blocking the exit and the average queue in the nearside lane was 9pcu and 2pcu in the offside lane. The average queue across the full hour was 5pcu in the nearside lane and 2pcu in the offside lane.

- 5.23 The 2023 baseline model was therefore adjusted by removing the intercept correction and reducing the capacity of the A5 eastbound on-slip to 1650pcu/hr so that the queues on Pennine Way North are generated by queuing back from the A5 eastbound slip road. As discussed above, the queueing back predominantly occurs from 08:00 to 08:30 and the model (watching the simulation video) now shows queuing back from 08:05 to 08:30, replicating the observed operating conditions well. The average modelled queue over the AM peak hour is 5pcu, the same as the observed, but now more accurately reflect the on-street situation.
- 5.24 Image 5.1 below shows the typical queueing on the Pennine Way North roundabout and A5 eastbound on-slip between 07:30 to 08:00 when blocking back does not occur and Image 5.2 shows the typical queueing situation between 08:00 to 08:30 when blocking back occurs.



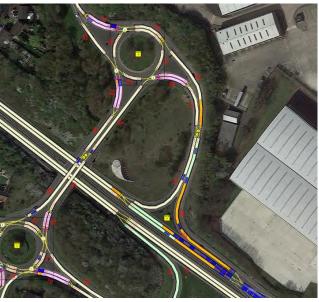
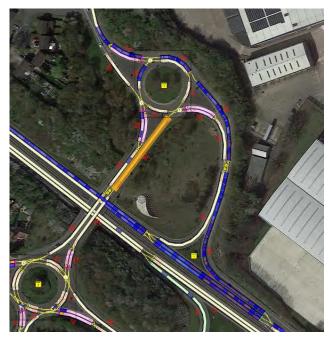


Image 5.2 - 2023 AM Peak TRANSYT Queue Simulation at 07:50.



5.25 Table 5.1b attached in Appendix H shows the updated 2023 revised validated model results. The further adjustment of the Pennine Way north approach and A5 eastbound on-slip has been carried through to the Reference case and Local Plan assessments set out below.

2026 Reference Case TRANSYT 16 Model

- 5.26 The v2 Consolidated Modelling Strategy Note at Appendix G sets out the derivation of the 2026 Reference Case flows in detail. The 2023 AM and PM peak surveyed flows have been factored to 2026 by applying the agreed traffic growth factors of 1.008 and 1.0079 respectively. For ease of reference the 2023 AM and PM peak surveyed flows are shown at Figures 1 and 2 attached in Appendix I and the 2026 AM and PM peak baseline Reference Case traffic flows are shown at Figures 3 and 4 respectively in Appendix I.
- 5.27 The committed development flows in 2026 have been extracted from the v2 Consolidated Modelling Strategy Note and for ease of reference Figure 5 attached in Appendix I shows the 2026 AM Peak committed flows and Figure 6 shows the PM peak equivalent. The committed development flows have been added to the 2026 Reference Case baseline flows to generate the 2026 AM Peak Reference Case No Development flows as shown at Figure 7 in Appendix I and the PM peak equivalent are shown at Figure 8.
- 5.28 The proposed development flows have been extracted from the v2 Consolidated Modelling Strategy Note and for ease of reference Figure 9 attached in Appendix I shows the AM Peak development generated flows and Figure 10 shows the PM peak equivalent. The proposed development flows have been added to the 2026 Reference Case No Development flows to generate the 2026 AM Peak Reference Case With Development flows as shown at Figure 11 in Appendix I and the PM peak equivalent are shown at Figure 12.
- 5.29 The No Development TRANSYT assessment uses the existing highway arrangements and is based on the 2023 validated model including the further adjustment discussed above. The Lane Simulation feature in TRANSYT 16 cannot optimise the signal timings or lane allocations, therefore they have been manually adjusted to reduce the queueing and delays on the network as would be expected in reality due to the junctions operating on MOVA and drivers switching lanes to join the shortest queue.
- 5.30 The With Development model is based on the No Development model but with the inclusion of the proposed site access arrangement (TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0002-P02 in Appendix C1) and the M42 Junction 10 improvement scheme (TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0001-P04 in Appendix C3). Through discussions with NH on the 2022 TRANSYT model it was agreed (email dated 26 July 2023 attached at Appendix A8) that the saturation flows used at the site access junction should be determined using RR67 calculated saturation flows together with a the a local factor derived from the RR67 and observed saturation flows at the nearby Birch Coppice junction. The local conversion factor which was applied to the RR77 saturation flows is 0.958.
- 5.31 Table 5.2 attached in Appendix J shows the tabulated results across the network in the No Development and With Development scenarios. For ease of identifying where the largest differences in queues and delays are between the two scenarios, the green highlighted cells in

Table 5.2 are where the impact of the development has a reduction in queue of 10pcu or more and/ or a reduction in delay of over 1 minute. The red highlighted cells are where the impact of the development results in an increase in queue of 10pcu or over and/ or an increase in delay of over 1 minute.

2026 AM Peak Reference Case Summary Results

- 5.32 At the Pennine Way North junction, the longest queue in the No Development scenario is 2pcu on the Pennine Way North approach. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 1pcu on the same approach.
- 5.33 At the Pennine Way South junction, the longest queue in the No Development scenario is 1pcu on the Quarry Hill approach. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 1pcu on the same approach.
- 5.34 With the proposed Junction 10 mitigation in place and the additional development generated traffic, the queue on the A5 eastbound on-slip merge towards Junction 10 decreases from 12pcu to 0pcu and a reduction in delay of 32 seconds. The A5 eastbound queue at Junction 10 significantly reduces from 28pcu to 5pcu in the nearside and offside lanes whilst the delay also decreases by over 2 minutes per lane. It should be noted that the No Development queue and delays on the A5 eastbound are shorter than in the 2023 results. This is because the signal timings have been manually adjusted to make the junction perform more efficiently, which could be carried out by NH in the future.
- 5.35 The nearside M42 northbound circulatory lane sees a reduction in queue from 15pcu to 3pcu with a 2 second reduction in delay.
- 5.36 At the site access junction, the longest predicted queue on the A5 eastbound approach (queue extending back towards Junction 10) is 7pcu. A forward SSD visibility of 160m to the back of this queue is readily achievable as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0012-P01 in Appendix C. Note that this drawing shows a 160m visibility to the back of a 17pcu queue, which is the longest modelled queue, from the 2033 PM Peak Local Plan scenario (see further below).
- 5.37 At the A5/ Birch Coppice junction the longest queue in the No Development scenario is 11pcu on the westbound approach (lane 3) whilst the longest delay is 1 minute 15 seconds on the A5 eastbound offside right turn lane. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 12pcu on the A5 eastbound right turn and the delay increases by 43 seconds to 1 minute 58 seconds on this lane.
- 5.38 At the A5/ Core 42 junction the longest queue in the No Development is 8pcu on the westbound approach (lane 1) whilst the longest delay is 7 minutes 56 seconds at the right turn lane coming out of Core 42. As discussed at para 5.10 above, This results from the infrequent call of Core 42 stage as observed on site and that the TRANSYT model uses the average stage frequency and the average flows across the peak hour. In reality the A5/ Core 42 signals are vehicle actuated and the delays are much less. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 8pcu on the westbound approach (lane 1) whilst the longest delay is 7 minutes 8 seconds at the right turn lane coming out of Core 42.

5.39 At the A5/ Dordon roundabout junction the longest queue in the No Development scenario is 5pcu on the westbound approach (lane 1) whilst the longest delay is 33 seconds on Long Street. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 8pcu on the westbound approach (lane 1) whilst the longest delay is 37 seconds on Long Street.

2026 PM Peak Reference Case Summary Results

- 5.40 At the Pennine Way North junction, the longest queue in the No Development scenario is 4pcu on the Northbound overbridge approach. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 3pcu on the same approach.
- 5.41 At the Pennine Way South junction, the longest queue in the No Development situation is 8pcu on the Quarry Hill approach. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 9pcu on the same approach.
- 5.42 In the PM peak it is only the M42 southbound circulating nearside lane which has an increase of over 10pcu queue (4 to 15), however the delay only increases by 2 seconds, from 7 to 9 seconds.
- 5.43 At the site access junction, the longest predicted queue on the A5 eastbound approach (queue extending back to Junction 10) is 11pcu. A forward SSD visibility of 160m to the back of this queue is readily achievable as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0012-P01 in Appendix C which shows the SSD to the back of a 17pcu queue.
- 5.44 At the A5/ Birch Coppice junction the longest queue in the No Development scenario is 18pcu on the westbound approach (lane 2) whilst the longest delay is 1 minute on the same lane. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 15pcu on westbound approach (lane 2) with the longest delay of 1 minute 6 seconds on the offside westbound approach (lane 3)
- 5.45 At the A5/ Core 42 junction the longest queue in the No Development situation is 5pcu on the westbound approach (lane 1) whilst the longest delay is 3 minutes 58 seconds at the right turn lane coming out of Core 42. As above, this long delay results from the way TRANSYT models infrequently called stages. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 5pcu on the westbound approach (lane 1) whilst the longest delay is 3 minutes 57 seconds at the right turn lane coming out of Core 42.
- 5.46 At the A5/ Dordon roundabout junction the longest queue in the No Development scenario is 6pcu on the eastbound approach (lane 1) whilst the longest delay is 36 seconds on Long Street. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 13pcu on the eastbound approach (lane 1) whilst the longest delay is 37 seconds on Long Street.

2026 Reference Case Summary

5.47 It is clear that with the proposed Junction 10 improvements in place, together with the new site access and the development generated traffic that the performance of the network in 2026 is improved in the AM peak and is only marginally worse in the PM peak. The impacts from the development, with mitigation in place are not considered severe with reference to NPPF para 111 and no additional mitigation to that identified for the M42 Junction 10 is required.

2033 Reference Case TRANSYT 16 Model

- 5.48 The v2 Consolidated Modelling Strategy Note describes the derivation of the 2033 Reference Case flows in detail. The 2023 AM and PM peak surveyed flows have been factored to 2033 by applying the agreed growth factors of 1.0253 and 1.0246 respectively. For ease of reference the 2023 AM and PM peak surveyed flows are shown at Figures 1 and 2 attached in Appendix I and the 2033 AM and PM peak baseline Reference Case traffic flows are shown at Figures 13 and 14 respectively in Appendix I.
- 5.49 The committed development flows in 2033 have been extracted from the v2 Consolidated Modelling Strategy Note and for ease of reference Figure 15 attached in Appendix I shows the 2033 AM Peak committed flows and Figure 16 shows the PM peak equivalent. The committed development flows have been added to the 2033 Reference Case baseline flows to generate the 2033 AM Peak Reference Case No Development flows as shown at Figure 17 in Appendix I and the PM peak equivalent are shown at Figure 18.
- 5.50 The proposed development flows have been extracted from the v2 Consolidated Modelling Strategy Note and for ease of reference Figure 9 attached in Appendix I shows the AM Peak development generated flows and Figure 10 shows the PM peak equivalent. The proposed development flows have been added to the 2033 Reference Case No Development flows to generate the 2033 AM Peak Reference Case With Development flows as shown at Figure 19 in Appendix I and the PM peak equivalent are shown at Figure 20.
- 5.51 The With Development model includes the site access junction as described in para 5.30 above,
- 5.52 Table 5.3 attached in Appendix K shows the tabulated results across the network in the No Development and With Development scenarios.

2033 AM Peak Reference Case Summary Results

- 5.53 At the Pennine Way North junction, the longest queue in the No Development is 12pcu on the Pennine Way North approach with a delay of 1minute and 58 seconds. With the addition of the development generated traffic and Junction 10 improvement scheme, this queue is reduced to 2pcu with over a 1½ minute reduction in delay.
- 5.54 At the Pennine Way South junction, the longest queue in the No Development is 1pcu on the Quarry Hill approach. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 1pcu on the same approach.
- 5.55 With the proposed Junction 10 mitigation in place and the additional development generated traffic, the queue on the A5 eastbound on-slip merge towards Junction 10 decreases from 28pcu to 0pcu and delay decreases by over 2 minutes.
- 5.56 The A5 eastbound queue at Junction 10 also significantly reduces from 46pcu to 7pcu in the nearside lane whilst the delay also decreases by 3 minutes. In the offside lane the queue decreases from 53pcu to 9pcu. As discussed above, it should be noted that the No Development queue and delays on the A5 eastbound are shorter than the 2023 results, that is because the signal timings have been manually adjusted to make the junction perform more efficiently, which could be carried out by NH in the future.

- 5.57 The nearside M42 northbound circulatory lane sees a reduction in queue from 16pcu to 3pcu.
- 5.58 At the site access junction, the longest predicted queue on the A5 eastbound approach (queue extending back to Junction 10) is 8pcu. A forward SSD visibility of 160m to the back of this queue is readily achievable as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0012-P01 in Appendix C which shows the SSD to the back of a 17pcu queue.
- 5.59 At the A5/ Birch Coppice junction the longest queue in the No Development is 11pcu on the westbound approach (lane3) whilst the longest delay is 1 minute 19 seconds on the A5 eastbound offside right turn lane. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 15pcu on the A5 eastbound right turn and the longest delay of 1 minute 56 seconds also on this lane.
- 5.60 At the A5/ Core 42 junction the longest queue in the No Development is 7pcu on the westbound approach (lane 1) whilst the longest delay is 7 minutes 29 seconds at the right turn lane coming out of Core 42. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 8pcu on the westbound approach (lane 1) whilst the longest delay is 7 minutes 12 seconds at the right turn lane coming out of Core 42. As above, this long delay results from the way TRANSYT models infrequently called stages.
- 5.61 At the A5/ Dordon roundabout junction the longest queue in the No Development is 9pcu on the westbound approach (lane 1) whilst the longest delay is 34 seconds on Long Street. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 10pcu on the westbound approach (lane 1) whilst the longest delay is 42 seconds on Long Street.

2033 PM Peak Reference Case Summary Results

- 5.62 At the Pennine Way North junction, the longest queue in the No Development scenarios 4pcu on the Northbound overbridge approach. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 5pcu on the same approach.
- 5.63 At the Pennine Way South junction, the longest queue in the No Development scenario is 15pcu on the A5 westbound off-slip approach. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 18pcu on the Quarry Hill Lane approach (6pcu more than the No Development scenario) and a 30 second increase in delay.
- 5.64 In the PM peak it is only the M42 southbound circulating nearside lane which has an increase of over 10pcu queue (3 to 14), however the delay only increases by 2 seconds to to 9 seconds.
- 5.65 At the site access junction, the longest predicted queue on the A5 eastbound approach (queue extending back to Junction 10) is 11pcu. A forward SSD visibility of 160m to the back of this queue is readily achievable as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0012-P01 in Appendix C which shows the SSD to the back of a 17pcu queue.
- 5.66 At the A5/ Birch Coppice junction the longest queue in the No Development scenario is 21pcu on the westbound approach (lane 3) whilst the longest delay is 1 minute 20 seconds on the same lane. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 23pcu on westbound approach (lane 2) with the longest delay of 1 minute 31 seconds on the same lane.

- 5.67 At the A5/ Core 42 junction the longest queue in the No Development is 6pcu on the A5 eastbound right turn (lane 3) whilst the longest delay is 4 minutes 12 seconds at the right turn lane coming out of Core 42. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 6pcu on the same eastbound right turn (lane 3) whilst the longest delay is 4 minutes 16 seconds at the right turn lane coming out of Core 42. As above, this long delay on the right turn from Core 42 results from the way TRANSYT models infrequently called stages.
- 5.68 At the A5/ Dordon roundabout junction the longest queue in the No Development scenario is 7pcu on the eastbound approach (lane 1) whilst the longest delay is 38 seconds on Long Street. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 15pcu on the eastbound approach (lane 1) whilst the longest delay is 40 seconds on Long Street.

2033 Reference Case Summary

5.69 It is clear that with the proposed Junction 10 improvements in place, together with the new site access and the development generated traffic that the performance of the network in 2033 is improved in the AM peak and is only marginally worse in the PM peak. The impacts from the development with mitigation in place are not considered severe with reference to NPPF para 111 and no additional mitigation to that identified for the M42 Junction 10 is required.

2033 Local Plan TRANSYT 16 Model

- 5.70 The v2 Consolidated Modelling Strategy Note discusses the derivation of the 2033 Local Plan flows in detail. The 2023 AM and PM peak surveyed flows have been factored to 2033 by applying the agreed growth factors of 1.0485 and 1.0481 respectively. For ease of reference the 2023 AM and PM peak surveyed flows are shown at Figures 1 and 2 attached in Appendix I and the 2033 AM and PM peak Local Plan baseline traffic flows are shown at Figures 21 and 22 respectively in Appendix I.
- 5.71 The committed development flows in 2033 have been extracted from the v2 Consolidated Modelling Strategy Note and for ease of reference Figure 15 attached in Appendix I shows the 2033 AM Peak committed flows and Figure 16 shows the PM peak equivalent. The total Local Plan Allocation flows in 2033 have been extracted from the v2 Consolidated Modelling Strategy Note and for ease of reference Figure 23 attached in Appendix I shows the 2033 AM Peak Local Plan development flows and Figure 24 shows the PM peak equivalent. The committed development flows and the total Local Plan flows have been added onto the 2033 Local Plan baseline flows to generate the 2033 Local Plan No Development flows. Figure 25 attached in Appendix I shows the AM peak flows and Figure 26 shows the PM peak equivalent.
- 5.72 The proposed development flows have been extracted from the v2 Consolidated Modelling Strategy Note and for ease of reference Figure 9 attached in Appendix I shows the AM Peak development generated flows and Figure 10 shows the PM peak equivalent. The proposed development flows have been added to the 2033 Local Plan No Development flows to generate the 2033 AM Peak Local Plan With Development flows as shown at Figure 27 in Appendix I and the PM peak equivalent are shown at Figure 28.

No Development Model

- 5.73 The 2033 Local Plan No Development TRANSYT assessment includes the associated Local Plan highway infrastructure and is based upon the 2023 validated model including the further adjustment at Pennine Way North discussed above.
 - M42 Junction 10
- 5.74 The Local Plan includes a mitigation scheme at Junction 10 as shown at Phil Jones Associates

 Drawing 02853-01 Rev A attached at Appendix L1. The Local Plan No Development TRANSYT model includes the coding of this arrangement.
 - A5/ Long Street/ Gypsy Lane (Dordon Roundabout)
- 5.75 The Dordon roundabout junction will be upgraded as part of the A5 Dordon to Atherstone project, and which was identified as ID6 in the North Warwickshire Infrastructure Delivery Plan, dated March 2018. An illustrative drawing of the traffic signal junction Dordon Roundabout was included in Appendix C of the Vectos Strategic Transport Assessment, which, and for ease of reference, is attached at Appendix L2 to this report. A scheme for A5 DOrdon Atherstone has been developed by WCC through the Housing Infrastructure Grant (HIG) in 2019, provided by the Department for Levelling Up, Housing and Communities. The application is supported by NH.
- 5.76 Since additional funding is required for the Dordon- Atherstone improvement, the project is being delivered by NH. A public consultation event ran for 7 weeks up to 27 October 2022 which presented 3 options, all of which involve a bypass carriageway to the south of the current A5 between Dordon roundabout to a point 500m west of Grendon roundabout. The main differences between the options are the treatment of the Dordon Roundabout junction. In Option A, the roundabout is replaced by traffic signals, in Option B a new larger roundabout is provided to the south east, and in Option C a left on/ left off- junction arrangement is proposed. The February 2023 Consultation Report concluded that of the three options presented, Option B was the preferred route overall. The next stage for the project is option selection at which point DfT will decide if the scheme is to progress to preferred route selection stage.
- 5.77 Given the uncertainty of the scheme to be progressed, NH advised (at the 23 May 2023 meeting) that the Local Plan models should be tested with the current proposal in the Local Plan (ID6), that is Option A (signalised junction), attached at Appendix L2. In order to accurately model the traffic signal junction, TT have prepared an indicative traffic signal junction layout based on the Vectos illustrative but with a a new dual carriageway to the east as in the Option A sketch shown in the A5 Dordon to Atherstone project report, dated 21 February 2023. TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0009 Rev P01 attached in Appendix L3 shows the indicative traffic signals scheme and proposed staging sequence. The Local Plan No Development TRANSYT model includes the coding of this arrangement.
- 5.78 The saturation flows for the ne junction have been calculated using RR67, and , as agreed with NH (see para 5.10) with the application of the same local factor.

With Development Model

5.79 The 2033 Local Plan With Development TRANSYT model is based on the 2033 Local Plan No Development model, discussed above.

- 5.80 The Local Plan improvements as per the Phil Jones Associates Drawing 02853-01 Rev A are included except for the left turn slip from the M42 southbound off-slip to the A5 east which is removed. The improvements to the A5 west and North West sector of the circulatory carriageway are taken from the TT proposals which are very similar in capacity terms to those on the Phil Jones Associates drawing, but the TT scheme includes signal controlled pedestrian/ cycle crossings of the north facing slip roads (as required by DMRB) and Green Lane. It also provides a single lane feed to the M42 northbound opposed to two lanes on Phil Jones Associates plan. The only other slight difference is the A5 westbound approach to Junction 10. The TT drawing lengthens the offside flared approach as a result of introducing the proposed site access junction.
- 5.81 Table 5.4 attached in Appendix M shows the tabulated results across the network in the No Development and With Development scenarios. For ease of identifying where the largest differences in queues and delays are between the two scenarios, the green highlighted cells in Table 5.4 are where the impact of the development has a reduction in queue of 10pcu or more and/ or a reduction in delay of over 1 minute. The red highlighted cells are where the impact of the development results in an increase in queue of 10pcu or over and/ or an increase in delay of over 1 minute.

2033 AM Peak Local Plan Summary Results

- 5.82 At the Pennine Way North junction, the longest queue in the No Development scenario is 5pcu on the Pennine Way North approach. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 7pcu on the same approach.
- 5.83 At the Pennine Way South junction, the longest queue in the No Development situation is 1pcu on the Quarry Hill approach. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 1pcu on the same approach.
- 5.84 With the additional development generated traffic, the queue on the A5 eastbound on-slip towards Junction 10 increases from 7pcu to 12pcu and delay increases by 16 seconds. The A5 eastbound queue in lane 2 at Junction 10 increases from 33pcu to 45pcu with a delay increase of 43 seconds. The A5 eastbound queue in lane 4 at Junction 10 increases from 33pcu to 34pcu with a delay increase of 16 seconds. The increase in queues and delays as a result of the development generated traffic are considered minor.
- 5.85 At the site access junction, the longest predicted queue on the A5 eastbound approach (queue extending back to Junction 10) is 13pcu. A forward SSD visibility of 160m to the back of this queue is readily achievable as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0012-P01 in Appendix C which shows the SSD to the back of a 17pcu queue.
- 5.86 At the A5/ Birch Coppice junction the longest queue in the No Development scenario is 15pcu on the eastbound offside right turn lane and the longest delay is 2 minute 18 seconds in the same lane. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 13pcu on the same approach and the longest delay of 2 minute 9 seconds also on this lane.
- 5.87 At the A5/ Core 42 junction the longest queue in the No Development scenario is 16pcu on the westbound approach (lane 1) whilst the longest delay is 8 minutes 52 seconds at the right turn lane coming out of Core 42. As above, this long delay results from the way TRANSYT models infrequently

- called stages.. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 15pcu on the same westbound approach lane whilst the longest delay is 8 minutes 5 second at the right turn lane coming out of Core 42.
- 5.88 At the upgraded signal controlled A5/ Dordon junction the longest queue in the No Development scenario is 13pcu on the two eastbound approach lanes whilst the longest delay is 1 minute 16 seconds on Long Street. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 12pcu on the eastbound approach lanes whilst the longest delay is 1 minute 15 seconds on Long Street.

2033 PM Peak Local Plan Summary Results

- 5.89 In the No Development scenario, the network performs reasonably well with manageable queues and delays on all approaches to each junction apart from;
 - The A5 eastbound queue in lane 2 at Junction 10 with a queue of 37pcu and delay of 2 minutes 46 seconds. The A5 eastbound queue in lane 4 at Junction 10 with a queue of 21pcu and delay of 1 minutes 57 seconds.
 - The A5 westbound off-slip approach to the southern Pennine Way roundabout with a queue of 40pcu and 1 minute 45 second delay.
 - The Quarry Hill approach to the southern Pennine Way roundabout with a queue of 25pcu and 2 minutes 49 second delay.
 - The offside lane at Green Lane with a 21pcu queue and 3 minutes 9 second delay.
- 5.90 In the With Development situation the network performs similarly. On the approaches where queues were noted in the No Development situation the following queues and delays are estimated:
 - the A5 eastbound queue at lane 2 increases to 57pcu with an additional 1 minute 12 second delay. In lane 4 the queue increases by 15pcu with a 1 minute 40 second delay increase.
 - The A5 westbound off-slip approach to the southern Pennine Way roundabout has a 1pcu decrease in queue..
 - The Quarry Hill approach to the southern Pennine Way roundabout has a 1pcu increase in queue and 9 second delay increase.
 - The offside lane at Green Lane decreases by 1 pcu with a 14 second reduction in delay.
- 5.91 At the site access junction, the longest predicted queue on the A5 eastbound approach (queue extending back to Junction 10) is 17pcu. A forward SSD visibility of 160m to the back of this queue is readily achievable as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0012-P01 in Appendix C.
- 5.92 At the A5/ Birch Coppice junction the longest queue in the No Development is 12pcu on the A5 westbound approach (lane 2) and the longest delay is 1 minute 1 second on the A5 eastbound right turn lane. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 13pcu on the same A5 westbound approach lane and the longest delay of 59 seconds on the A5 eastbound right turn lane.
- 5.93 At the A5/ Core 42 junction the longest queue in the No Development is 7pcu on the westbound approach (lane 1) whilst the longest delay is 5 minute 5 seconds at the right turn lane coming out of

- Core 42. With the addition of the development generated traffic the queues and delays are very similar, with a longest queue of 7pcu on the same westbound approach lane whilst the longest delay is 4 minutes 52 seconds at the right turn lane coming out of Core 42.
- 5.94 At the upgraded signal controlled A5/ Dordon junction the longest queue in the No Development scenario is 21pcu on the offside eastbound A5 approach lane whilst the longest delay is 2 minutes 13 seconds on Long Street. With the addition of the development generated traffic the queues and delays are very similar, with the longest queue of 19pcu on the nearside eastbound A5 approach lane whilst the longest delay is 2 minutes 8 seconds on Long Street.

2033 Local Plan Summary

- 5.95 In the Local Plan scenario, the effect of the proposed development at Land NE of M42 Jn10 is the greatest in the PM peak. Here 2 lanes on the A5 eastbound approach to M42 Junction 10 (out of 4) experience an increase in delay of between 1 minute and 1½ minutes per vehicle. This impact is not considered to be severe with regard to the NPPF paragraph 111 because it occurs for one short period of the day and, is small in relation to typical commuter journey times.
- 5.96 The proposed development does not result in a significant constraint to the delivery of Local Plan allocated sites and will deliver some of the highway improvements needed to accommodate the Local Plan allocations on the highway network.

2033 Local Plan - Additional Mitigation

- 5.97 Although further improvements are not considered necessary, a potential additional mitigation scheme has been considered to reduce the queues and delays on the A5 eastbound approach in particular for the PM peak period.
- 5.98 The problem in the PM peak is unequal lane usage, with the A5 eastbound nearside lane has a lower use than the other 3 lanes. In the PM peak With Development scenario the nearside lane (allocated for the services and M42 North) has 380pcu, whilst the 2 middle lanes allocated for the A5 West has 1,174 shared across them (on average 587 per lane). The offside lane is allocated for Trinity Way and M42 South which has 622pcu.
- 5.99 By allocating some A5 eastbound traffic to the nearside lane the queues and delays on the A5 eastbound approach can be reduced. To have 3 lanes with A5 traffic requires 3 allocated lanes on the north overbridge and 3 lanes on the A5 eastbound exit. The proposed A5/ Site access junction already proposes 3 lanes on its eastbound approach. TT Drawings 784-B033920-TTE-00-ZZ-SK-H-0010-P01 and 784-B033920-TTE-00-ZZ-SK-H-0011-P01 attached in Appendix C shows the suggested lane allocations on the A5 eastbound approach to M42 Jn10, on the north overbridge and a widening of the A5 eastbound exit to 3 lanes. In the TRANSYT model 25% of the A5 eastbound flow (293 vehicles in the PM Peak) has been assumed to use the nearside lane on the A5 eastbound west approach to Jn10, increasing the flow to 674 vehicles. The middle of the 3 lanes on the approach has 763pcu and the offside lane 742pcu, thus all three approach lanes (before the approach flares to 4 lanes) are reasonably well balanced.
- 5.100 Table 5.5 attached in Appendix O shows the tabulated results across the network in the No Development and With Development scenarios. For ease of identifying where the largest differences in queues and delays are between the two scenarios, the green highlighted cells in

Table 5.5 are where the impact of the development has a reduction in queue of 10pcu or more and/ or a reduction in delay of over 1 minute. The red highlighted cells are where the impact of the development results in an increase in queue of 10pcu or over and/ or an increase in delay of over 1 minute.

2033 AM Peak Local Plan Summary Results with Additional Mitigation

- 5.101 With the additional mitigation in place, the A5 eastbound nearside lane (lane 1) approach to junction 10 increases from 10pcu to 22pcu with delay increase of 29 secs, however the queue on lane 2 decreases from 33pcu to 29pcu with a 15 second reduction in delay and in lane 4 the queue also decreases from 33pcu to 22pcu with a 34 second reduction in delay. This is as a result of the A5 eastbound traffic redistributing across the three available lanes.
- 5.102 The only other lanes that have a 10pcu queue increase are the circulating nearside lane past Green Lane, which increases from 1pcu to 15pcu, but the delay is only 9 secs; the circulating lane 2 past the A5 westbound also increases by 5pcu to 16pcu and the delay increases by 30 seconds per vehicle and finally the 4th circulating lane past the M42 southbound offslip increasing from 1pcu to 11pcu with a 18 second delay increase.
- 5.103 At the site access junction, the longest predicted queue on the A5 eastbound approach (queue extending back to Junction 10) is 13pcu. A forward SSD visibility of 160m to the back of this queue is readily achievable as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0012-P01 in Appendix C which shows the SSD to the back of a 17pcu queue.
- 5.104 On all of the other lanes at each junction the difference in queues and delays are no more than 10pcu or 1 minute and are similar to the previous Local Plan results reported above, i.e., without the additional mitigation.

2033 PM Peak Local Plan Summary Results with Additional Mitigation

- 5.105 With the additional mitigation in place there is only 1 lane which has a queue increase of 10pcu or more and/or a delay increase over 1 minute, that is the A5 westbound (lane 1) approach to Junction 10 but the delay only increases by 17 seconds. The A5 eastbound approach to Junction 10 has a reduction in queue from 37pcu to 19pcu in lane 2 with over 1½ minute reduction in delay, whilst there is a 13pcu queue reduction and over 1 minute reduction in delay on lane 4.
- 5.106 The queue on the M42 southbound circulating lane 1 also decreases from 13pcu to 3pcu, with a 4 second reduction in delay.
- 5.107 At the site access junction, the longest predicted queue on the A5 eastbound approach (queue extending back to Junction 10) is 17pcu. A forward SSD visibility of 160m to the back of this queue is readily achievable as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-012-P01 in Appendix C.
- 5.108 On all of the other lanes at each junction the difference in queues and delays are no more than 10pcu or 1 minute and are similar to the previous Local Plan results reported above, i.e., without the additional mitigation.

2033 Local Plan Summary with Additional Mitigation

5.109 The effect of the additional mitigation is to reduce queues and the delay increase in the PM peak on the A5 west approach to Junction 10 from 1 minute to $1\frac{1}{2}$ minutes per vehicle to up to $1\frac{1}{2}$ minute

- reduction in delay per vehicle compared to the No Development scenario. The effect of the additional mitigation in the AM peak is small, but the effect of the development in this time period is less.
- 5.110 With the additional mitigation the impact of the development is less, is not severe and does not significantly constrain the delivery of Local Plan allocations or highway improvement schemes.

Road Safety Implications

- 5.111 Chapter 3 above provides a detailed review of the road traffic accidents that have taken place within the study area. Whilst there has been a total of 46 recorded incidents, 6 were reported on the A5 west of Junction 10, including the two Pennine Way roundabouts, 28 were at M42 Jn10, 6 were on the A5 east of Junction 10 up to and including Core 42 and 4 between Core 42 and to the east of Dordon Roundabout. The accident review concluded that mitigation measures for safety reasons as a result of the proposed development are not required.
- 5.112 A GG104 Safety Risk Assessment will be carried out, in accordance with DMRB, to evaluate the changes in safety risk arising from the proposed access junction, which will introduce turning movements across the A5, as well as the other measures which are proposed.
- 5.113 The proposed improvement schemes at M42 Jn10 and along the A5 are expected to deliver tangible highway safety benefits for both existing and proposed users of the highway network. These can be summarised as follows:
 - Widened foot/cycleways between Pennine Way north roundabout and the proposed site access which include a separation strip between vulnerable users and moving traffic mostly in accordance with CD143.
 - Signal controlled pedestrian and cycle crossing of the M42 north facing slip roads in accordance with CD143, at the Green Lane arm of M42 Jn10, and at the proposed site access junction.
 - Signal controlled pedestrian crossing of the A5 near to the AE55 Public Footpath south of the A5 and Public Bridleway AE45 north of the A5, replacing the existing uncontrolled crossing.
 - Improved bus stop facilities at the northern edge of the A5, with a layout that segregates cyclists from pedestrians and includes standard merge and diverge tapers and a wider bus stop area.
 - Provision of an internal link connecting the A5 to Birchmoor, thus offering a higher quality route for pedestrians and cyclists travelling between the A5 and areas to the north and west including Tamworth.
 - Provision of separate (offline) pedestrian/ cycle way between site access and Browns Lane away from the A5 avoiding the narrow 1.0m wide foot/ cycleway at A5/ Birch Coppice junction.
 - Reduction in speed limit to 50mph on the A5 between Pennine Way overbridge and the existing 50mph speed limit east of the proposed site access.
 - Removal of existing parking laybys that do not meet current design requirements, in favour of a high-quality lorry parking facility for up to 150 vehicles, to include supporting facilities for drivers.

5.114 The proposals are expected to have a beneficial effect on road safety and therefore provide safe means of access for all users in accordance with NPPF paragraph 110 and will not have, in relation to NPPF paragraph 111, an unacceptable impact on road safety.

Summary

- 5.115 A Consolidated Modelling Strategy Note, dated 7 June 2023 was approved by WCC in July 2023. Following comments from NH and SCC, a v2 Consolidated Modelling Strategy Note, dated 1 November 2023 was submitted and has been agreed by NH and SCC.
- 5.116 A TRANSYT 2023 Baseline Validation Report has been produced using the agreed traffic surveys from July 2023. At the time of writing, the only outstanding matter to be agreed with NH is the stage sequence, signal timings and frequency of the demand dependant stages at the A5/ Core 42 junction. It is anticipated NH will approve the suggested timings put forwards by TT. The validated 2023 baseline results presented in this report demonstrates the model is a good representation of the existing network performance and is appropriate to assess the future assessment year scenarios.
- 5.117 A TRANSYT assessment for the 2026 and 2033 Reference Case scenarios was carried out and has shown that with the proposed M42 junction 10 mitigation works, together with the site access junction, the development generated traffic can be accommodated on the network and the performance is improved in the AM peak in 2026 and 2033. In the PM peak the performance of the network is only marginally worse in the 2026 and 2033 assessment years. The impact of the development with the identified mitigation measures is not considered severe with reference to NPPF para 111, and no additional mitigation to that identified for the M42 Junction 10 is required.
- 5.118 The proposed improvement scheme proposals are expected to have a beneficial effect on road safety and therefore provide safe means on access for all users in accordance with NPPF paragraph 110, and will not have, in relation to NPPF paragraph 111, an unacceptable impact on road safety.
- 5.119 A TRANSYT assessment for the 2033 Local Plan scenario was carried out and showed that the impact of the proposed development is not considered severe with reference to para 111 of NPPF and no additional mitigation to that identified for the Local Plan scheme is considered necessary. Although further improvements are not considered necessary, a potential additional mitigation scheme has been considered to reduce the queues and delays on the A5 eastbound approach in particular for the PM peak period. The additional mitigation reduces the queues and delays on the A5 eastbound approach particularly in the PM peak.
- 5.120 The proposed development can be delivered without compromising the Local Plan proposals and it will deliver some of the required highway improvements needed to mitigate the Local Plan allocations.

6.0 SUMMARY AND CONCLUSIONS

- 6.1 Tetra Tech (TT) was engaged by Hodgetts Estates in January 2022 to advise on transport and highway matters in relation to their proposals for a development of 100,000sqm of employment uses and a 150-space lorry park with 400sqm amenity block, accessed from the A5 Watling Street, north-east of the M42 Junction 10 (M42 Jn10) interchange, in Warwickshire.
- 6.2 The outline application for the site (ref: PAP/2021/0663) was validated on 2 December 2021 and was initially supported by a Transport Assessment (TA) and Framework Travel Plan (FTP) produced by Bancroft Consulting. These reports were superseded by a Revised TA, prepared by TT, dated February 2023. This was based on traffic surveys carried out in March 2022, used TRANSYT 16 to assess the impacts on the A5 between and including the M42 Jn10 and A5/ Core 42 junctions. The assessment considered both a Reference Case and Local Plan Case and showed that with mitigation the development did not result in a severe impact.
- 6.3 The Revised TA also proposed a package of accessibility improvements to the pedestrian and cycling linkages between the site, Dordon, Polesworth and Tamworth underpinned by a WCHAR in accordance with GG142. In addition a public transport strategy was developed, and it was agreed with Stagecoach that the 766 Tamworth- Hinckley bus service will divert into the site to provide convenient bus access.
- 6.4 In January 2023, NH and WCC advised that the 2022 surveys were no longer acceptable, and also that the TRANSYT model should be extended to include the A5/ Long Street "Dordon Roundabout". SCC also requested that the TRANSYT model was extended to include the two Pennine Way roundabouts, which had previously been modelled with Junctions10.
- 6.5 A Consolidated Modelling Note was prepared which set out the approach to TRANSYT modelling, the extent of the network to be assessed, the traffic survey data required, and the derivation of the committed development traffic flows to be used in the assessment. This note has been agreed by NH, WCC and SCC. Traffic surveys were carried out on 4 July 2023, as agreed with NH, WCC and SCC.
- 6.6 This TAA amended the Revised TA submitted in February 2023 with the updated TRANSYT model results. The opportunity has been taken to update the accident data to 23 September 2023, and, in response to Circular 01/2022, include a Vision, and to report on the Vision Based Travel Plan.
- 6.7 The vision for the proposed development is to be the greenest business park in the West Midlands. The vision is underpinned by a sustainability strategy and a sustainable transport and highway strategy. The sustainable transport and highway strategy includes proximity of the site to the SRN and to the intermodal rail freight site at Birch Coppice (BIFT), walking, cycling and public transport connectivity, connectivity for electric vehicles and active promotion of sustainable transport choices through a travel plan.
- 6.8 A Vision Based Travel Plan which sets out how the vision can be achieved, includes suitable multimodal (person) trip rates, clear targets and commitments to manage down has been submitted. It has been agreed by SCC. NH have some comments which are being addressed. The VBTP proposes a reduction in car travel of 18% in line with TAG.

- 6.9 The accident records between 1 January 2018 and 23 September 2023, excluding 2020 and 2021, have been assessed for a study area which comprised the two Pennine Way/ A5 roundabouts, the A5 from Pennine Way to the A5/ Dordon roundabout, and includes the M42 Jn10. The data was provided by SCC and WCC.
- 6.10 The road safety assessment has shown there were:
 - 6 accidents on the two Pennine Way roundabouts and the A5 slip roads. There were no significant clusters and contributory factors appear to be driver error rather than inadequate highway design.
 - 28 accidents occurred at M42 Jn10 or on the approach roads. There were no significant clusters and contributory factors appear to be driver error rather than inadequate highway design.
 - 6 accidents on the A5 east of Jn10 up to and including A5/ Core 42 junction. There was a cluster of 3 accidents all of which occurred on the eastbound carriageway at the A5/ Danny Morson Way (Birch Coppice) junction. All three accidents occurred in the dark and on a wet/ damp or icy road surface. It is considered that NH should review the lighting and road surface at this location. There were no significant clusters on the westbound carriageway and contributory factors appear to be driver error rather than inadequate highway design.
 - 4 accidents on the section of road from the east of the A5/ Core 42 junction, to approximately 200m east of the Dordon roundabout, including Dordon Roundabout and the Long Street and Gypsy Lane approaches. There were no clusters of accidents or common factors, and the accidents could be attributed to driver error rather than junction design.
- 6.11 It can be concluded that the road network operates within acceptable levels of road safety and that mitigation measures for safety reasons as a result of development are not required. It is considered that NH should review the lighting at the A5/ Danny Morson Way junction.
- 6.12 The proposed highway improvements discussed at Chapter 5 below (A5 speed limit reduced to 50mph, improved pedestrian / cycle facilities and crossings offer a safety betterment to all road users. It is therefore expected that the increase in traffic due to the proposed development will not pose an unacceptable highway safety risk, and there may be some betterment to some use classes.
- 6.13 A Consolidated Modelling Strategy Note, dated 7th June 2023 was approved by WCC in July 2023. Following comments from NH and SCC, a v2 Consolidated Modelling Strategy Note, dated 1st November 2023 was submitted and has been agreed by NH and SCC.
- 6.14 A TRANSYT 2023 Baseline Validation Report has been produced using the agreed traffic surveys from July 2023. At the time of writing, the only outstanding matter to be agreed with NH is the stage sequence, signal timings and frequency of the demand dependant stages at the A5/ Core 42 junction. It is anticipated NH will approve the suggested timings put forwards by TT. The validated 2023 baseline results presented in this report demonstrates the model is a good representation of the existing network performance and is appropriate to assess the future assessment year scenarios.
- 6.15 A TRANSYT assessment for the 2026 and 2033 Reference Case scenarios was carried out and has shown that with the proposed M42 Jn10 mitigation works, together with the site access junction, the development generated traffic can be accommodated on the network and the performance is

- improved in the AM peak in 2026 and 2033. In the PM peak the performance of the network is only marginally worse in the 2026 and 2033 assessment years. The impact of the development with the identified mitigation measures is not considered severe with reference to NPPF para 111, and no additional mitigation to that identified for the M42 Junction 10 is required.
- 6.16 The proposed improvement scheme proposals are expected to have a beneficial effect on road safety and therefore provide safe means on access for all users in accordance with NPPF paragraph 110, and will not have, in relation to NPPF paragraph 111, an unacceptable impact on road safety.
- 6.17 A TRANSYT assessment for the 2033 Local Plan scenario was carried out and showed that the impact of the proposed development is not considered severe with reference to para 111 of NPPF and no additional mitigation to that identified for the Local Plan scheme is considered necessary. Although further improvements are not considered necessary, a potential additional mitigation scheme has been considered to reduce the queues and delays on the A5 eastbound approach in particular for the PM peak period. The additional mitigation reduces the queues and delays on the A5 eastbound approach particularly in the PM peak.
- 6.18 The proposed development can be delivered without compromising the Local Plan proposals and it will deliver some of the required highway improvements needed to mitigate the Local Plan allocations.
- 6.19 In conclusion, having regard to Paragraphs 110 and 111 of the NPPF, it has been shown that the opportunities to travel by sustainable modes for both workers and the movements of goods have been comprehensively provided for and will be promoted through a Travel Plan, a safe and suitable access for all users can be provided, and that the impacts of the development can be adequately mitigated. Overall, the cumulative residual impact of the development is not severe and there are no unacceptable road safety consequences. As a result, subject to resolution of all other technical and planning policy matters, there are no substantive highway reasons which should prevent the proposed development from being approved.

APPENDIX A CORRESPONDENCE	Transport Assessment Addendum				
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
APPENDIX A CORRESPONDENCE					
		APPENDIX A CORRESPONDE	NCE		

Land North-East of Jn10 M42 Motorway, North Warwickshire

WCC Email 25 July 2023



OFFICIAL - Sensitive

Hi Gareth,

Please find below our comments:

- Coton House Farm and Dunstall Lane: These developments are too far from Warwickshire's network to be considered as an impact. Coton House Farm been considered within TEMPRO growths and the number of trips going to the A5 from Dunstall Ln seem ok.
- With regards to point 6 and the link road effect, we can only say that the link road needs to be in place to deliver the allocated sites. It is necessary for that link road to come forward, in order to all the other developments to be delivered. It is not supposed to be the purpose of this development to evaluate iterations for the link road.
- We have reviewed the rest of consolidated note and we can confirm it includes everything discussed so far.

I am attaching to this email PJA's CAD for the M42 J10 mitigation scheme.

Kind Regards,



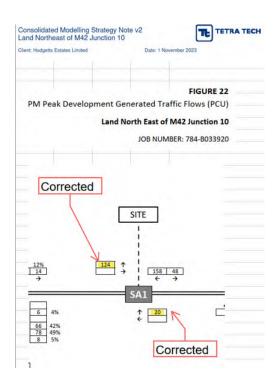
WCC Email 27 November 2023

Hi Gareth,

Thank you for your email, please find our comments as below.

Consolidated Modelling Strategy Note:

We note the Consolidated Modelling Strategy Note has been updated to correct a discrepancy found in the PM development trip figure (Figure 22). We note that the error has now been corrected in the revised note (Version 2, dated Nov 2023) and is now in line with the agreed trip generation. National Highways agree that there are no further comments for the applicant to address regarding trip generation associated with the development.



Demand Dependent Stage Frequency:

We have reviewed queries raised by Tetra Tech via email on 6th November 2023 regarding AM peak call frequencies, as listed in our previous comments on 25th October 2023. The applicant should note that these figures are a result of checks performed by AECOM to determine the frequency of stages

being called at the A5/Meridian Drive junction in the AM Peak, based on an analysis of the signal data supplied by the applicant. This analysis was undertaken with the purpose of determining the accuracy of Demand Dependency values used in the v5 models submitted in October 2023. Therefore, we require the applicant to determine the frequency demand dependent stages and demonstrated how signal data has been determined in the modelling of this junction.

For information the signal data supplied for this junction had been recorded for each phase or movement. Therefore, the data will require sorting such that the stages running can then be determined. In our stage frequency analysis, we summated the signal data and then sorted the phase start and end green times for each movement (sorted by the start of green time). We then determined which stage was running throughout the peak hour. We suggest that you could carry out a similar analysis for both peak hours and then use this data to determine suitable stage lengths.

Furthermore, we require the applicant to undertake an analysis of the phase signal data at the A5 / Meridian Drive junction to determine how often, and how long each stage runs for. We require this to be presented in an Excel spreadsheet showing how the observed phase signal timings lead to the stage duration and demand dependency data that is entered into the TRANSYT model. We note that following this, National Highways require TRANSYT models updated with the calculated data, for our review and comment.

Furthermore, the applicant should note that based on the screenshots included within the applicant's email dated 30th October 2023, the A5 Eastbound ahead movement (Phase A) should be running in Stage 4, so please can you add it into the Stage Library tab for the junction (Controller 8).

Kind regards,



SCC Email 30 November 2023



Morning Gareth,

Once again, apologies for the delay in coming back to you on revised Modelling Strategy Note.

I can now confirm that Staffordshire County Council has no objection to the revised document as all of our previous comments have been addressed.

One thing I would however like to point out is that I believe there is a typo at para. 5.36 which states 2031 instead of 2033.

Regards,



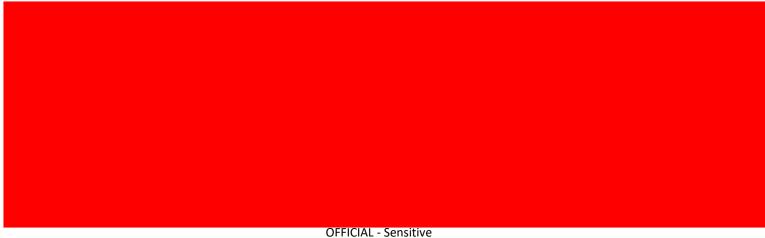
CAUTION: This email originated from outside of Staffordshire County Council. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Mark,

No worries, hopefully its straightforward as I have taken on board all of Amrit's comments and queries.

Kind Regards

WCC Email 24 April 2023



Hi Gareth,

Thanks for your email.

- Traffic Surveys: We can agree with the survey date. Please keep an eye on the strikes calendar.
- Committed & LP Sites to be included in the model: We need confirmation from @Andrew that the proposed occupations are aligned with NWBC trajectory.
- Method of data extraction from VM for Committed and LP: None of the options proposed for HGV percentage calculations would give us a robust estimate of HGV percentage for the junctions. Because of the level of detail for the split when producing the models and that most of the developments are residential, the HGVs would potentially be underestimated in both cases for undertaking individual junctions' assessments in this area. The most robust method would be using the percentage of HGVs percentage from the surveys and apply this percentage to the forecasted scenarios.

Kind Regards,



NH Email 3 May 2023



I can confirm that the 4th July is acceptable, but this is caveated in regards to any potential roadworks or delays to the A5 resurfacing works as you identify below.

Thanks

Ben



Hi Ben,

Thanks for confirming the survey methodology, that has all parties now in agreement.

I have pencilled the surveys in for Tuesday 4th July, it would be great to get everyone to confirm that day is acceptable whilst keeping an eye on potential additional roadworks and/ or delays to the A5 resurfacing works.

Kind Regards

Gareth Wakenshaw

Associate Transport Planner

SCC Email 21 April 2023



Tuesday 4th July for the MCCs and presumably w/c Monday 3rd July for the ATCs is acceptable to SCC.

I was not aware that Monday 26th June was a bank holiday in England, I will take it if it is! Either way seems sensible to go with the date you have suggested in case there is any slippage to the improvement works programme on the A5.



Subject: RE: A5 surveys Land North East of M42 J10

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 Ben,

Thanks for confirming the survey methodology, that has all parties now in agreement.

I have pencilled the surveys in for Tuesday 4th July, it would be great to get everyone to confirm that day is acceptable whilst keeping an eye on potential additional roadworks and/ or delays to the A5 resurfacing works.

Kind Regards

NH Email 9 October 2023



Hi Gareth,

National Highways has undertaken a review of the Vision Led Travel Plan document forwarded on 18th September. We offer the following comments.

In summary, we welcome the applicant in adopting the baseline modal split (derived from existing Travel to Work 2011 Census data) and the proposed modal shift from single occupancy vehicles to sustainable modes of travel for the development, resulting from the travel plan being implemented. The applicant should note that the traffic impact of the development shall be assessed using the baseline modal split, i.e. without the proposed reduction of vehicle trips by sustainable mode of travel, unless consent has been obtained by National Highways and the relevant Local Planning Authority. The following matters were also noted:

- The "Good Practice Guidelines: Delivering Travel Plans through the Planning Process (DfT, 2009)" was archived in October 2010. The relevant content in the Travel Plan should be updated accordingly.
- We note that the trip generation for employment, presented in Table 4.1 of the Travel Plan, is based on the previous submission. We recommend the relevant submission / document to be quoted in the travel plan for ease of reference and checking
- We note that Paragraph 6.18 of the Travel Plan states that the existing A5 eastbound bus stop should be relocated. We recommend the layout for the relocated bus stop / layby to be illustrated fully in Drawing: B033920-TTE- 00-ZZ-PL-H-0003-P02 for ease of checking.

We hope this provides sufficient clarity, please do not hesitate to get in touch should you require anything further.

Kind Regards Patrick

Transport Assessment Addendum		
	APPENDIX B MASTERPLAN	

Land North-East of Jn10 M42 Motorway, North Warwickshire



NOT

Please note Title Plans have been scaled using Ordinace Survey features which may have altered over time. Complete accuracy cannot be guaranteed without further on-site survey.

Any dimensions given are to be confirmed with site measure.

Subject to Surveys, constraints & planning.

Red Line indicative only.

Copyright Chetwoods (Birmingham) Limited. No implied licence exists.

Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only. Subject to statutory approvals and survey.

Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments.

Please note the information contained within this drawing is solely for the benefit of the employer and should not be relied upon by third parties.

benefit of the employer and should not be relied upon by third parties.

The CDM hazard management procedures for the Chetwoods aspects of the design of this project are to be found on the "Chetwoods - Hazard Analysis and Design Risk Assessment" and/or drawings. The full project design teams comprehensive set of hazard management procedures are available from the Principle Designer appointed for the project.

Please note Title Plans have been scaled using Ordinace Survey features which may have altered over time. Complete accuracy cannot be guaranteed without further on-site survey.



NB.
• SUBJECT TO SURVEYS,
CONSTRAINTS & PLANNING.
• LAYOUT TO BE TRACKED.
• RED LINE INDICATIVE ONLY.

Development Site Boundary (red line indicative only) 79.97 acres / 32.36 Ha

Parameter Boundary

Unit Demise Boundary

Public bridleway (to be diverted where necessary)

Rev Revision Description

PRELIMINARY

32 Frederick Street, Birmingham, B1 3HH

+44 (0)121 234 7500 www.chetwoods.com

·

LAND NORTH EAST OF J10 M42, DORDON

lient

HODGETTS ESTATES

Drawing Title

INDICATIVE MASTERPLAN
MULTI UNIT OPTION

1:1500 A1 PJBNH 25/11/202

Originator Zone Level Type Role Number

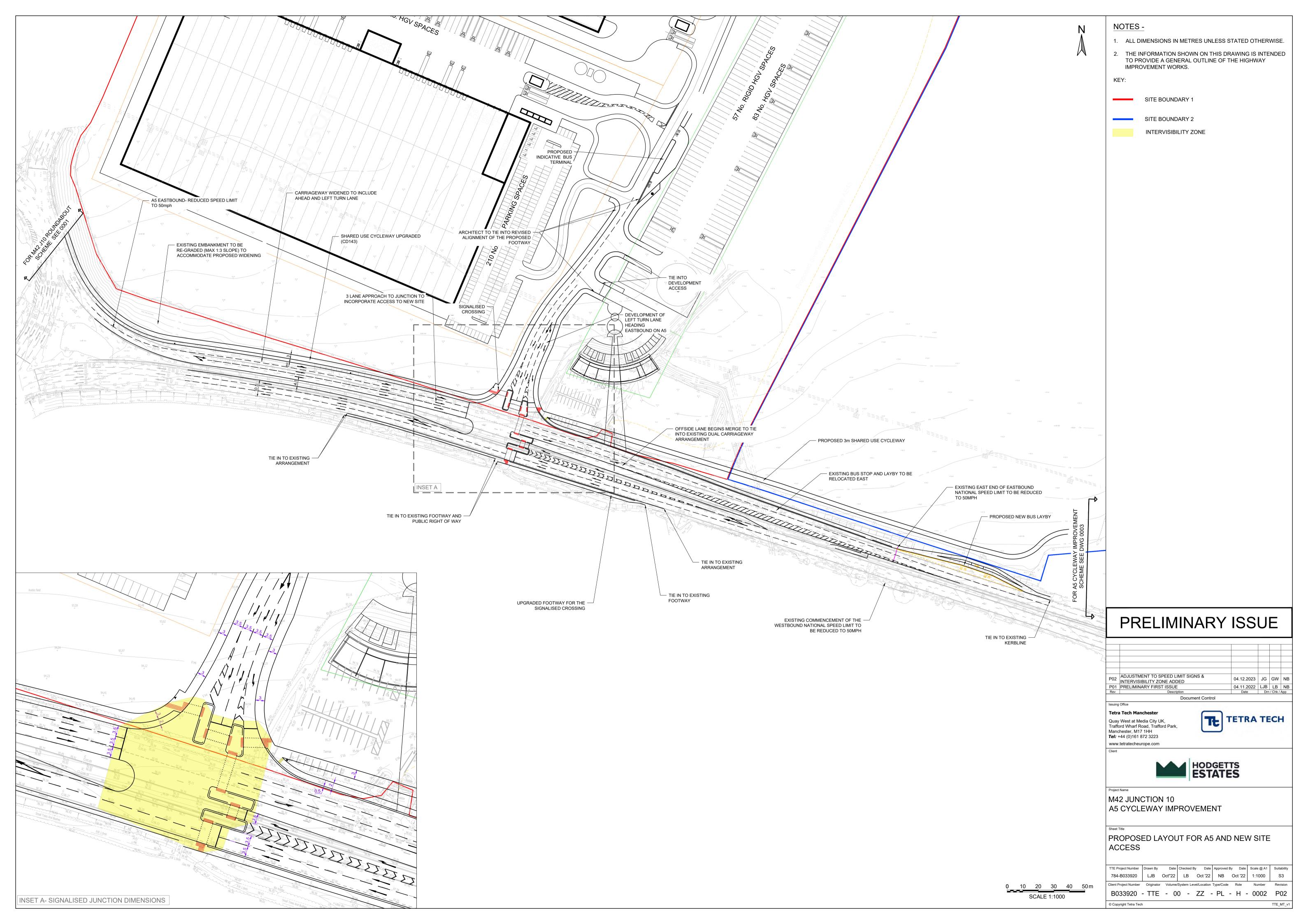
3 CA 00 00 DR A 00078 P11

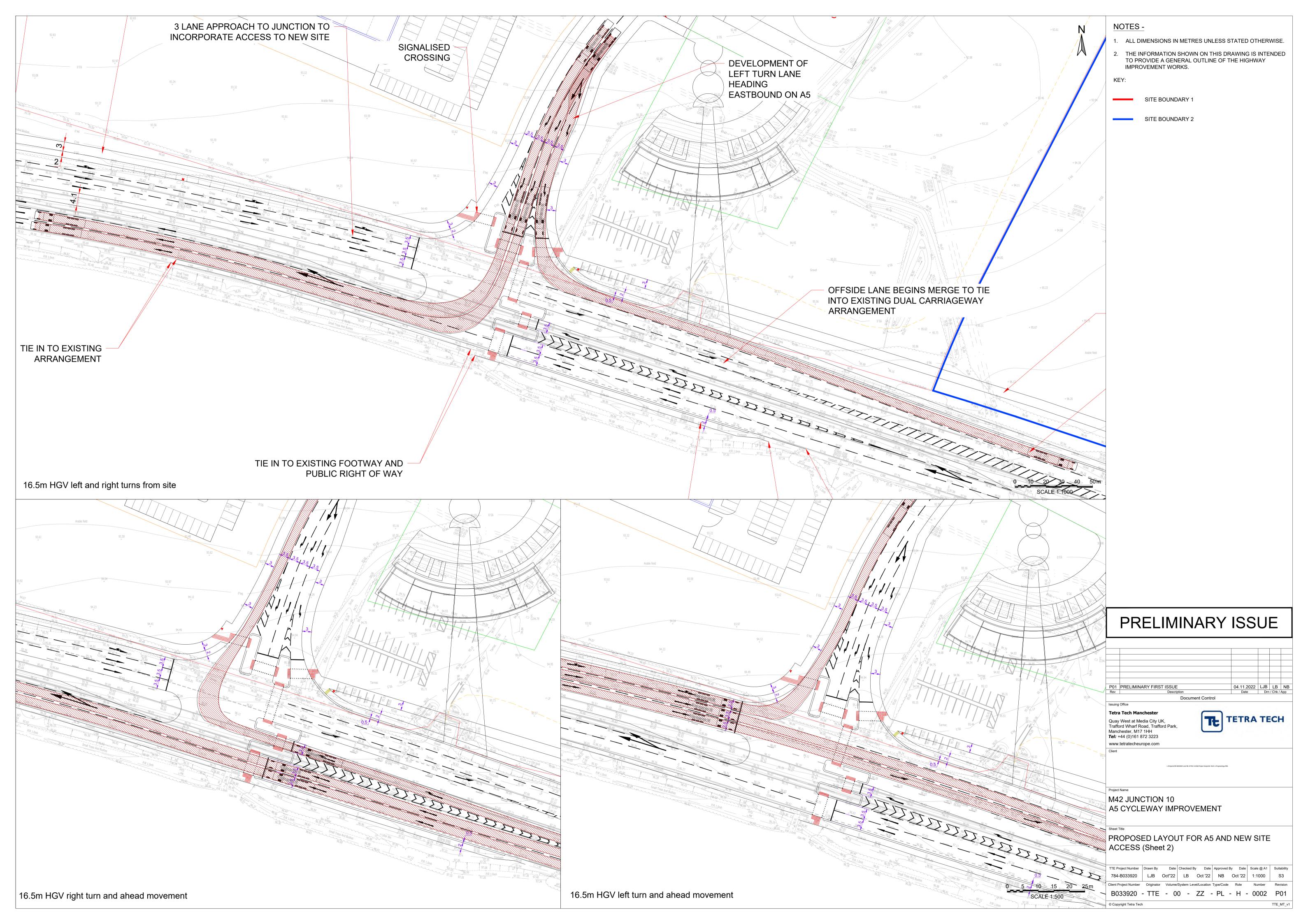
Transport Assessment Addendum					
	APPENDIX C TT DRAWINGS				

Land North-East of Jn10 M42 Motorway, North Warwickshire

Appendix C1 - Site Access

TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0002 TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0012





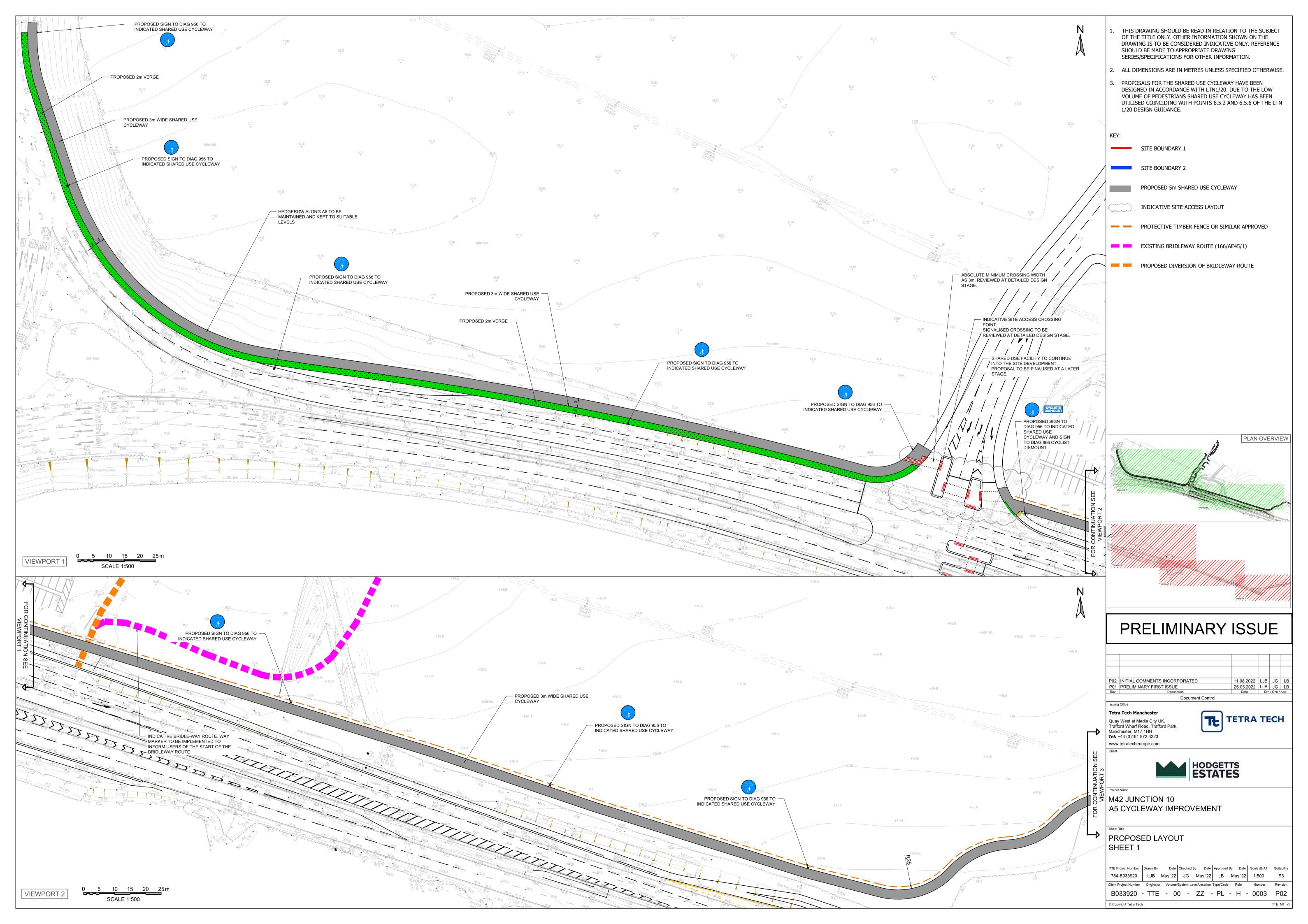


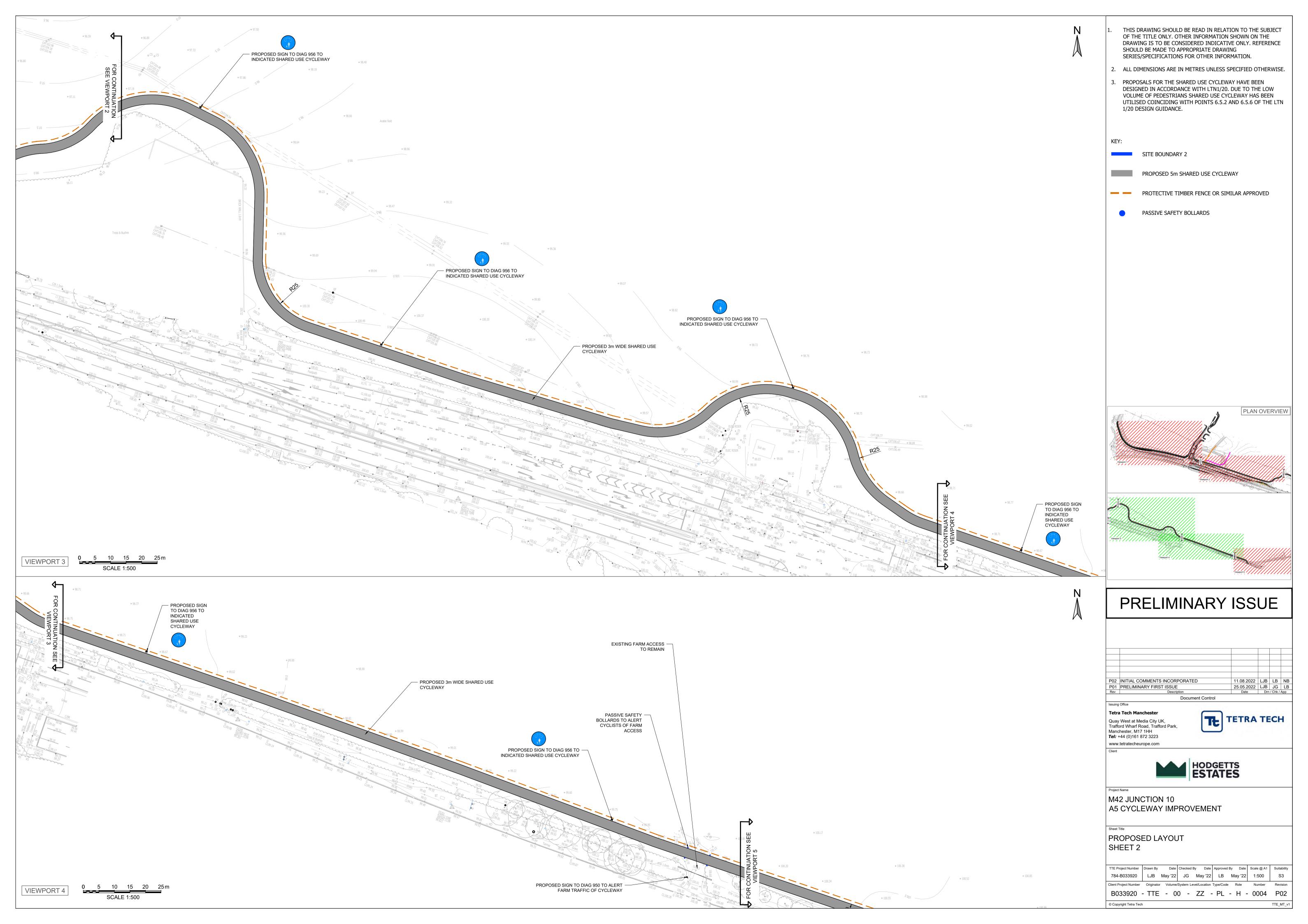
Appendix C2 – A5 Cycle Improvements

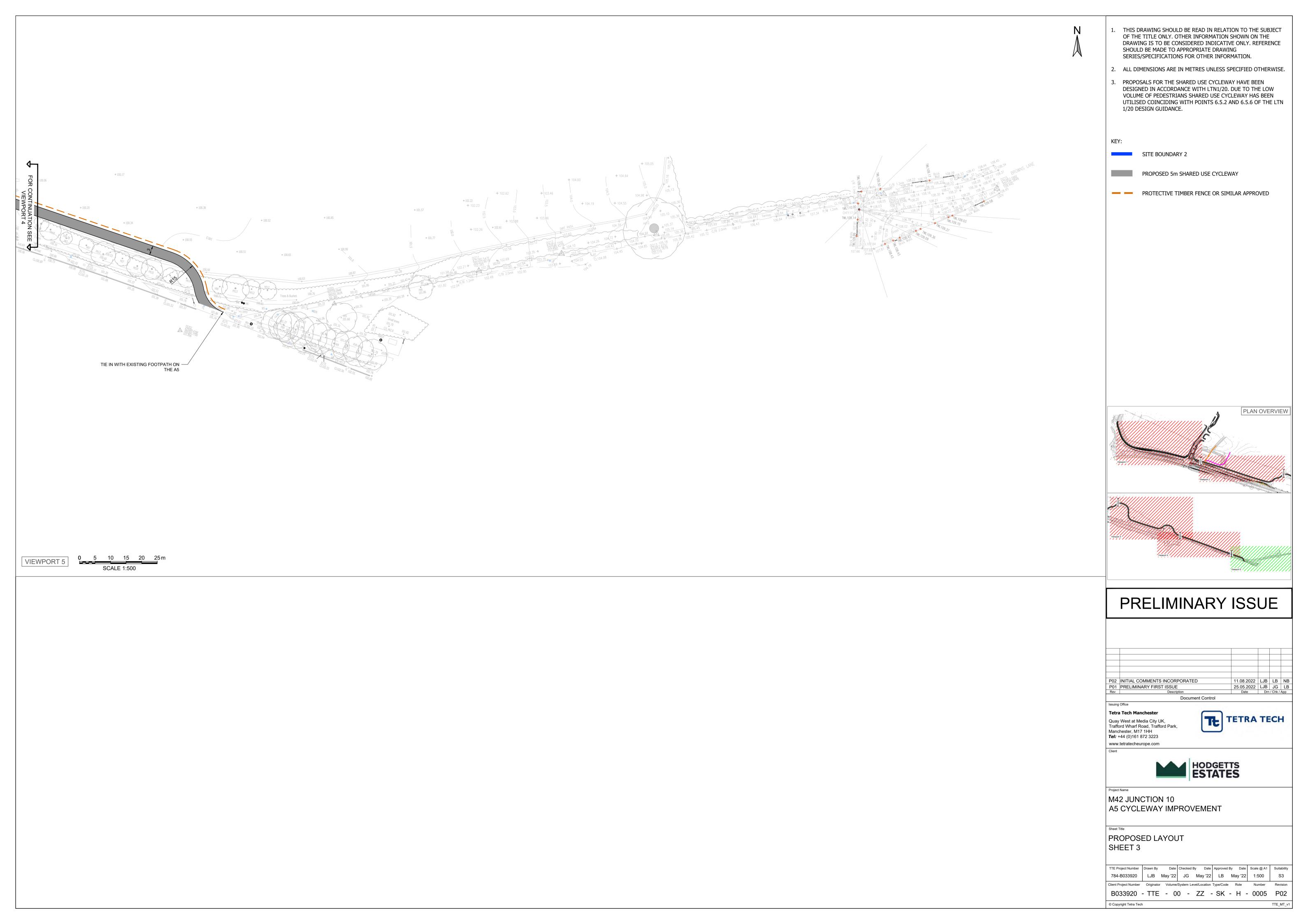
TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0003

TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0004

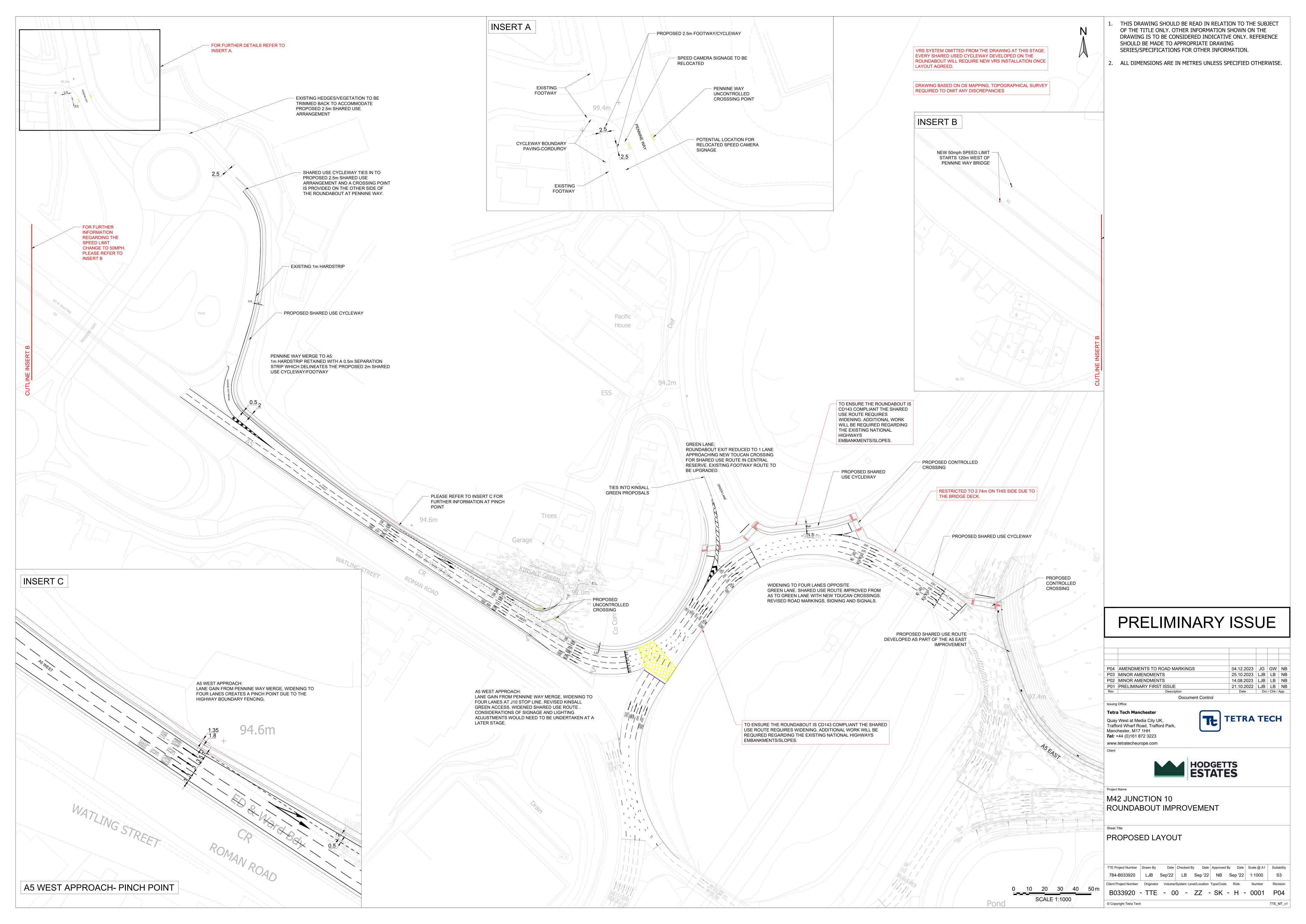
TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0005







Appendix C3 – M42 Junction 10 Improvements TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0001



Transport Assessment Addendum				
	APPENDIX D SP	DEED SHDVEV DI	ECIII TC	
	APPENDIA D SP	PEED SURVEY K	ESULTS	

Land North-East of Jn10 M42 Motorway, North Warwickshire

Report Id 110/23
Site Name Site 1
Description A5 Watling Street, Tamworth
Direction Eastbound

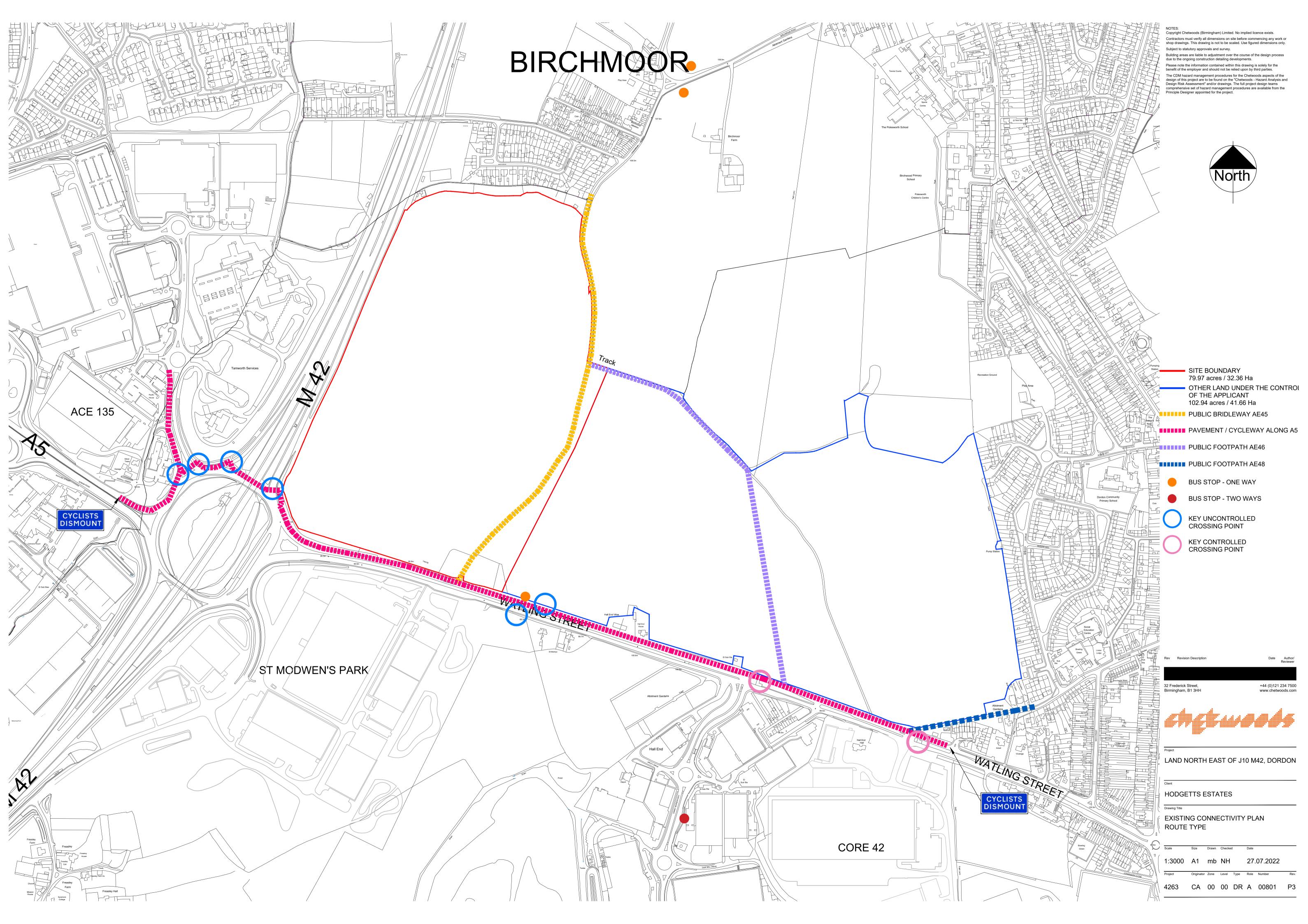
	_																													
7 Day nn∙nn	197K	n	η	n	10	115	250	215	212	72	36	12	1	1	1	n	n	n	0	n		49	5%	I 0	1%	1 2	0%	37.5	44.5	49.0
01:00	70 P	0	0	1	6	70	163	159	1/11	64	28	F .	1	'n	1	0	1	n	0	0	n	32	5%	5	1%	2	0%	37.9	47.0	49.8
01.00	50 5	0	0	0	19	80	135	133	120	61	20	6	2	1	'n	0	,	0	0	0	0	30	7%	5	19/	1	0%	37.7	47.7	51.1
02:00	[AVIS	n	n	0	25	107	218	364	401	227	66	15	2	'n	0	n	0	n	n	0	0	78	5%	5	0%	'n	0%	39.5	43.9	49.5
04:00	DATA	0	0	2	26	197	381	705	724	314	96	26	6	4	1	0	0	n	0	0	n	124	5%	30	19/	6	0%	39.4	46.1	50.7
05:00		0	0	2	47	299	749	1473	1559	724	213	£1	1/	-	'n	0	0	0	0	0	0	267	5%	32	19/	5	0%	39.8	48.5	53.5
05:00	2027	0	0		96	521	1166	1645	1980	1062	276	71	23	2	0	1	0	0	0	0	0	2/12	5%	55	19/	3	0%	39.5	47.4	52.4
07:00	2476	0	0	4	130	833	1732	2531	2123	837	208	61	10	7	1	'n	0	n	0	0	n	272	3%	52	19/	7	0%	38.0	46.1	51.3
07.00	8435 8837 8475	0	0	3	135	874	1680	2266	1850	679	1/11	35	15	1	1	0	0	0	0	0	0	181	2%	31	0%	2	0%	37.5	45.5	50.7
09:00	6596	n	n	5	130	784	1686	1770	1413	603	15/	3/	16	'n	1	n	0	n	n	0	0	196	3%	31	0%	1	0%	37.2	46.2	51.1
10:00	8064	0	1	4	80	745	1449	1712	1306	548	154	39	11	4	'n	0	1	n	0	0	n	106	3%	31	19/	7	0%	37.3	46.6	51.7
11-00	6064 6529 7329	1	'n	-	110	768	1613	1801	1388	600	183	3/	12	4	0	1	,	0	0	0	0	217	3%	29	0%	,	0%	37.3	46.3	50.6
12:00	7329	'n	n	8	154	813	1774	2108	1587	652	168	47	1/	4	0	'n	0	n	n	0	0	220	3%	37	1%	4	0%	37.3	45.3	49.5
12:00	8144	3	2	5	122	859	1951	2408	1709	812	212	48	0	3	0	0	0	n	0	0	n	246	3%	35	0%	3	0%	37.5	46.2	49.6
14-00	8711	1	1	2	168	871	2081	2579	2029	737	182	40	1/	4	0	0	0	0	0	0	0	240	2%	30	0%	3	0%	37.4	45.0	48.7
15:00	7922	1	1	3	117	820	1743	2325	1838	784	228	50	11	1	0	n	0	n	n	0	0	268	3%	31	0%	1	0%	37.8	45.3	50.0
16:00	8259	'n	'n	3	142	715	1862	2233	2037	936	248	58	17	3	4	1	0	n	0	0	n	305	4%	44	19/	7	0%	38.2	45.9	50.6
17:00	0040	46	46	F1	154	762	1916	2360	2083	991	305	70	26	5	2	1	0	n	0	0	n	393	4%	64	19/	,	0%	37.9	46.0	51.1
18:00	1220	1	-4-0	0	50	513	1436	2117	1877	873	254	67	20	7	2	1	0	0	0	0	0	333	5%	63	19/	11	0%	39.0	45.6	49.4
10:00	1782	0	1	0	37	296	986	1275	1223	641	230	65	15	,	4	1	0	0	0	0	0	302	6%	67	19/	13	0%	39.4	45.0	51.1
20:00	3811	0	'n	6	17	252	726	1012	1029	529	168	52	15	3	2	'n	0	n	0	0	n	222	6%	39	19/	5	0%	39.6	46.1	52.1
21-00	8508	0	0	2	26	190	601	993	987	490	168	//1	13	7	0	1	0	0	0	0	0	210	6%	46	19/	3	0%	30.0	46.3	51.3
22:00	2471	0	0	0	16	174	529	733	587	309	96	10	7	1	0	'n	0	0	0	0	0	11/	5%	30	19/	1	0%	39.0	46.0	49.1
22-00	Escel	0	0	0	20	141	3/18	111	325	195	56	10	0	1	2	0	0	0	0	0	0	70	5%	17	19/	3	0%	38.4	45.0	50.5
07.19	91746	52	50	03	1511	9357	20923	26210	21240	9052	2437	574	185	//3	1/1	4	1	0	0	0	0	3045	3%	476	1%	60	0%	37.7	45.7	50.1
06-22	110684	52	51	106	1675	10606	24402	31135	26459	11774	3279	803	251	63	20	7	1	0	0	0	0	4131	4%	671	1%	89	0%	38.0	46.0	50.5
06.00	114693	52	51	106	1711	10000	25270	32300	27371	12268	3/131	832	267	65	20	7	1	0	0	0	0	4131	4%	708	1%	03	0%	38.1	46.0	50.5
00.00	125804	52	51	111	18/13	11788	27175	35358	30537	13730	3800	9/17	207	76	25	7	2	0	0	0	0	4904	4%	784	1%	108	0%	38.2	46.0	50.6
00'00	123034	JZ			1043	11700	21113	93330		13/30	J-099	547	290		20			J	U	U	U	+304	4 70	704	170	100	076	J0.Z	40.0	30.0

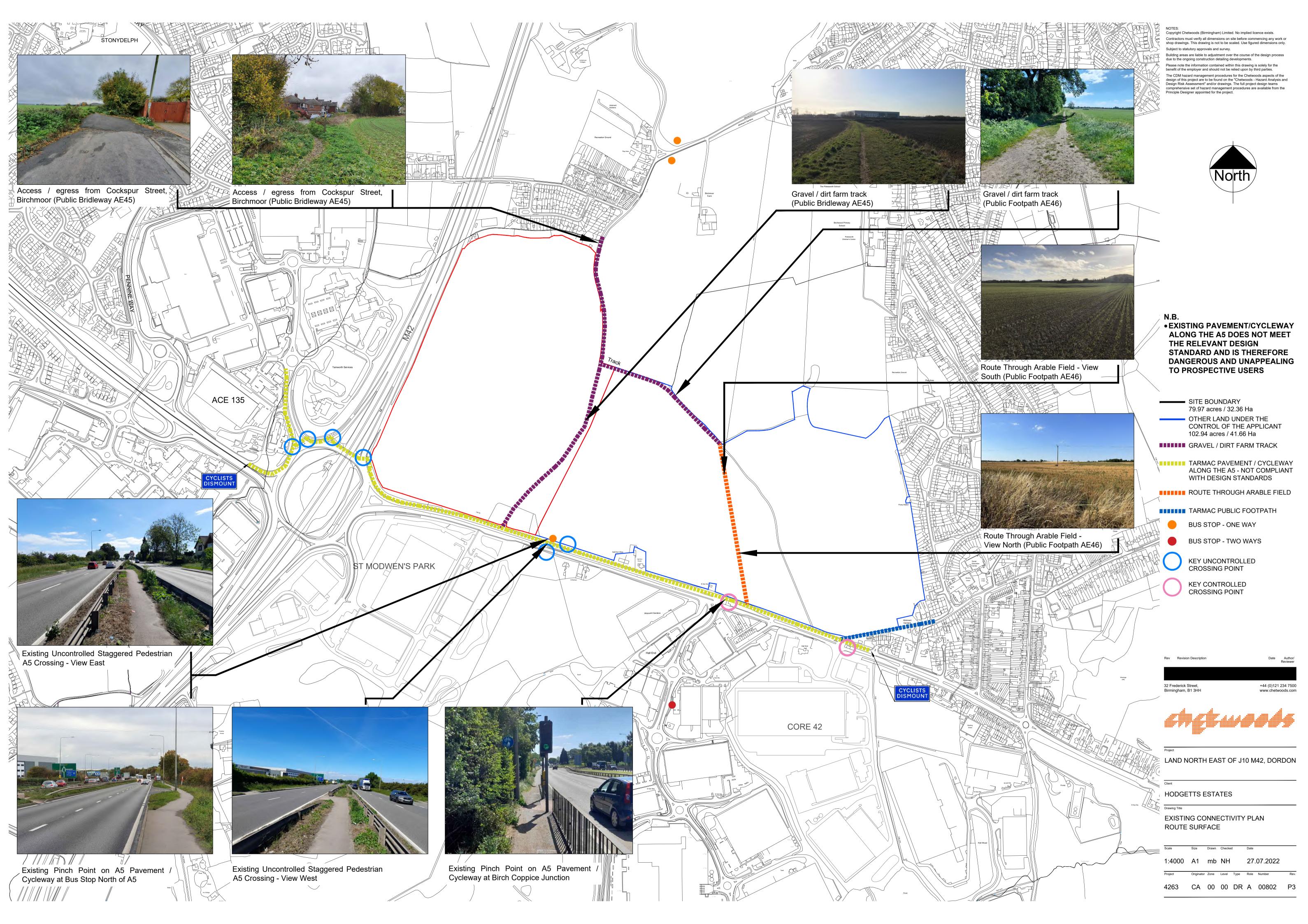
	Abbreviations											
PSL	Posted Speed Limit											
ACPO	Association of Chief Police Officers (Used to display the speed limit the police will generally enforce, 110% of PSL +2mph)											
DFT	Department for Transport (Used to display a speed statistic used by the government looking at vehicles travelling over 15mph above the PSL)											

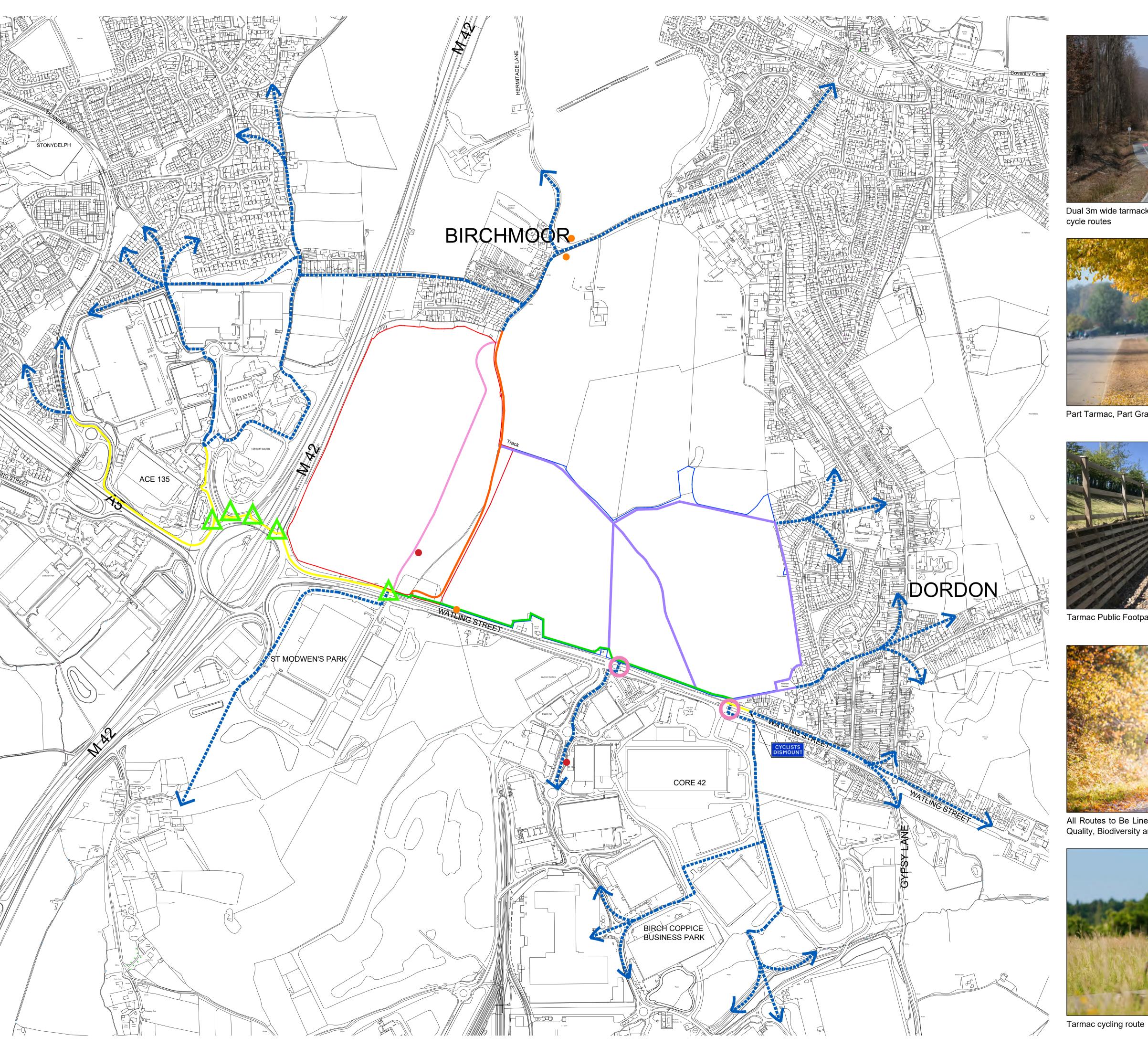
Tamworth																														
Report Id	110/23																													
Site Name	Site 1																													
Description	A5 Watling Street, Tamworth																													
Direction	Westbound																													
7 Day																														
00:00	DE 8	0	0	1	3	44	184	337	325	178	92	31	16	5	1	1	0	0	0	0	0	138	11%	36	3%	7	1%	41.2	50.1	57.2
01:00 02:00		0	0	1	2	25	159	276	249	147	56	24	4	0	1	0	0	0	0	0	0	79	8%	20	2%	1	0%	40.7	48.2	53.8
02:00	PE 3	0	3	0	6	41	150	317	371	214	128	38	13	5	0	0	0	0	0	0	0	178	14%	35	3%	5	0%	41.9	49.6	53.5
03:00	137D1	0	0	1	4	48	208	450	515	356	155	71	34	14	5	5	3	2	1	0	0	283	15%	97	5%	30	2%	42.8	50.6	56.4
04:00 05:00	M640	0	7	1 46	8 22	46 128	228 568	468 1077	618 1331	451 815	268 422	96 137	42 68	17	5	1	1	0	0	0	0	413 625	18% 14%	105 151	5% 3%	24 18	1% 0%	43.5 42.0	51.2 50.6	59.9 56.5
06:00	856Q	0	'n	15	21	226	848	1648	1831	1171	545	162	55	36	8	2	1	0	0	0	ň	772	12%	172	3%	47	1%	41.7	51.8	56.2
07:00	7570	1	10	16	90	422	1328	2186	1994	978	380	122	34	7	n	0	'n	0	2	n	ň	514	7%	96	1%	9	0%	39.6	52.8	57.7
08:00	7144	16	8	19	102	440	1269	2228	1765	911	286	72	19	6	3	Ö	Ö	Ö	0	Ö	ŏ	367	5%	58	1%	9	0%	39.0	50.4	54.1
09:00	/261	4	12	39	161	435	1415	2195	1853	807	244	70	17	6	1	0	1	1	0	0	0	318	4%	52	1%	8	0%	38.6	48.3	55.1
10:00	743	0	16	30	124	456	1574	2336	2110	765	255	57	17	3	0	0	0	0	0	0	0	301	4%	51	1%	3	0%	38.5	46.2	49.8
11:00	7807	9	8	18	121	431	1506	2327	2050	917	301	97	15	5	1	1	0	0	0	0	0	394	5%	56	1%	7	0%	38.9	46.7	51.1
12:00	8580	2	14	41	162	654	1629	2605	2092	966	289	76	40	8	2	0	0	0	0	0	0	399	5%	84	1%	10	0%	38.6	45.7	50.0
13:00	8721	10	17	34	120	636	1647	2587	2188	994	325	117	31	6	4	3	2	0	0	0	0	473	5%	91	1%	15	0%	38.7	46.0	52.6
14:00	0337	48	35	202	338	973	2162	2697	2266	1120	335	103	38	18	2	0	0	0	0	0	0	472	5%	102	1%	20	0%	37.3	48.2	52.2
15:00	9430	60	88	133	329	935	1748	2446	2188	1042	324	102	22	10	2	0	1	0	0	0	0	442	5%	70	1%	12	0%	37.4	47.9	53.8
16:00	9595	20 51	46 94	122	345	703	1783	2509	2302	1221	370	120	39 35	14	0	0	0	0	1	0	0	529	6%	111	1%	15	0%	38.3	50.0	55.1
17:00 18:00	8833 8236	0	7	120 22	394 99	597	1547	2177 1944	2173	1162	359	135 164	30	16	5 4	0	1	1	0	0	0	517	6%	106	1%	11	0%	38.1 40.8	48.2	52.7 55.1
19:00	5410	1	2	22	18	289 115	1003 480	1224	1920 1561	1206 1001	482 454	179	47	25	7	0	1	0	0	0	0	711 681	10% 13%	158 147	2% 3%	19 33	0% 1%	40.8 42.6	49.5 50.5	55.1
20:00	2865	0	0	0	3	22	210	665	907	591	293	112	41 54	20 5	1	2	0	0	0	0	ů	454	16%	112	4%	33	0%	42.6	50.5 49.5	55.0
21:00	9618	0	0	0	0	28	188	568	815	483	312	136	49	27	10	2	0	0	0	0	ň	518	20%	147	6%	38	1%	44.2	52.9	59.6
22:00	DCD-7	ő	0	1	5	33	207	531	705	484	256	101	45	12	5	2	0	0	0	0	ő	411	17%	103	4%	18	1%	43.6	51.5	60.7
23:00	NTAY	ō	0	0	2	36	226	536	623	340	209	106	53	4	9	2	1	0	0	0	ō	373	17%	126	6%	16	1%	43.2	51.5	58.5
	100269	230	355	796	2385	6971	18611	28237	24901	12089	3950	1235	369	104	21	5	5	2	3	0	0	5437	5%	1035	1%	138	0%	38.6	47.9	52.9
06-22	117439	231	357	814	2427	7362	20337	32342	30015	15335	5554	1824	574	197	47	11	7	2	3	0	0	7862	7%	1613	1%	264	0%	39.2	48.3	53.4
06-00	121973	231	357	815	2434	7431	20770	33409	31343	16159	6019	2031	672	213	61	15	8	2	3	0	0	8646	7%	1842	2%	298	0%	39.3	48.3	53.7
00-00	134153	233	367	834	2479	7763	22267	36334	34752	18320	7140	2428	849	267	75	25	12	4	4	0	0	10362	8%	2286	2%	383	0%	39.6	48.5	53.9

Transport Assessment	Addendum			
	ADDENDIY E C	HETWOOD CON	INECTIVITY PLA	N
	APPENDIXEC	IILI WOOD CON	INLCTIVITIPLA	MV

Land North-East of Jn10 M42 Motorway, North Warwickshire









Dual 3m wide tarmacked footway/cycleways for the new pedestrian/



Part Tarmac, Part Grass/Sand Public Bridleway



Tarmac Public Footpath

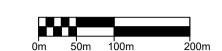


All Routes to Be Lined With Trees / Hedgerows to Enhance Rural Quality, Biodiversity and Wayfinding



Copyright Chetwoods (Birmingham) Limited. No implied licence exists. Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only. Subject to statutory approvals and survey.

Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments. Please note the information contained within this drawing is solely for the benefit of the employer and should not be relied upon by third parties. The CDM hazard management procedures for the Chetwoods aspects of the design of this project are to be found on the "Chetwoods - Hazard Analysis and Design Risk Assessment" and/or drawings. The full project design teams comprehensive set of hazard management procedures are available from the Principle Designer appointed for the project.





SITE BOUNDARY

79.97 acres / 32.36 Ha

OTHER LAND UNDER THE CONTROL OF THE APPLICANT 102.94 acres / 41.66 Ha

3M WIDE TARMAC SHARED PAVEMENT / CYCLEWAY ALONG SITE ROAD AND NORTH TO

BIRCHMOOR PART TARMAC, PART GRASS/SAND PUBLIC

BRIDLEWAY (AE45) 3M WIDE TARMAC OFFLINE SHARED FOOT / CYCLEWAY

3M WIDE TARMAC SHARED FOOT / CYCLEWAY ALONG ROUTE OF EXISITING AND PROPOSED PUBLIC RIGHTS OF WAY **NETWORK**

ENHANCED TARMAC PAVEMENT / CYCLEWAY ALONG A5

POSSIBLE INBOUND / ONWARD JOURNEY **ROUTE OPTIONS**

BUS STOP - ONE WAY

BUS STOP - TWO WAYS

KEY CROSSING POINT UPGRADED TO SIGNAL CONTROLLED

KEY CONTROLLED CROSSING POINT

32 Frederick Street, Birmingham, B1 3HH +44 (0)121 234 7500 www.chetwoods.com



LAND NORTH EAST OF J10 M42, DORDON

HODGETTS ESTATES

PROPOSED CONNECTIVITY PLAN -

ROUTE TYPE & SURFACE

4263 CA 00 00 DR A 00803 P6

Transport Assessment Addendun	1		
	APPENDIX F AC	CIDENT DATA	
	AFFENDIATAC	CIDENT DATA	

Land North-East of Jn10 M42 Motorway, North Warwickshire



Lane NE of M42 Junction 10

Staffordshire Accident Data

Figure E1





FULL LISTING Run on: 10/11/2023

AccsMap - Accident Analysis System

Accidents between dates 01/01/2018 and 29/10/2023 (70) months

Selection: Notes:

Selected using Manual Selection

18299447 A 5 423916 300819 Acc. Ref. No: Road: **Grid Reference:**

1530 District Council: Tamworth Time: Saturday 21-April-2018 Lighting:

Daylight Weather: Fine without high winds Speed limit: 70

SLIGHT Wet/Damp Severity: Road surface

THOMAS GUY WAY A5 NB EXIT SLIP BY PREMIER INN Location:

The accident occured on the A5, a slip road.

Special conditions and hazards:

Car, travelling from SE to NW was stopping on the main carriageway. The vehicle was not at, or within 20M of a junction and skidded. The Vehicle 1

male driver aged 18 lived in BH31.

(Vehicle 1) A male driver aged 18 suffered a slight injury. Casualty 1

Contributory Factors

Severity:

Vehicle 1 Poor turn or manoevre Vehicle 1 Sudden braking Vehicle 1 Loss of control

Acc. Ref. No: 18322469 Road: D 66 **Grid Reference:** 423838 300842

District Council: Tamworth Time: 1703 Monday 02-July-2018

Daylight Fine without high winds 30 Liahtina: Weather: Speed limit:

SLIGHT Road surface Dry

WATLING ST B5404 JN WITH QUARRY HILL Location:

The accident occured at a roundabout on the D66, a single carriageway at its junction with the B5404 controlled by a give way or uncontrolled.

None Special conditions and hazards:

Vehicle 1 Car, travelling from SW to NE was going ahead other on the main carriageway. The vehicle was approaching junction or waiting/parked at

junction approach. The female driver aged 24 lived in NG8.

Pedal Cycle, travelling from NW to SE was going ahead other on the main carriageway. The vehicle was entering main road. The female d Vehicle 2

(Vehicle 2) A female rider aged 23 suffered a slight injury.

A female driver aged 24 suffered a slight injury. (Vehicle 1)

Casualty 2 Contributory Factors

Casualty 1

Vehicle 2 Illegal turn or direction of travel

Vehicle 2 Cyclist entering road from pavement

18338615 B 5404 **Grid Reference:** Acc. Ref. No: Road: 423839 300845 Tamworth 1430 Tuesday District Council: Time: 25-September-2018 Lighting: Daylight Weather: Fine without high winds Speed limit:

Severity: SLIGHT Road surface

QUARRY HILL B5404 AT JN WITH PENINE WAY Location:

The accident occured at a roundabout on the B5404, at its junction with the B5080 controlled by a give way or uncontrolled..

Special conditions and hazards: None

Car, travelling from NE to NW was turning right on the main carriageway. The vehicle was mid junction - on roundabout or main road. The Vehicle 1

male driver of an unknown age.

Car, travelling from NE to NW was stopping on the main carriageway. The vehicle was mid junction - on roundabout or main road. The ferr Vehicle 2

driver aged 24 lived in B77.

A female driver aged 24 suffered a slight injury. (Vehicle 2) Casualty 1

Contributory Factors

Vehicle 1 Failed to look properly



FULL LISTING Run on: 10/11/2023

AccsMap - Accident Analysis System

Accidents between dates 01/01/2018 and 29/10/2023 (70) months

Selection: Notes:

Selected using Manual Selection

Acc. Ref. No: 19400169 Road: A 5 Grid Reference: 424202 300705

District Council: Tamworth Time: 2018 Tuesday 28-May-2019

Lighting: Daylight Weather: Fine without high winds Speed limit: 70

Severity: SLIGHT Road surface Dry

Location: THOMAS GUY WAY (A5) APPROX 60MTS NW M42 ISLAND

The accident occured on the A5, a dual carriageway.

Special conditions and hazards: None

Vehicle 1 Motorcycle over 500cc, travelling from SE to NW was going ahead other on the main carriageway. The vehicle was not at, or within 20M of

junction. The male driver aged 68 lived in DA2.

Casualty 1 (Vehicle 1) A male rider aged 68 suffered a slight injury.

Contributory Factors

Severity:

Severity:

Vehicle 1 Dazzling sun

Acc. Ref. No: 19868172 Road: A 5 Grid Reference: 424034 300813

District Council: Tamworth Time: 2018 Thursday 18-July-2019

Lighting: Daylight Weather: Fine without high winds Speed limit: 70

SLIGHT Road surface Dry

Location: A5 NB J/W STONEYDELPH EXIT

The accident occured at a T or staggered junction on the A5, a slip road at its junction with the A5 controlled by a give way or uncontrolled..

Special conditions and hazards: None

Vehicle 1 Motorcycle over 500cc, travelling from SE to W was turning left on the main carriageway. The vehicle cleared junction or waiting/parked at

junction exit. The male driver aged 44 lived in CV9.

Casualty 1 (Vehicle 1) A male rider aged 44 suffered a slight injury.

Contributory Factors

Vehicle 1 Dazzling sun

Vehicle 1 Swerved

19887971 A 5 Grid Reference: Road: 424220 300718 Acc. Ref. No: Tamworth 1202 Saturday District Council: 07-September-2019 Time: Daylight Fine without high winds Speed limit: Lighting: Weather:

SLIGHT Road surface Dry

Location: A5 - APPROX 38MTS SE J/W KINSALL GREEN

The accident occured on the A5, a dual carriageway.

Special conditions and hazards: None

Vehicle 1 Car, travelling from NW to SE was going ahead other on the main carriageway. The vehicle was not at, or within 20M of a junction. The fer

driver aged 70 lived in DE13.

Vehicle 2 Car, travelling from NW to SE was going ahead but held up on the main carriageway. The vehicle was not at, or within 20M of a junction. T

male driver aged 53 lived in B75.

Casualty 1 (Vehicle 1) A female vehicle or pillion passenger aged 74 suffered a slight injury.

Contributory Factors

Vehicle 1 Following too close
Vehicle 1 Failed to look properly

Vehicle 1 Failed to judge other persons path or speed



FULL LISTING Run on: 10/11/2023

AccsMap - Accident Analysis System

Accidents between dates 01/01/2018 and 29/10/2023 (70) months

Selection: Notes:

Selected using Manual Selection

20936138 A 5 **Grid Reference:** 424001 300860 Acc. Ref. No: Road: Tamworth 1659 District Council: Time: Thursday 09-January-2020

Lighting: Darkness: street lights present and lit Weather: Fine without high winds Speed limit: 70

SERIOUS Road surface Severity: Drv

THOMAS GUY WAY (A5 EB) J/W STONEYDELPH ENTRY SLIP Location:

The accident occured at a slip road on the A5, a dual carriageway at its junction with the A5 controlled by a give way or uncontrolled...

Special conditions and hazards:

Car, travelling from N to SE was changing lane to right on the main carriageway. The vehicle was entering from slip road. The male driver Vehicle 1

Motor Cycle over 50 cc and up to 125cc, travelling from NW to SE was going ahead other on the main carriageway. The vehicle was mid

junction - on roundabout or main road. The male driver aged 19 lived in DE12.

Car, travelling from NW to SE was going ahead other on the main carriageway. The vehicle cleared junction or waiting/parked at junction ε

The male driver aged 62 lived in B77.

Casualty 1 (Vehicle 2) A male rider aged 19 suffered a serious injury.

Contributory Factors

Vehicle 2

Vehicle 3

Vehicle 1 Failed to look properly

Poor turn or manoeyre Vehicle 1 Careless/Reckless/In a hurry Vehicle 1

Exceeding speed limit Vehicle 1

201000821 A 5 Grid Reference: Acc. Ref. No: Road: 423958 300889 District Council: Tamworth 1252 Friday Time: 28-August-2020 70

Lighting: Daylight Weather: Raining without high winds Speed limit:

Wet/Damp Road surface Severity:

A5 EB J/W EXIT SLIP STONEYDELPH Location:

The accident occured at a slip road on the A5, a dual carriageway at its junction with the A5 controlled by a give way or uncontrolled..

Special conditions and hazards: None

Goods 7.5 tonnes mgw and over, travelling from NW to SE was going ahead other on the main carriageway. The vehicle was approaching Vehicle 1

junction or waiting/parked at junction approach. The male driver aged 49 lived in DE23.

Car, travelling from NW to SE was going ahead but held up on the main carriageway. The vehicle was mid junction - on roundabout or mai

road. The male driver aged 20.

Car, travelling from NW to SE was going ahead but held up on the main carriageway. The vehicle cleared junction or waiting/parked at june

exit. The male driver aged 35 lived in CV11.

A male vehicle or pillion passenger aged 61 suffered a slight injury. Casualty 2

Contributory Factors

Vehicle 2

Vehicle 3

Vehicle 1 Vehicle 1

Slippery road (due to weather) Travelling too fast for conditions Vehicle 1

221139087 B 5080 Acc. Ref. No: Road: **Grid Reference:** 423889 301093 Tamworth District Council: Time: 1620 Friday 21-January-2022 Fine without high winds Daylight Weather: Speed limit: 40 Lighting:

Severity: SLIGHT Road surface Drv

PENNINE WAY (B5080) AT JUNCTION WITH PENNYMOOR ROAD Location:

The accident occured at a T or staggered junction on the B5080, a single carriageway at its junction with the Unclassified52 controlled by a giv

way or uncontrolled..

Vehicle 2

Special conditions and hazards: None

Car, travelling from W to SE was turning right on the main carriageway. The vehicle was entering main road. The female driver aged 38 liv Vehicle 1

B77

Van or Goods 3.5 tonnes mgw and under, travelling from SE to NW was going ahead other on the main carriageway. The vehicle was mid

junction - on roundabout or main road. The male driver aged 31 lived in B24.

A female driver aged 38 suffered a slight injury. (Vehicle 1) Casualty 1



FULL LISTING Run on: 10/11/2023

AccsMap - Accident Analysis System

Accidents between dates 01/01/2018 and 29/10/2023 (70) months

Selection: Notes:

Selected using Manual Selection

 Acc. Ref. No:
 221195045
 Road:
 B 5080
 Grid Reference:
 423967
 301048

District Council: Tamworth Time: 1733 Monday 11-April-2022

Lighting: Daylight Weather: Fine without high winds Speed limit: 30

SLIGHT Road surface Dry

Location: PENNINE WAY R'BT J/W THOMAS GUY WAY (A5)

The accident occured at a roundabout on the B5080, at its junction with the A5 controlled by a give way or uncontrolled..

Special conditions and hazards: Non

Vehicle 1 Car, travelling from N to S was going ahead other on the main carriageway. The vehicle was mid junction - on roundabout or main road. The

female driver aged 39 lived in B77.

Vehicle 2 Car, travelling from SW to S was stopping on the main carriageway. The vehicle was mid junction - on roundabout or main road. The male

driver of an unknown age .

Casualty 1 (Vehicle 1) A female driver aged 39 suffered a slight injury.

Contributory Factors

Severity:

Vehicle 1 Following too close

Vehicle 2 Sudden braking

Acc. Ref. No: 221241676 Road: A 5 **Grid Reference:** 424195 300732 District Council: Tamworth Time: 1715 Wednesday 09-November-2022 Darkness: street lights present and lit Unknown Speed limit: Lighting: Weather:

Severity: SLIGHT Road surface Dry

Location: A5 EB APPROX 10MTS SE J/W KINSALL GREEN (A5)

The accident occured at a T or staggered junction on the A5, a dual carriageway at its junction with the Unclassified31 controlled by a give way

uncontrolled..

Special conditions and hazards: None

Vehicle 1 Car, travelling from NW to SE was stopping on the main carriageway. The vehicle cleared junction or waiting/parked at junction exit. The main carriageway.

driver aged 22 lived in CV9.

Vehicle 2 Car, travelling from NW to SE was stopping on the main carriageway. The vehicle cleared junction or waiting/parked at junction exit. The

female driver aged 63 lived in CV10.

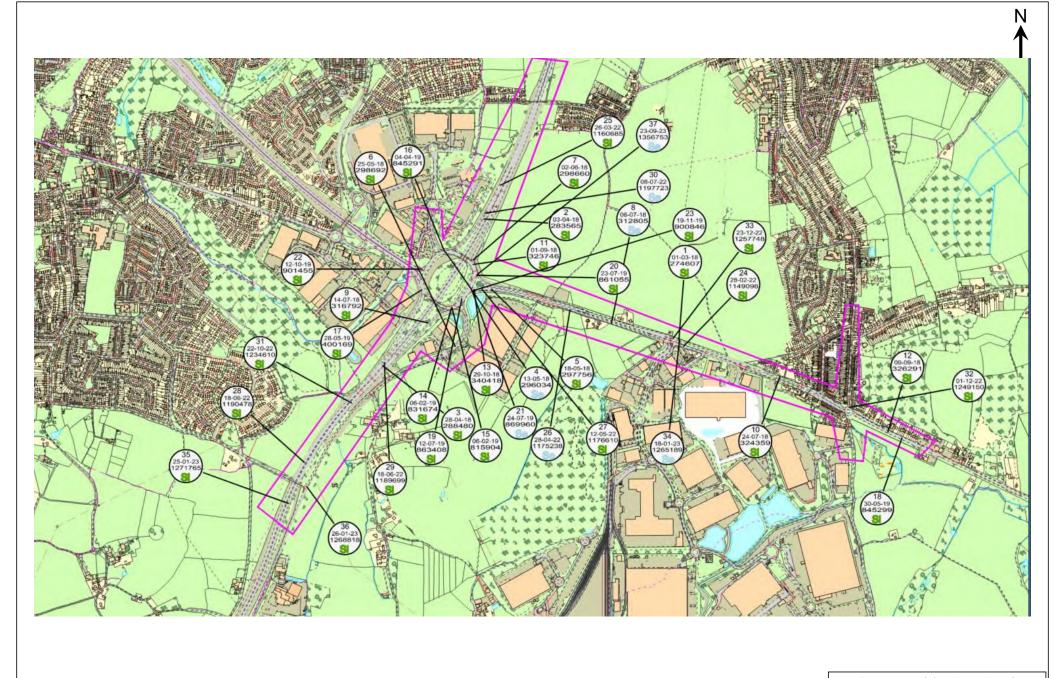
Casualty 1 (Vehicle 2) A female driver aged 63 suffered a slight injury.



01/01/2018 - 31/12/2019 and 01/01/2022 - 18/10/2023 01 Mar 2018 to 23 Sep 2023

Report produced: 16/11/2023

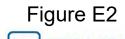
Road Safety Intelligence Team Tel: 01926 412740 Email: rsinfo@warwickshire.gov.uk



Lane NE of M42 Junction 10

Warwickshire Accident Data

Source: Warwickshire County Council





ALL ROAD USERS - ACCIDENTS

Year	Fatal	Serious	Slight	Total	Time	Fatal	Serious	Slight	Total	District	Fatal	Serious	Slight	Total
2018	0	2	11	13	0000-0059	0	0	1	1	North Warwickshire	0	7	28	35
2019	0	1	9	10	0100-0159	0	0	0	0	Tamworth	0	0	2	2
2022	0	2	8	10	0200-0259	0	0	0	0					
2023	0	2	2	4	0300-0359	0	0	1	1	Road Class	Fatal	Serious	Slight	Total
					0400-0459	0	0	0	0	М	0	1	9	10
Month	Fatal	Serious	Slight	Total	0500-0559	0	1	1	2	A(M)	0	0	0	0
January	0	1	2	3	0600-0659	0	0	1	1	Α	0	6	18	24
February	0	0	3	3	0700-0759	0	0	0	0	В	0	0	0	0
March	0	0	2	2	0800-0859	0	0	0	0	Other	0	0	3	3
April	0	1	3	4	0900-0959	0	0	3	3	Speed Limit	Fatal	Serious	Slight	Total
May	0	1	5	6	1000-1059	0	1	2	3	•				
June	0	0	3	3	1100-1159	0	0	1	1	20	0	0	0	0
July	0	3	4	7	1200-1259	0	0	1	1	30	0	0	7	7
August	0	0	0	0	1300-1359	0	1	1	2	40	0	0	2	2
September	0	1	2	3	1400-1459	0	0	1	1	50	0	2	8	10
October	0	0	3	3	1500-1559	0	1	1	2	60	0	1	2	3
November	0	0	1	1	1600-1659	0	2	2	4	70	0	4	11	15
December	0	0	2	2	1700-1759	0	0	2	2	Obstruction (Veh Totals)	Fatal	Serious	Slight	Total
Davis	F-4-1	0	Olimba	Tatal	1800-1859	0	1	5	6	Sign/Signal	0	0	09.11	0
Day	Fatal	Serious	Slight	Total	1900-1959	0	0	2	2	Lamp Post	0	1	0	1
Sunday	0	1	1	2	2000-2059	0	0	2	2	Pole	0	0	0	0
Monday	0	0	2	2	2100-2159	0	0	2	2	Tree	0	0	0	0
Tuesday	0	0	5	5	2200-2259	0	0	1	1	Bus Stop	0	0	0	0
Wednesday	0	2	3	5	2300-2359	0	0	0	0	·	-		0	
Thursday	0	1	6	7	2000 2000		· ·		· ·	Barrier	0	0	3	3
Friday	0	2	4	6	Lighting	Fatal	Serious	Slight	Total	Other	0	U	1	1
Saturday	0	1	9	10	Daylight	0	6	21	27	Junction Type	Fatal	Serious	Slight	Total
Ped Crossing	Fatal	Serious	Slight	Total	Darkness	0	1	9	10	Not at Junction	0	2	16	18
Not at crossing	0	6	28	34	Weather	Fatal	Serious	Slight	Total	Roundabout	0	3	10	13
Zebra	0	0	0	0	Fine without high winds	0	6	22	28	Mini R'about	0	0	0	0
Pelican	0	1	1	2	Raining without high winds	0	0	6	6	T or Staggered	0	1	3	4
Ped Phase	0	0	1	1	Snowing without high winds	0	1	0	1	Slip Road	0	1	1	2
Footbridge	0	0	0	0	Fine with high winds	0	0	0	0	Crossroads	0	0	0	0
Refuge	0	0	0	0	Raining with high winds	0	0	0	0	Multiple Junct	0	0	0	0
Unknown	0	0	0	0	Snowing with high winds	0	0	0	0	Private Drive	0	0	0	0
					Fog or mist - if hazard	0	0	1	1	Other Junction	0	0	0	0
Bends (Veh Totals)	Fatal	Serious	Slight	Total	Other	0	0	1	1	Unknown	0	0	0	0
Left Hand Bend	0	0	4	4	Unknown	0	0	0	0					
Right Hand Bend	0	0	1	1	C.I.I.I.O.II.I	ŭ	_		ŭ					
					Road Surface	Fatal	Serious	_	Total					
					Dry	0	6	16	22					
					Wet/Damp	0	1	13	14					
					Snow	0	0	0	0					
					Frost/Ice	0	0	1	1					
					Flood	0	0	0	0					
					Unknown	0	0	0	0					

ALL ROAD USERS - CASUALTIES

Year	Fatal	Serious	Slight	Total	Casualty Age	Fatal	Serious	Slight	Total	Weather	Fatal	Serious	Slight	Total
2018	0	2	20	22	0 - 5	0	0	3	3	Fine without high winds	0	6	38	44
2019	0	1	14	15	6 - 10	0	1	0	1	Raining without high winds	0	0	9	9
2022	0	2	13	15	11 - 16	0	1	0	1	Snowing without high winds	0	1	0	1
2023	0	2	2	4	17 - 25	0	1	7	8	Fine with high winds	0	0	0	0
Month	Fatal	Cariana	Climbs	Tatal	26 - 35	0	2	13	15	Raining with high winds	0	0	0	0
Month	Fatal	Serious	Slight	Total	36 - 45	0	0	8	8	Snowing with high winds	0	0	0	0
January	0	1	2	3	46 - 55	0	2	6	8	Fog or mist - if hazard	0	0	1	1
February	0	0	3	3	56 - 64	0	0	7	7	Other	0	0	1	1
March	0	0	2	2	65+	0	0	5	5	Unknown	0	0	0	0
April	0	1	3	4	Unknown	0	0	0	0	Dood Conford	Fatal	0	Olimb4	Tatal
May	0	1	10	11	T:	Fatal	0	Oli mb4	T-4-1	Road Surface	Fatal	Serious	Slight	Total
June	0	0	4	4	Time	Fatal	Serious	Slight	Total	Dry	0	6	29	35
July	0	3	9	12	0000-0059	0	0	2	2	Wet/Damp	0	1	19	20
August	0	0	0	0	0100-0159	0	0	0	0	Snow	0	0	0	0
September	0	1	4	5	0200-0259	0	0	0	0	Frost/Ice	0	0	1	1
October	0	0	8	8	0300-0359	0	0	2	2	Flood	0	0	0	0
November	0	0	1	1	0400-0459	0	0	0	0	Unknown	0	0	0	0
December	0	0	3	3	0500-0559	0	1	1	2	District	Fatal	Serious	Slight	Total
Day	Fatal	Serious	Slight	Total	0600-0659	0	0	3	3				•	
					0700-0759	0	0	0	0	North Warwickshire	0	7	47	54
Sunday	0	1	3	4	0800-0859	0	0	0	0	Tamworth	0	0	2	2
Monday	0	0	2	2	0900-0959	0	0	4	4	Road Class	Fatal	Serious	Slight	Total
Tuesday	0	0	6	6	1000-1059	0	1	3	4	M	0	1	14	15
Wednesday	0	2	3	5	1100-1159	0	0	1	1	A(M)	0	0	0	0
Thursday	0	1	8	9	1200-1259	0	0	2	2		0	6	29	35
Friday	0	2	10	12	1300-1359	0	1	2	3	A B	0	0	29 0	
Saturday	0	1	17	18	1400-1459	0	0	1	1	Other	0	0	6	0 6
Ped Crossing	Fatal	Serious	Slight	Total	1500-1559	0	1	2	3	Other	U	U	O	O
	0	6	47		1600-1659	0	2	3	5	Speed Limit	Fatal	Serious	Slight	Total
Not at crossing	0	0	0	53 0	1700-1759	0	0	2	2	20	0	0	0	0
Zebra	0	•			1800-1859	0	1	10	11	30	0	0	13	13
Pelican	•	1	1 1	2	1900-1959	0	0	2	2	40	0	0	3	3
Ped Phase	0	-	•	1	2000-2059	0	0	5	5	50	0	2	10	12
Footbridge	0	0	0	0	2100-2159	0	0	2	2	60	0	1	6	7
Refuge	0	0	0	0	2200-2259	0	0	2	2	70	0	4	17	21
Unknown	0	0	0	0	2300-2359	0	0	0	0	70	U	7	17	21
Bends	Fatal	Serious	Slight	Total						Obstruction	Fatal	Serious	Slight	Total
Left Hand Bend	0	0	5	5	Lighting	Fatal	Serious	Slight	Total	Sign/Signal	0	0	0	0
Right Hand Bend	0	0	1	1	Daylight	0	6	34	40	Lamp Post	0	1	0	1
Ngiit Hallu bellu	U	U	1	'	Darkness	0	1	15	16	Pole	0	0	0	0
										Tree	0	0	0	0
										Bus Stop	0	0	0	0
										Barrier	0	0	3	3
										Other	0	0	1	1
										Oulei	U	U	1	I

ALL ROAD USERS - CASUALTIES

Junction Type	Fatal	Serious	Slight	Total
Not at Junction	0	2	28	30
Roundabout	0	3	16	19
Mini R'about	0	0	0	0
T or Staggered	0	1	3	4
Slip Road	0	1	2	3
Crossroads	0	0	0	0
Multiple Junct	0	0	0	0
Private Drive	0	0	0	0
Other Junction	0	0	0	0
Unknown	0	0	0	0

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involv	ved
1	Road No A5 Section	Grid 425412E Ref 300392N	SLIGHT	01/03/2018	5	05:49	Dark: lit	Frost/Ice	Fog Mist				P/C	
	A5 AT JN WITH E	BIRCH COPPICE	BUSINESS F	PARK						North Warw	ickshire			
	_ 110.00.110 11.00.12 11.00.													1 2
2	Road No M42 Section		SLIGHT	03/04/2018	3	17:20	Daylight	Dry	Fine					
	NB JCT 10 M42									North Warw	ickshire			
	2 LANES RUNNII	NG. V002 BRAKE	S AND V001	HITS THE RI	EAR.			Veh1, car, SW Veh2, goods u	→ NE nknown weight, S	$SW \rightarrow NE$		Casua Vehic		1 2
3	Road No M42 Section	Grid 424068E Ref 300275N	SLIGHT	28/04/2018	7	09:20	Daylight	Wet/Damp	Rain			S.VEH		
	52/1 J10 M42 AT	JN WITH JCT 10	NB SLIP OF	F M42						North Warw	ickshire			
	Single vehicle RT causing it to collic carriageway and hard shoulder.	le with central res	erve barrier b	efore rebound	ding a		Veh1, car, SW → NE				Casua Vehic		1	

Key	Involved		FACTORS		Special Cond	itions
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works
	P/C	Pedal Cycle		_	Surface	Road Surface Defective
	PSV	Bus/Coach				

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involv	ved	
4	Road No A5 Section	Grid 424353E Ref 300791N	SERIOUS	13/05/2018	1	18:27	Daylight	Dry	Fine						
	WILNECOTE BY	PASS ISLAND AS	AT JN WITH	GREEN LAN	ΙE					North Warw	ickshire				
	VEHICLE 1 AND 2 HAVE TRAVELLED ALONG THE A5 FROM TAMWORTH AND APPROACHED THE M42 ROUNDABOUT. VEHICLE 2 WAS STATIONARY AT THE TRAFFIC LIGHTS WITH SEVERAL CARS BEHIND THEM HOWEVER STALLED WHEN THE LIGHTS TURNED GREEN. VEHICLE 1 HAS CHANGED LANES MOVING TO THE RIGHT HAND SIDE ATTEMPTNG TO GO AROUND THE QUE OF CARS, HOWEVER CUT IN FRONT OF VEHICLE 2 TO TRAVEL DOWN M42 SLIP ROAD CAUSING A COLLISION. VEHICLE 2 WAS TRAVELLING STRAIGHT AHEAD INTENDING TO TAKE THE A5 EXIT. Veh1, car, NW → NE Veh2, car, NW → SE Veh2, car, NW → SE														
5	Road No A5 Section	Grid 424561E Ref 300622N	SLIGHT	18/05/2018	6	22:40	Dark: lit	Dry	Fine						
	A5 NEAR JN WIT	ΓΗ JCT 10 ISLAN	D M42						•	North Warw	/ickshire				
	VEHICLE 1 AND ATHERSTONE T INTO THE REAR INJURY TO THE SCENE.COLLISI PLEASE SEN TO AND NO CCTV. FILED.	OWARDS TAMW OF VEHICLE 2 (OCCUPANTS OI ON OCCURED C) THEM FOR RE(ORTH WHEN CAUSING MII VEHICLE 2. ON THE WARN CORDING. T	I VEHICLE 1 NOR DAMAG VEHICLE 1 WICKSHIRE I HERE ARE N	HAS I E ANI LEFT ORC O WI	łT A.	Veh1, car, E - Veh2, car, E -		•		Casua Vehicl		2 2		

Key	<u>Involved</u>		<u>FACTORS</u>		Special Condi	<u>itions</u>
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works
	P/C	Pedal Cycle			Surface	Road Surface Defective
	PSV	Bus/Coach				

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involv	ved
6	Road No U Section	Grid 424397E Ref 300363N	SLIGHT	25/05/2018	6	20:20	Daylight	Dry	Fine					
	TRINITY ROAD N	IEAR JN WITH J	CT 10 M42							North Warw	ickshire			
	VEHICLE 1 HAS EXITED THE M42 AT JUNCTION 10 AND DRIVEN ON TO TRINITY ROAD. WHILST DRIVING ALONG TRINITY ROAD AROUND A GRADUAL RIGHT HAND BEND VEHICLE 1 HAS CONCIOUSLY CHANGED IN TO THE OPPOSING LANE, DRIVING ALONG THE WRONG SIDE OF THE ROAD FOR AROUND 75 YARDS. VEHICLE 2 THAT WAS TRAVELLING IN THE OPPOSING ROAD, HAS BEEN MET HEAD ON BY VEHICLE 1 AND COULD NOT AVOID THE COLLISION. 7 Road No M42 Grid 424477F 10 20/06/2018 7 16:55 Daylight Dry Fine										Casua Vehic		3 2	
7	Road No M42 Section		SLIGHT	02/06/2018	7	16:55	Daylight	Dry	Fine					
	JUNCTION 10 OF							L Valadi aan NE	CIA	North Warw	ickshire			_
	V2 WAS STATION JOIN ROUNDABO REACTED TOO L	OUT. V1 HAS FA	ILED TO SEE	V2 STATION			\S	Veh1, car, NE Veh2, car, NE				Casua Vehic		2
8	Road No A5 Section	Grid 425105E Ref 300467N	SERIOUS	06/07/2018	6	15:37	Daylight	Dry	Fine					
	DORDON A5 NE	AR JN WITH JUN	ICTION 10 M	42						North Warw	ickshire			
	V1 has been in the outside lane of a two lane stretch of the A5. V2 has been in lane 1. V1 has then tried to merge into lane 1 and has not seen V2 and has hit V2 causing extensive damage.							Veh1, goods u Veh2, car, E —	nknown weight, E → W	E→W		Casua Vehic		2 2

Key	Involved		FACTORS		Special Cond	itions_
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works
	P/C	Pedal Cycle		-	Surface	Road Surface Defective
	PSV	Bus/Coach				

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Invol	ved
9	Road No M42 Section	Grid 424273E Ref 300469N	SLIGHT	14/07/2018	7	00:34	Dark: lit	Dry	Fine					
	SOUTHBOUND	J10 SLIP ROAD N	142 NEAR JN	WITH A5					•	North Warw	ickshire			
	VEHICLE 1, AN U JUNCTION 10 SO HITTING THE OF THE CENTRAL E OF THE SLIP RO	OUTHBOUND, HA FFSIDE CAUSING BARRIER. VEHIC	AS CUT IN FF S VEHICLE 2 CLE 1 HAS ST	RONT OF VEI TO SPIN ARG	HICLE DUNE	E 2), HITTII	_	Veh1, goods u Veh2, car, NE	nknown weight, N → SW	NE → SW		Casua Vehicle		2 2
10	Road No A5 Section	Grid 425871E Ref 300225N	SLIGHT	24/07/2018	3	16:34	Daylight	Dry	Fine					
	NEAR TO VICAR	AGE CLOSE A5								North Warw	rickshire			
	VEHICLE 2 WAS WHILST VEHICL DIRECTION ON DONE A U TURN CAUSING VEHICH HAVEN'T COLLIE THE LEFT SIDE AND HER EXHA	E 1 WAS TRAVE THE OPPOSITE THROUGH A GA LE 2 TO TAKE E DED BUT VEHICL CAUSING DAMA	LLING ALONG CARRIAGEW AP IN THE CE VASIVE ACTI LE 2 HAS BUI GE TO HER I	G THE A5 IN YAY. VEHICLE INTRAL RESION. THE VEW MPED INTO THE VEW NEARSIDE FI	THE (E 1 H, ERVA HICL THE K	OPPOSI AS THE TION ES (ERB OI	N	Veh1, car, SE Veh2, car, NW				Casua Vehicle		1 2
11	Road No A5 Section	Grid 424478E Ref 300735N	SLIGHT	01/09/2018	7	09:30	Daylight	Dry	Fine					
	TAMWORTH ISL	AND A5 AT JN W	ITH JCT 10 S	LIP OFF M42						North Warw	rickshire			
	Ambo are travelling around the roundabout on blue with sirens activated. V1 & V2 travelling onto the roundabout from M42 south, V2 has slowed to allow ambo to pass and V1 has bumped into the rear				1 &	Veh1, car, NE Veh2, car, NE Veh3, , NW →	$\rightarrow NW$			Casua Vehicle		2 3		

Key	<u>Involved</u>		FACTORS		Special Cond	itions
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works
	P/C	Pedal Cycle		5	Surface	Road Surface Defective
	PSV	Bus/Coach				

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors	lı	nvolved
12	Road No A5 Section	Grid 426361E Ref 299973N	SLIGHT	09/09/2018	1	12:11	Daylight	Dry	Fine				
	O/S THE KINGD	OM HALL OF JEH	IOVAS WITN	ESSES WATL	ING	STREET	A5			North Warw	ickshire		
	VEHICLE 1 HAS BEHIND VEHICL APPROACH TO DONE THE SAM INTO THE REAR	E 2. VEHICLE 2 A TRAFFIC ISLAN E. VEHICLE 1 H	HAS SLOWE ID AS THE T	D AND BRAK RAFFIC IN FI	CED C	N THE HAS	ĒD	Veh1, car, SE Veh2, car, SE			_	asualtie ehicles	s 2 2
13	Road No A5 Section	Grid 424482E Ref 300620N	SLIGHT	29/10/2018	2	15:30	Daylight	Wet/Damp	Fine				
										North Warw	ickshire		
	VEHICLE 2 STAT FROM BEHIND A TO EXCHANGE	AND HIT VEHICLE						Veh1, goods u Veh2, car, E –	nknown weight, E → W	$\Xi \to W$		asualtie ehicles	s 1 2
14	Road No A5 Section	Grid 424380E Ref 300539N	SLIGHT	06/02/2019	4	17:50	Drk: SL u/k	Dry	Other			P/0	GV
	WATLING STRE	ET (A5) NEAR JU	INCTION WIT	TH TRINITY F	ROAD					North Warw	ickshire		
	IP ON PUSH BIK JUNCTION 10 M BEEN STRUCK I VEHICLE. INJUI DID NOT TAKE A MODEL OR DRIV	42 SOUTH. IP H BEFORE SLIP RO RY TO RIGHT AR NY DETAIL AS W	AS GONE AC OAD TO M42 M AND LEG, VAS IN SHOC	ROSS JUCN BY A WHITE DRIVER STO	TION RECC DPPE	AND HADVERY		Veh1, goods < Veh2, pedal cy	3.5t, NE \rightarrow W vcle, NE \rightarrow W		_	asualtie ehicles	s 1 2

Key	Involved		FACTORS		Special Cond	itions_
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works
	P/C	Pedal Cycle		-	Surface	Road Surface Defective
	PSV	Bus/Coach				

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Invol	ved
15	Road No A5 Section	Grid 424382E Ref 300539N	SLIGHT	06/02/2019	4	18:00	Dark: lit	Wet/Damp	Fine				P/C	
	WATLING STREE	T (A5) AT JUNC	TION WITH T	TRINITY ROA	ď					North Warwi	ickshire			
	VEHICLE 2 WAS 1 HAS CUT HIM U	0.020700		JNDABOUT V	VHEN	I VEHIC	LE	Veh1, goods ui Veh2, pedal cy	nknown weight, Scle, $E \rightarrow W$	SE → SW		Casua Vehic		1 2
16	Road No A5 Section	Grid 424349E Ref 300791N	SLIGHT	04/04/2019	5	18:40	Daylight	Wet/Damp	Rain					M/C
	WATLING STREE	ET (A5) NEAR JU	INCTION WIT	TH RELAY DF	RIVE					Tamworth				
		to brake so to brake sh of travel was to	harply. This s narply and col	subsequently olide with the r	da	Veh1, car, S → Veh2, m/cycle	- NE 50 - 125cc, S →	NE		Casua Vehic		1 2		
17	Road No A5 Section	Grid 424245E Ref 300619N	SLIGHT	28/05/2019	3	21:20	Daylight	Dry	Fine		\$	S.VEH		M/C
	A5 NEAR JUNCT	ION WITH M42								Tamworth				
	Rider of V1 has exited the island from the M42 onto the A5 West bound and the low sun has taken his visibility and has caused him to lose control of the bike, hitting a junction maker sign and this has dislodged him from the bike causing him to slide down the carriageway.							Veh1, m/cycle	> 500cc, S → NV	V		Casua Vehic		1

Key	Involved		<u>FACTORS</u>		Special Cond	itions
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works
	P/C	Pedal Cycle		-	Surface	Road Surface Defective
	PSV	Bus/Coach				

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involv	ved
18	Road No A5 Section	Grid 426425E Ref 299947N	SLIGHT	30/05/2019	5	18:58	Daylight	Dry	Fine					
	WATLING STREE	T (A5) DORDON	O/S 'SILVER	BIRCHES'				•		North Warw	ickshire			
	VEHICLE 01 WAS TOWARDS GREN TOWARDS DORI CHECKED BY LO WAITED FOR TR AND CLIPPED VI ONTO A DRIVEW	NDON WANTING DON. DRIVER OI DOKING IN HIS M AFFIC TO PASS EHICLE 02 CAUS	TO CHANGE F VEHICLE 0 MIRRORS AT THEN PULLE SING IT TO FI	E DIRECTION 1 HAS THEN ONCOMING ED OUT OF T LIP ONTO ITS	AND VISU TRAF HE S	TRAVE ALLY FIC HAS LIP ROA	L S	Veh1, car, NW Veh2, car, NW				Casua Vehicl		1 2
19	Road No A5 Section	Grid 424426E Ref 300577N	SLIGHT	12/07/2019	6	03:29	Dark: lit	Wet/Damp	Rain				HGV	
	A5 WATLING ST	ISLAND DORDO	N J/W M42 J	CT 10						North Warw	ickshire			
	It appears that vel Island towards M ² lane 2 without not its n/s. Vehicle01 suggesting the dri	12 (SW) slip whei icing Vehicle02 a has then only not	n Vehicle01 hand has collide ticed it has be	as merged int ed into the o/s en in a collision	o lane of Ve	e 1 from hicle02	with	Veh1, goods 3. Veh2, car, NE	.5 - 7.5t, NE → S → SW	W		Casua Vehicl		2 2
20	Road No A5 Section	Grid 424495E Ref 300685N	SLIGHT	23/07/2019	3	20:15	Daylight	Dry	Fine		·			M/C
	A5 NEAR JUNCT	ION WITH UNCL	ASSIFIED RO	DAD						North Warw	ickshire			
	THIS IS A 2 VEHI MOTORCYCLES. EXIT. AS THEY H THEY HAVE HAD THEIR MACHINE	TRAVELLING IN IAVE TAKEN THE CONTACT CAU	N THE SAME E EXIT OFF C	LANE, TAKIN OF THE TRAF	G TH FIC IS	E SAME SLAND,		1	> 500cc, NW → > 500cc, NW →			Casua Vehicl		2 2

Key	<u>Involved</u>		FACTORS		Special Cond	<u>itions</u>
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works
	P/C	Pedal Cycle		-	Surface	Road Surface Defective
	PSV/	Rus/Coach				

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involved	d
21	Road No A5 Section	Grid 424473E Ref 300616N	SERIOUS	24/07/2019	4	16:45	Daylight	Dry	Fine					M/C
	WATLING STRE	ET (A5) J/W M42	JCT 10 ISLAN	ND						North Warw	rickshire			
	AT APPROXIMATELY 16:45 HRS ON 24.07.2019 RIDER OF VEH 002 HAS BEEN TRAVELLING ON THE A5, M42 ISLAND HEADING WEST, COMING FROM THE DIRECTION OF HINCKLEY, GOING TOWARDS TAMWORTH. RIDER OF VEH 002 HAS BEEN FILTERING BETWEEN LANES 3 AND 4 AT THE ISLAND ON THE APPROACH TO THE JUNCTION. THE RAFFIC LIGHTS WERE NOT WORKING WITH SIGNS DISPLAYING THIS - RIDER OF VEH 002 WAS AWARE OF THE BORKEN LIGHTS. WHILST WAITING TO PULL OUT OF THE JUNCTION, VEH 002 HAS BEEN HIT FROM BEHIND, CAUSING HIM TO FALL OFF HIS BIKE ON TO THIS LEFT SHOULDER CAUSING INJURY - HUMERAL FRACTURE.								Casua Vehicl		2			
22	Road No A5 Section	Grid 424247E Ref 300714N	SLIGHT	12/10/2019	7	18:40	Daylight	Wet/Damp	Fine					
	A5 - 27 METRES	FROM JUNCTIO	TAW HTIW N	LING STREE	T (A5	j)			•	North Warw	rickshire			
	Vehicle 2 was stationary at traffic lights at the M42 island when Vehicle 1 has							Veh1, car, E – Veh2, car, E –				Casua Vehicl		
23	Road No A5 Section	Grid 424475E Ref 300615N	SLIGHT	19/11/2019	3	11:47	Daylight	Wet/Damp	Fine				G'	٧
	WATLING STRE	ET (A5) JW A5 N	142 JCT 10 TF	RAFFIC ISLA	ND					North Warw	rickshire			
	Veh 2 struck veh tamworth.	1 from behind wh	ilst stationary	at traffic light	s on A	\5 dordo	on	Veh1, car, E – Veh2, goods <				Casua Vehicl		2

Key <u>Involved</u>			FACTORS		Special Cond	Special Conditions			
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working			
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective			
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred			
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works			
	P/C	Pedal Cycle		-	Surface	Road Surface Defective			
	PSV	Bus/Coach							

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involv	ved
24	Road No A5 Section	Grid 425433E Ref 300363N	SLIGHT	28/02/2022	2	09:19	Daylight	Wet/Damp	Fine					M/C
	WATLING STREE	ET (A5), NEAR J/	W DANNY MO	ORSON WAY	, DOF	RDON				North Warw	ickshire			
	BOTH VEHICLES M42 J10 FROM D TRAFFIC LIGHT	OORDON. VEH 0	02 IN LANE 2	SLOWING F	OR T	HE RED		Veh1, m/cycle Veh2, car, SE	50 - 125cc, SE – → NW	→ NW		Casua Vehicl		1 2
25	Road No M42 Section	Grid 424602E Ref 301094N	SLIGHT	26/03/2022	7	10:27	Daylight	Dry	Fine					
	M42 J10 NORTH	BOUND, BIRCH	OOR, WARV	VICKSHIRE						North Warw	ickshire			
	BOTH VEHICLES JUST AFTER JUI MOTORWAY. LO VEH 002 HAS ST APPLIED THE BF CAUSING DAMA	NCTION 10 IN LA OSE DOG IN TH ARTED TO PICK RAKES. VEH 001	NE 2 OF THE E ROAD WIT UP A LITTLE HAS REAR I	E LANE 2 SEC H TRAFFIC M E SPEED AND	CTION MOVIN THE	N OF TH NG SLOV	_	Veh1, car, SW Veh2, car, SW				Casua Vehicl		1 2
26	Road No A5 Section	Grid 424918E Ref 300529N	SERIOUS	28/04/2022	5	16:25	Daylight	Dry	Fine					
	WATLING STREE	ET (A5), DORDO	, WARWICK	SHIRE				•		North Warw	ickshire			
	VEHICLES TRAV BOTH IN LANE 1 OUT INTO LANE INTO THE BACK	OF 2. VEH 002 I 2, BEFORE IT H	HAS SLOWE	O AND LOOK	ED T	O MOVE	<u> </u>	Veh1, car, SE - Veh2, car, SE -				Casua Vehicl		1 2

Key	Involved		FACTORS		Special Cond	Special Conditions			
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working			
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective			
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred			
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works			
	P/C	Pedal Cycle		5	Surface	Road Surface Defective			
	PSV	Bus/Coach							

	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involve	ed
27	Road No A5 Section	Grid 424518E Ref 300622N	SLIGHT	12/05/2022	5	10:30	Daylight	Dry	Fine					
	WATLING STRE	ET (A5), DORDOI	N, WARWICK	SHIRE		<u> </u>				North Warw	/ickshire			
	WHEN A LORRY	LLING TOWARDS VERED OVER T LORRY DID NOT	HE LANE FR	OM THE LEF	ТСО	LLIDING	3	Veh1, goods Veh2, car, SE	unknown weigh E → NW	it, SE → NW		Casuali Vehicle		2
28	Road No M42 Section	Grid 423711E Ref 299837N	SLIGHT	18/06/2022	7	19:10	Daylight	Wet/Damp	Rain		5	S.VEH		
	M42 NB J9-10 M	/P 83/1A, TAMWC	RTH, WARW	ICKSHIRE				•	•	North Warw	/ickshire			
	APPROXIMATEL	EAR THAT VEH 00 LY 60 MPH DRIVE CONTROL AND 0	R HAS HIT S COLLIDED IN	SURFACE WA	TER	AND AQ	UA	Veh1, car, SV	V → INE			Casual Vehicle		1 1
		TO REST IN LA	NE 2 OF 2.											
29	Road No M42 Section	Grid 424074E	SLIGHT	18/06/2022	7	19:25	Daylight	Wet/Damp	Rain					
29	Section	Grid 424074E	SLIGHT		7	19:25	Daylight	Wet/Damp	Rain	North Warw	vickshire			
29	Section M42 NB J10 M/P DUE TO AN UNF 2 AT J10 M42 NO	Grid 424074E Ref 300290N	SLIGHT RTH, WARWII EH 002 HAS TO THE OFI	CKSHIRE HAD TO STO F SLIP. VEH (P IN L	_ANE 2 AS FAIL	OF	Wet/Damp Veh1, car, SV Veh2, car, SV	V → NE	North Warw	vickshire	Casuali Vehicle		1 2
	Section M42 NB J10 M/P DUE TO AN UNF 2 AT J10 M42 NO	Grid 424074E Ref 300290N 83/01A TAMWOF RELATED RTC, VI DRTH ADJACENT IE AND COLLIDE Grid 424531E	SLIGHT RTH, WARWII EH 002 HAS TO THE OFI	CKSHIRE HAD TO STO F SLIP. VEH (P IN L	_ANE 2 AS FAIL	OF	Veh1, car, SV	V → NE	North Warw	vickshire	Vehicle		-
30	Section M42 NB J10 M/P DUE TO AN UNF 2 AT J10 M42 NO TO STOP IN TIM Road No M42 Section	Grid 424074E Ref 300290N 83/01A TAMWOF RELATED RTC, VI DRTH ADJACENT IE AND COLLIDE Grid 424531E	SLIGHT RTH, WARWIGHTH, WARWIGHTH OOZ HAS TO THE OFFE DOWNTH THE SERIOUS	CKSHIRE HAD TO STO F SLIP. VEH (REAR OF VE 08/07/2022	P IN I 001 H	_ANE 2 AS FAIL 2.	OF ED	Veh1, car, SV Veh2, car, SV	V → NE V → NE	North Warw		Vehicle	es	-
	Section M42 NB J10 M/P DUE TO AN UNF 2 AT J10 M42 NO TO STOP IN TIM Road No M42 Section M42 J10 NB SLII VEH 001 AND VI SLIP. ON ENTRY	Grid 424074E Ref 300290N 883/01A TAMWOF RELATED RTC, VI DRTH ADJACENT IE AND COLLIDE Grid 424531E Ref 300966N	SLIGHT RTH, WARWIGH 002 HAS TO THE OFFI D WITH THE SERIOUS WARWICKSHING ONTO TENTERING M	CKSHIRE HAD TO STO F SLIP. VEH (REAR OF VE 08/07/2022 HIRE HE M42 NOR AIN CARRIAG	P IN L 2001 H 2001 H 3H 002 6	_ANE 2 AS FAIL 2. 13:50	OF ED Daylight	Veh1, car, SV Veh2, car, SV Dry	$V \rightarrow NE$ $V \rightarrow NE$ Fine	North Warw		Vehicle	HGV	-

Key <u>Involved</u>			FACTORS		Special Cond	itions
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works
	P/C	Pedal Cycle		•	Surface	Road Surface Defective
	PSV	Bus/Coach				

No	Location	Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involved	b
31	Road No M42 Grid 423925E Section Ref 300106N	SLIGHT	22/10/2022	7	06:11	Drk: no SL	Wet/Damp	Rain					
	M42 SB J10-9 M/P 52/3B, DORDO	ON, WARWIC	KSHIRE		•	•	•		North Warw	rickshire			
	IT WOULD APPEAR THAT VEH 00 DUE TO AQUA PLANNING CAUS 001 HAS CONTINUED DOWN TH ROOF COLLIDING WITH VEH 00 OCCUPANTS OF VEH 001 AND 3	SING IT TO CO IE MOTORWA 3. MINOR IN	OLLIED WITH AY FLIPPING JURIES SUST	VEH ONTO AINE	002, VE) ITS D	ΞH	Veh1, car, NE Veh2, car, NE Veh3, car, NE	\rightarrow SW			Casua Vehicle		
32	Road No U Grid 426187E Section Ref 300085N	SLIGHT	01/12/2022	5	18:45	Dark: lit	Dry	Fine					
	LONG STREET NEAR JUNCTION	WITH WATL	ING STREET	(A5),	DORD	ON, WARWIC			North Warw	ickshire			
	I was in my car at end of Long Str. Dordon. I was waiting to pull out of into the back of my car. I was push and pulled over to inspect the car. pulled over. The driver was a lady The lady got out of he said I couldn't see any but it was of She refused and said I would just whiplash. I asked again for her de	nto the island ned into the ro The other cal in her late 50 r car and askelark so I said where claiming for the control of the said where controls is the controls of the control of the	and the car boad so drove as involved follows. Her read if there was we should excord any other date.	ehind round wed r g num any d	me werd the islance and ober is damage details	and . I	Veh1, car, N — Veh2, car, N —				Casua Vehicle		
33	Road No A5 Grid 425385E Section Ref 300398N	SLIGHT	23/12/2022	6	21:31	Dark: lit	Wet/Damp	Fine					
	WATLING STREET (A5) NEAR JU WARWICKSHIRE	JNCTION WIT	H DANNY MO	ORSC	N WAY	, NORTH WAF	RWICKSHIRE,		North Warw	rickshire			
	BOTH VEHICLES HAVE BEEN TI ON THE A5. ONE OF THE VEHIC THROUGH A RED LIGHT AT THE CAUSING THE COLLISION.	LES SEEMS	TO HAVE CR	OSSE	ΞD		Veh1, car, N — Veh2, car, S →				Casua Vehicle		
Key	Involved PED Pedestrian HGV Heavy Goods Vehicle GV Goods Vehicle M/C Motor Cycle P/C Pedal Cycle PSV Bus/Coach	FACTORS +VE R.TURN O/TAKE S.VEH	Positive Breath Right Turn Mand Overtaking Man Single Vehicle	oeuvre		ATS DEF SIGNS I RD WRKS I	<u>s</u> Traffic Lights Not Wor Traffic Lights Defectiv Road Signs Defective Road Works Road Surface Defecti	e or Obscurred					Page 11

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Invol	lved
34	Road No A5 Section	Grid 425415E Ref 300390N	SERIOUS	18/01/2023	4	05:44	Dark: lit	Wet/Damp	Snow				P/C	
	WATLING STRE WARWICKSHIR	ET (A5) NEAR JU E	NCTION WIT	H DANNY MO	ORSC	N WAY,	, NORTH WA	RWICKSHIRE,		North Warw	rickshire			
	COLLISION HAS V1 PEDAL CY TOWARDS DOF DIRECTION SLI INDUSTRIAL ES GREEN FOR EA CONTINUED TH TIME V1 HAS D PEDESTRIAN C LANE 1 SLIGHT	IME AND PLACE AS OCCURRED. CLIST TRAVEL RDON. V2 HAS BE GHTLY BEHIND V STATE JUNCTION ASTBOUND TRAF IEIR JOURNEY TI VERTED ACROS ROSSING INTO T LY BEHIND V2 HA EERIOUSLY INJUR	LING EASTBO EN TRAVELI (1. ON APPRO THE TRAFFI FIC. V2 AND HROUGH TH S THE CARR THE PATH OF AS MANAGEI	OUND FROM LING IN THE DACH TO BIF C LIGHTS AF WITNESS HA E LIGHTS. AT LIAGEWAY AT V2 IN LANE O TO AVOID A	J10 I SAME RCH (RE SH AVE THE THE 2. WI	M42 E COPPIC IOWING SAME TNESS	in	Veh1, pedal cy Veh2, car, NW	/cle, SW → NE / → SE		-	asua ehic	alties es	1 2
35	Section	Grid 423638E Ref 299650N	SLIGHT	25/01/2023	4	14:40	Daylight	Dry	Fine				HGV	GV
		/P 46.6B, TAMWC	•		D 05	\ <u>(000</u>		Veh1 goods	: 3.5t, NE → SW	North Warw			oltino	1
	THAT WAS IN LA CAUSED V002 T TRAVELLING IN	VAN. THIS HAS C ANE 2 OF 2 SLOV TO COLLIDE WITI FRONT OF V002. 3 A RESULT V004	VING FOR TE H THE REAR V001 HAS N	RAFFIC AHEA OF V003 THA OT STOPPE	D. TH AT WA D ANI	HIS HAS AS D LEFT		Veh2, car, NE Veh3, car, NE Veh4, car, NE	→ SW → SW			asua ehic	alties es	5

Key <u>Involved</u>			FACTORS		Special Cond	Special Conditions			
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working			
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective			
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred			
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works			
	P/C	Pedal Cycle		_	Surface	Road Surface Defective			
	PSV	Bus/Coach							

No	Location		Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors		Involv	ved
36	Road No U Section	Grid 423722E Ref 299727N	SLIGHT	26/01/2023	5	13:09	Daylight	Wet/Damp	Fine		R.TURN			
	OVERWOODS F	ROAD AT JUNCTION	ON WITH TR	NITY ROAD,	KING	SBURY	, WARWICKS	HIRE	•	North Warw	vickshire			
	INTO OVERSWO TO SEE VEH002 COLLIDES WITH VEH001 IS NOT	TIONARY ON PICATIONARY ON PICATION IN THE REAR OF VIOLENAMES SEAT CAUSING	I ONCOMING IARY UNTIL I VEH001 REA ITBELT AND I	TRAFFIC. VE T IS TOO LAT R SEAT PASS FACE PLANT	EH00' TE. SI SENG	1 FAILS (IDS AN ER IN	-	Veh1, car, NE Veh2, car, NE				Casua Vehicl		1 2
37	Road No A5 Section		SERIOUS	23/09/2023		10:26	Daylight	Dry	Fine					M/C
	A5 NEAR JUNC	FION WITH M42 J	J10, DORDON	N, WARWICK	SHIRE					North Warw	vickshire			
	Rider has been riseen V002 headi and has hit him. I continued on the and made off. We have since hat the rider who has punching his wince	iding V001 on Jung closely next to Rider of V001 has road with his cluter at a call from the sthen asked him to dow and broke his goto the vets to av	action 10 Dord him. The veh felt severe pa ch in riding slo driver of the \ o pull over but s wing mirror.	icle has move ain in his arm owly as the ve /002 stating to to become irate So he has the	ed tow and h hicle hat he e and	vards V0 nas did not s e did clip started	01 stop	Veh1, m/cycle Veh2, car, NW	> 500cc, NW → 3	SE		Casua Vehicl		1 2

Key <u>Involved</u>			<u>FACTORS</u>		Special Conditions				
	PED	Pedestrian	+VE	Positive Breath Test	ATS OUT	Traffic Lights Not Working			
	HGV	Heavy Goods Vehicle	R.TURN	Right Turn Manoeuvre	ATS DEF	Traffic Lights Defective			
	GV	Goods Vehicle	O/TAKE	Overtaking Manoeuvre	SIGNS	Road Signs Defective or Obscurred			
	M/C	Motor Cycle	S.VEH	Single Vehicle	RD WRKS	Road Works			
	P/C	Pedal Cycle			Surface	Road Surface Defective			
	PSV	Bus/Coach							

Land North-East of Jn10 M42 Motorway, North Warwickshire
Transport Assessment Addendum
APPENDIX G CONSOLIDATED MODELLING NOTE V2



Client: Hodgetts Estates Limited Date: 1 November 2023

1 INTRODUCTION

- Tetra Tech (TT) have been appointed by Hodgetts Estates to support their outline planning application for a proposed development of up to 100,000sqm of employment uses and a 150-space overnight lorry park (including an associated 400sqm amenity block) on land to the northeast of M42 Junction 10. The application is supported by a Transport Assessment (TA) prepared by TT, dated February 2023.
- 1.2 This Consolidated Modelling Strategy Note v2 expands on the previously approved Modelling Strategy Note, dated 18th March 2022 and Consolidated Modelling Strategy Note, dated 7th June 2023. It also follows the recent meetings held between representative of National Highways (NH), Warwickshire County Council (WCC), Staffordshire County Council (SSC), North Warwickshire Borough Council (NWBC), Hodgetts Estates and TT on 15th March 2023 and 23rd May 2023. Minutes of both meetings are attached at Appendix A.
- 1.3 WCC confirmed acceptance of the Consolidated Modelling Note on 25th July 2023. SCC provided comments on the 7th June Note and NH provided comments on 21st September. This v2 Modelling Strategy Note seeks to address the comments raised by SCC and NH and update the document where applicable due to timing of events, i.e. 4th July traffic surveys now complete.
- 1.4 The key changes agreed to the previous modelling strategy note include;
 - i) Additional junctions requiring assessment.
 - ii) Use of 2023 survey data in the baseline model.
 - iii) Extraction of committed and Local Plan traffic flows from the current WCC A5 Atherstone A5 PARAMICS model and adding them to the 2023 surveyed flows.
 - iv) Use of TEMPRO growth factors.



Client: Hodgetts Estates Limited Date: 1 November 2023

2 AGREED SCOPE OF ROAD NETWORK

- 2.1 At the 15th March 2023 meeting it was agreed that further detailed modelling work to test the traffic impacts of the proposed development are required for the following seven junctions;
 - 1. M42 Junction 10 Interchange (6-arm grade separated signalised roundabout)
 - 2. A5 Watling Street/ Site Access junction (proposed 3-arm signalised junction)
 - 3. A5 Watling Street/ Danny Morson Way (4-arm signalised junction, known locally as Birch Coppice)
 - 4. A5 Watling Street/ Meridian Drive (3-arm signalised junction, known locally as Core 42)
 - 5. B5080 Pennine Way North/ A5 Eastbound on/ off slip road (3-arm roundabout junction)
 - 6. B5080 Pennine Way South/ A5 Westbound on/ off slip road/ Centurion Way/ Quarry Hill (4-arm roundabout junction)
 - 7. A5 Watling Street/ Long Street/ Gypsy Lane (4-arm roundabout junction)

3 CURRENT TRAFFIC MODELS

- 3.1 A validated TRANSYT model of junctions 1 to 4 (excluding the site access) was developed using March 2022 traffic flows and agreed with NH and WCC. The model has since been extended to include junctions 5 and 6 but at the time of writing the validation of the model has not been approved. Notwithstanding that, based on the latest discussions, the extent of the model requires further extending to include an additional junction (junction 7), discussed in more detail at Chapter 4 below.
- 3.2 The current WCC Atherstone A5 PARAMICS model operated by Vectos requires an update using 2023 surveyed traffic flows. At the 15th March 2023 it was confirmed the updated model would not be available for use until September 2023 at the earliest.
- 3.3 The WCC Atherstone A5 PARAMICS model includes the junctions listed at Chapter 2 above. It was agreed that the current model could be used to extract the committed and Local Plan



Client: Hodgetts Estates Limited Date: 1 November 2023

traffic, which in turn would then be added to the new 2023 flows to establish "No Development" scenarios (discussed in more detail at Chapter 5 below) together with background growth factors applied to the surveys. A licence has been obtained by Hodgetts Estates to use the WCC Atherstone A5 PARAMICS model.

4 VALIDATED 2023 BASELINE MODEL

- 4.1 TT will model the network of 6 junctions (excluding the site access at this stage) by extending the previously approved 2022 TRANSYT model which will provide a sound basis for assessing the performance of the road network in future years both with and without the proposed development. TRANSYT 16 has been used as it models the interaction of queuing, lane starvation, and blocking back effects. The software also can model the effects of uncoordinated traffic signals and intermittent stages. In addition, a simulation mode is available within which individual vehicles are simulated so the queuing effects and lane starvation can be readily tracked.
- 4.2 Full manual classified traffic counts of the six junctions took place on Tuesday 4th July 2023 between the hours 07:00 to 09:30 and 16:00 to 18:30, Appendix B refers. The flows were converted to Passenger Car Units (PCU) and the peak hours derived. Figure 11 attached in Appendix D shows the AM peak hour flows and Figure 12 shows the PM peak equivalent. Traffic flow link counts were collected for a full week of data, to verify the 4th July surveys are typical of weekday conditions, from Monday 3rd July to Sunday 9th July inclusive of both, Appendix B also refers. SCC, WCC and NH have all confirmed the 4th July surveys were typical weekday surveys and are acceptable to use in the baseline model.
- 4.3 The green signal timings at each stop line were recorded so that the average green splits, cycle times and offsets can be obtained and then used in the TRANSYT model.
- The stop line saturation flows calculated using the 2022 traffic surveys, identified in TT's 2022 TRANSYT Baseline Validation Model Report, dated 13th May 2022, will be retained.
- 4.5 Maximum queue lengths on each signalised approach were recorded in 5-minute intervals.

 The observed queues provide a useful tool to verify the queuing results in the TRANSYT model.



Client: Hodgetts Estates Limited Date: 1 November 2023

- 4.6 At the priority controlled roundabout junctions the queue in each lane on each approach were recorded at 1-minute intervals.
- 4.7 A TRANSYT 2023 Model Validation Report was be issued to NH, WCC & SCC on 21st August 2023 for approval prior to running the opening and future year assessments discussed in more detail at Chapters 5 and 6 below. NH prepared a response to this report, dated 21st September 2023 and TT subsequently submitted a "TRANSYT 2023 Baseline Validation Report, Response to NH Comments of 21st September 2023", dated 9th October 2023. At the time of writing NH submitted a response, dated 26th October 2023 which confirmed all matters are now agreed apart from one relating to signal timings at the A5/ Core 42 junction.

5 OPENING AND FUTURE YEAR ASSESSMENTS – REFERENCE CASE

Committed Developments

As discussed in the 15th March 2023 meeting, an opening year assessment and a future year assessment are required for the reference case, i.e., without the Local Plan generated traffic and associated highway infrastructure. An opening year of 2026 and a future year of 2033 have been agreed and will be the years used in the forthcoming TRANSYT modelling.

WCC Atherstone A5 PARAMICS Committed Developments

- As agreed, the committed development generated traffic flows to be used within the TRANSYT model have been taken from the current WCC Atherstone A5 PARAMICS model. A thorough review of the committed traffic flows has been undertaken and adjustments made for those development partially built and occupied at the time of the traffic surveys to avoid double counting. The agreed adjustments to the committed development traffic flows are shown in Tables 1 and 2 attached at Appendix C.
- It should be noted that SCC did raise a concern that the existing base year flows in the PARAMICS model may have an influence on the routeing of committed development traffic flows. Vectos provided the following response, "I would suggest that the com dev assignment will not be particularly sensitive to the baseline flows as (1) the model has limited route choice, (2) the A5 is classed as a Major road so is more attractive in Paramics (in the cost calcs Major



Client: Hodgetts Estates Limited Date: 1 November 2023

roads are valued at half the cost of Minor roads) making route choice switching less sensitive, but most importantly (3) the Demand flows are taken out of a model run with no congestion (i.e. we run the model with 50% of demands and double the answers), which ensures traffic (including Com Dev demands) uses their preferred route despite any congestion that may be seen in a 100% run." This response satisfied SCC concerns.

- The majority of the committed development flows have been extracted from the WCC Atherstone A5 PARAMICS model. Figure 1 attached at Appendix D shows the numbered turning movements TT have derived to assign the committed traffic from the WCC Atherstone A5 PARAMICS model. Table A also at Appendix D shows all of the committed development AM peak hour traffic flows (PCU) by movement number, assuming all are unoccupied. Table B shows the PM peak hour equivalent.
- The agreed build out and occupations in 2026 (see Appendix C) have been applied to the committed developments and Table C attached at Appendix D shows the AM peak adjusted traffic flows that need to be added onto the baseline flows, also shown diagrammatically in Figure 2 at Appendix D. Table D attached at Appendix D shows the PM peak adjusted traffic flows that need to be added onto the baseline flows, also shown diagrammatically in Figure 3 at Appendix D.
- The agreed build out and occupations in 2033 (see Appendix C) have been applied to the committed developments and Table E attached at Appendix D shows the AM peak adjusted traffic flows that need to be added onto the baseline flows, also shown diagrammatically in Figure 4 at Appendix D. Table F attached at Appendix D shows the PM peak adjusted traffic flows that need to be added onto the baseline flows, also shown diagrammatically in Figure 5 at Appendix D.

Arkall Farm Committed Development

5.7 In addition, the traffic flows from the Arkall Farm development of 1,100 dwellings have had to be calculated manually as agreed with NH, WCC and SCC. Figure 6 attached at Appendix D shows the traffic assignment routing on the road network. In 2026 it is assumed 315 homes will be occupied at the site after the July 2023 traffic surveys and Figure 7 at Appendix D shows the 2026 AM Peak associated flows. Figure 8 also at Appendix D shows the PM peak equivalent. In 2033 it is assumed 884 homes will be occupied at the site after the July 2023



Client: Hodgetts Estates Limited Date: 1 November 2023

traffic surveys and Figure 9 at Appendix D shows the 2033 AM Peak associated flows. Figure 10 also at Appendix D shows the PM peak equivalent.

Core 42 Committed Development

Another development that needs to be considered is the remaining 0.34ha at Core 42. The total development is for 17.47ha, of which 17.13ha is built and occupied. The July 2023 traffic surveys have been used to derive the volume of additional traffic which is 2% (0.34ha/17.13ha).

Figure 11 attached at Appendix D shows the 2023 AM Peak surveyed traffic and Figure 12 also at Appendix D shows the PM peak for which the Core 42 committed development flows have been derived. The committed development flows from Core 42 have been distributed around the road network based on the proposed development's traffic assignment, discussed later (see Figure 21 for the AM peak and Figure 22 for the PM peak both at Appendix E). Figure 13 attached at Appendix D shows the AM peak traffic flows associated with the remaining 0.34ha at Core 42 and will be applied to the 2026 and 2033 assessment years. Figure 14 also at Appendix D shows the PM peak equivalent.

Dunstall Lane Committed Development

5.10 The final committed development that needs to be considered is the ongoing Dunstall Lane development of 800 units. At the time of the July 2023 surveys, Tamworth Borough Council advised that approx. 550 homes will be built and occupied, with the remaining 250 to be fully occupied by 2026. The supporting TA, prepared by WYG, dated 2016, provides the traffic flows associated with all 800 homes at the Pennine Way roundabout junctions and M42 Junction 10 in their Appendix J. The flows have factored down to 31.2% (250/ 800) for those remaining to be built and occupied in July 2023. To the east of Junction 10, the flows have been assigned in a similar manner to the Arkall Farm residential development. Figure 15 attached at Appendix D shows the AM peak traffic flows associated with the remaining 250 homes and will be applied to the 2026 and 2033 assessment years. Figure 16 also at Appendix D shows the PM peak equivalent.



Client: Hodgetts Estates Limited Date: 1 November 2023

2026 Total Committed Development Flows

5.11 The committed development flows from the WCC Atherstone A5 PARAMICS model (2026), Arkall Farm (2026), Dunstall Lane (2026) and Core 42 developments have all been added together to generate the 2026 total committed traffic flows. Figure 17 attached at Appendix D shows the 2026 AM Peak and Figure 18 also at Appendix D shows the PM Peak equivalent.

2033 Total Committed Development Flows

5.12 Similarly, the committed development flows from the WCC Atherstone A5 PARAMICS model (2033), Arkall Farm (2033), Dunstall Lane (2033) and Core 42 developments have all been added together to generate the 2033 total committed traffic flows. Figure 19 attached at Appendix D shows the 2033 AM Peak and Figure 20 also at Appendix D shows the PM Peak equivalent.

Traffic Growth

- 5.13 For the remainder of the committed developments neither included in the WCC Atherstone A5 PARAMICS model nor added manually based on extracts from the approved TAs, it is necessary to capture their traffic flows within a background growth factor.
- 5.14 DfT have released TEMPro v8, which replaces v7.2c, however the 2022 update to the National Trip End Model (NTEM) using National Road Traffic Projections 22 (NRTP 22) is not fully functioning with alternative planning assumptions until the release of TEMPro v8.1, due later in 2023.
- 5.15 It has been agreed with NH, WCC and SCC, in the first instance, to compare the traffic growth factors using those from the TEMPro v7.2c utilising Road Traffic Forecasts 18 (RTF 18) and later do so with TEMPro v8.1 and NRTP 22 when available.
- For the purpose of agreeing the TEMPro 7.2c growth factors, the methodology and planning assumptions are discussed below.

2023 to 2026 Growth Factors

5.17 Traffic flows surveyed in 2023 will be projected to 2026 by applying factors extracted from DfT's TEMPRO v7.2c program using the definitive NTEM v7.2c database and the current RTF



Client: Hodgetts Estates Limited Date: 1 November 2023

2018 dataset in line with TAG Unit M4 Forecasting and Uncertainty. As all committed developments within the North Warwickshire and Tamworth regions are being considered, the growth factors for both areas have been derived. Following discussions with DfT there is no function to combine cross boundary authorities together, it is up to the user and local authorities to agree a suitable local approach. It is considered that taking the average of the growth factors for North Warwickshire and Tamworth then applying it to the 2023 surveyed flows is appropriate.

- 5.18 TEMPro includes growth for committed and Local Plan allocation sites, therefore in the Reference Case scenario it is important to exclude projections for Local Plan sites which do not benefit from planning permission, this is discussed in more detail below.
- 5.19 Table 5.1 below shows the planning assumptions for households and jobs in North Warwickshire and Tamworth from 2023 to 2026.

Table 5.1: TEMPro 2023 to 2026 Household and Employment Projections

	Households			Emp	oloyment (j	obs)
	2023	2026	Increase	2023	2026	Increase
Tamworth	34103	34725	+622	33286	33581	+295
North Warwickshire	27849	28202	+353	43199	43580	+381

In Tamworth TEMPro assumes 622 new homes will be constructed from 2023 to 2026. Following a review of Table 1 from Table v7 at Appendix C, it can be seen that traffic generated from 796 new homes with planning permission has been manually added onto the road network. The traffic flows are discussed earlier in this Chapter. Therefore the 622 new homes projected in TEMPro have been accounted for already within committed developments and so they can removed from the growth factor to avoid double counting. However, there is one site (Coton House Farm) for 141 dwellings which has not been manually added within committed developments, therefore those new homes have been added back into the TEMPro growth.

5.21 In North Warwickshire TEMPro assumes 353 new homes will be constructed from 2023 to 2026. Following a review of Table 1 from Table v7 at Appendix C, it can be seen that traffic generated from 217 new homes with planning permission has been manually added onto the road network, thus leaving a residual of 136 new homes. These are Local Plan sites which do not yet benefit from planning permission, not to be considered in the Reference Case, so the



Client: Hodgetts Estates Limited Date: 1 November 2023

residual 136 new homes can be removed. However, there is one site (Land off Spon Lane) for 4 dwellings which has not been manually added within committed developments, therefore those new homes have been added back into the TEMPro growth.

- For the employment in Tamworth, TEMPro assumes an increase of 295 jobs. Following a review of Table 2 from Table v7 at Appendix C, there is only 1 committed employment site in Tamworth and that is fully built and occupied hence its traffic flows will be included in the July 2023 surveys. Therefore, it is reasonable to assume the extra 295 jobs in TEMPro are associated with the Local Plan sites and can be removed from the projections.
- For the employment in North Warwickshire, TEMPro assumes an increase of 381 jobs. Following a review of Table 2 from Table v7 at Appendix C, there are several committed employment sites in North Warwickshire which are either fully built and occupied or their traffic generations have been included in the Vectos WCC Atherstone A5 PARAMICS model, one being the Land at Rowland Way generating an extra 425 jobs. Therefore, TEMPro will be adjusted, removing the extra 381 jobs to avoid double counting. However, there is one site (Land off Carlyon Road Industrial Estate) which is fully built but not yet occupied that will create an extra 170 jobs, therefore they have been added back into the TEMPro growth.

5.24 Table 5.2 below summarises the 2023 to 2026 TEMPro adjustments for the Reference Case.

Table 5.2: TEMPro Adjusted 2023 to 2026 Household and Employment Projections (Reference Case)

	Households			Employment (jobs)		
	2023	2026	Increase	2023	2026	Increase
Tamworth	34,103	34,244	+141	33,286	33,286	+0
TNorth Warwickshire	27,849	27,853	+4	43,199	43,369	+170

5.26 The RTF 2018 NTM dataset was used and "Trunk" was selected as the road type. Table 5.3 below summarises the growth factors for Tamworth and North Warwickshire along with the average rates that will be applied to the July 2023 surveyed PCU flows.

Table 5.3: TEMPro 2023 to 2026 Growth Factors (Reference Case)

	Pe	Period		
	AM Peak	PM Peak		
Tamworth	1.0088	1.0082		
North Warwickshire	1.0072	1.0076		
Average	1.008	1.0079		



5.25



Client: Hodgetts Estates Limited Date: 1 November 2023

2023 to 2033 Growth Factors

- 5.27 The methodology discussed above for the 2023 to 2026 growth factors has been followed for the those from 2023 to 2033.
- 5.28 Table 5.4 below shows the planning assumptions in households and jobs in North Warwickshire and Tamworth from 2023 to 2033.

Table 5.4: TEMPro 2023 to 2033 Household and Employment Projections

	Households			Emp	oloyment (je	obs)
	2023	2033	Increase	2023	2033	Increase
Tamworth	34,103	36,209	+2,106	33,286	34,202	+916
North Warwickshire	27,849	29,336	+1,487	43,199	44,387	+1,188

- In Tamworth TEMPro assumes 2,106 new homes will be constructed from 2023 to 2033. Following a review of Table 1 from Table v7 at Appendix C, it can be seen that traffic generated from 894 new homes with planning permission has been manually added onto the road network, thus leaving a residual of 1,212 new homes. These are Local Plan sites which do not yet benefit from planning permission, not to be considered in the Reference Case, so the residual 1,212 new homes can be removed. However, there is one site (Coton House Farm) for 141 dwellings which has not been manually added within committed developments, therefore those new homes have been added back into the TEMPro growth.
- In North Warwickshire TEMPro assumes 1,487 new homes will be constructed from 2023 to 2033. Following a review of Table 1 from Table v7 at Appendix C, it can be seen that traffic generated from 1,319 new homes has been manually added onto the road network, thus leaving a residual of 168 new homes. These are Local Plan sites which do not yet benefit from planning permission, not to be considered in the Reference Case, so the residual 1,212 new homes can be removed. However, there is one site (Land off Spoon Lane) for 4 dwellings which has not been manually added within committed developments, therefore those new homes have been added back into the TEMPro growth.
- For the employment in Tamworth, TEMPro assumes an increase of 916 jobs. Following a review of Table 2 from Table v7 at Appendix C, there is only 1 committed employment site in Tamworth and that is fully built and occupied hence its traffic flows will be included in the July 2023 surveys. Therefore, it is reasonable to assume the extra 916 jobs in TEMPro are associated with the Local Plan sites and can be removed from the projections.



Client: Hodgetts Estates Limited Date: 1 November 2023

For the employment in North Warwickshire, TEMPro assumes an increase of 1,188 jobs. Following a review of Table 2 from Table v7 at Appendix C, there are several committed employment sites which are either fully built and occupied or their traffic generations have been included in the Vectos WCC Atherstone A5 PARAMICS model, one being the Land at Rowland Way generating an extra 425 jobs. Therefore, TEMPro will be adjusted, removing the extra 1,188 jobs to avoid double counting. However, there is one site (Land off Carlyon Road Industrial Estate) which is fully built but not yet occupied that will create an extra 170 jobs, therefore they have been added back into the TEMPro growth.

5.33 Table 5.5 below summarises the 2023 to 2033 TEMPro adjustments for the Reference Case.

Table 5.5: TEMPro Adjusted 2023 to 2033 Household and Employment Projections (Reference Case)

	Households			Employment (jobs)		
	2023	2033	Increase	2023	2033	Increase
Tamworth	34,103	34,244	+141	33,286	33,286	+0
North Warwickshire	27,849	27,853	+4	43,199	43,369	+170

5.34 The RTF 2018 NTM dataset was used and "Trunk" was selected as the road type. Table 5.6 below summarises the growth factors for Tamworth and North Warwickshire along with the average rates that will be applied to the July 2023 surveyed PCU flows.

Table 5.6: TEMPro 2023 to 2033 Growth Factors (Reference Case)

	Pe	riod
	AM Peak	PM Peak
Tamworth	1.0278	1.0251
North Warwickshire	1.0228	1.0241
Average	1.0253	1.0246

No Development Flows

- 5.35 The relevant committed development flows will be added to the 2023 baseline traffic to generate the 2026 and 2033 Reference Case No Development flows.
- 5.36 The following scenarios will be modelled in the AM peak (08:00 to 09:00) and PM peak (17:00 to 18:00) periods;
 - a) 2026 Reference Case No Development
 - b) 2031 Reference Case No Development



Client: Hodgetts Estates Limited Date: 1 November 2023

Development Generated Traffic Flows

5.37 The development generated flows (PCU) have been extracted from the WCC Atherstone A5 PARAMICS model. Figure 21 attached at Appendix E shows the AM Peak traffic and Figure 22 also at Appendix E shows the PM Peak equivalent.

With Development Flows

- 5.38 The development generated flows will be added to the 2026 and 2033 Reference Case No Development traffic to generate the 2026 and 2033 Reference Case With Development flows.
- Once the 2023 TRANSYT baseline model is approved, the proposed site access junction as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0002 Rev P01 attached at Appendix G will be coded into the model. Based on previous future year modelling work it has been identified that a mitigation scheme is required at Junction 10, whilst also providing foot/ cycle enhancements. It is considered this scheme will again be required, therefore the Junction 10 improvement drawings as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0001 Rev P03 attached at Appendix F will also be coded into the model.
- 5.40 Following the modelling work, if further mitigation is required over and above that identified already at Junction 10, a scheme will be developed and the model adjusted to incorporate the necessary improvements.
- 5.41 The following scenarios will be modelled in the AM peak (08:00 to 09:00) and PM peak (17:00 to 18:00) periods;
 - c) 2026 Reference Case With Development
 - d) 2033 Reference Case With Development
- The A5/ Long Street/ Gypsy Lane (Dordon) roundabout junction will be upgraded as part of the Dordon to Atherstone project. A scheme has been developed by WCC through the Housing Infrastructure Grant (HIG) in 2019, provided by the Department for Levelling Up, Housing and Communities. The application is supported by NH. It was confirmed at the 23rd May 2023 meeting that the Dordon roundabout scheme is only to be included in the Local Plan assessment (see next chapter) therefore the existing arrangement will be retained in the 2026 and 2033 Reference Case assessments.



Client: Hodgetts Estates Limited Date: 1 November 2023

6 FUTURE YEAR ASSESSMENT – LOCAL PLAN CASE

Local Plan Allocations

As discussed in the 15th March 2023 meeting a future year assessment (2033) is required for the Local Plan case, i.e., with the traffic generated from the committed developments identified above, plus that from the Local Plan sites and their associated highway infrastructure schemes.

WCC Atherstone A5 PARAMICS Local Plan Allocations

- As agreed, the Local Plan Allocation generated traffic flows to be used within the TRANSYT model have been taken from the current WCC Atherstone A5 PARAMICS model. A thorough review of the Local Plan traffic flows have been undertaken and adjustments made for those developments partially built and occupied at the time of the traffic surveys to avoid double counting. The agreed adjustments are shown at Tables 3 and 4 attached at Appendix C.
- The majority of the Local Plan traffic flows have been extracted from the WCC Atherstone A5 PARAMICS model. Figure 1 attached at Appendix D shows the numbered turning movements TT have derived to assign the Local Plan traffic from the WCC Atherstone A5 PARAMICS model. Table G attached at Appendix F shows all of the Local Plan flows by movement number, assuming all are unoccupied. Table H shows the PM peak equivalent.
- In 2033 the agreed build out and occupations (see Appendix C) have been applied to the Local Plan developments and Table I attached at Appendix F shows the AM peak adjusted traffic that need to be added onto the baseline flows, also shown diagrammatically in Figure 23 also at Appendix F. Table J attached at Appendix F shows the PM peak adjusted traffic that need to be added onto the baseline flows, also shown diagrammatically in Figure 24 also at Appendix F.

Birch Coppice and Core 42 Local Plan Flows

As identified in Table 4 at Appendix C, there is a 5.1ha site at Birch Coppice and a 3.45ha site at Core 42 forming part of the Local Plan. In order to estimate the vehicle trips from these sites the July 2023 surveyed flows have been used on a pro rata basis. At Birch Coppice, 5.1ha of the currently built 145ha equates to 3.5%, and so 3.5% of the surveyed traffic flow in/ out of



Client: Hodgetts Estates Limited Date: 1 November 2023

Birch Coppice will represent the Local Plan site. At Core 42, 3.45ha of the currently built 17.13ha equates to 20.1%, and so 20.1% of the surveyed traffic flow in/ out of Core 42 will represent the Local Plan site.

6.6 Figure 11 attached at Appendix D shows the 2023 AM Peak surveyed flows and Figure 12 also at Appendix D shows the PM peak from which the Birch Coppice and Core 42 Local Plan sites have been derived. The Local Plan flows from Birch Coppice and Core 42 have been distributed around the road network based on the proposed development's traffic assignment, discussed later (see Figure 21 for the AM peak and Figure 22 for the PM peak both at Appendix E). Figure 25 attached at Appendix F shows the AM peak traffic flows associated with the Birch Coppice and Core 42 Local Plan sites and will be applied to the 2033 Local Plan assessment years. Figure 26 also at Appendix F shows the PM peak equivalent.

2033 Total Local Plan Allocation Flows

6.7 The Local Plan Allocation flows from the WCC Atherstone A5 PARAMICS model (2033) and the additional Local Plan Allocations at Birch Coppice and Core 42 have all been added together to generate the 2033 total Local Plan traffic flows. Figure 27 attached at Appendix F shows the 2033 AM Peak and Figure 28 also at Appendix F shows the PM Peak equivalent.

Traffic Growth

2023 to 2033 Growth Factors

- 6.8 The methodology discussed in Chapter 5 for the 2023 to 2033 growth factors has been followed for the Local Plan assessment.
- 6.9 Table 6.1 below shows the planning assumptions in households and jobs in North Warwickshire and Tamworth from 2023 to 2033.

Table 6.1: TEMPro 2023 to 2033 Household and Employment Projections

	Households		Employment (jobs		obs)	
	2023	2033	Increase	2023	2033	Increase
Tamworth	34,103	36,209	+2,106	33,286	34,202	+916
North Warwickshire	27,849	29,336	+1,487	43,199	44,387	+1,188





Client: Hodgetts Estates Limited Date: 1 November 2023

- 6.10 In Tamworth TEMPro assumes 2,106 new homes will be constructed from 2023 to 2033. Following a review of Table 1 from Table v7 at Appendix C, it can be seen that traffic generated from 894 new homes with planning permission has been manually added onto the road network, thus leaving a residual of 1,212 new homes. The residual 1,212 new homes have been retained in TEMPro for the Local Plan growth. It has been assumed the 1,212 new homes includes the Coton House Farm committed site for 141 new dwellings.
- In North Warwickshire TEMPro assumes 1,487 new homes will be constructed from 2023 to 2033. Following a review of Table 1 from Table v7 at Appendix C, it can be seen that traffic generated from 1,319 new homes with planning permission has been manually added onto the road network, thus leaving a residual of 168 new homes. However, following a further review of Table 3 from Table v7, there are another 1,135 homes among the Local Plan sites that have not been added manually, therefore the residual of 168 new homes in TEMPro has been replaced with an allowance of 1,135 new homes.
- For the employment in Tamworth, TEMPro assumes an increase of 916 jobs. Following a review of Table 2 from Table v7 at Appendix C, there is only 1 committed employment site in Tamworth and that is fully built and occupied hence its traffic flows will be included in the July 2023 surveys. Following a review of Table 4 from Table v7 at Appendix C, there are 4 Local Plan employment sites in Tamworth, totalling 13.14ha. Of the 13.14ha, 0.75ha is built and occupied at the time of the July 2023 surveys therefore, the extra 916 jobs has been factored down by 5.7% (0.75/ 13.14) which is a reduction of 52 jobs, leaving a total of extra 864 jobs to be retained in the TEMPro assumptions.
- 6.13 For the employment in North Warwickshire, TEMPro assumes an increase of 1,188 jobs. Following a review of Table 2 from Table v7 at Appendix C, there are several committed employment sites which are either fully built and occupied or their traffic generations have been included in the Vectos WCC Atherstone A5 PARAMICS model, one being the Land at Rowland Way generating an extra 425 jobs, leaving a residual of extra 763 jobs. There is one site (Land off Carlyon Road Industrial Estate) which is fully built but not yet occupied that will create an extra 170 jobs and as they have not been added manually the extra 170 jobs need to be included in TEMPro growth. It is reasonable to assume the remaining extra 593 jobs (763 170) are associated with the 3 Local Plan employment sites yet to be built and totalling 50.55ha as listed in Table 4 from Table v7 at Appendix C. The traffic flows associated with



Client: Hodgetts Estates Limited Date: 1 November 2023

these 3 sites have been accounted for in the Vectos WCC Atherstone A5 PARAMICS model or uplifting surveyed flow data, therefore they can be removed from the TEMPro growth.

6.14 Table 6.2 below summarises the 2023 to 2033 TEMPro adjustments for the Local Plan Case.

Table 6.2: TEMPro Adjusted 2023 to 2033 Household and Employment Projections (Local Plan Case)

	Households			Employment (jobs)		
	2023	2033	Increase	2023	2033	Increase
Tamworth	34,103	35,315	+1,212	33,286	34,150	+864
North Warwickshire	27,849	28,984	+1,135	43,199	43,369	+170

6.15 The RTF 2018 NTM dataset was used and "Trunk" was selected as the road type. Table 6.3 below summarises the growth factors for Tamworth and North Warwickshire along with the average rates that will be applied to the July 2023 surveyed PCU flows.

Table 6.3: TEMPro 2023 to 2033 Growth Factors (Local Plan Case)

	Period		
	AM Peak	PM Peak	
Tamworth	1.0570	1.0544	
North Warwickshire	1.0399	1.0417	
Average	1.0485	1.0481	

Local Plan Allocation Infrastructure

- As discussed and agreed previously, a future year assessment is required for the Local Plan case, which includes all the Local Plan allocations and their associated highway infrastructure.
- 6.17 The Local Plan includes a mitigation scheme at Junction 10 shown at Phil Jones Associates Drawing 02853-01 Rev A attached at Appendix H. It was agreed at the 15th March 2023 meeting with NH and WCC that when assessing the road network including the traffic associated with the Local Plan allocations, the scheme at Junction 10 also must be included.
- 6.18 The A5/ Long Street/ Gypsy Lane roundabout junction will be upgraded as part of the Dordon to Atherstone project and identified as ID6 in the North Warwickshire Infrastructure Delivery Plan, dated March 2018. A scheme has been developed by WCC through the Housing



Client: Hodgetts Estates Limited Date: 1 November 2023

Infrastructure Grant (HIG) in 2019, provided by the Department for Levelling Up, Housing and Communities. The application is supported by NH.

- A Public Consultation Event ran for 7 weeks up to 27th October 2022 which presented 3 options, all of which involve a bypass carriageway to the South of the current A5 between Dordon roundabout to a point 500m west of Grendon roundabout, the results of which are attached at Appendix I. Option B is the preferred scheme to be taken forwards. However, the initial funding was allocated for a signalised junction as shown at Option A.
- 6.20 Given the uncertainty of the scheme to be progressed, NH advised (at the 23rd May 2023 meeting) the No Development model should be tested with the current proposal in the Local Plan (ID 6), that is Option A (signalised junction).
- In addition there will be a new link road between the B5000 and the A5, with a 40mph speed limit and will connect to a new A5 roundabout junction to the east of Green Lane which will serve the new Grendon bypass. In order to appreciate how it might affect the baseline traffic in 2033, Vectos ran their model with and without the link road and provided traffic turning matrices for both scenarios as well as the percentage changes in baseline traffic flow at each of the junctions to be assessed. To consider applying a change the baseline traffic flows in 2033, the following criteria have been set;
 - the absolute change in vehicle flow on any movement is +/- 50pcu and
 - the percentage change in vehicle flow on any movement is +/- 10%
- The results at the junctions to be included in the TRANSYT model are attached at Appendix J and it shows that in only two instances (on the A5/ Gypsy Lane/ Long Lane junction) is the absolute change in flow +/- 50 and on those relatively lightly trafficked movements the % change is greater than 10%. However in both the AM and PM peak hours the traffic impacts of the link road at the junction overall are minor, i.e. less than 1% in the AM and 2% in the PM. So on balance it is considered the A5 to B5000 link road has minor effects to the baseline flows across the Transyt network so no adjustment will be made to the 2033 Local Plan scenario.



Client: Hodgetts Estates Limited Date: 1 November 2023

No Development Flows

- 6.23 The 2033 total committed development flows (Figure 19 and 20 at Appendix D) and the 2033 total Local Plan flows (Figures 27 and 28 at Appendix F) will be added to the 2023 baseline traffic to generate the 2033 Local Plan Case No Development flows.
- The following scenario will be modelled in the AM peak (08:00 to 09:00) and PM peak (17:00 to 18:00) periods;
 - e) 2033 Local Plan Case No Development

Development Generated Traffic Flows

The development generated flows (PCU) have been extracted from the WCC Atherstone A5 Paramics model. Figure 21 attached at Appendix E shows the AM Peak traffic and Figure 22 also at Appendix E shows the PM Peak equivalent.

With Development Flows

- The development generated flows will be added to the 2033 Local Plan Case No Development traffic to generate the 2033 Local Plan Case With Development flows.
- 6.27 The following scenario will be modelled in the AM peak (08:00 to 09:00) and PM peak (17:00 to 18:00) periods;
 - f) 2033 Local Plan Case With Development

7 TECHNICAL NOTE

7.1 A Technical Note will be produced detailing the modelling results for all scenarios discussed above. The Note will be issued to WCC, SCC and NH for review.





Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX A

Meeting Notes

Project Number:	784-B033920
Project Title:	PAP/2021/0663 - Land NE of M42 J10 Atherstone/ A5 model
Meeting:	A5 Atherstone Model, TT TRANSYT Model
Held At:	Teams
Date and Time:	15 th March 2023
Minutes Taken By:	Gareth Wakenshaw
	Andrew Collinson (AC); NWBC
	Ben Simm (BS); National Highways (NH)
Attornatore	Alan Law (AL), Tony Burrows (TB), Moises Muguerza (MM); WCC
Attendees:	Amrit Mudhar (AM), Will Spencer (WS); SCC
	Nick Bunn (NB), Gareth Wakenshaw (GW); Tetra Tech (TT)
	David Hodgetts (DH), Edward Hodgetts (EH), Jane Hodgetts (JH); Hodgetts Estates (HE)
Apologies:	

1. Introductions

- As requested by AM, it was agreed that identified monthly meetings would be useful to keep track on the application. **Action: AC to set up monthly meetings**

2. Transyt Model

i) AECOM technical comments

- BS identified that NH will issue AECOM comments to TT's TRANSYT response by the end of the week. **Action: BS to issue comments**

ii) Flows to use & growth

- It was agreed that Option 3 in TT email 23 Feb was an acceptable means of assessing the highway impacts of the proposed development and avoided the need to wait until the WCC A5 Corridor model is ready. The junctions are to be resurveyed in March/ April 2023 survey counts. NB asked that the highways authorities advise of any committed works which might interfere with the survey timeframe. Action: TT to appoint surveys and get survey permissions/ permits. NH/SCC/WCC to advise of committed works.
- AM requested a week long ATC surveys to validate the turning counts, and AL suggested that there should ideally be 1 west of the Jn 10, 1 set east of Jn10 and 1 set E of Core 42. **Action TT to arrange additional surveys. Post meet note:** survey firm advised of safety issues placing ATC on the A5 west of Jn10. Suggested ATC locations attached.

- It was also agreed that committed development and local plan allocation traffic flows can be extracted from the A5/ Atherstone model. **Action: TT to request flows from Vectos.**
- Assessment years were agreed to be 2026 and 2033 (End of local Plan). **Action: TT to provide growth factors for approval**
- AC/ AM requires Staffordshire committed developments to be reviewed to see if any more recent additions. Action: TT to contact Richard Powell – please pass on contact details. Post meet note: GW emailed Richard Powell.
- It was agreed that the committed developments would be reviewed with AC and Richard Powell of Tamworth so that completed development can be removed and the flows for part completed development can be adjusted accordingly. Action TT to review Committed Developments with NWBC and TBC. Post meet note: TT are reviewing the current applications and taking an initial estimate of their build out completions (and occupations) and forecast for 2026 and 2033 to be issued for review this week.

iii) Extent of model

- It was agreed that the extent of TRANSYT model include A5/ Pennine Way roundabout junctions in the west, M42 Jn10, A5/ Birch Coppice, A5/ Core 42 and A5/ Dordon roundabout. **Action TT to extend proposed surveys to include A5/ Dordon roundabout.**
- It was noted that the A5/ Dordon roundabout affected by the Dordon to Atherstone improvement scheme which was out to public consultation last October. The exact scheme to assess in 2033 is not confirmed. At present the A5/ Atherstone model includes Option A (Traffic Signals) but latest consultation shows that Option B (roundabout) is the preferred option. BS stated that NH does not have a preferred scheme at the present time and this will not be confirmed until PCF Stage 3. AL advised that agreement with Homes England is for the scheme to be delivered in start in 2028. AL further confirmed that the scheme was independent of RIS3. AL advised that WCC preference was Option 2. BS noted that NH had not yet announced the preferred scheme. NB suggested that for completeness, TT could assess both the Option A and Options B schemes. AL noted that WCC has a recovery and recycling strategy agreed with Homes England and that any impacts of the proposals on the junction could be subject to contributions therefore. Action: AL and BS to speak to colleagues and advise which option(s) to assess in the future year.
- BS discussed the impacts at Longshoot/Dodwells remote from the site further to the east, which has capacity constraints. In particular the potential volume of HGV traffic generated by the site. The Land at Padge Hall Farm application (employment uses) (Rugby Borough Council ref. R21/0985) was approved nearby and will deepen the c/w under the Watling Street Bridge and thus make the A5 corridor to the M69 more attractive for HGVs. BS would like to see traffic flow predictions along this route to rule out the need for any assessment. NB noted the Jn10 development site's proximity to Birch Coppice and that some 10% of goods lifted could be by rail-freight based on a study attached to the TA. Although no reductions has yet been applied to the development generated flows, this would be a consideration under Circular 01/2022 and the potential impact at Longshoot/Dodwells. Action: TT to request development traffic flows (cars and HGVs) from Vectos to establish the volume of traffic (particularly for HGVs) to/ from Longshoot/Dodwells.

iv) Use of Transyt

 AL queried the use of Transyt. NB offered to liaise with TRL to provide advice direct to WCC on Transyt. It was agreed by all parties that Transyt is appropriate to assess the agreed model area (which includes both the signal controlled junctions and priority controlled roundabouts).

3. WCC Licence

AL agreed to the use of the existing A5/ Atherstone model and for HE to enter into the WCC licence agreement. As HE already paid for the licence, AL/ MM will advise of a reduced rate. Action: TT/ HE to submit licence application doc and discuss fees with AL. Post meet note: TT submitted licence application and await WCC response for payment to be made.

4. Site Access Design

- NB discussed the SSD to back of predicted queue and embankment can be amended to suit. BS confirms asset team will not review the layout until the modelling work is completed and agreed. It was agreed that the SSD to the junction should be based on the observed speeds. BS had concerns with the radar speed meter method and requested a verification from an ATC. Action: TT to arrange ATC. Post meet note: Suggested ATC locations attached.
- BS noted that the segregated left turn lane (from the Local Plan scheme) has been removed from TT proposal. NB confirmed that the Transyt modelling showed that the left turn slip was not necessary to cater for the Local Plan scenario. TT has identified the modelling works shows that the segregated left turn slip is not required even in the Local Plan scenario with Development. BS stated that as the proposals differ from the from the Local Plan scheme, the applicant will therefore be required to provide drawings showing the proposed improvements at M42 Jn10. Action: TT to provide note and modelling results covering this point.

5. Proposed Improvements

- BS not consulted on foot/ cycleway on north side of M42 Jn10 / A5 proposals. Asset teams needs to review but appreciates they may need modelling work complete first. **Action: BS to ask Technical team to review the foot**/ **cycleway proposals.** Please see attached Appendix L from the Revised TA which includes the Site access, Jn10 and offline foot/ cycleway proposals.
- AM would like to see swept path drawings at the site access and at the A5 eastbound slip road from Pennine Way to J10. **Action: TT to provide swept path drawings.**
- AM would like confirmation on bus times and frequency into the site (i.e., bus schedule for both routes), PTS doesn't mention. **Action: TT to advise.**
- AL queried if there are ped/ cycle counts on northern bridge of J10. TT confirmed counts undertaken in 2022 at a number of locations. Action: AL to speak to cycling officer to see if counts undertaken in in 2022 are acceptable. Post meet note: For ease of refence please see attached Figure 2 from the Revised TA which shows the two-way 12 hour ped/ cycle counts in the area.
- BS recognises the new DfT Circular 01/2022 has active travel at its heart and sustainable transport options and promotion is critical in all new developments. NB acknowledged this and reiterated the excellent sustainable options the site is proposing, not only for the development itself but for the wider community by upgrading and providing new connections, effectively making routes both more attractive and shorter distances. The new Circular states measures to improve community connectivity and public transport accessibility, will be weighed against any negative safety, traffic flow, environmental and deliverability considerations. BS noted the site must have a robust Travel Plan with ambitious targets.

6. WCHAR, RSA1, GG104

- WCHAR will be revised. Action: TT to submit.
- BS no comments on the S1RSA brief until the junction modelling is complete and agreed.
- BS very important to get any Departures logged onto DAS and get approved before undertaking the S1RSA. **Action: TT to log Departures on DAS and put Ben down as the sponsor.**
- BS requires GG104 in accordance with new Circular. **Action: TT to provide a GG104 brief** to Ben for review.

7. Circular 01/2022 issues

- BS confirmed that a Vision document and Vision-led Travel Plan are required. BS confirmed no protocol yet set on these requirements but will be in a better position to advise next week. **Action:** BS to advise on requirements for a Vision-Led Travel Plan, etc.
- BS advised that the Coventry Gigafactory is a useful example to consider in the form of a Sustainable Transport Statement linked to the S106. NB confirmed that NH in North Tyneside have accepted one of our Vision Documents. BS offered to find and circulate the Sustainable Transport Statement for the Coventry Gigafactory. **Action: BS to find and circulate the Sustainable Transport Statement for the Coventry Gigafactory.**

8. WCC Update on A5 Corridor Model

- AL says the surveys are a month behind schedule but should be all complete end of April and data available in May. Confident that as the A5 corridor model to the M69 has limited route choice it should be possible to make up the time with the aim for future year models to be available in September.

9. Next Steps

- Arrange Monthly meetings. AC to arrange monthly meetings moving forwards.
- Review NH/ AECOM Transyt comments. **BS to issue and TT to review AECOM comments on Transyt model.**
- Arrange Traffic surveys. TT to arrange traffic surveys. Please confirm the proposed surveys (see attached PDF) are acceptable to be undertaken on Wednesday 19th April
- Extend Transyt model to include Pennine Way rbts and A5/ Dordon roundabout. TT to action.
- Renew Licence Agreement. TT/HE have applied for new licence, WCC to take payment from HE
- Extract committed development & local plan allocations traffic flows from A5/ Atherstone Model. **TT to action.**
- Review % complete on Committed Developments / allocations with TBC and NWBC. TT and AC to action.
- Confirm whether there are additional committed developments to be included. **TT to emailed Richard Prowell, await response.**
- Confirm future year junction(s) layouts to be assessed at A5/ Dordon roundabout. **BS and AL to advise on appropriate scheme(s) to assess.**
- TT to prepare a Consolidated Methodology Strategy Note to bring together all of the above items. **TT to action.**

10. AOB

- AM noted an article which stated that in order to meet net zero, there should be 35% electric car charging should be provided for fleets on site. AM accepted that this was only one source and confirmed that SCC would not object on this issue but stated a preference for an increase on the current offer of 10% EV charging and rapid charging points, as well as ducting for a further 15% of spaces to future proof the development (25% in total). Post Meet: it should be noted that ducting is being provided to 100% of commercial vehicle parking spaces (for both light vehicles and HGVs).
- AM, in future report submissions, please do not append previous submitted document. **TT to action.**
- AM, please provide TRANSYT outputs in reports. TT to action.
- AM explanation to why accident data is only provided pre Covid. NB explained Covid that lockdowns resulted in less traffic and therefore accident patterns and frequencies not typical of normal conditions. AM requested accident data for last three years regardless. **TT to action.**
- AM welcomed the bus service into the site (between Tamworth and Nuneaton) but would like to see offer of free bus taster tickets. **TT to review Travel Plan.**
- AM would like to see emergency lifts home extended to all employees and not just cyclists. TT to review Travel Plan.
- AM requested clarity on the extent of the 50mph zone. Post Meet: Please see attached drawings from TA Appendix L which show the indicative location proposals subject to agreement.
- AM offer to provide comprehensive list setting out the above points to TT. **AM to provide AOB points to TT.**

Date of Next Meeting:	TBC by AC
Date of Issue:	28 th March 2023
File Reference:	\\lds-dc-vm-101\Data\Projects\784-B033920 Land NE of M42 Jn10\40 Communications\42 Meetings

Project Number:	784-B033920
Project Title:	PAP/2021/0663 - Land NE of M42 J10 Atherstone/ A5 model
Meeting:	Highways
Held At:	Teams
Date and Time:	23 rd May 2023
Minutes Taken By:	Gareth Wakenshaw
	Andrew Collinson (AC); NWBC
	Ben Simm (BS), Patrick Thomas (PT); National Highways (NH)
Attendees:	Alan Law (AL), Tony Burrows (TB); WCC
	Amrit Mudhar (AM); SCC
	Nick Bunn (NB), Gareth Wakenshaw (GW); Tetra Tech (TT)
	David Hodgetts (DH); Hodgetts Estates (HE)
Apologies:	

1. Introductions

- PT to take over from BS on behalf of NH as BS is moving to work on a DCO scheme. All communications to go through PT, and BS to no longer be cc's on emails.

2. Update on 15th March 2023 Meeting

- NB gave a brief overview and noted that matters arising were covered in the main agenda.

3. Progress on A5 roadworks

- BS commented that Fiona McKenzie (NH route manager) confirmed 2 weeks ago that the A5 resurfacing works progressing well and on schedule. **Action: PT and BS to check with Fiona again and revert back.**

4. Circular 01/2022

- BS confirmed that as the modelling work is not complete, the application is subject to the new 01/2022 Circular.
- NB discussed the required process, i.e. vision document, vision-led Travel Plan and resultant trip reductions to be agreed.
- NB outlined the likely reductions in employee movements and HGV movements arising from use of the Birch Coppice rail freight terminal.
- BS happy with this approach but does require two scenarios to be assessed, i.e. "worst-case" with no trip reductions and "Sustainable Transport Case" with trip reductions for sustainable mode offerings.

- AL requires clear evidence for trip reductions and don't just apply a blanket reduction of all trips. For example, if a new foot/ cycleway crosses Junction 10, then trips on that particular OD movement within the model needs to be reduced for the transfer of a car trip to a walk/ cycle trip.

Action: TT to prepare and issue Vision document and vison led travel plan.

5. Transyt Model

i) TT response to AECOM comments

- GW discussed the main responses and those that require NH to agree Phase G at junctions 3 and 4 and saturation flows at the site access junction. Agreement is sought facilitate model preparation when the traffic data is received.
- Action: BS & PT to review with AECOM and respond.

ii) General Update

- GW talked through the progress table and thanked all for contributions to date, noted that a lot of progress has been made.
- Coton House Farm and Dunstall Lane developments not in Vectos paramics model flows, GW suggested to use Tempro growth. AM requires the TA's to be reviewed to see if the predicted trips can be extracted. AM said it is for NH to take a view. Action: TT to review TA's
- GW talked about the use of Tempro v8.1 upon release and will issue factors to apply to 2023 survey counts. AM wary of new growth factors and would like to see a comparison against Tempro v7.2c. Action GW: to issue both sets of growth factors for discussion (after v8.1 released). This will be included in the Consolidated Methodology Note.
- Dordon roundabout. All agreed 2026 and 2033 Reference case to model Dordon roundabout in its current arrangement. In the 2033 Local Plan scenario model Dordon roundabout as Option A Traffic Signals as in the current Local Plan scenario.
- NB discussed the potential effect of the A5 to B5000 link road on baseline traffic flows (Local Plan scenario only) and this is not accounted for from Vectos committed and local plan flow data . AL confirmed WCC don't have any baseline flow reductions etc that can be applied to the network but considers the link road will take traffic away from Dordon/ Long Street and not necessarily from the A5.
- NB advised that Vectos can do additional Local Plan +/- the link road to evaluate the traffic change. All agreed worthwhile exercise. Action: TT to instruct Vectos, analyse the data and revert back with findings and any proposed adjustments. This will be included in the Consolidated Methodology Note.
- AL sought confirmation from BS that WCC can review the Transyt model assessments/ review carried out by AECOM on behalf of NH.. BS explained that AECOM review all the TRANSYT inputs and the models are thoroughly checked over BS confirmed that the AECOM reviews can be shared with WCC and SCC. GW reiterated TRANSYT far better tool than LINSIG for complex and linked junctions where queuing back is an issue.

iii) 4th July Surveys

- All agreed 4th July surveys acceptable subject to A5 roadworks completed on time.
- AM requires confirmation of dates for ATC surveys. **Post meet note:** GW confirmed ATCs will cover Monday 3rd July to Sunday 9th July inclusive.

6. Site Access Design & Improvements

- NB discussed that we need early view back from NH on access junction and cycle proposals. BS & PT explained that ideally the modelling needs to be agreed first but

appreciate early views are sought. PT explained they will seek high level views from asset team but will be caveated that it is subject to the modelling results. Action: PT to instruct Asset team for review of proposals (GW sent at meeting) and revert back with comments.

- AM has no comments on the design as not affecting Staffordshire network. Post Meet Note: see image on last page, proposal is to convert the 2m footway into a shared/ cycleway (yellow highlight) and provide tactile paving at the uncontrolled crossing point. The shared foot/ cycleway route will terminate on Pennymoor Road and cyclists drop onto the carriageway. Amrit it would be useful for your comments as this is on part of Staffordshire network.
- BS requires Departure from Standards in design to be logged onto DAS and PT as sponsor. **Action: TT preparing and will log onto DAS system.**

7. Extent of highway maintainable at public expense by SoS on A5.

- BS acknowledges that this is with him to action. **Action: BS to send through plans.**
- NB queried whether the adoption of the slip road from the A5 to Kinsall Green had been adopted. The Sc106 Agreement for ACE135 (planning application reference 0646/2018) include a sum for its adoption.. **Action: PT to review and revert back.**

8. WCHAR, S1RSA and GG104

- WCHAR will be revised after modelling work agreed. **Action: TT to instruct Drummond Black after modelling approved.**
- S1RSA Brief, BS cant find CV's to the brief. BS agrees it will be good to get brief agreed in advance of modelling work. **Action: TT to send CV's to PT. Action: PT to review Brief.**
- GG104. PT confirms there is no formal brief to follow, NB proposed doing an informal GG104 brief, agreed this is appropriate. **Action: TT to send informal GG104 brief to PT.**

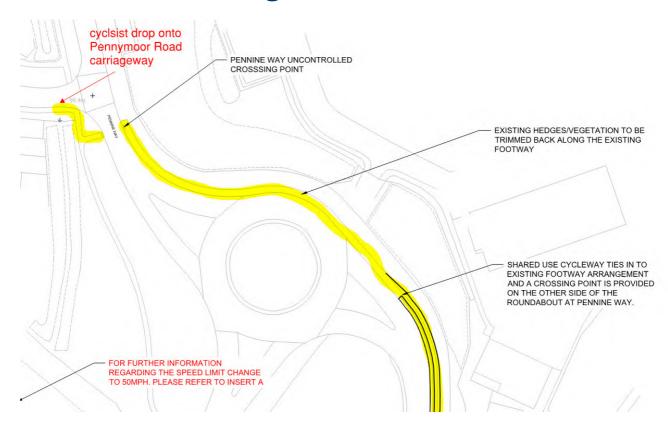
9. Next Steps

TT to prepare and issue meeting notes.

10. AOB

- Discussion around July meeting. All agreed to a meeting on July 26th. **Post meet note:** AC issued meeting invite for 2pm on Wednesday 26th July.

Date of Next Meeting:	28 th June 2023
Date of Issue:	24 th May 2023
File Reference:	\\lds-dc-vm-101\Data\Projects\784-B033920 Land NE of M42 Jn10\40 Communications\42 Meetings

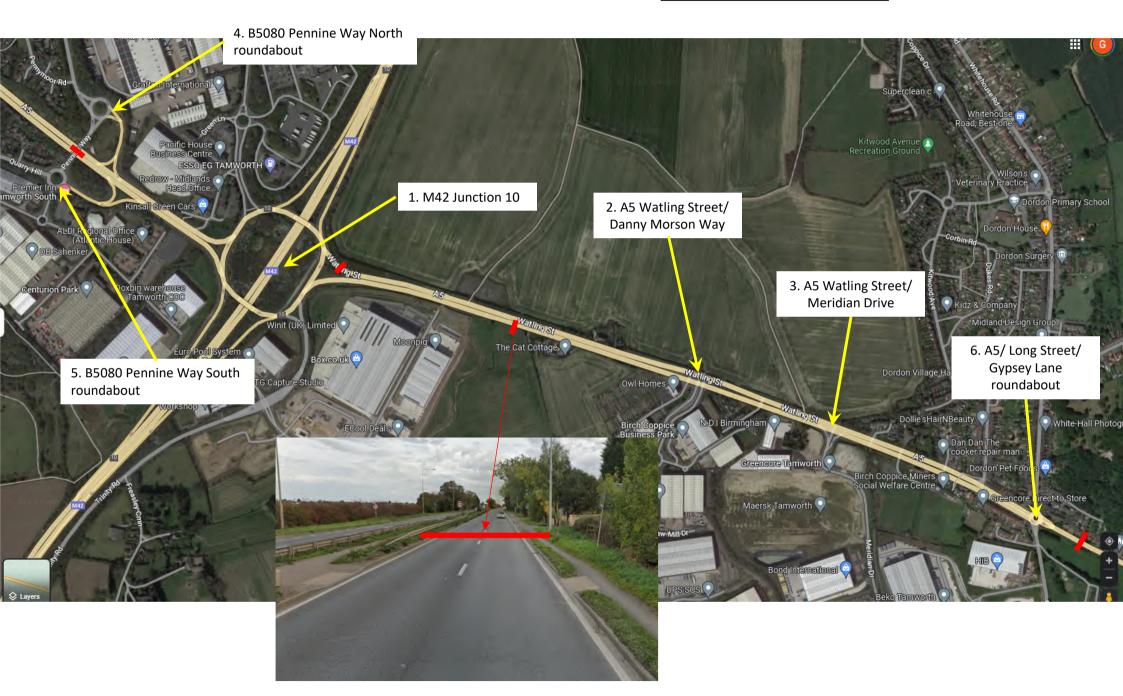


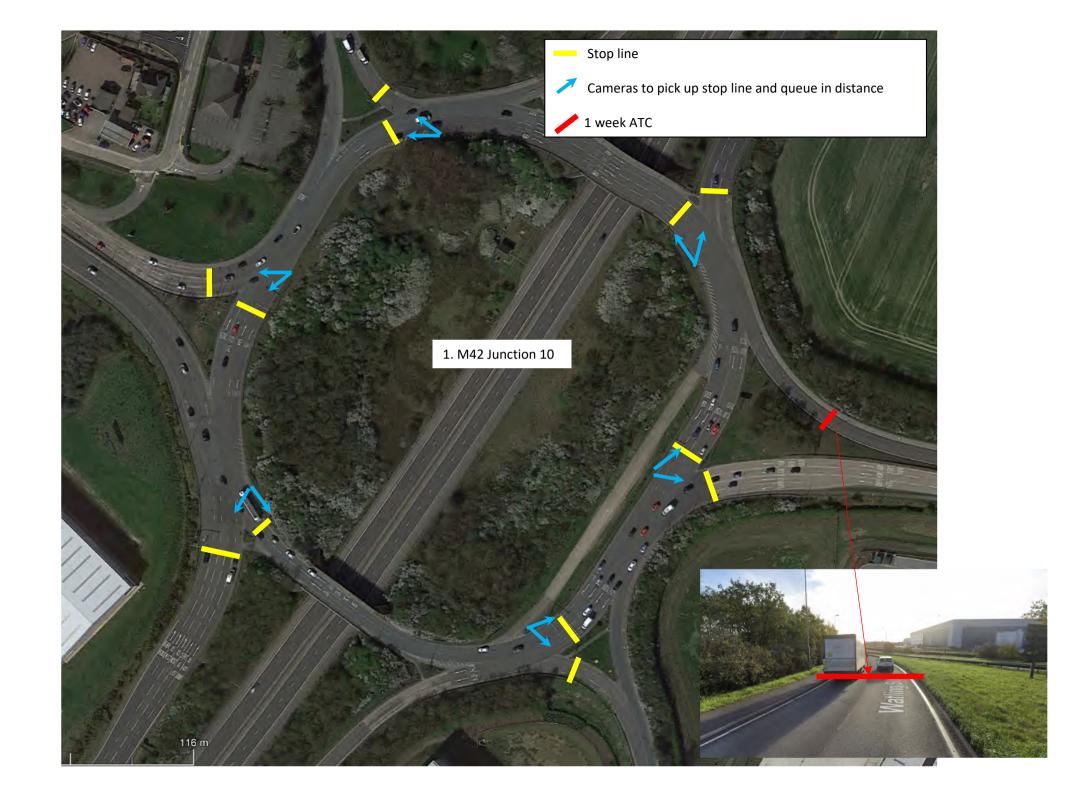


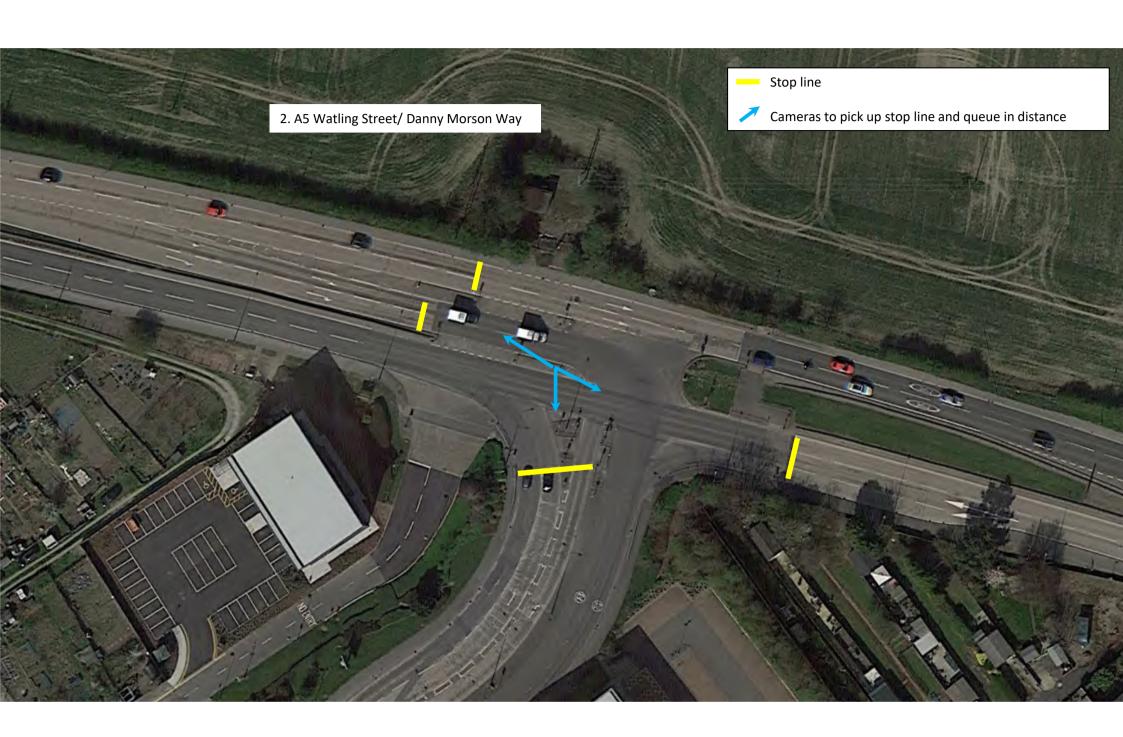
Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX B

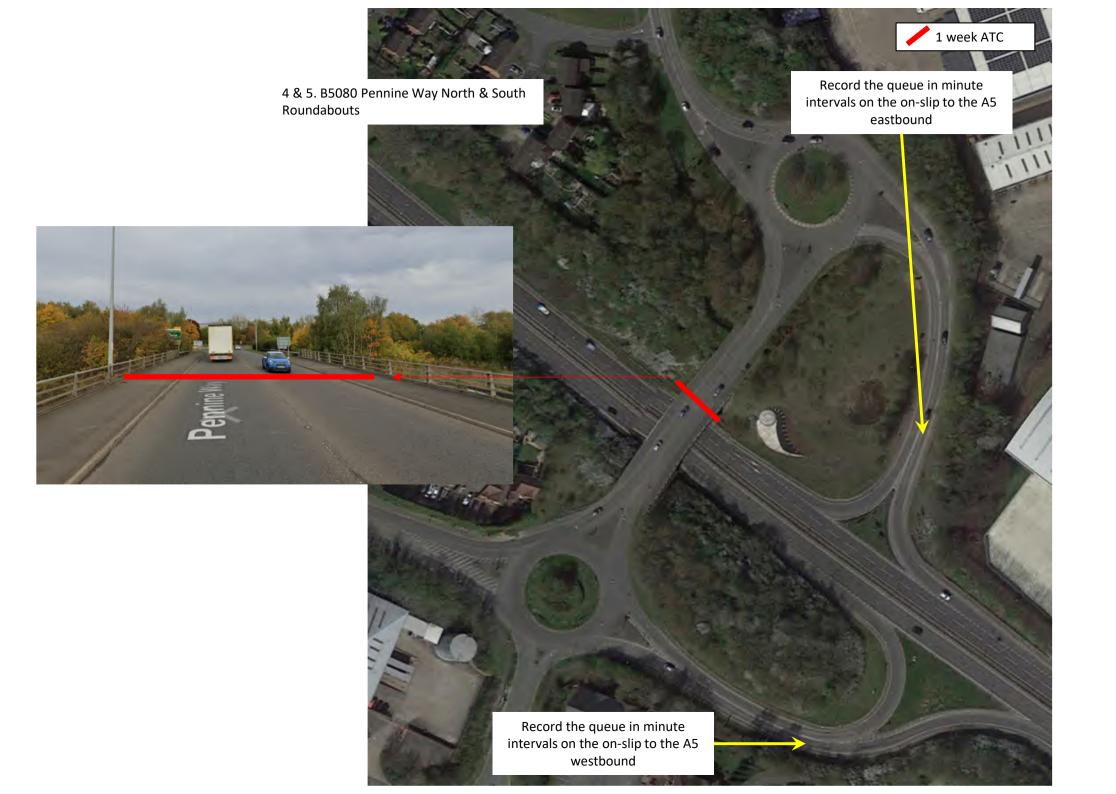
Traffic Survey Specification

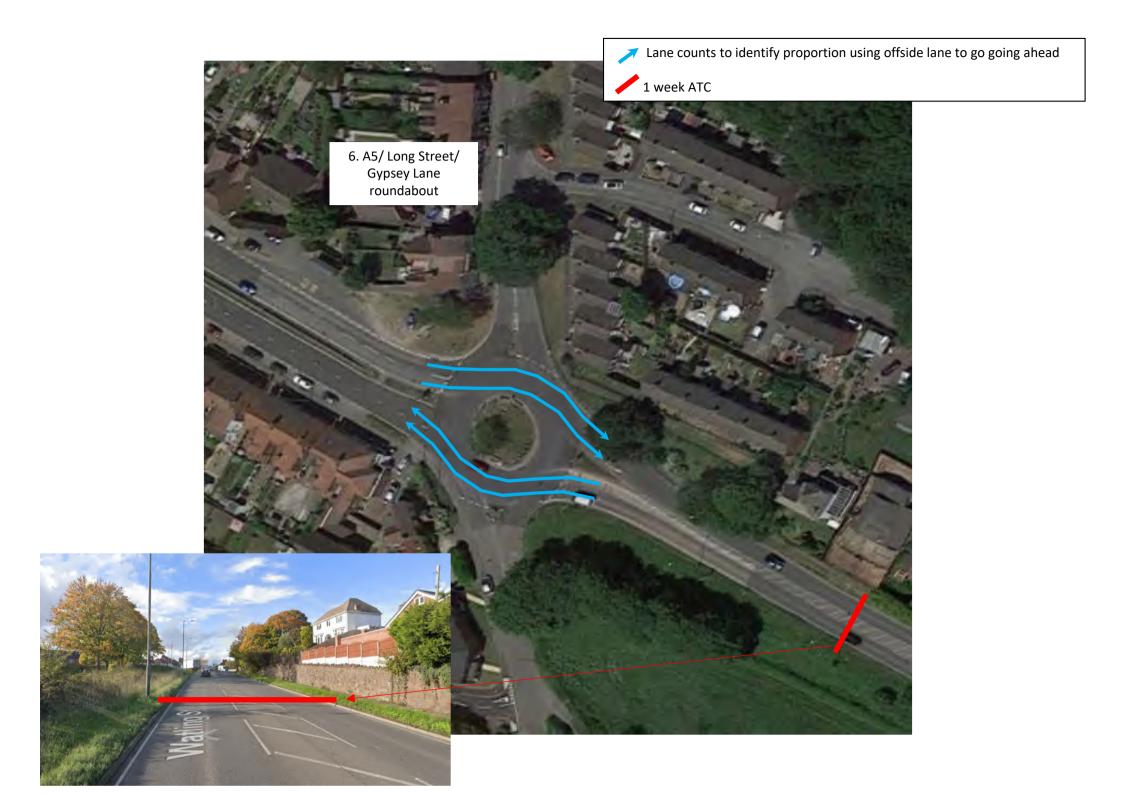














Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX C

Committed & Local Plan Sites & Build Out Rates

North Warwickshire Borough Council & Tamworth Borough Council - Committed & Local Plan Allocations (Residential & Employment) v7

Prepared by TetraTech (TT) for the purpose of establising committed and Local Plan allocation traffic flows to be included in the A5 TRANSYT model to support Hodgett Estates Planning Application PAP/2021/0663 Land North East of M42 Jn10 Oct-23

Estimated Occupied in Committed Development Residential Sites (Dwellings) Estimated Occupied in 2033 Policy Number Reference Number Notes Annroyed Units Estimated Occupied in 2026 Method for including traffic flows in TT's Transvt Model July 2023 Tamworth Golf Club 0088/2015 (Outline Partially built in April 2023 1100 1002 Flows from Vectos, A5 Atherstone Model 143 Flows from Vectos, A5 Atherstone Mo Land South of Dairy House Farm (Phase 1 and Phase 2) PAP/2013/0224 & PAP/2017/0156 Fully built & occupied in April 2023 205 Flows included in July 2023 surveys Land at Holly Lane PAP/2014/0542 (Ou 743 100 Flows from Vectos, A5 Atherstone Mode Fully built & occupied in April 2023 Land RO 5/7 Fairfields Hill PAP/2019/0689 Not Started Flows from Vectos, A5 Atherstone Mode PAP/2019/0180 Flows from Vectos, A5 Atherstone Mod Fully built & occupied in April 2023 Former Sparrowdale School Site/ Recycling Centre PAP/2019/0396 61 Flows included in July 2023 surveys Fully built & occupied in April 2023 Flows included in July 2023 surveys PAP/2017/0257 Not Started 500 100 Flows from Vectos, A5 Atherstone Mode PAP/2017/0229 Flows from Vectos, A5 Atherstone Mode Land West of Woodpack Farm Fully built & occupied in April 2023 Flows included in July 2023 surveys 0105/2014 - 555 dwellings 0331/2018 Anker Valley Flows derived taken from WYG TA, dated 2016 Partially built in April 2023 Coton House Farm 0020/2019 141 170 Traffic generations to be included in TEMPRO background Growth Fully built & occupied in April 2023 Land north of Coton Lane Flows included in July 2023 surveys PAP/2020/0082 Traffic generations to be included in TEMPRO background Growth Land off Spon Lane Arkall Farm, Land north of Ashby Road 14/00516/OUTMEI tarted 1000 116 431 ows derived from PBA assignment at M42 Jn 10. Await WCC acceptance 5477 2376 3708 Total Table 2: Committed Employment Sites ated Occupied in Occupied in 2033 Method for including traffic flows in TT's Transyt Model nmited Development Employment Sites Reference Number Approved Ha ated Occupied in 202 Occupied in 2026 imated Occupied in 2033 July 2023 (Staff) Plot 7, Birch Coppice Fully built & occupied in April 2023 Flows included in July 2023 surveys Danny Morson Way (Phase 1) Fully built & occupied in April 2023 Flows included in July 2023 surveys 1.15 PAP/2013/0269 PAP/2012/0347 Land At Hall End Farm 0.34ha left to develop 17.47 17.13 Uplift surveyed flows in/out of Core 42 by 2% (0.34ha/17.13ha) Fully built & occupied in April 2023 13.06 Aldi Foodstores LTD PAP/2012/0103 Fully built & occupied in April 2023 1.08 Flows included in July 2023 surveys Land to southeast of M42 J10 Trinity Road Fully built & occupied in April 2023 Flows included in July 2023 surveys PAP/2018/0159 Land at Rowland Way Employ Flows from Vectos, A5 Atherstone Mo Andrew Collinson ully built & occupied in April 2023 Flows included in July 2023 surveys TBC EMP8 Site at Relay Park 0464/2018 fully built & occupied in April 2023 2.84 Flows included in July 2023 surveys ully built & occupied in April 2023 lows included in July 2023 surveys Land off Carlyon Road Industrial Estate, Atherston Traffic generations to be included in TEMPRO backgro Fully built but not occupied 62.8 54.66 62.8 62.8 Table 3: Local Plan Allocation Residential Sites Map Ref Method for including traffic flows in TT's Transvt Model Local Plan Allocation Residential Sites (Dwellings) Allocated Units Estimated Occupied in 2026 Estimated Occupied in 2033 olicy Number omments July 2023 Flows from Vectos, A5 Atherstone Model Land at Whittingham Farm Adopted 2021 Local Plan 1282 Not Started Allotments adjacent to Memorial Park, Coleshill
Land East of Dordon & Polesworth Traffic generations to be included in TEMPRO background Growth Adopted 2021 Local Plan, changed from H7 1675 Flows from Vectos, A5 Atherstone Model Not Started Adopted 2021 Local Plan, changed from H13 Not Started 1270 150 Flows from Vectos, A5 Atherstone Model Adopted 2021 Local Plan, now a Reserved site Atherstone Football Ground Discount reserved housing site: 46 Do not include Land at Church Farm, Baddesley Adopted 2021 Local Plan Not Started Traffic generations to be included in TEMPRO background Growth Traffic generations to be included in TEMPRO background Growth Adopted 2021 Local Plan Not Started Land between Church Road and Nuneaton Road, Hartshill Land south of Coleshill Road, Ansley Common Adopted 2021 Local Plan Adopted 2021 Local Plan Traffic generations to be included in TEMPRO background Growth Traffic generations to be included in TEMPRO background Growth Not Started 400 Not Started Manor Farm Adopted 2021 Local Plan Ground works started 21 Traffic generations to be included in TEMPRO background Growth H15 Land south of Shuttington Village Hall Traffic generations to be included in TEMPRO background Growth Adopted 2021 Local Plan Not Started Land north of Orton Road Adopted 2021 Local Plan Ground works started 128 80 Traffic generations to be included in TEMPRO background Growth Land south of Islington Farm Traffic generations to be included in TEMPRO background Growt Adopted 2021 Local Plan Ground works started 5408 378 5132 Table 4: Local Plan Allocation Employment sites Estimated timated Occupied in nated Occupied in 2033 ocal Plan Allocation Employment Sites ated Occupied in 202 ccupied in 2026 ccupied in 2033 M ethod for including traffic flows in TT's Transyt Model (Staff) (Staff) Land North of Aldi Whittington Lane Fully built & occupied in April 2023 lows included in July 2023 surveys Sites at Centurian Park Fully built & occupied in April 2023 Flows included in July 2023 surveys plift surveyed flows in/out of Birch Coppice by 3.5% (5.1ha/145ha) Land to the West of Birch Coppice dopted 2021 Local Plan, changed from 8.55ha to 5.1ha Land including site of playing fields south of A5 Dordon, adjacent lot Started 3.45 Iplift surveyed flows in/out of Core 42 by 20.1% (3.45ha/17.13ha) to Hall End Farm Flows from Vectos, A5 Atherstone Mode Mira Technology Park PAP/2022/0423 Not Started 42 EMP 1 Land south of the A5, Bitterscote South
EMP 10 Vacant land and car oark off Sandy Way, Amington 0055/2018 - expired Not Started 9.8 Traffic generations to be included in TEMPRO background Growth

1.64

65.19

Traffic generations to be included in TEMPRO background Growth

Traffic generations to be included in TEMPRO background Growth

65.19

0337/2020

Not Started

Not Started

EMP 10, 30, 34

sites in North Warwickshire

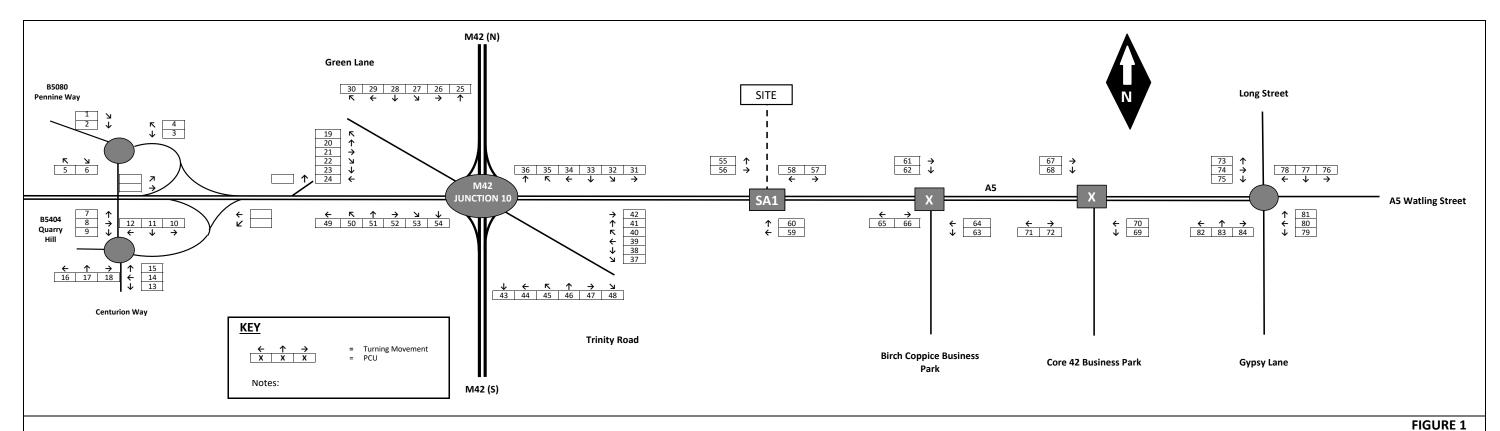
EMP 26 Land adjacent to Sandy Hill Business Park



Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX D

Committed Development Traffic Flows



Turning Movements for Committed & Local Plan Developments - VECTOS Data

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920



Table A - AM Peak Committed Developments 0% complete - VECTOS (PCU) Land South of																						
	Tamworth	Land South of	Dairy House Farm (Phase 1	Land at Rowlands	Land at Holly	Former Polesworth	Land RO 5/7	Former Brittania	Former Sparrowdale	Land at Former	Robey's	Land at Windy	Land West of	Aldi Foodstores	Land to Southeast M42 J10 Trinity	Land at Rowland Way	Darwell	Site at Relay	Land East of Centurion	Birch Coppice		
Committed Development		Grendon	and Phase 2)	Way	Lane	HighSchool		Mill	School Site/Recycling	-	Lane Ph1	Ridge	Woodpack Farm	Ltd	Road	(employment)	Park	Park	Road	Business Park	Total	
Total Dwellings No. Dwellings Occupied	1100 0	143 0	205 0	88 0	743 0	12 0	9 0	59 0	61 0	8 0	500 0	8 0	32 0	1.08 0	8 0	6.5 0	0.7 0	2.84 0	8.5 0	34 0		
Percentage Complete	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
HGV %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17.9%	0.0%	0.0%	4.2%	0.0%	0.7%		
Movement Number																						
Movement Number		18	2	0	0	0	0	0	2	0	60	0	2	10	52	0	0	25	0	81	391	1
2		12	0	0	0	2	0	0	0	0	10	0	2	0	0	0	2	0	0	0	46	2
3		0 2	0 0	0 0	0	0 2	0 0	0	0 0	0 0	0 4	0	0 2	0 0	0 0	0 0	0	0	0 0	0 0	0 16	3 4
5		2	4	0	0	0	0	0	2	0	20	0	2	0	21	2	6	8	0	18	140	5
6 7		0	0	0 0	0	0	0	0	0	0 0	0	0	0	2 2	7 7	0 0	0 4	0	0	8 8	17 21	6 7
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
9 10		0 12	0	0	0	0 2	0	0	0	0 0	0 10	0	0	0	0	0 0	0	0	0	0	0 44	9 10
11	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
12 13		0	0	0 0	0	0	0	0	0	0 0	0	0	0	0 2	0 5	0 0	2 0	0 2	0 82	0 18	2 109	12 13
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
15 16		2	4 0	0 0	0	0	0	0	2	0 0	20 0	0	2 0	0 0	21 0	2 0	2 0	6 0	0	18 0	134 0	15 16
17		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
18 19		0 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0 23	30 0	0	30 33	18 19
20		2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	8	20
21 22		0 2	8 0	0	0	0	0	0	4 0	0 0	18 10	0	0	24 0	0 113	0 0	0	0	0	222 0	328 151	21 22
23		8	0	0	0	0	0	0	0	0	26	0	2	0	0	0	0	0	0	0	86	23
24		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
25 26		0 0	0 2	0 0	0	0	0 0	0	0 0	0 0	0	0	0 0	0 0	0	0 0	0	2 4	0 0	0	2 6	25 26
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	4	27
28 29		0 0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0 2	0	0 0	0 0	0 0	0 0	0	4 10	0 2	0 0	4 18	28 29
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
31 32		0	0	0	0	0	0	0	0	0 0	0	0	0	4 0	0 24	0 0	0	0	0	10 0	14 24	31 32
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
34 35		0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0 0	0	0 10	8 0	0	10 10	34 35
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
37 38		0 2	4 16	0 2	0	0	0	0	0 4	0 2	0	0	0	0 2	73 0	0	0	0	0	10 20	87 48	37 38
39	14	0	16	2	0	0	0	2	4	2	4	0	0	2	0	2	2	0	50	87	187	39
40 41		0	0 0	0 0	0	0	0	0	0 2	0 0	0	0	0	0 0	0	0 0	0	13 0	0	2 22	15 24	40 41
42		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
43 44		0	0	0	0	0	0	0	0	0	0 4	0	0 2	0	5 47	0 0	0	0	0 4	0	5 67	43 44
45		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
46 47		0	0 0	0 0	0	0	0	0	0 0	0 0	0	0	0	0 2	9 42	0 0	0	0	0	0 22	9 67	46 47
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
49 50		2	0 0	0 0	0	0 0	0	0	0 0	0 0	10 0	0 0	0 0	0 0	0	0 0	0	0 27	18 0	0	52 27	49 50
51	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
52 53		0	6 0	0 0	0	0 0	0	0	2 0	0 0	0	0 0	0 0	8 0	0 28	<u>2</u> 0	0	0	0 0	56 0	74 28	52 53
54		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
55 56		0	0 16	0 0	0	0 0	0	0	0 6	0 0	0 18	0 2	0 0	0 38	2 40	0 0	0	0	0 0	0	4 168	55 56
57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55 56 57
58 59		0 2	0 38	0 4	0	0 0	0	0 2	0 10	0 4	0 4	0 2	0 0	0 4	0 73	0 0	0	0	0 0	0 0	0 157	58 59
60		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
61 62		0 0	16 0	0 0	0	0 0	0	0	6 0	0 0	10 8	2 0	0 0	38 0	14	0 0	0	0	0 0	0 0	116 52	61 62
63		4	6	2	0	0	0	2	0	0	0	0	2	0	26 0	0	0	0	0	0	16	63
64 65		2 0	38 0	4 0	0	0 0	0	2	10 0	4 0	2	2 0	0 0	4 0	61 12	0 0	0	0	0 0	0	135 22	63 64 65 66
66		0	2	0	0	0	2	0	2	0	0	0	0	2	0	0	0	0	0	0	8	66
67		0	16	0	0	0	2	0	6	0	10	2	0	40	14	0	0	0	0	0	118	67 68 69
68 69		0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0	0	0	0	69
70		6	46	6	0	0	0	4	10	4	2	2	2	4	61	0	0	0	0	0	153	70
71 72		0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0	0	0 0	0 0	0	71 72
73	2	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	6	72 73
74 75		0 0	12 0	0 0	0	0 0	0	0	4 0	0 0	10 0	0 0	0 0	24 0	9 0	0 0	0	0	0 0	0 0	83 0	74 75 76 77
76	0	0	2	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	10	76
77 78		0	0 0	0 0	0	0 0	0 0	0	0 0	0 4	0	0 2	0 0	0 0	0 14	0 0	0	0	0 0	0	0 20	77 78
79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
80 81		6 0	42 2	6 2	0	0 0	0 0	6 2	12 0	0 0	2	0	2 0	4 0	42 0	0 0	0	0	0 0	0 0	128 6	80 81
82	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	82
83 84		0 0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0	0	0 0	0 0	0	83 84
04	Ü	•	ū	•	-	•	•	-	ŭ	ŭ	-	•	ū	ŭ	•	·	•	-	•	ū	·	34

Table B - PM Peak Committed Developments 0% complete - VECTOS (PCU)

Table B - PM Peak Committed Developments 0% complete - VECTOS (PCU) Land South of																						
		Land	Dairy House	Land at	Land at	Former		Former				Land at		Aldi	Land to Southeast	Land at Rowland		Site at	Land East of			
		rth South			Holly		Land RO 5/7					Windy	Land West of	Foodstores	M42 J10 Trinity	Way	Darwell	Relay	Centurion	Birch Coppice		
Committed Development Total Dwellings	Golf C		n and Phase 2) 205	Way 88	Lane 743	HighSchool F	Fairfields Hill	Mill 59	School Site/Recycling 61	Chapel House 8	Lane Ph1 500	Ridge 8	Woodpack Farm 32	1.08	Road 8	(employment) 6.5	Park 0.7	Park 2.84	Road 8.5	Business Park 34	Total	
No. Dwellings Occupied	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Percentage Complete	0%		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
HGV %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17.9%	0.0%	0.0%	4.2%	0.0%	0.7%		
Movement Numbe		_	_		_		_	_		_		_	_					_	_			
	1 66 2 12	2 2	2 0	0	0	0	0	0	4	0 0	32 6	0	0	2 0	24 0	2 0	2	2	0	18 0	156 24	1 2
	3 0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	4	3
	4 18	10	0	0	0	2	2	0	0	0	6	0	2	0	0	0	0	0	0	0	40	4
	5 128		4	0	0	2	0	0	2	0	52	0	2	10 0	59	2	0	10	0	26	318	5 6
	6 0 7 0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	2	0 0	0	0	0	0	2	7
:	8 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	9 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
1 1		2 0	0	0	0 0	0	0	0	0	0	6 0	0	0	0	0 0	0 0	0	0	0	0	20 0	10 11
1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	12
1		0	0	0	0	0	0	0	0	0	0	0	0	8	12	0	0	2	100	58	180	13
1- 1:		0 18	0	0	0	0	0	0	0	0 0	0 50	0	0 2	0 8	0 59	0 2	0	0 10	0	0 26	0 312	14 15
1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	30	18
1: 2:		0	0	0	0 0	0	0	0	0	0 0	2	0	0	0	0 0	0 0	0	2	0	0	4	19 20
2		0	14	2	0	0	0	2	8	0	6	0	0	2	0	2	0	0	0	36	92	21
2			0	0	0	0	0	0	0	0	6	0	0	0	40	0	0	0	0	0	62	22
2.		2 0	0	0	0 0	0	0	0	0	0 0	14 0	0	0	0	0 0	0 0	2 0	0	0	0	46 0	23 24
2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	13	25
2	6 0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	8	0	0	10	26
2		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	4	27
2: 2:		0	0	0	0	0	0	0	0	0 0	0 4	0	0	0	0	0 0	0	10 25	0 2	0	10 37	28 29
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
3		2	0	0	0	0	0	0	2	0	0	0	2	2	0	0	0	0	0	2	10	31
3.		0	0	0	0	0	0	0	0	0 0	0	0	0	0	7 0	0 0	0	0	0	0	7	32 33
3.		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	6	34
3	5 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
3		0	2 6	0	0	0	0	0 2	0	0 2	0	0	0	0 2	47 0	0 0	0	0	0	26 42	75 58	37 38
3:		0	12	2	0	0	0	0	4	0	12	0	0	26	0	2	0	0	76	205	381	39
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	16 0	16 0	41
4.		0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	14	42 43
4		4	0	0	0	0	0	0	0	0	10	0	0	0	144	0	0	0	10	0	192	44
4.		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	4	45
44		0	0 4	0	0	0	0	0	0	0	0	0	0	0	21 59	0	0	0	0	0 2	21 65	46 47
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
4		8	0	0	0	2	0	0	0	0	24	0	2	0	0	0	0	0	8	0	98	49
5i 5		0 0	0 0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0 0	0 0	0 0	0	2 0	0	0 0	2 0	50 51
5.		2	12	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	10	30	
5		0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9	52 53
5- 5-		0	0 0	0	0 0	0	0 0	0	0 0	0 0	0	0	0 0	0 0	0 5	0 0	0	0	0 0	0 0	0 5	54 55
5			30	2	0	0	0	4	14	2	6	0	2	4	54	0	0	0	0	0	144	56
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56 57
5: 5:		0	0 20	0 6	0	0	0 0	0 2	0 6	0 2	0 12	0 0	0 0	0 28	7 40	0 0	0	0	0 0	0	7 158	58 59
6		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
6	1 14		30	2	0	0	0	4	14	2	4	0	2	4	52	0	0	0	0	0	132	61
6.		0	0 2	0	0	0	0 0	0 2	0 0	0 0	2	0 0	0 0	0 2	2 0	0 0	0	0	0	0	14 8	62 63
6			20	2 6	0	0	0	2	6	2	8	0	0	28	9	0	0	0	0	0	8 107	64
6			0	0	0	0	0	0	0	0	4	0	0	0	31	0	0	0	0	0	49	65
6		2	2	2	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	10	66
6 6		6 0	32 0	4 0	0	0	0 0	4 0	14 0	4 0	4 0	2 0	2 0	6 0	52 0	0 0	0	0	0	0	144 0	67 68
6		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
7			22	8	0	0	0	4	6	2	8	0	0	30	9	0	0	0	0	0	115	70
7. 7.		0	0	0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0	0	0	0	0 0	71 72
7.		2	0	0	0	0	0	0	0	4	0	2	2	0	7	0	0	0	0	0	23	73
7-	4 6	4	26	4	0	0	0	2	14	0	2	0	0	4	35	0	0	0	0	0	97	74
7.		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75 76
70		0 0	6 0	2 0	0	0	0 0	2 0	0	0 0	0	0	0 0	0 0	0 0	0 0	0	0	0 0	0	10 0	76 77
7:		0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	14	78
7:	9 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
8		0 0	22 2	8 0	0 0	0	0 0	4 0	6 0	0 2	4 2	0	0 0	34 2	7 0	0 0	0	0	0 0	0 0	103 8	80 81
8		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82
8	3 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
8	4 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84

Tbale C - AM Peak Committed D	evelopments	in 2026 (PC	U) Land South of																			
	Tamworth	Land South of	Dairy House Farm (Phase 1	Land at Rowlands	Land at Holly	Former	Land RO 5/7	Former Brittania	Former Sparrowdale	Land at Former	Robey's	Land at Windy	Land West of	Aldi Foodstores	Land to Southeast M42 J10 Trinity	Land at Rowland Way	Darwell	Site at Relay	Land East of Centurion	Birch Coppice		
Committed Development	Golf Club	Grendon	and Phase 2)	Way	Lane	HighSchool	Fairfields Hill	Mill	School Site/Recycling	Chapel House	Lane Ph1	Ridge	Woodpack Farm	Ltd	Road	(employment)	Park	Park	Road	Business Park	Total	
Total Dwellings/ Employment No. Dwellings Occupied at time of 2023 Surveys	1100 : 597	143 0	205	88 88	743 0	12 12	9	59 0	61 61	8	500	8	32 32	1.08	8	6.5	0.7	2.84	8.5 8.5	34 33.5		
Percentage Complete in 2023	54%	0%	100%	100%	0%	100%	0%	0%	100%	100%	0%	0%	100%	100%	100%	0%	100%	100%	100%	98.5%		
No. Dwellings Occupied in 2026	1002	0	205	88	100	12	9	0	61	8	100	8	32	1.08	8	6.5	0.7	2.84	8.5	34		
Percentage Occupied in 2026	91%	0%	100%	100%	13%	100%	100%	0%	100%	100%	20%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Percentage Occupied between																						
2023 and 2026 HGV %	37% 0%	0% 0%	0% 0%	0% 0%	13% 0%	0% 0%	100% 0%	0% 0%	0% 0%	0% 0%	20% 0%	100% 0%	0% 0%	0% 0%	0% 17.9%	100% 0.0%	0% 0.0%	0% 4.2%	0% 0.0%	1.5% 0.7%		
1 2		0	0	0	0	0	0	0	0	0	12 2	0	0	0	0	0	0	0	0	1 0	65 9	1 2
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4 5		0	0 0	0	0 0	0	0 0	0	0 0	0	1 4	0	0	0 0	0 0	0 2	0	0	0 0	0	3 26	4 5
6		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6 7
8	3 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
9 10		0	0 0	0 0	0 0	0	0 0	0 0	0 0	0	0 2	0	0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 9	10
11 12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11 12
13 14	3 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13 14
15	5 20	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	26	15
16 17		0	0 0	0	0	0	0 0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	0	0	16 17
18 19	3 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18 19
20) 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	20
21 22		0	0 0	0	0 0	0	0 0	0	0 0	0	4 2	0	0	0	0 0	0	0 0	0	0 0	3 0	26 12	21 22
23 24		0	0	0	0	0	0	0	0	0	5 0	0	0	0	0	0	0	0	0	0	24 0	23 24
25 26		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
27	7 0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0 0	26 27
28 29		0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0 0	0	0 2	28 29
30 31		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30 31
32	2 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
33 34		0	0 0	0 0	0	0 0	0 0	0	0 0	0	0	0	0	0	0 0	0 0	0 0	0 0	0 0	0 0	1	33 34
35 36		0	0 0	0	0	0	0 0	0	0 0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0 0	35 36
37 38		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37 38
39	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	1	9	39
40 41	L 0	0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	40 41
42 43		0	0	0	0 0	0	0	0	0	0	0	0 0	0	0	0	0 0	0	0	0 0	0	0	42 43
44		0	0	0	0	0	0	0	0	0	1 0	0	0	0	0	0	0	0	0	0	4 0	44 45
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
47 48		0	0 0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	47 48
49 50		0	0 0	0	0 0	0	0 0	0	0	0	2	0	0	0	0	0	0	0	0 0	0	10 0	49 50
51	. 0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0 0	0	0 0	0	0	51
52 53	3 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	52 53
54 55		0	0	0	0 0	0	0 0	0 0	0 0	0	0	0	0	0 0	0 0	0	0	0	0 0	0	0 1	54 55
56 57	18	0	0	0	0	0	0	0	0	0 0	4 0	2 0	0	0	0	0 0	0 0	0	0 0	0	23 0	56 57
58	3 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
59 60	0	0	0	0	0	0	0	0	0	0	1 0	0	0	0	0	0	0 0	0	0	0	8 0	59 60
61 62		0	0	0	0	0	0 0	0	0	0	2	2 0	0	0	0	0 0	0	0	0 0	0	15 8	61 62
63 64		0	0 0	0	0	0	0	0	0	0	0	0 2	0	0 0	0	0	0	0	0 0	0	0 5	63 64
65	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	65
66 67	7 10	0	0 0	0	0	0	2 2	0	0	0 0	0 2	0 2	0	0 0	0 0	0	0	0	0 0	0	2 16	66 67
68 69	0	0	0 0	0 0	0 0	0	0 0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	68 69
70 71		0	0 0	0	0 0	0	0 0	0 0	0	0	0	2	0	0 0	0 0	0 0	0	0	0 0	0 0	5 0	70 71
72		0	0	0	0	0	0 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72 73
74	9	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	11	74
76		0	0 0	0 0	0 0	0	0 0	0	0	0 0	0	0 4	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 4	75 76
77 78		0	0 0	0	0	0	0 0	0	0	0 0	0	0 2	0	0	0	0	0	0	0 0	0	0 2	77 78
79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 3	79 80
81	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
82 83	3 0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0 0	0	0 0	82 83
84	1 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84

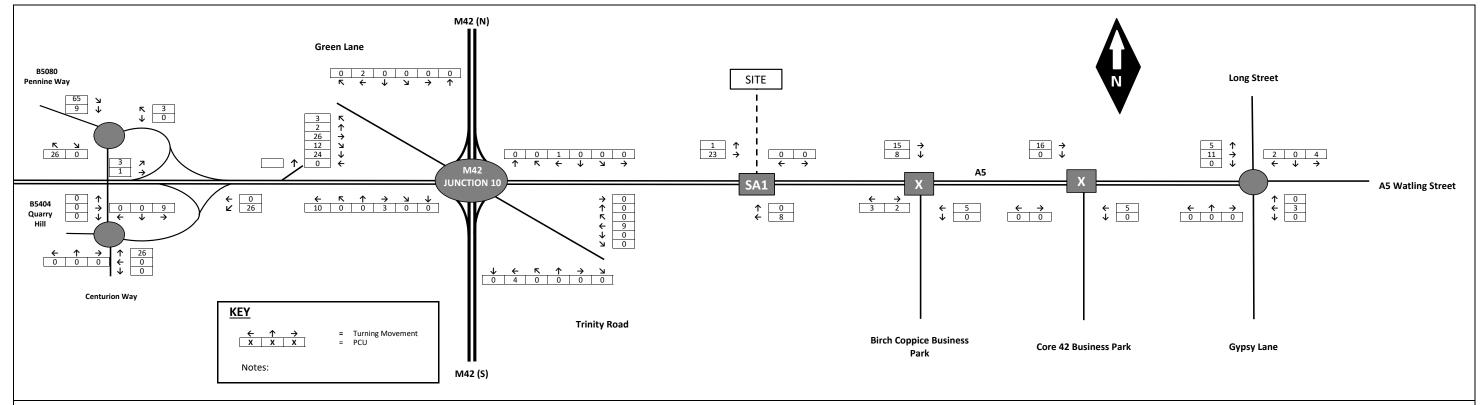


FIGURE 2

2026 AM Peak Committed Developments PCU (from Vectos)

Land North East of M42 Junction 10

	T	Land	Land South of Dairy House	Land at		Former	1d PO 5/7	Former	Former Sparrowdale	landat farmer	Dahada	Land at	Land West of	Aldi	Land to Southeast		Damuell	Site at	Land East of	Birch Courties	
elopment Employment	Golf Club 1100	Grendon 143	Farm (Phase 1 and Phase 2) 205	Rowlands Way 88	Holly Lane 743		Land RO 5/7 Fairfields Hill		School Site/Recycling		Robey's Lane Ph1 500	Windy Ridge 8	Land West of Woodpack Farm 32	Ltd 1.08	M42 J10 Trinity Road 8	(employment) 6.5	Park 0.7	Relay Park 2.84	Centurion Road 8.5	Birch Coppice Business Park 34	Total
ccupied at time	597	0	205	88	0	12	0	0	61	8	0	0	32	1.08	8	0	0.7	2.84	8.5	33.5	
plete in 2023	54%	0%	100%	100%	0%	100%	0%	0%	100%	100%	0%	0%	100%	100%	100%	0%	100%	100%	100%	98.5%	
ccupied in 2026	1002	0	205	88	100	12	9	0	61	8	100	8	32	1.08	8	6.5	0.7	2.84	8.5	34	
ipied in 2026 ipied between	91%	0%	100%	100%	13%	100%	100%	0%	100%	100%	20%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	37% 0%	0% 0%	0% 0%	0% 0%	13% 0%	0% 0%	100% 0%	0% 0%	0% 0%	0% 0%	20% 0%	100% 0%	0% 0%	0% 0%	0% 17.9%	100% 0.0%	0% 0.0%	0% 4.2%	0% 0.0%	1% 0.7%	
1 2	4	0	0	0	0 0	0	0	0	0 0	0 0	6 1	0	0	0	0	2 0	0	0	0 0	0 0	33 6
3 4	7	0	0	0	0 0	0	0 2	0	0 0	0 0	0 1	0 0	0 0	0	0	0	0	0	0 0	0 0	0 10
5	0	0	0	0	0	0	0	0	0	0	10 0	0	0	0	0	0	0	0	0	0	60 0
7 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 10	4	0 0 0	0 0 0	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 1 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	6
11 12 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 15	0	0	0	0	0	0	0	0	0	0	0 10	0	0	0	0	0	0	0	0	0	0 60
16 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 2	0	0	0	0	1 11
22 23	6 10	0 0	0	0	0 0	0	0	0	0	0 0	1 3	0	0 0	0	0	0	0	0	0	0 0	7 13
24 25		0	0 0	0	0 0	0	0	0	0 0	0	0 0	0 0	0 0	0	0	0 0	0	0	0 0	0 0	0 0
26 27	0	0	0 0	0	0	0	0	0	0 0	0 0	0 0	0	0 0	0	0	0	0	0	0 0	0 0	0 0
28 29	1	0	0	0	0	0	0	0	0	0	0 1	0	0 0	0	0	0	0	0	0 0	0 0	0 2
30 31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32 33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34 35	0	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0
36 37 38	0	0 0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 40	15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	3	23
41 42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43 44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 11
45 46	0	0	0	0	0	0	0	0	0 0	0 0	0 0	0	0 0	0	0	0	0	0	0	0 0	0 0
47 48	0	0	0 0	0	0	0	0	0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0 0	0 0
49 50		0	0	0	0 0	0	0	0	0	0	5 0	0 0	0 0	0	0	0	0	0	0 0	0 0	25 0
51 52	0	0	0	0	0 0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0 0
53 54	0	0	0 0	0	0	0	0	0	0 0	0	0 0	0	0 0	0	0 0	0	0	0	0 0	0 0	0 0
55 56	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 9
57 58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59 60 61	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	2 0 1	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	18 0 6
62 63	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
64 65	10	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	11 6
66 67	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
68 69	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0 0	0 0	0 0	0	0 0	0 0	0	0	0 0	0 0	0 0
70 71	10	0	0 0	0	0	0	0	0	0 0	0 0	2 0	0	0 0	0	0	0 0	0	0	0 0	0 0	11 0
72 73		0	0	0	0 0	0	0	0	0	0	0 0	0 2	0	0	0	0	0	0	0	0	0 4
74 75	0	0	0	0	0	0	0	0	0 0	0	0 0	0	0 0	0	0	0	0	0	0 0	0 0	3 0
76 77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4 0
81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7 0
82 83		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0 0
76 77 78 79 80 81 82	0 0 3 0 7 0 0	0 0 0 0 0	0 0 0 0 0		0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	0 0	0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

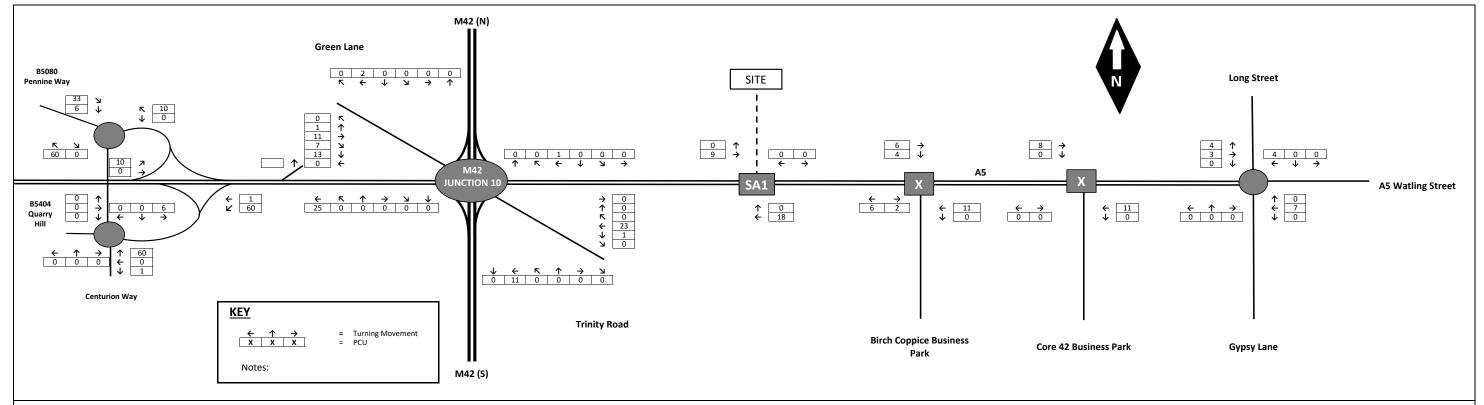


FIGURE 3

2026 PM Peak Committed Developments PCU (from Vectos)

Land North East of M42 Junction 10

Table E - AM Peak Committed De	velopments	in 2033 (PC																				
	Tamworth	Land South of	Land South of Dairy House Farm (Phase 1	Land at Rowlands	Land at Holly	Former Polesworth	Land RO 5/7	Former Brittania	Former Sparrowdale	Land at Former	Robey's	Land at Windy	Land West of	Aldi Foodstores	Land to Southeast M42 J10 Trinity	Land at Rowland Way	Darwell	Site at Relay	Land East of Centurion	Birch Coppice		
Committed Development Total Dwellings/ Employment	Golf Club 1100	Grendon 143	and Phase 2) 205	Way 88	Lane 743	HighSchool 12	Fairfields Hill 9	Mill 59	School Site/Recycling 61	Chapel House 8	Lane Ph1 500	Ridge 8	Woodpack Farm 32	Ltd 1.08	Road 8	(employment) 6.5	Park 0.7	Park 2.84	Road 8.5	Business Park 34	Total	
No. Dwellings Occupied at time of 2023 Surveys	597	0	205	88	0	12	0	0	61	8	0	0	32	1.08	8	0	0.7	2.84	8.5	34		
Percentage Complete in 2023	54%	0%	100%	100%	0%	100%	0%	0%	100%	100%	0%	0%	100%	100%	100%	0%	100%	100%	100%	100%		
No. Dwellings Occupied in 2033	1100	143	205	88	743	12	9	59	61	8	500	8	32	1.08	8	6.5	0.7	2.84	8.5	34		
Percentage Occupied in 2033	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Percentage Occupied between 2023 and 2033	46%	100%	0%	0%	100%	0%	100%	100%	0%	0%	100%	100%	0%	0%	0%	100%	0%	0%	0%	0%		
HGV %		0% 18	0%	0%	0%	0%	0%	0%	0%	0%	0% 60	0%	0% 0	0%	17.9% 0	0.0%	0.0%	4.2% 0	0.0%	0.7%	142	1
2 3	0	12 0	0 0	0	0	0 0	0 0	0	0 0	0	10 0	0	0	0 0	0 0	0 0	0	0	0 0	0 0	30 0	2 3
4 5	-	2	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0	4 20	0	0 0	0	0 0	0 2	0	0	0 0	0 0	9 49	4 5
6		0	0	0 0	0	0	0 0	0	0 0	0	0	0	0	0	0 0	0 0	0	0	0	0	0 0	6 7
8 9		0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0	0	0 0	0 0	0	0	0	0	0 0	8 9
10 11		12 0	0	0	0	0	0	0	0	0	10 0	0	0	0	0	0	0	0	0	0	30 0	10 11
12 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12 13
14 15	0	0 2	0	0	0	0	0	0	0	0	0 20	0	0	0	0	0	0	0	0	0	0 49	14 15
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
17 18	0	0 0	0 0	0 0	0	0	0	0 0	0 0	0	0	0	0	0	0 0	0 0	0	0	0	0	0 0	17 18
19 20	2	2	0 0	0 0	0	0 0	0 0	0	0 0	0 0	2	0	0 0	0 0	0 0	0 0	0	0	0 0	0 0	7 6	19 20
21 22		0 2	0 0	0 0	0	0	0 0	0	0 0	0	18 10	0	0	0	0 0	0 0	0	0	0	0 0	42 24	21 22
23 24		8	0	0 0	0	0	0 0	0	0 0	0	26 0	0	0	0	0 0	0	0	0	0	0	57 0	23 24
25 26		0	0 0	0	0	0	0 0	0	0 0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	25 26
27 28	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	27 28
29 30	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	4	29 30
31 32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31 32
33 34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	33 34
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
36 37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36 37
38 39	6	2 0	0 0	0	0	0	0	0 2	0 0	0	0 4	0	0	0	0 0	0 2	0	0	0	0	2 14	38 39
40 41	0	0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0 0	0 0	0 0	0	0	0 0	0 0	0 0	40 41
42 43	0	0	0 0	0 0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0 0	0 0	0 0	0	0	0 0	0 0	0 0	42 43
44 45		0 0	0	0 0	0 0	0	0	0 0	0 0	0	4 0	0	0	0	0 0	0 0	0 0	0	0	0	9 0	44 45
46 47		0	0	0 0	0	0	0 0	0	0 0	0	0	0	0	0	0 0	0	0	0	0	0	0 0	46 47
48 49		0	0 0	0 0	0	0 0	0 0	0	0 0	0	0 10	0	0 0	0 0	0 0	0 0	0 0	0	0 0	0	0 22	48 49
50 51	0	0 0	0 0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0 0	50 51
52 53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	52 53
54 55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54 55
56 57	22	0	0	0	0	0	0	0	0	0	18 0	2	0	0	0	0	0	0	0	0	42 0	56 57
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
59 60	0	0	0	0	0	0	0	0	0	0	4 0	0	0	0	0	0	0	0	0	0	16 0	59 60
61 62	8	0	0	0	0	0	0	0	0	0	10 8	0	0	0	0	0	0	0	0	0	26 16	61 62
63 64	3	4 2	0 0	0 0	0	0	0 0	2	0 0	0 0	0 2	0 2	0	0 0	0 0	0 0	0	0	0	0	6 11	63 64
65 66	0	0 0	0 0	0 0	0	0	0 2	0 0	0 0	0 0	2 0	0	0	0 0	0 0	0 0	0	0	0 0	0 0	6 2	65 66
67 68		0	0 0	0 0	0 0	0 0	2 0	0 0	0 0	0	10 0	2 0	0 0	0	0 0	0 0	0 0	0	0 0	0 0	27 0	67 68
69 70		0 6	0	0 0	0	0	0 0	0 4	0 0	0	0 2	0	0	0	0 0	0	0	0	0	0	0 17	69 70
71 72	0	0 0	0	0 0	0	0	0 0	0 0	0 0	0	0	0	0	0	0	0	0 0	0	0	0	0 0	71 72
73 74	1	0	0 0	0	0	0	2	0 0	0 0	0 0	0 10	2	0	0 0	0 0	0 0	0	0	0	0 0	5 21	73 74
75 76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75 76
77 78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 2	77 78
79 80	0	0	0	0	0	0	0	0	0	0	0 2	0	0	0	0	0	0	0	0	0	0 17	79 80
81 82	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	81 82
83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84

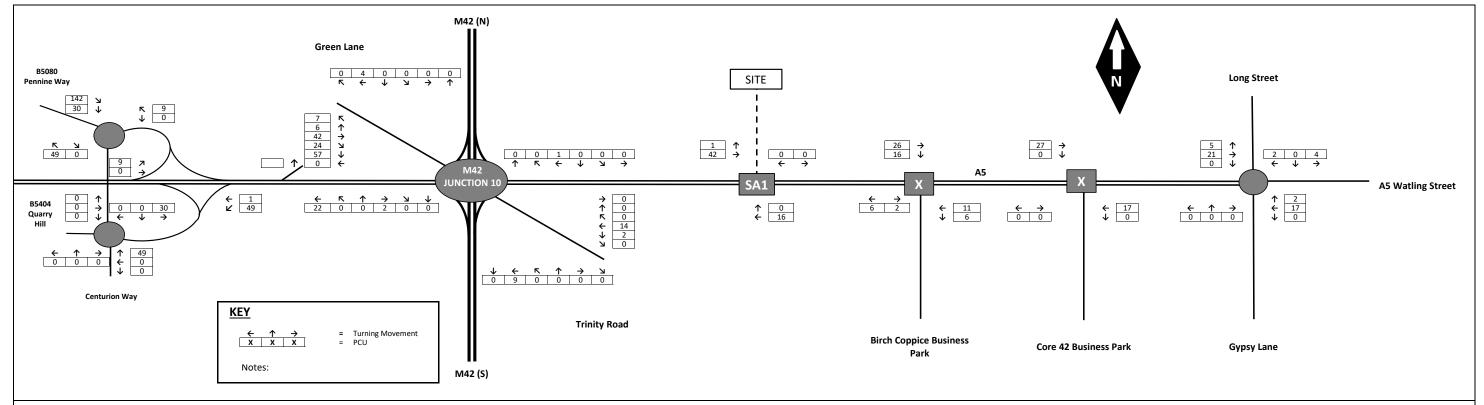


FIGURE 4

2033 AM Peak Committed Developments PCU (from Vectos)

Land North East of M42 Junction 10

Table F - PM Peak Committed D	evelopments	s in 2033 (PC	CU) Land South of																			
Committed Development	Tamworth Golf Club	Land South of Grendon	Dairy House Farm (Phase 1 and Phase 2)	Land at Rowlands Way	Land at Holly Lane		Land RO 5/7 Fairfields Hill		Former Sparrowdale School Site/Recycling		Robey's Lane Ph1	Land at Windy Ridge	Land West of Woodpack Farm	Aldi Foodstores Ltd	Land to Southeast M42 J10 Trinity Road	Land at Rowland Way (employment)	Darwell Park	Site at Relay Park	Land East of Centurion Road	Birch Coppice Business Park	Total	
Total Dwellings/ Employment No. Dwellings Occupied at time	1100	143	205	88	743	12	9	59	61	8	500	8	32	1.08	8	6.5	0.7	2.84	8.5	34	Total	
of 2023 Surveys	597	0	205	88	0	12	0	0	61	8	0	0	32	1.08	8	0	0.7	2.84	8.5	34		
Percentage Complete in 2023 No. Dwellings Occupied in 2033	54% 1100	0% 143	100% 205	100% 88	0% 743	100%	0% 9	0% 59	100% 61	100%	0% 500	0% 8	100% 32	100%	100%	0% 6.5	100% 0.7	2.84	100% 8.5	100% 34		
Percentage Occupied in 2033	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Percentage Occupied between 2023 and 2033 HGV %	46% 0%	100% 0%	0% 0%	0% 0%	100% 0%	0% 0%	100% 0%	100% 0%	0% 0%	0% 0%	100% 0%	100% 0%	0% 0%	0% 0%	0% 17.9%	100% 0.0%	0% 0.0%	0% 4.2%	0% 0.0%	0% 0.7%		
1 2	30	2 2	0	0	0	0	0	0	0	0	32 6	0	0	0	0	2	0.0%	0	0	0.7%	66 13	1 2
3	0	2	0	0	0	0	0 2	0	0	0	2	0	0	0	0	0	0	0	0	0	4 26	3
5		20 0	0	0	0	0	0 0	0	0	0	52 0	0	0	0	0	2 0	0	0	0	0	133 0	5 6
7 8	•	0	0 0	0 0	0	0	0 0	0	0 0	0 0	0	0	0 0	0 0	0 0	0	0	0	0	0 0	0 0	7 8
9 10	-	0 2	0	0 0	0	0	0	0 0	0	0	0 6	0 0	0	0	0	0	0	0 0	0	0	0 13	9 10
11 12	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	11 12
13 14	0	0 0	0 0	0 0	0	0	0	0	0 0	0 0	0	0	0 0	0 0	0 0	0	0	0	0	0	0 0	13 14
15 16	0	18	0	0	0	0	0	0	0	0	50 0	0	0	0	0	0	0	0	0	0	129 0	15 16
17 18	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0	0	0 0 0	0 0 2	0 0 0	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0	17 18 19
19 20 21	1	0	0	0	0	0	0	0	0	0	2 6	0	0	0	0	0	0	0	0	0	2 3 19	20 21
22 23	7	0 2	0	0	0	0	0	0	0	0	6 14	0	0	0	0	0	0	0	0	0	13 29	22 23
24 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24 25
26 27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26 27
28 29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28 29
30 31		0 2	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0 0	0 0	0	0 0	0	0	0	0 2	30 31
32 33	0	0 0	0 0	0 0	0	0	0	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0	0	0 0	32 33
34 35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	34 35
36 37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36 37
38 39 40	19	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0	0 0 0	0 0 0	0 12 0	0 0 0	0	0 0 0	0 0 0	0 2 0	0 0 0	0 0 0	0 0 0	0 0 0	2 33 0	38 39 40
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41 42
43 44	0	0	0	0	0	0	0	0	0	0	0 10	0	0	0	0	0	0	0	0	0	0 25	43 44
45 46	0	0 0	0	0 0	0	0	0	0	0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	45 46
47 48	0	0 0	0	0 0	0	0	0	0	0	0	0	0	0	0	0 0	0 0	0	0	0 0	0	0 0	47 48
49 50	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57 0	49 50
51 52	0	0 2	0	0	0	0	0	0 2	0	0	0	0	0	0	0	0	0	0	0	0	0	51 52
53 54 55	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	53 54 55
56 57	10	4	0	0	0	0	0	4	0	0	6	0	0	0	0	0	0	0	0	0	24 0	56 57
58 59	0	0	0	0	0	0	0	0	0	0	0 12	0	0	0	0	0	0	0	0	0	0 33	58 59
60 61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 18	60 61
62 63	5	0 0	0 0	0 0	0	0	0	0	0	0 0	2	0	0	0 0	0 0	0	0	0	0	0	7 2	62 63
64 65		0 0	0	0 0	0	0	0	2 0	0	0	8 4	0	0	0	0	0	0	0	0	0	22 10	64 65
66 67	6	2 6	0 0	0 0	0	0	0	0 4	0 0	0 0	0 4	2	0 0	0	0 0	0	0	0	0	0	4 22	66 67
68 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68 69
70 71	. 0	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0	0	0	8 0 0	0	0	0 0 0	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	24 0 0	70 71
72 73 74	3	0 2 4	0	0	0	0	0	0 0 2	0 0 0	0 0 0	0 2	0 2 0	0 0 0	0	0 0 0	0	0	0	0	0	7 11	72 73 74
74 75 76	0	0	0	0	0	0	0	0 2	0	0	0	0	0	0	0	0	0	0	0	0	0 2	75 76
77 78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77 78
79 80	0	0	0	0	0	0	0	0	0	0	0 4	0	0	0	0	0	0	0	0	0	0 16	79 80
81 82	0	0 0	0 0	0	0	0	0	0 0	0	0 0	2 0	0	0 0	0	0 0	0	0	0	0	0	2 0	81 82
83 84		0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0 0	83 84

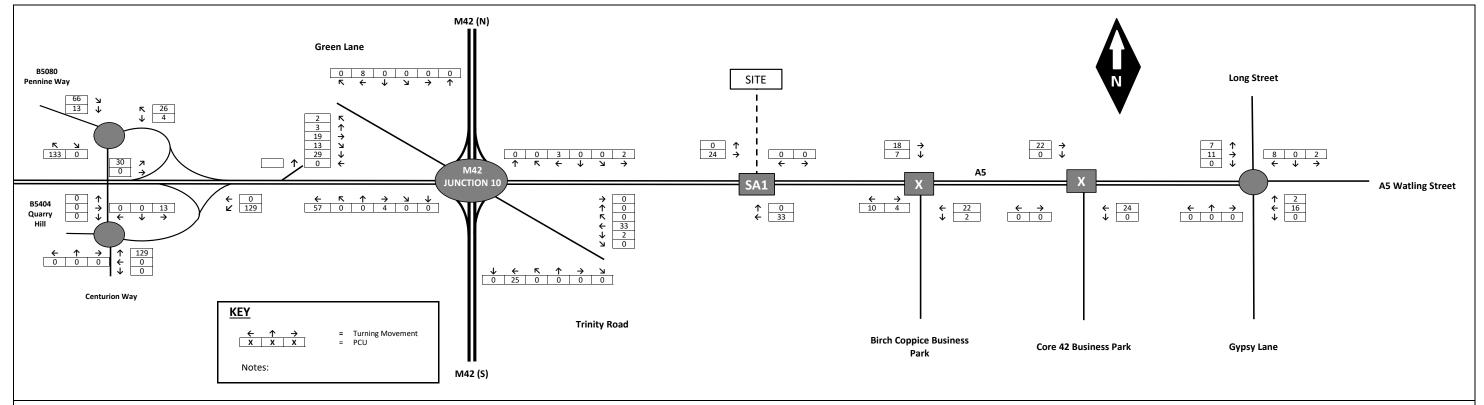


FIGURE 5

2033 PM Peak Committed Developments PCU (from Vectos)

Land North East of M42 Junction 10

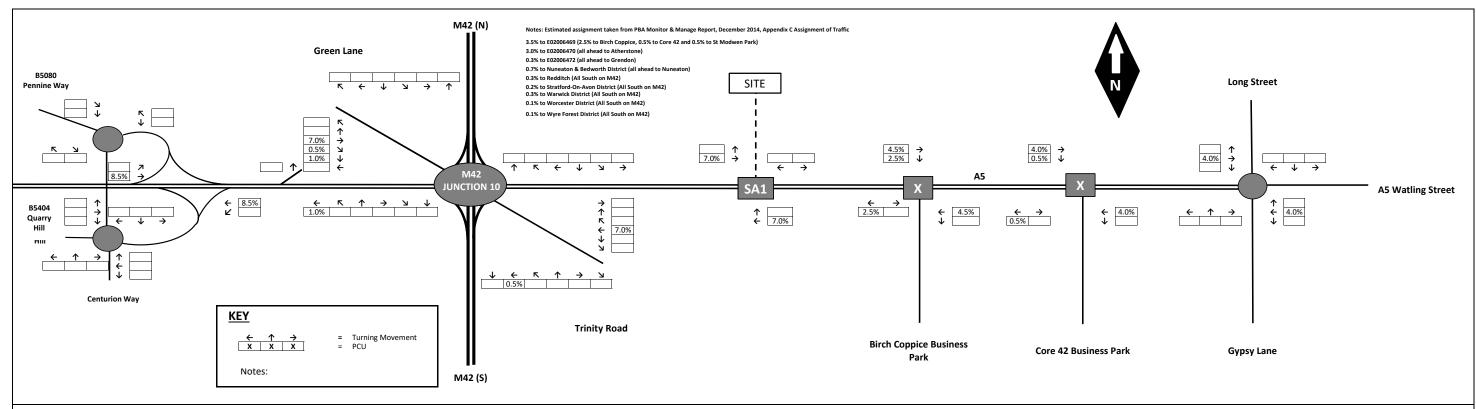
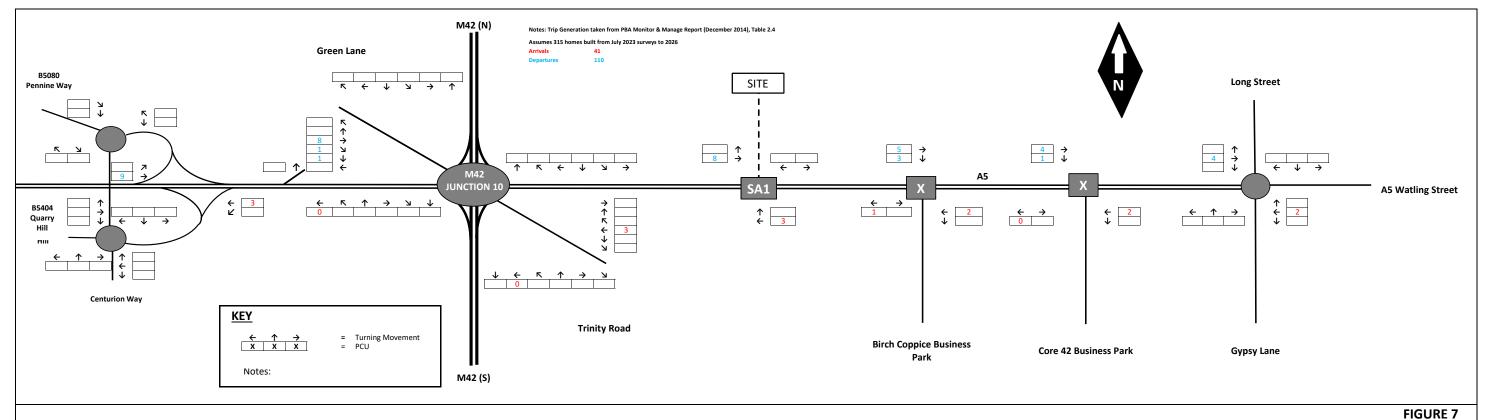


FIGURE 6

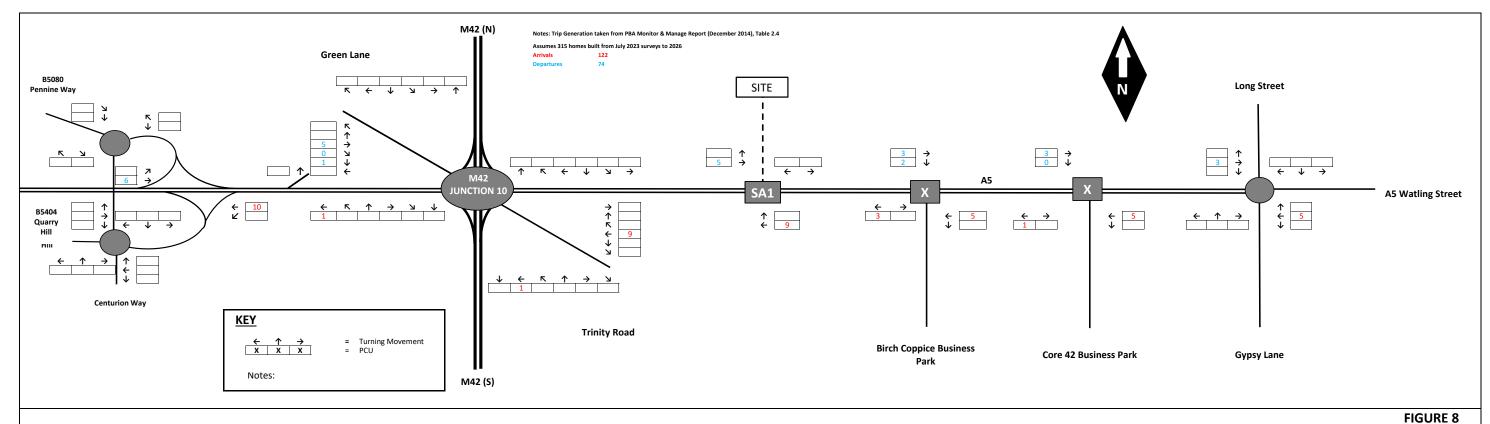
Arkall Farm - Traffic Assignment

Land North East of M42 Junction 10



Arkall Farm - AM Peak Development Flows in 2026

Land North East of M42 Junction 10



Arkall Farm - PM Peak Development Flows in 2026

Land North East of M42 Junction 10

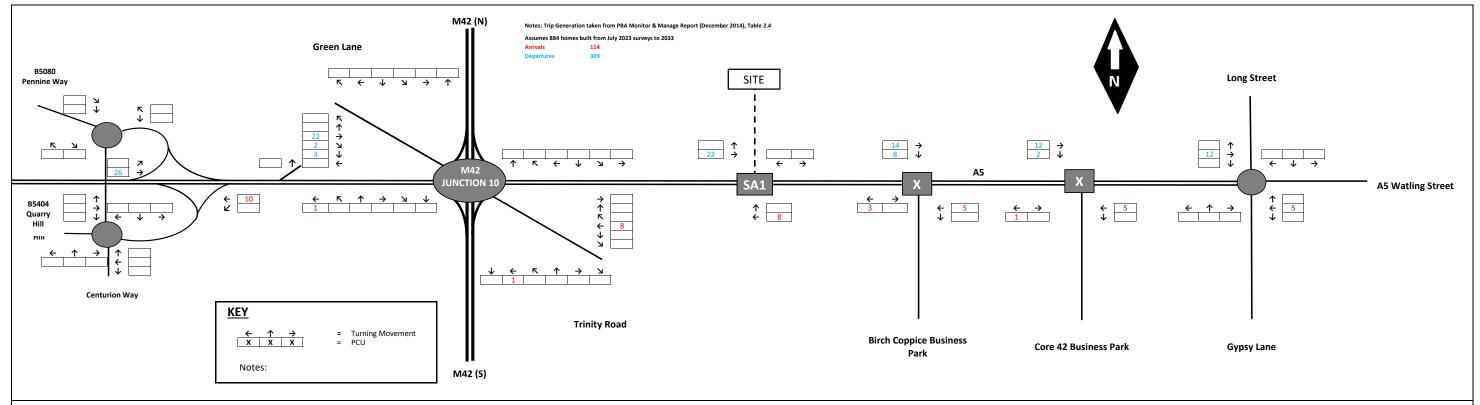


FIGURE 9

Arkall Farm - AM Peak Development Flows in 2033

Land North East of M42 Junction 10

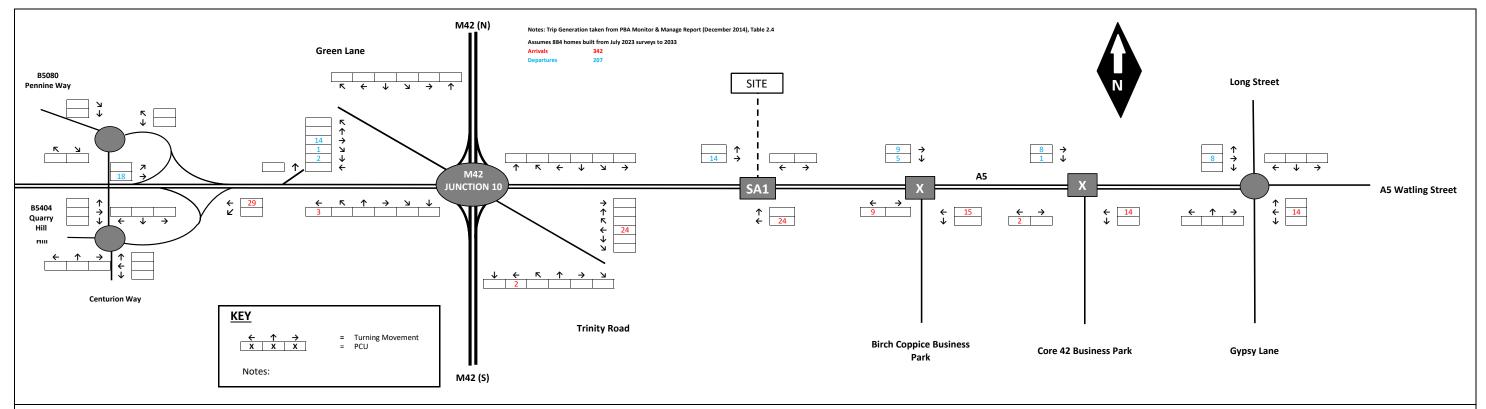
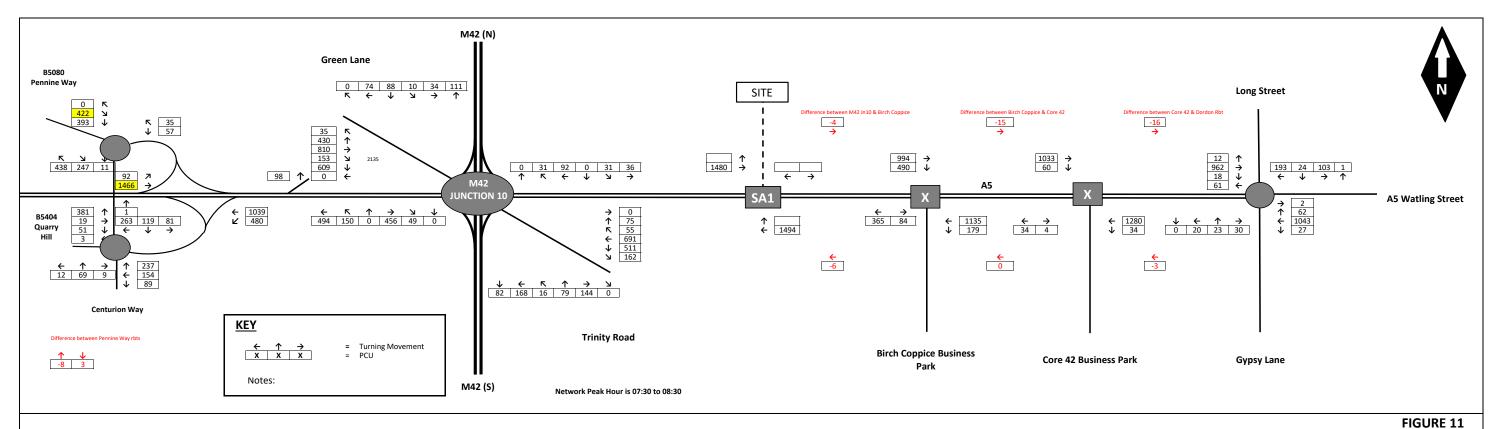


FIGURE 10

Arkall Farm - PM Peak Development Flows in 2033

Land North East of M42 Junction 10





2023 AM PEAK (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

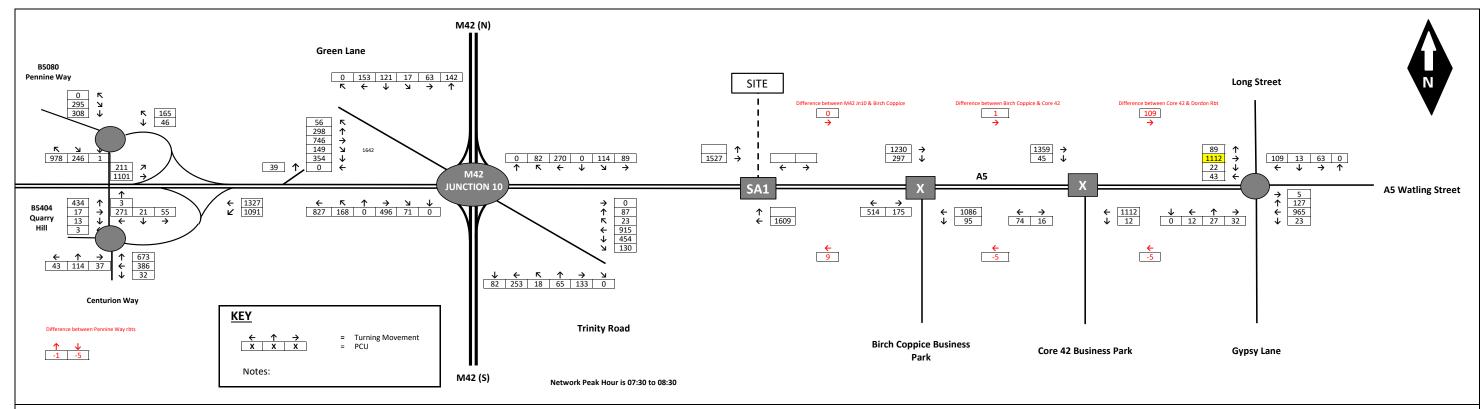


FIGURE 12

2023 PM PEAK (1645 TO 1745) - DEMAND FLOWS CORRECTED

Land North East of M42 Junction 10

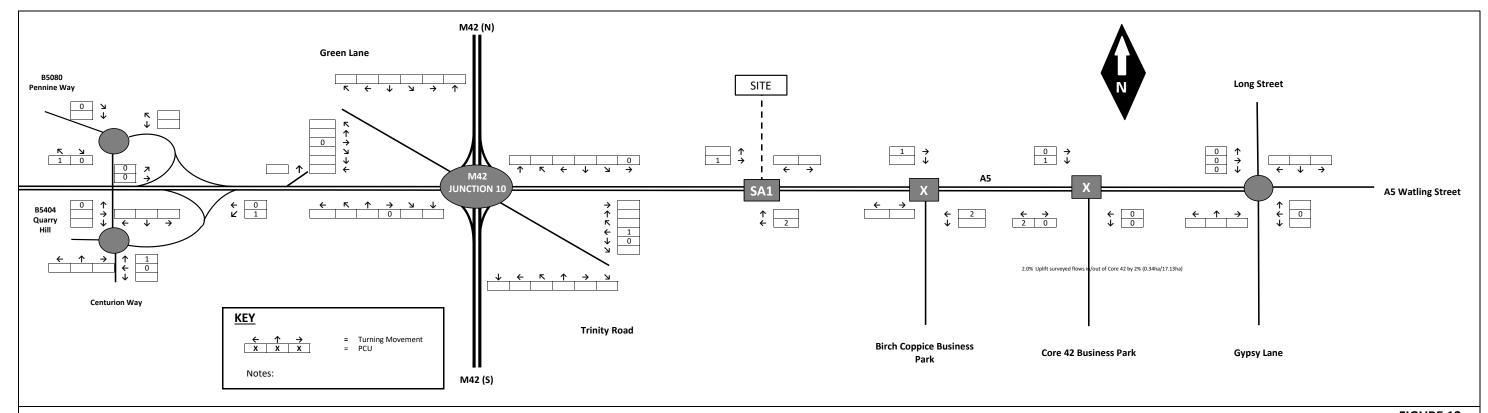


FIGURE 13 AM Core 42 Committed Development Flows

·

Land North East of M42 Junction 10

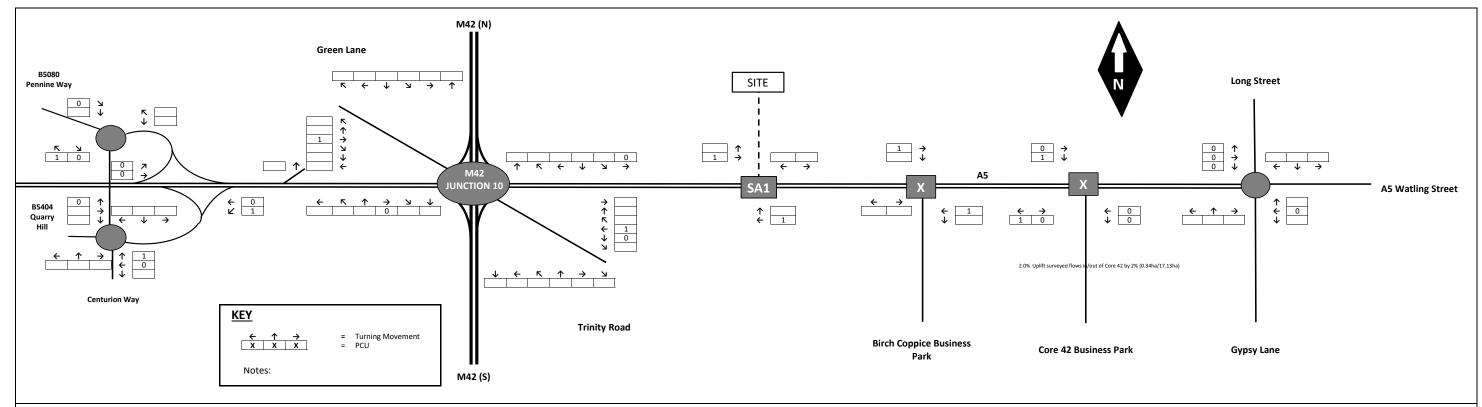
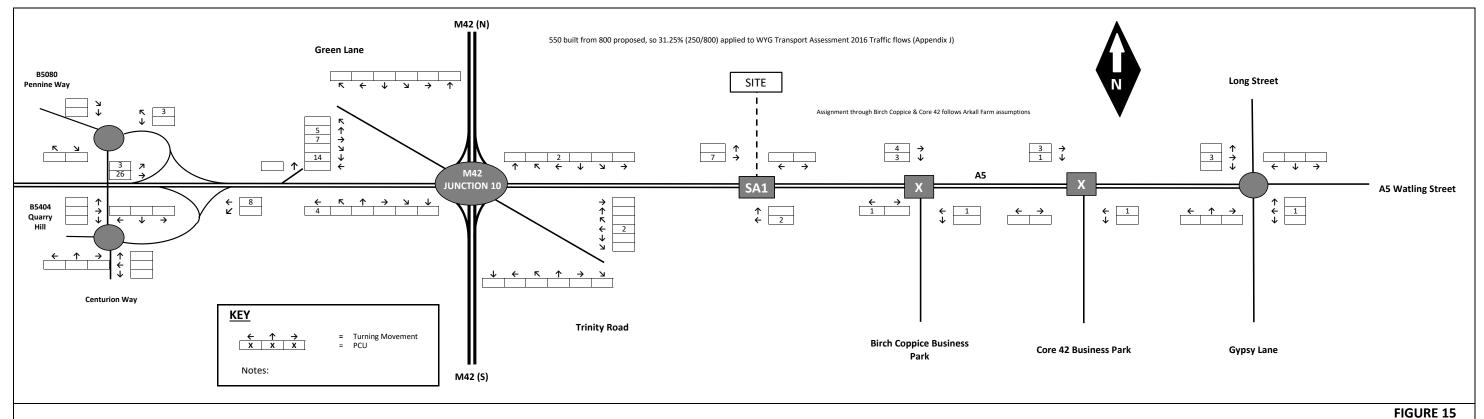


FIGURE 14

PM Core 42 Committed Development Flows

Land North East of M42 Junction 10



AM Dunstall Lane Development Flows

•

Land North East of M42 Junction 10

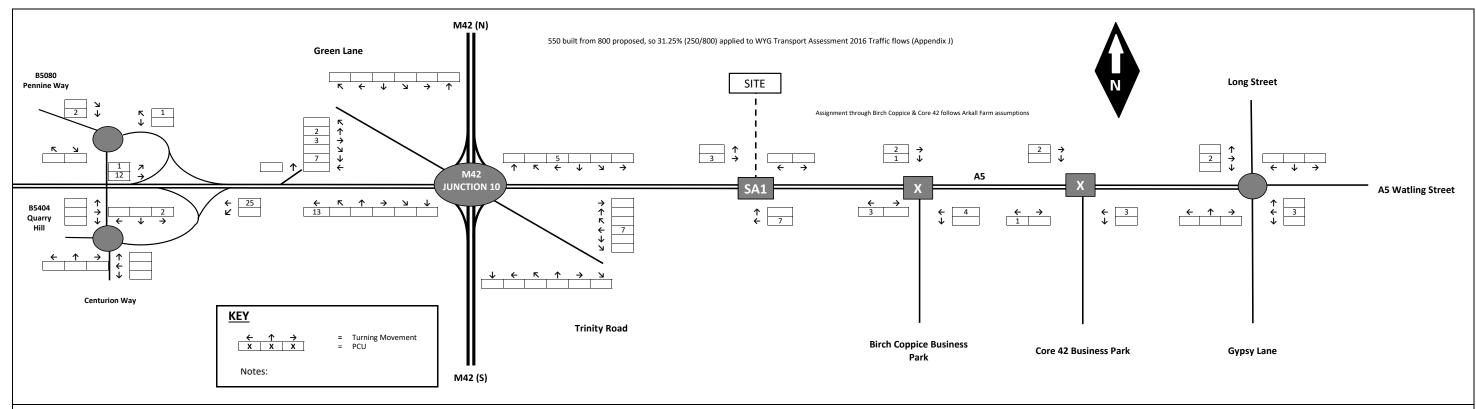


FIGURE 16

PM Dunstall Lane Development Flows

Land North East of M42 Junction 10

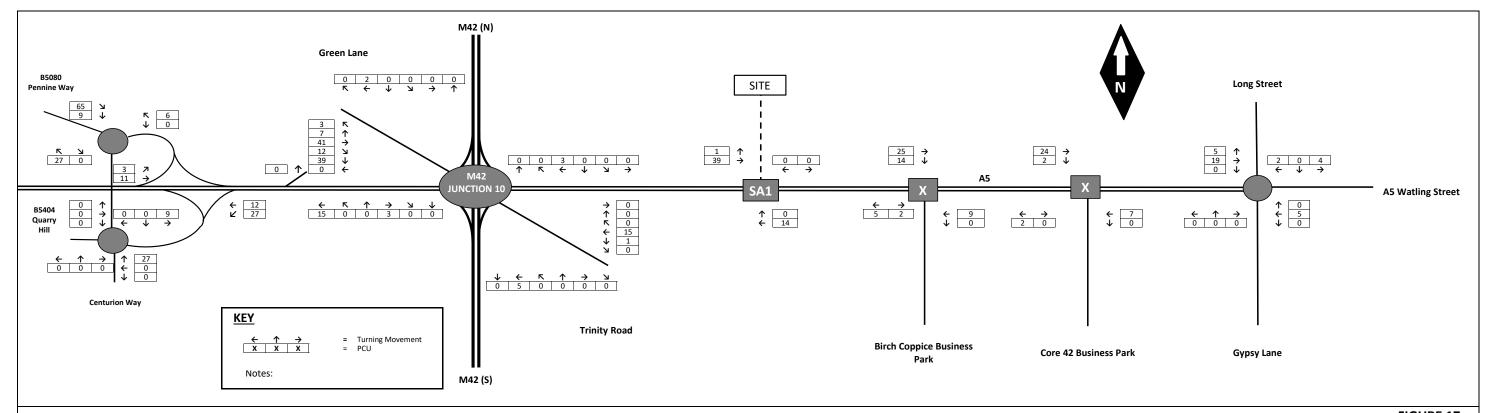
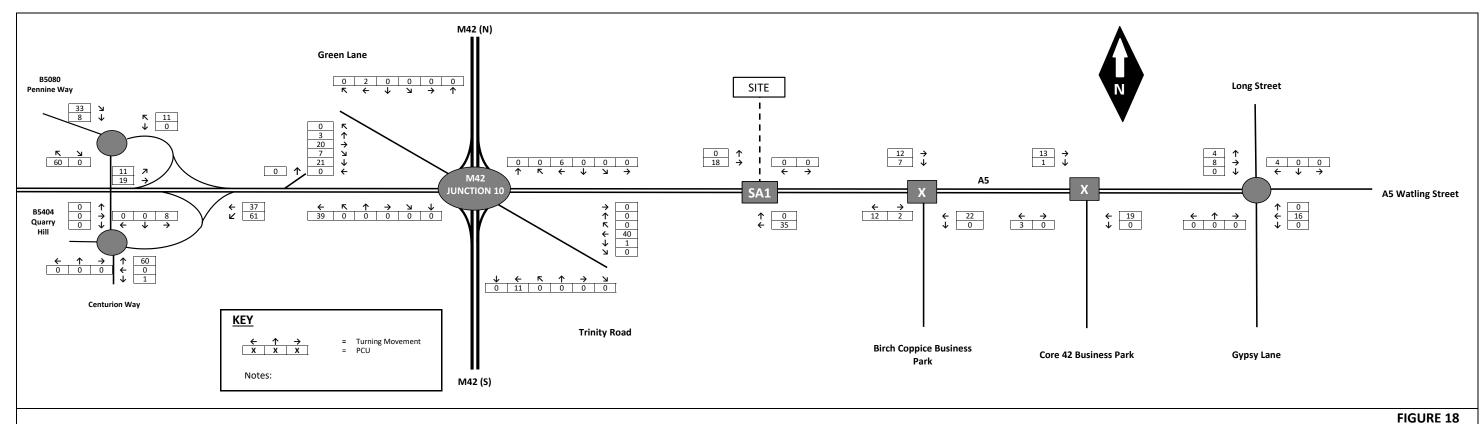


FIGURE 17 2026 AM Peak Total Committed Development Flows

Land North East of M42 Junction 10



2026 PM Peak Total Committed Development Flows

Land North East of M42 Junction 10

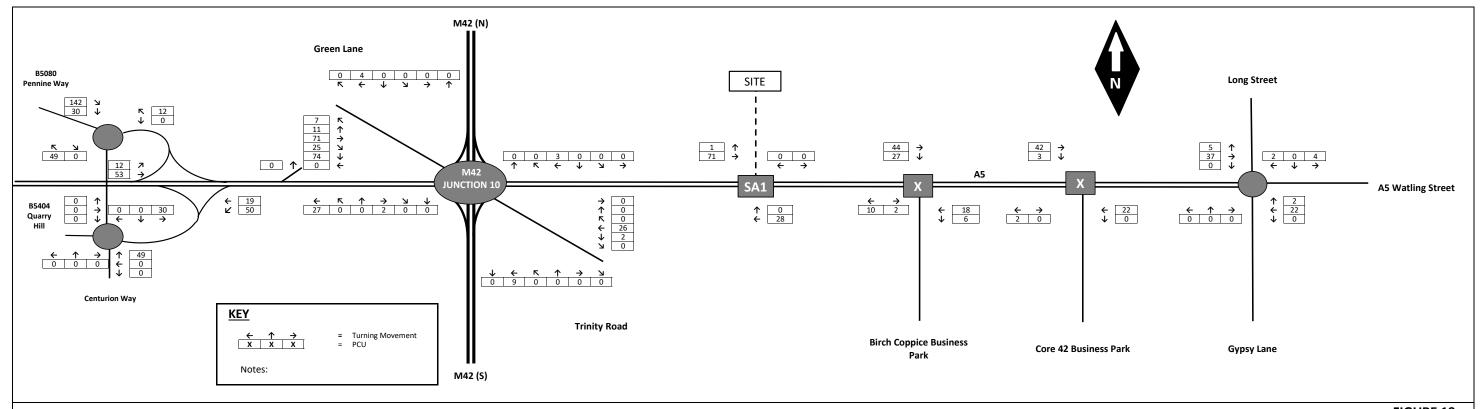


FIGURE 19 2033 AM Peak Total Committed Development Flows

Land North East of M42 Junction 10

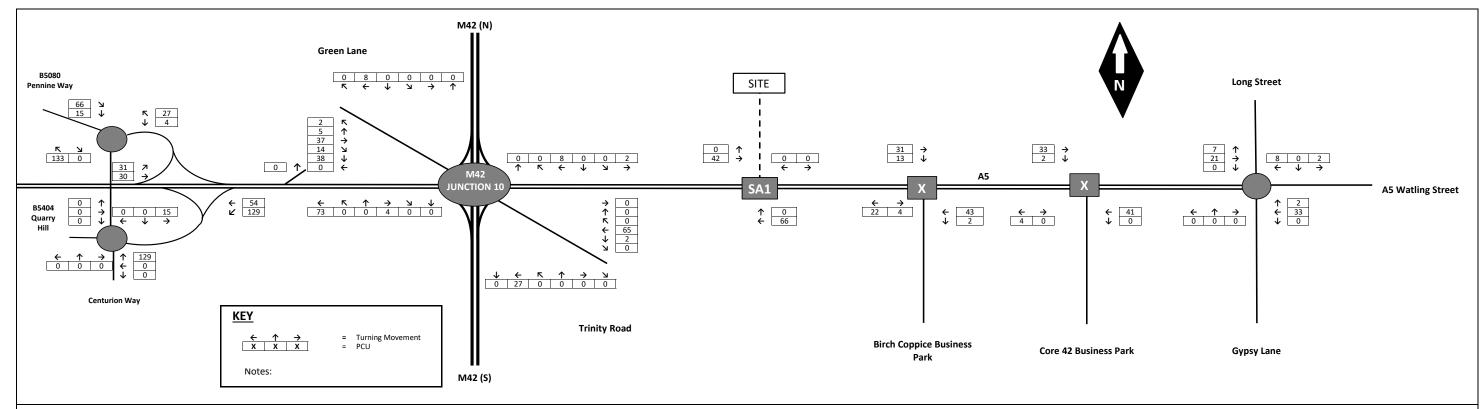


FIGURE 20

2033 PM Peak Total Committed Development Flows

Land North East of M42 Junction 10

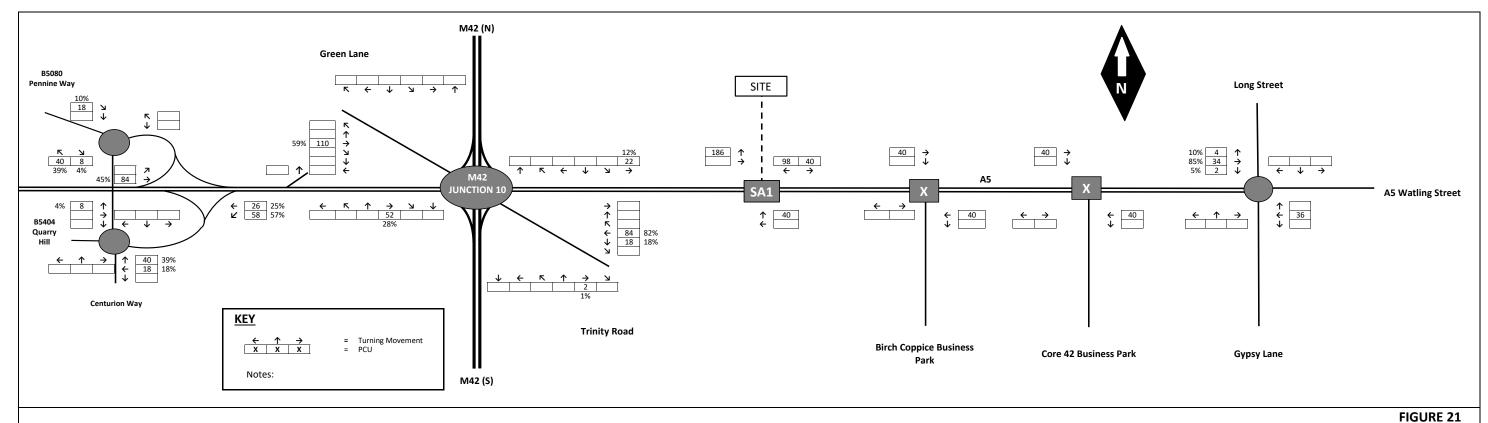
Consolidated Modelling Strategy Note v2 Land Northeast of M42 Junction 10



Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX E

Development Generated Traffic Flows



AM Peak Development Generated Traffic Flows (PCU)

Land North East of M42 Junction 10

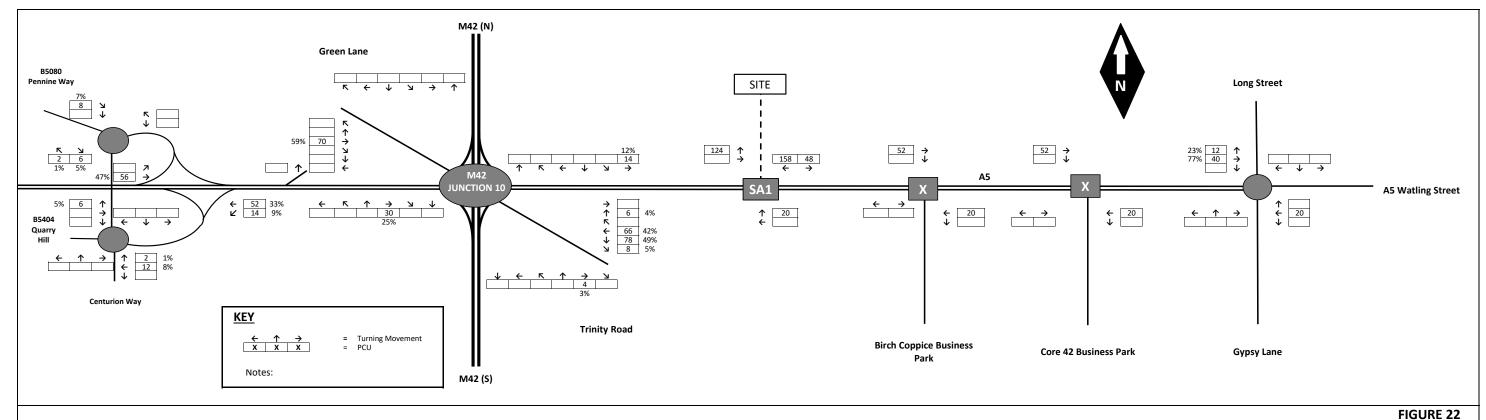


FIGURE 22

PM Peak Development Generated Traffic Flows (PCU)

Land North East of M42 Junction 10

Consolidated Modelling Strategy Note v2 Land Northeast of M42 Junction 10



Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX F

Local Plan Allocation Traffic Flows

Local Plan Allocation	Robey's Lane Ph1	Polesworth	Land at Whittington Farm	Atherstone Football Ground	Birch Coppice (All sites)	Sites at Centurion Park	Land North of Aldi Whittington Lane	MIRA	Total
Total Dwellings	1270	2000	1282	46	8.55	0.77	1.5	42	
No. Dwellings Occupied Percentage Complete	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	
HGV %	0%	0%	0%	0%	0%	0%	0%	0%	
Movement Numbe	r								
	1 134	2	0	0	26	0	2	2	166 1
	2 24 3 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	24 2 0 3
	4 8	0	0	0	0	0	0	0	8 4
	5 50	6	2	0	8	0	0	0	66 5
	6 0 7 0	0 0	0 0	0 0	0 0	2 0	0 0	12 10	14 6 10 7
	8 0	0	0	0	0	0	0	0	0 8
	9 0	0	0	0	0	0	0	0	0 9
10 1:		0 0	0 0	0 0	0 0	0 0	0 0	0 0	22 10 0 11
17		0	0	0	0	0	0	0	0 12
1:	3 0	0	0	0	4	14	0	0	18 13
14 1!		0 6	0 2	0 0	0 8	0 0	0 0	2 0	2 14 66 15
10		0	0	0	0	0	0	0	0 16
1	7 0	0	0	0	0	2	0	2	4 17
18 19		0 0	0 0	0 0	0 0	2 0	0 0	0 0	2 18 6 19
20		0	0	0	0	0	0	0	4 20
2:		60	16	0	48	2	12	34	202 21
2. 2:		0 0	0 0	0 0	0 0	0 0	0 0	0 0	26 22 60 23
24		0	0	0	0	0	0	0	0 24
2.	5 0	0	0	0	0	0	0	0	0 25
20		2	2 0	0	0	0 0	2 0	2	8 26 0 27
2		0 0	0	0 0	0 0	0	0	0 0	0 27
29	9 2	0	0	0	0	0	0	0	2 29
30		0	0	0	0	0	0	0	0 30
3: 3:		0 0	0 0	0 0	2 0	0 0	0 0	0 0	2 31 0 32
33		0	0	0	0	0	0	0	0 33
34		0	0	0	0	2	0	0	4 34
3: 3:		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 35 0 36
3:	7 0	4	0	0	0	0	0	0	4 37
38 39		248 228	24 52	0	4 22	0 8	0 0	0 4	276 38 328 39
40		10	4	2 0	0	0	0	0	14 40
4:		4	2	2	4	0	0	0	12 41
4: 4:		10 0	2 0	0 0	0 0	0 0	0 0	0 0	12 42 0 43
4.		0	0	0	0	2	0	0	14 44
4:		0	0	0	0	0	0	0	0 45
4(4'		0 0	0 0	0 0	0 2	0 0	0 0	0 0	0 46 2 47
48		0	0	0	0	0	0	0	0 48
4:		0	0	0	0	2	0	0	22 49
50 5:		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 50 0 51
5.		64	6	0	10	0	4	0	84 52
5:		0	0	0	0	0	0	0	0 53
54 5!		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 54 0 55
50		134	26	0	62	2	18	36	308 56
5° 58		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 57 0 58
59		502	88	4	30	8	0	4	648 59
60	0 0	0	0	0	0	0	0	0	0 60
6: 6:		134 0	26 0	0 0	6 56	2 0	18 0	36 0	230 61 78 62
63		76	16	0	114	0	0	0	206 63
64		500	88	4	4	4	0	4	608 64
6: 6:		0 20	0 4	0 0	26 34	4 0	0 0	0 0	38 65 58 66
6		152	30	0	34	2	18	36	280 67
68		0	0	0	6	0	0	0	6 68
69 70		6 584	6 104	0 4	16 114	0 4	0	0 4	28 69 818 70
7:		0	0	0	4	0	0	0	4 71
72	2 0	2	2	0	4	0	0	0	8 72
7: 7:		0 142	0 30	0 0	0 38	0 2	0 16	0 36	2 73 272 74
7. 7.		0	0	0	0	0	0	0	0 75
70	6 0	0	2	0	0	0	0	2	4 76
7° 78		0 0	0 0	0 0	0 4	0 0	0 0	0 0	0 77 4 78
7: 7:		0	0	0	0	0	0	0	0 79
80	0 4	592	112	4	128	4	0	4	848 80
8:		0 0	10 0	0 0	0 0	0 0	0 0	0 0	10 81 0 82
83	3 0	0	0	0	0	0	0	0	0 83
84	4 0	0	0	0	0	0	2	2	4 84

Table H - PM Peak Local Plan Alloc	Robey's	Land East of Dordon and	Land at Whittington	Atherstone Football	Coppice	Sites at Centurion	Land North of Aldi		
Local Plan Allocation Total Dwellings	Lane Ph1 1270	Polesworth 2000	Farm 1282	Ground 46	(All sites) 8.55	Park 0.77	Whittington Lane 1.5	MIRA 42	Total
No. Dwellings Occupied	0	0	0	0	0	0.77	0	0	
Percentage Complete	0%	0%	0%	0%	0%	0%	0%	0%	
HGV %	0%	0%	0%	0%	0%	0%	0%	0%	
Movement Numbe									
	1 72 2 12	0 0	4 0	0 0	14 0	0 0	0 0	4 0	94 1 12 2
	3 0	0	0	0	0	0	0	0	0 3
4	4 22	0	0	0	0	0	0	0	22 4
	5 128	0	0	0	22	0	0	2	152 5
	5 0 7 0	0 0	0 0	0 0	0 0	2 0	0 0	8 6	10 6 6 7
8	3 0	0	0	0	0	0	0	0	0 8
	9 0	0	0	0	0	0	0	0	0 9
10 1:		0 0	0 0	0 0	0 0	0 0	0 0	0 0	12 10 0 11
17		0	0	0	0	0	0	0	0 12
13		0	0	0	2	2	0	0	4 13
14 15		0 0	0 0	0 0	0 22	0 0	0 0	6 2	6 14 152 15
16	5 0	0	0	0	0	0	0	0	0 16
17		0	0	0	0	2	0	2	4 17
18		0 0	0 0	0 0	0 0	2 0	0 0	0 0	2 18 0 19
20	2	0	0	0	0	0	0	0	2 20
2:		224	54 0	2	22	2	2	20	340 21 18 22
22		0 0	0 0	0 0	0 0	0 0	0 0	0 0	18 22 34 23
24	4 0	0	0	0	0	0	0	0	0 24
2 <u>9</u> 20		0 10	0 4	0 0	0 0	0 0	0 0	0 2	0 25 16 26
21		0	0	0	0	0	0	0	0 27
28	3 0	0	0	0	0	0	0	0	0 28
29		0	0	0	0	0	0	0	8 29
30 31		0 4	0 2	0 2	0 0	0 0	0 0	0 0	0 30 8 31
32		0	0	0	0	0	0	0	0 32
33		0	0	0	0	0	0	0	0 33
34 35		0 0	0 0	0 0	0 0	0 0	0 0	0 0	4 34 0 35
36		0	0	0	0	0	0	0	0 36
33		2	0	0	2	0	0	0	4 37
38 39		66 54	6 12	0 0	2 34	0 2	4 10	0 16	78 38 156 39
40		4	0	0	0	0	0	0	4 40
4:		0	0	0	0	0	0	0	0 41
42 43		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 42 0 43
44		0	0	0	0	0	0	0	30 44
4!		0	0	0	0	0	0	0	0 45
46 47		0 14	0 0	0 0	0 0	0 0	0 0	0 0	0 46 14 47
48		0	0	0	0	0	0	0	0 48
49		0	0	0	0	0	0	0	60 49
50 51		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 50 0 51
52	2 0	246	28	0	6	0	0	0	280 52
53 54		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 53 0 54
5.		0	0	0	0	0	0	0	0 55
56	5 14	494	86	4	28	2	2	22	652 56
5: 58		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 57 0 58
59		126	18	0	40	2	14	16	244 59
60	0 0	0	0	0	0	0	0	0	0 60
6: 6:		494 0	86 0	4 0	2 26	2 0	2 0	22 0	616 61 36 62
63		18	4	0	32	0	0	2	56 63
64		128	20	0	6	0	16	16	198 64
65 66		0 76	0 20	0 0	34 112	2 0	0 0	0 2	52 65 210 66
67	7 2	576	108	4	118	2	2	24	836 67
68		0	0	0	2	0	0	0	4 68
69 70		2 146	2 24	0 0	4 32	0 0	0 16	0 18	8 69 242 70
7:	1 6	0	0	0	8	2	0	0	16 71
72		8	4	0	12	0	0	0	24 72
73 74		0 586	0 114	0 4	0 130	0 2	0 2	0 22	6 73 860 74
75	5 0	0	0	0	0	0	0	0	0 75
76 7		0	2	2	0	0	0	2	6 76
77. 78		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 77 0 78
79	9 0	0	0	0	0	0	2	2	4 79
80		148 0	26 4	0 0	36 0	0 0	16 0	18 0	250 80 4 81
8. 8.		0 0	0	0	0	0	0 0	0	4 81 0 82
83	3 0	0	0	0	0	0	0	0	0 83
84	4 0	0	0	0	0	0	0	0	0 84

Table I - 2033 AM Peak Local Plan Allocations

Table I - 2033 AM Peak Local Plan All	ocations								
		Land East of	Land at	Atherstone	Birch	Sites at	Land North of		
	Robey's Lane	Dordon and	Whittington	Football	Coppice	Centurion	Aldi Whittington		
Local Plan Allocation	Ph1	Polesworth	Farm	Ground	(All sites)	Park	Lane	MIRA	Total
Total Dwellings/ Employment No. Dwellings Occupied at time of	1270	2000	1282	46	8.55	0.77	1.5	42	
2023 Surveys	0	0	0	0	0	0.77	1.5	0	
Percentage Complete in 2023	0%	0%	0%	0%	0%	100%	100%	0%	
No. Dwellings Occupied in 2033	1040	1675	1282	0	0	0.77	1.5	42	
Percentage Occupied in 2033 Percentage Occupied between 2023	82%	84%	100%	0%	0%	100%	100%	100%	
and 2033	82%	84%	100%	0%	0%	0%	0%	100%	
HGV %	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
1		2 0	0 0	0 0	0 0	0 0	0 0	2 0	113 1 20 2
3		0	0	0	0	0	0	0	0 3
4		0	0	0	0	0	0	0	7 4
5		5	2	0	0	0	0	0	48 5
6		0 0	0 0	0 0	0 0	0 0	0 0	12 10	12 6 10 7
		0	0	0	0	0	0	0	0 8
g		0	0	0	0	0	0	0	0 9
10 11		0 0	0 0	0 0	0 0	0 0	0 0	0	18 10 0 11
12		0	0	0	0	0	0	0 0	0 11 0 12
13		0	0	0	0	0	0	0	0 13
14		0	0	0	0	0	0	2	2 14
15 16		5 0	2 0	0 0	0 0	0 0	0 0	0 0	48 15 0 16
17		0	0	0	0	0	0	2	2 17
18		0	0	0	0	0	0	0	0 18
19		0	0	0	0	0	0	0	5 19
20		0 50	0 16	0 0	0 0	0 0	0 0	0 34	3 20 125 21
22		0	0	0	0	0	0	0	21 22
23		0	0	0	0	0	0	0	49 23
24		0	0	0	0	0	0	0	0 24
25 26		0 2	0 2	0 0	0 0	0 0	0 0	0 2	0 25 6 26
27		0	0	0	0	0	0	0	0 27
28		0	0	0	0	0	0	0	0 28
29		0	0	0	0	0	0	0	2 29
30 31		0	0 0	0	0	0 0	0	0	0 30 0 31
32		0	0	0	0	0	0	0	0 32
33	3 0	0	0	0	0	0	0	0	0 33
34		0	0	0	0	0	0	0	2 34
35 36		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 35 0 36
37		3	0	0	0	0	0	0	3 37
38	3 0	208	24	0	0	0	0	0	232 38
39		191	52	0	0	0	0	4	257 39
40 41		8 3	4 2	0 0	0 0	0 0	0 0	0 0	12 40 5 41
42		8	2	0	0	0	0	0	10 42
43	3 0	0	0	0	0	0	0	0	0 43
44		0	0	0	0	0	0	0	10 44
45 46		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 45 0 46
47		0	0	0	0	0	0	0	0 47
48		0	0	0	0	0	0	0	0 48
49 50		0 0	0 0	0 0	0 0	0 0	0 0	0 0	16 49 0 50
51		0	0	0	0	0	0	0	0 51
52		54	6	0	0	0	0	0	60 52
53		0	0	0	0	0	0	0	0 53
54 55		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 54 0 55
56		112	26	0	0	0	0	36	199 56
57	0	0	0	0	0	0	0	0	0 57
58		0	0	0	0	0	0	0	0 58
59 60		420 0	88 0	0 0	0 0	0 0	0 0	4 0	522 59 0 60
61		112	26	0	0	0	0	36	181 61
62	18	0	0	0	0	0	0	0	18 62
63		64	16	0	0	0	0	0	80 63
64 65		419 0	88 0	0 0	0 0	0 0	0 0	4 0	514 64 7 65
66		17	4	0	0	0	0	0	21 66
67		127	30	0	0	0	0	36	200 67
68		0	0	0	0	0	0	0	0 68
69 70		5 489	6 104	0 0	0 0	0 0	0 0	0 4	11 69 600 70
71		0	0	0	0	0	0	0	0 71
72	2 0	2	2	0	0	0	0	0	4 72
73		0 110	0	0	0	0	0	0	2 73
74 75		119 0	30 0	0 0	0 0	0 0	0 0	36 0	191 74 0 75
76		0	2	0	0	0	0	2	4 76
77	0	0	0	0	0	0	0	0	0 77
78		0	0	0	0	0	0	0	0 78
79 80		0 496	0 112	0 0	0 0	0 0	0 0	0 4	0 79 615 80
81		0	10	0	0	0	0	0	10 81
82	2 0	0	0	0	0	0	0	0	0 82
83 84		0 0	0 0	0	0	0 0	0 0	0	0 83 2 84
84	0	U	U	0	0	U	U	2	2 84

surveyed flows in/out of Birch Coppice to be uplifted by surveyed flows (disregard Vectos flows) to be discounted as agreed with North Warwickshire Revised housing numbers as advised by North Warwickshire Sites built and occupied at time of 2033 surveys (disregard Vectos flows)

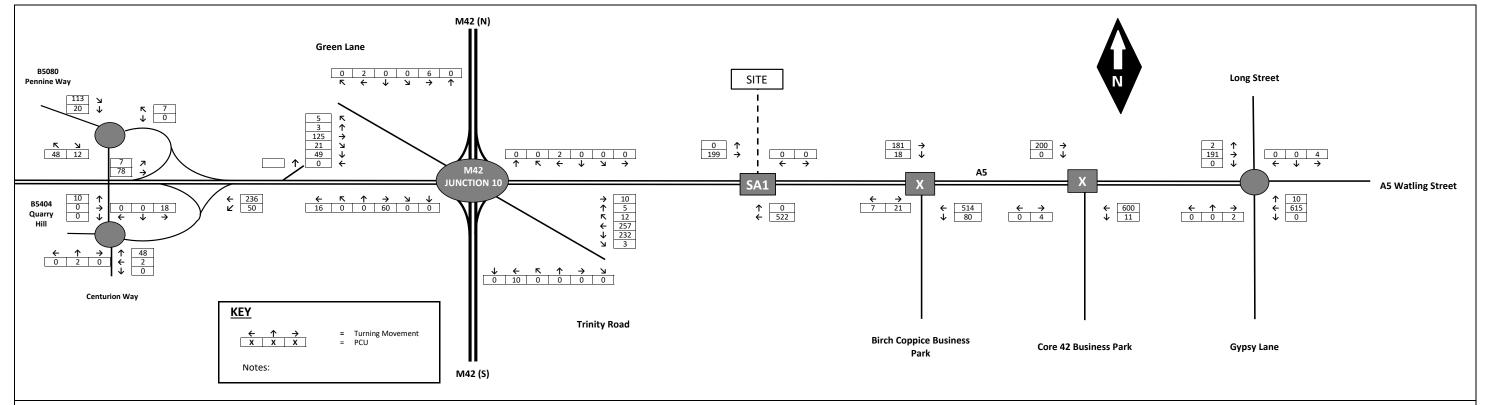


FIGURE 23

2033 AM Peak Local Plan PCU Traffic Flows (from Vectos)

Land North East of M42 Junction 10

Table J - 2033 PM Peak Local Plan Allocations

Table J - 2033 PM Peak Local Plan All	ocations								
		Land East of	Land at	Atherstone	Birch	Sites at	Land North of		
	Robey's Lane	Dordon and	Whittington	Football	Coppice	Centurion	Aldi Whittington		
Local Plan Allocation	Ph1	Polesworth	Farm	Ground	(All sites)	Park	Lane	MIRA	Total
Total Dwellings/ Employment	1270	2000	1282	46	8.55	0.77	1.5	42	
No. Dwellings Occupied at time of 2023 Surveys	0	0	0	0	0	0.77	1.5	0	
Percentage Complete in 2023	0%	0%	0%	0%	0%	100%	100%	0%	
No. Dwellings Occupied in 2033	1040	1675	1282	0	0	0.77	1.5	42	
Percentage Occupied in 2033	82%	84%	100%	0%	0%	100%	100%	100%	
Percentage Occupied between 2023	;								
and 2033	82%	84%	100%	0%	0%	0%	0%	100%	
HGV %	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
1		0	4	0	0	0	0	4	67 1
2		0 0	0 0	0 0	0 0	0 0	0 0	0 0	10 2 0 3
4		0	0	0	0	0	0	0	18 4
5		0	0	0	0	0	0	2	107 5
6	6 0	0	0	0	0	0	0	8	8 6
7		0	0	0	0	0	0	6	6 7
8		0	0	0	0	0	0	0	0 8
9		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 9 10 10
11		0	0	0	0	0	0	0	0 11
12		0	0	0	0	0	0	0	0 12
13		0	0	0	0	0	0	0	0 13
14		0	0	0	0	0	0	6	6 14
15		0	0	0	0	0	0	2	107 15
16		0	0	0	0	0	0	0	0 16
17 18		0 0	0 0	0 0	0 0	0 0	0 0	2 0	2 17 0 18
19		0	0	0	0	0	0	0	0 19
20		0	0	0	0	0	0	0	2 20
21	. 11	188	54	0	0	0	0	20	273 21
22		0	0	0	0	0	0	0	15 22
23		0	0	0	0	0	0	0	28 23
24 25		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 24 0 25
26		8	4	0	0	0	0	2	14 26
27		0	0	0	0	0	0	0	0 27
28		0	0	0	0	0	0	0	0 28
29		0	0	0	0	0	0	0	7 29
30		0	0	0	0	0	0	0	0 30
31		3	2	0	0	0	0	0	5 31
32 33		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 32 0 33
34		0	0	0	0	0	0	0	3 34
35		0	0	0	0	0	0	0	0 35
36		0	0	0	0	0	0	0	0 36
37		2	0	0	0	0	0	0	2 37
38		55	6	0	0	0	0	0	61 38
39 40		45 3	12 0	0 0	0 0	0 0	0 0	16 0	96 39 3 40
41		0	0	0	0	0	0	0	0 41
42		0	0	0	0	0	0	0	0 42
43	0	0	0	0	0	0	0	0	0 43
44		0	0	0	0	0	0	0	25 44
45		0	0	0	0	0	0	0	0 45
46 47		0	0 0	0 0	0 0	0 0	0 0	0 0	0 46 12 47
48		12 0	0	0	0	0	0	0	0 48
49		0	0	0	0	0	0	0	49 49
50		0	0	0	0	0	0	0	0 50
51		0	0	0	0	0	0	0	0 51
52		206	28	0	0	0	0	0	234 52
53		0	0	0	0	0	0	0	0 53
54 55		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 54 0 55
56		414	86	0	0	0	0	22	533 56
57		0	0	0	0	0	0	0	0 57
58		0	0	0	0	0	0	0	0 58
59		106	18	0	0	0	0	16	162 59
60 61		0 414	0 86	0 0	0 0	0 0	0 0	0 22	0 60 525 61
62		414 0	0	0	0	0	0	0	8 62
63		15	4	0	0	0	0	2	21 63
64		107	20	0	0	0	0	16	153 64
65		0	0	0	0	0	0	0	13 65
66		64	20	0	0	0	0	2	86 66
67		482	108	0	0	0	0	24	616 67
68 69		0 2	0 2	0 0	0 0	0 0	0 0	0 0	2 68 4 69
70		122	24	0	0	0	0	18	169 70
71		0	0	0	0	0	0	0	5 71
72	2 0	7	4	0	0	0	0	0	11 72
73		0	0	0	0	0	0	0	5 73
74		491	114	0	0	0	0	22	627 74
75 76		0	0 2	0	0	0 0	0	0 2	0 75 4 76
77		0	0	0	0	0	0	0	0 77
78		0	0	0	0	0	0	0	0 78
79	0	0	0	0	0	0	0	2	2 79
80		124	26	0	0	0	0	18	173 80
81		0	4	0	0	0	0	0	4 81
82 83		0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 82 0 83
83 84		0	0	0	0	0	0	0	0 83 0 84
04	. 0	3	3	J	3	J	J	J	₹

surveyed flows in/out of Birch Coppice to be uplifted by surveyed flows (disregard Vectos flows) to be discounted as agreed with North Warwickshire Revised housing numbers as advised by North Warwickshire Sites built and occupied at time of 2033 surveys (disregard Vectos flows)

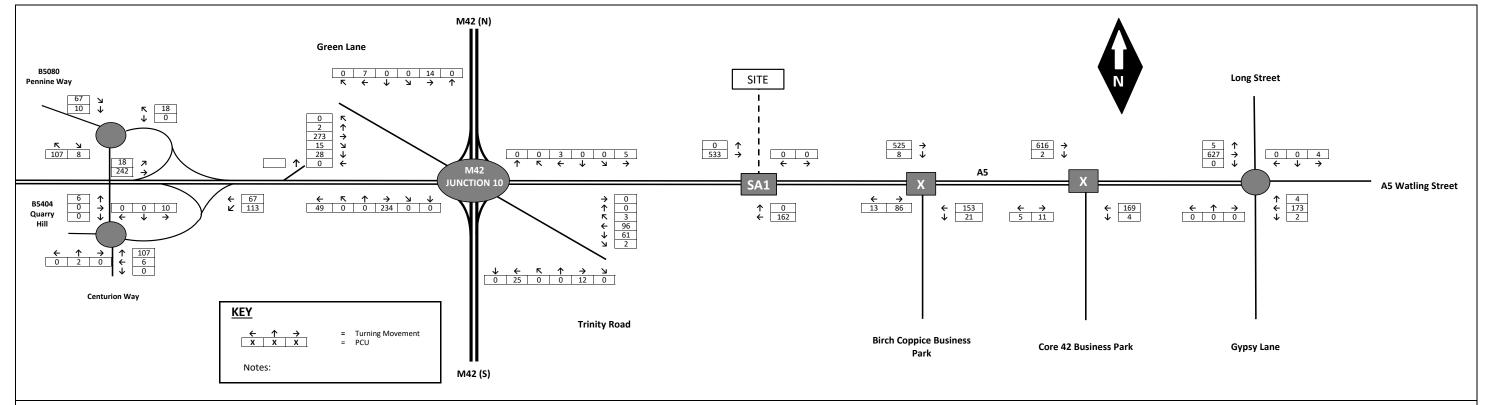


FIGURE 24

2033 PM Peak Local Plan PCU Traffic Flows (from Vectos)

Land North East of M42 Junction 10



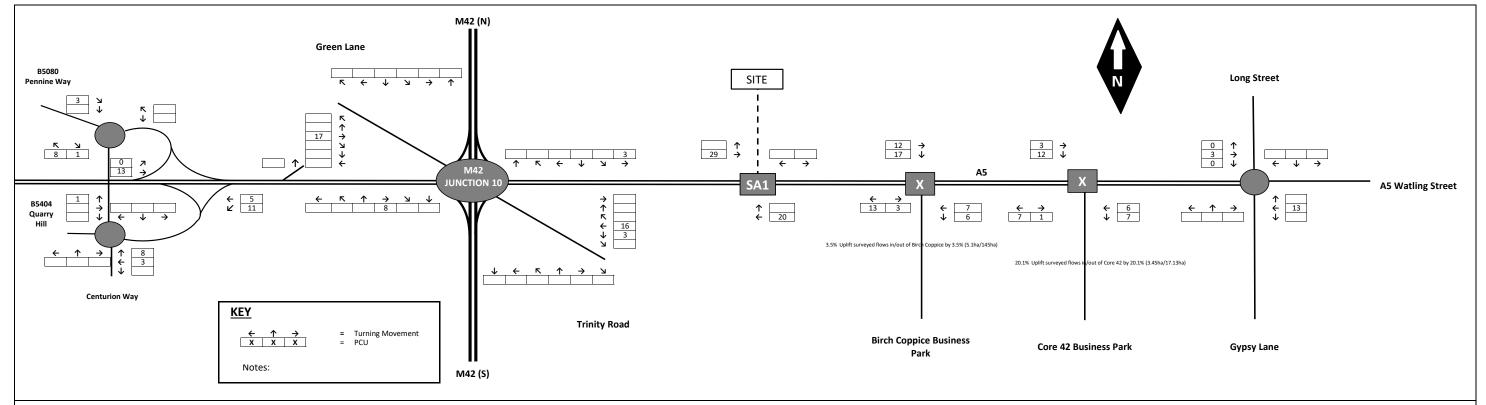


FIGURE 25

2033 AM Peak Birch Coppice & Core 42 Local Plan Flows

Land North East of M42 Junction 10

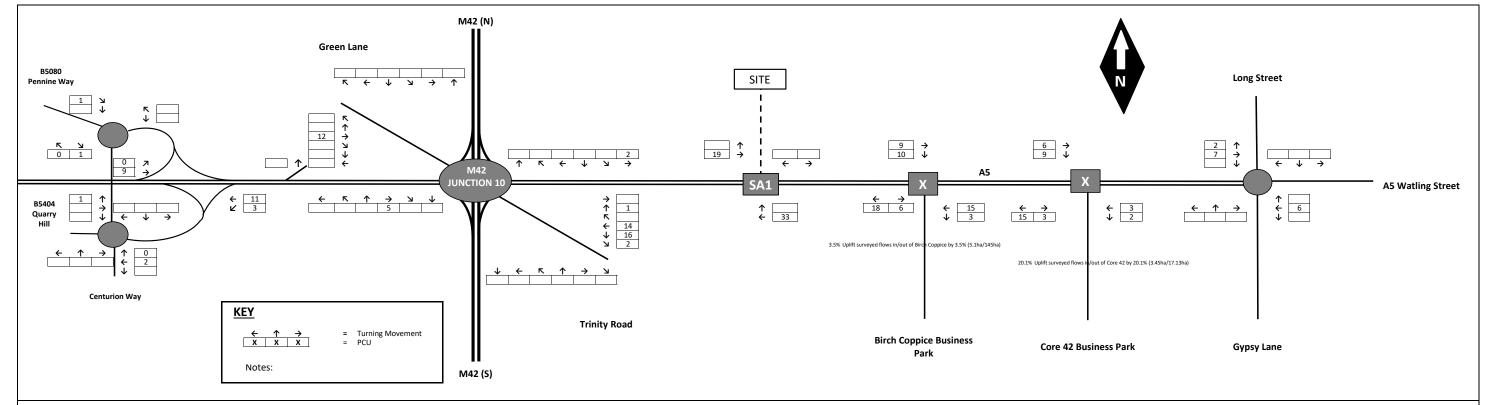
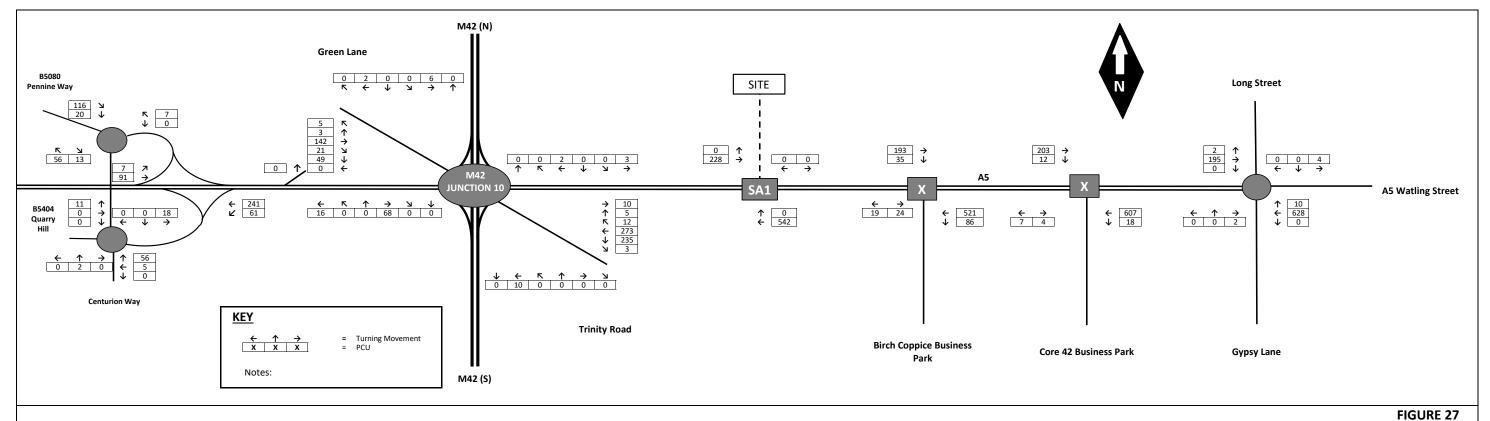


FIGURE 26

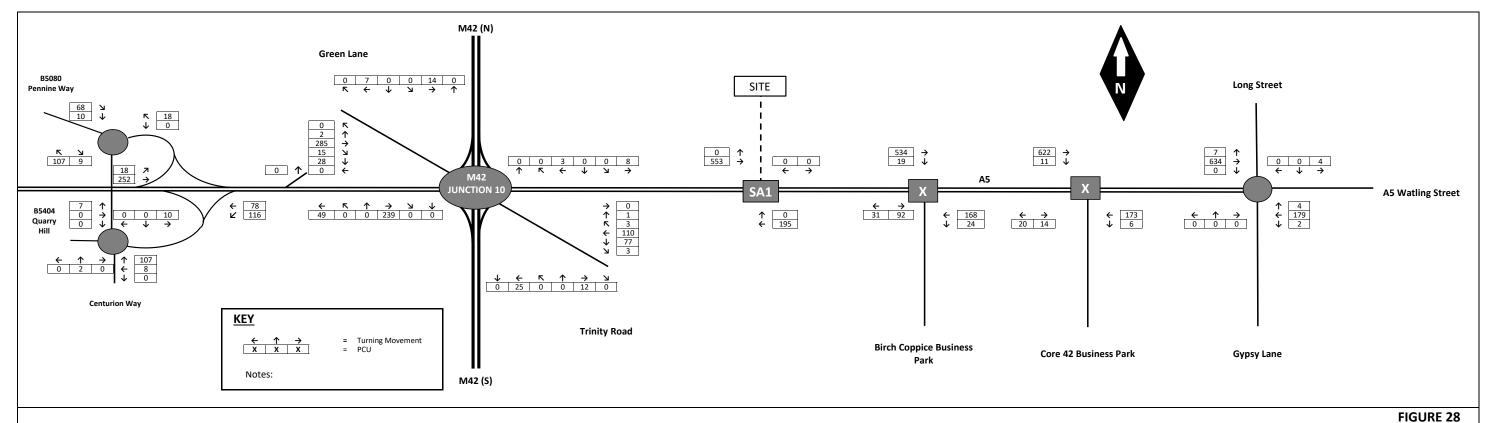
2033 PM Peak Birch Coppice & Core 42 Local Plan Flows

Land North East of M42 Junction 10



2033 AM Peak Total Local Plan Traffic Flows (PCU)

Land North East of M42 Junction 10



TETRA TECH

2033 PM Peak Total Local Plan Traffic Flows (PCU)

·

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

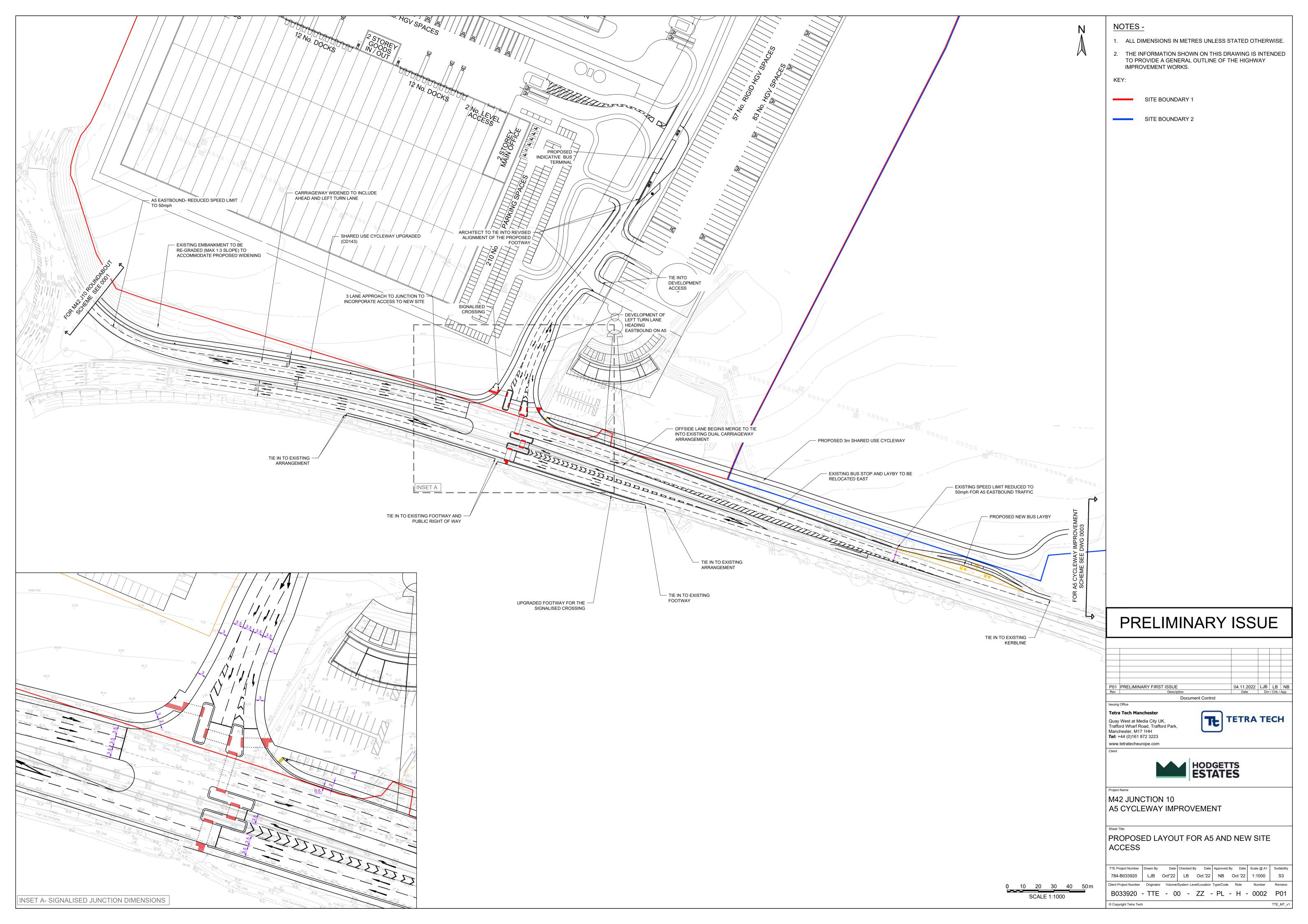
Consolidated Modelling Strategy Note v2 Land Northeast of M42 Junction 10

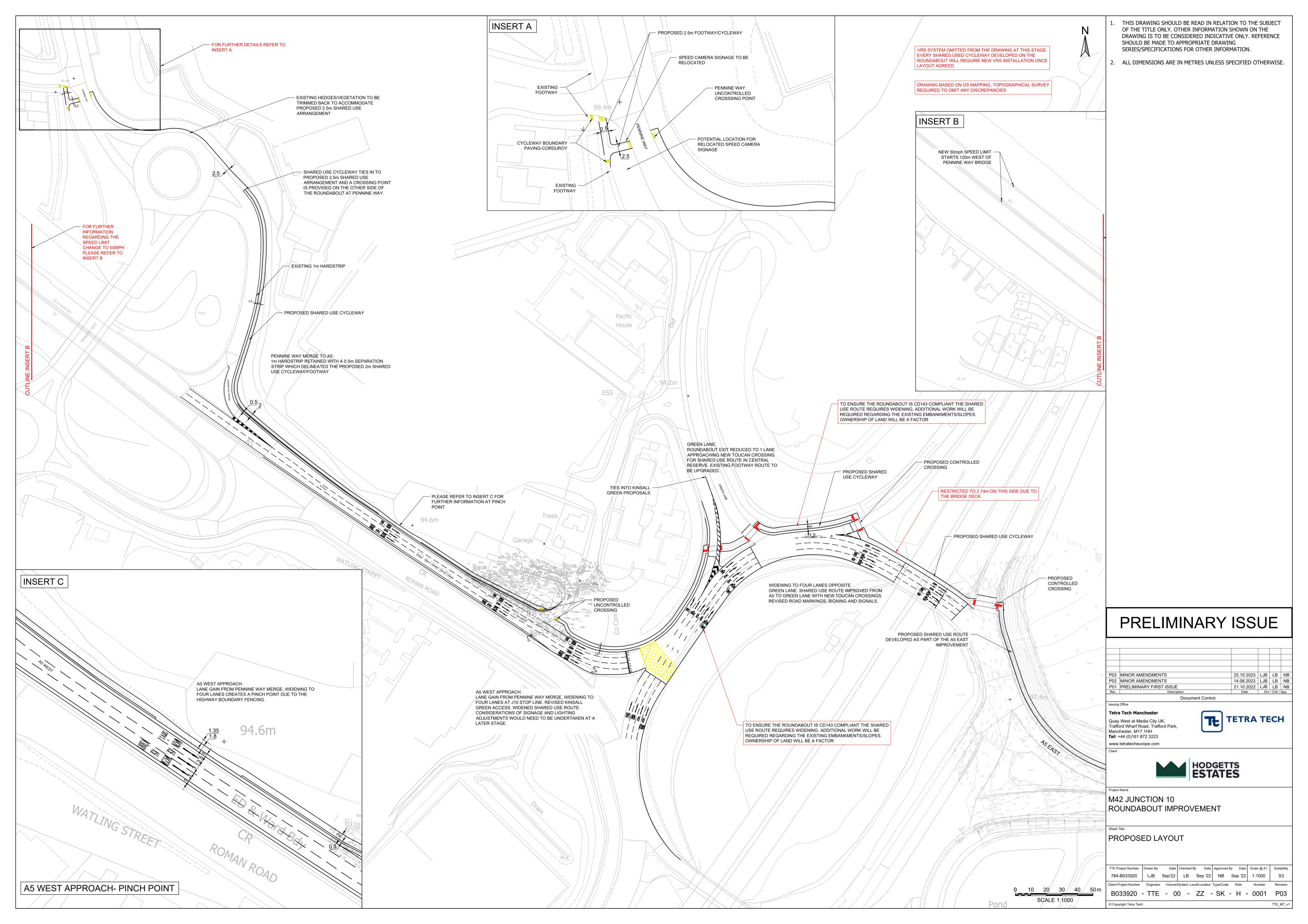


Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX G

TT Drawings





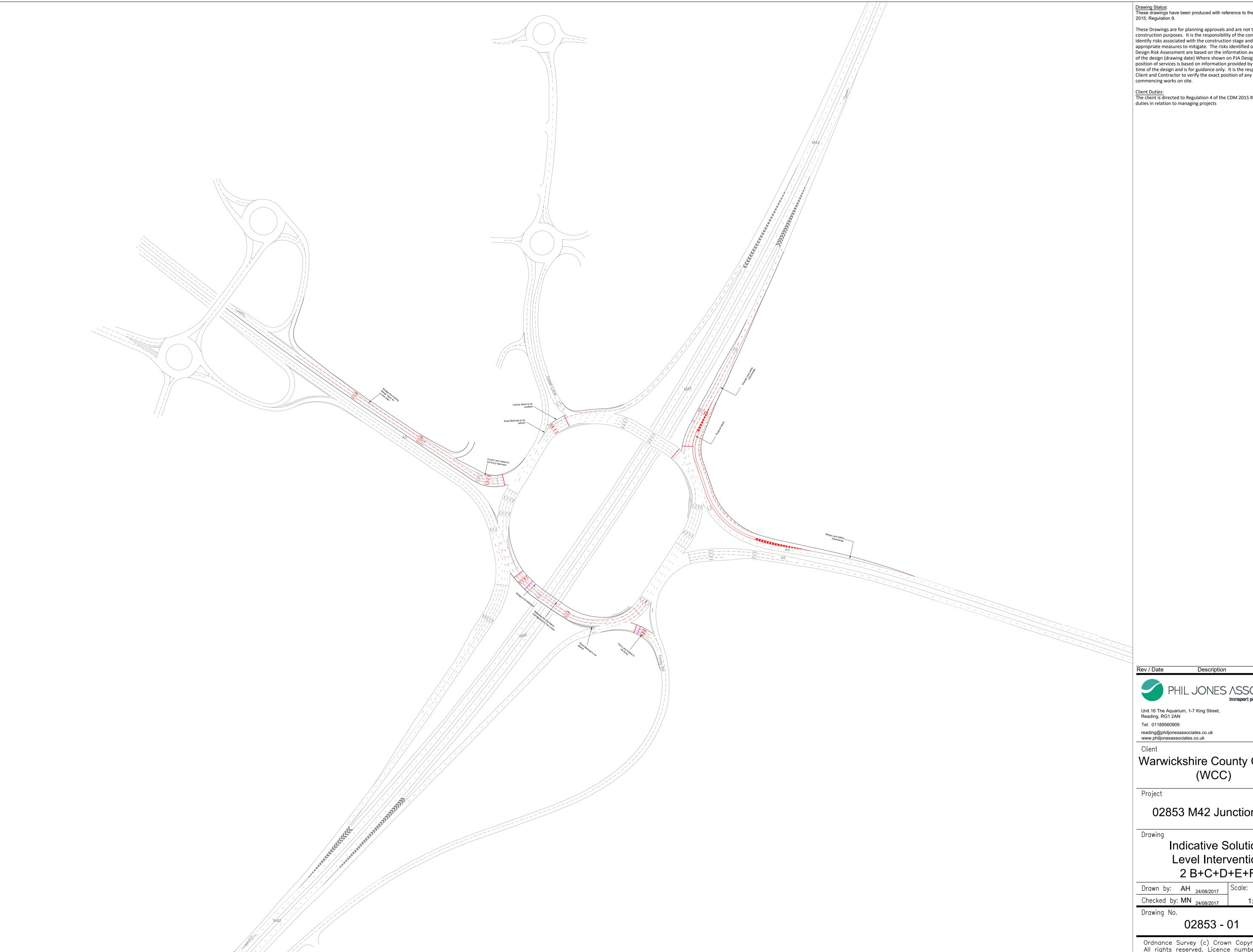
Consolidated Modelling Strategy Note v2 Land Northeast of M42 Junction 10



Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX H

Drawings by Others



<u>Drawing Status:</u>
These drawings have been produced with reference to the CDM Regulations 2015; Regulation 9.

These Drawings are for planning approvals and are not to be used for construction purposes. It is the responsibility of the contractor and client to identify risks associated with the construction stage and to design appropriate measures to mitigate. The risks identified on the PJA Scheme Design Risk Assessment are based on the information available at the time of the design (drawing date) Where shown on PJA Design Drawings, the position of services is based on information provided by other parties at the time of the design and is for guidance only. It is the responsibility of the Client and Contractor to verify the exact position of any services before

Client Duties:
The client is directed to Regulation 4 of the CDM 2015 Regulations: Client duties in relation to managing projects

Drn Chck'd Description

Warwickshire County Council (WCC)

02853 M42 Junction 10

Indicative Solution. Level Intervention 2 B+C+D+E+F

1:2000 @ A1

| Revision

Ordnance Survey (c) Crown Copyright 2014. All rights reserved. Licence number xxxxxxxxxx

Consolidated Modelling Strategy Note v2 Land Northeast of M42 Junction 10



Client: Hodgetts Estates Limited Date: 1 November 2023

APPENDIX I

A5/ Dordon Roundabout Consultation



A5 Dordon to Atherstone project

Public consultation report

Contents Table

1.	Executive Summary	2
2.	Introduction	4
2.1	Introduction to the scheme	4
2.2	Background	5
2.3	Scheme aims and objectives	5
2.4	Summary of options	6
3.	Consultation	10
3.1	What we did	10
4.	Consultation Findings	14
4.1	Overview	14
4.2	Who we heard from	15
4.3	Views on the current road	19
4.4	Views on the options to dual the route	23
4.5	Views on proposed improvements to the A5	28
4.6	Any additional comments	30
4.7	Freeform responses	31
4.8	Change requests and alternative suggestions	32
4.9	Stakeholder participation	32
4.10	Equality and diversity	34
5 .	Conclusion	37
6.	Next Steps	38

1. Executive Summary

The A5 Dordon to Atherstone project proposes improvements to sections of the A5 between Dordon and Atherstone to increase capacity and provide opportunities for housing and employment growth, to support North Warwickshire Borough Council and the wider West Midlands region.

The purpose of the Public Consultation was to seek feedback from the public and stakeholders on which of the three options presented (Option A, Option B and Option C), would best improve current conditions and facilitate increased growth in the region.

The three options presented all involve a bypass carriageway to the south of the current A5 between the Dordon roundabout to a point 500m west of the Grendon (Spon Lane / Boot Hill / Watling Street) roundabout. The bypass options only differ in their road layout, connections to local roads and overall scale of works.

Option A – signalised junction to replace the Dordon roundabout.

Option B – new larger roundabout to serve Watling Street and Gypsy Lane, no direct access from Long Street to the A5.

Option C – "left in – left out" arrangement for traffic using Gypsy Lane, no direct access from Long Street to the A5.

All three scheme options also include improvements to the Spon Lane / Boot Hill / Watling Street roundabout and the Holly Lane / Merevale Lane / Watling Street roundabout to the western side of the Atherstone bypass.

The consultation ran for seven and a half weeks from 5 September to 27 October 2022, including an extension to acknowledge the National Mourning Period following the death of Queen Elizabeth II. Over the consultation period, **179** responses were received via the following channels:

- CitizenSpace 108 responses
- Freeform responses (project inbox, letters and phone calls) **36 responses**
- Hard copy returns (received via freepost, email and at consultation events) –
 35 responses

Responses were predominantly received from local residents (84%) with 94% travelling by car along the A5 between Dordon and Atherstone as their main means of transport. The majority of consultees use the A5 on a daily basis, and at a combination of 'peak' and 'off-peak' periods throughout the week and on weekends.

Key findings

Overall, 63% of consultees 'agree' or 'strongly agree' that improvements to the route are needed. This is reflected in the feedback received relating to the existing A5 conditions, which show high levels of dissatisfaction in relation to road layout, road safety, congestion, journey times, and access for walking, cycling and horse riding.

The feedback received relating to the proposed A5 improvements show limited support, with 48% of consultees indicating they 'oppose' or 'strongly oppose' the proposed improvements, while 45% indicated they 'support' or 'strongly support'.

When asked about their preferred route overall, Option B was the clear preference, with a 34% majority via the consultation survey and 42% via the freeform responses.

While Option B is shown to be the preferred route, many consultees chose not to answer or to select 'No preference' when asked which option they support (37% of survey responses and 52% in freeform responses).

When asked about route preference in relation to specific considerations, results varied, with the majority of consultees selecting Option A when considering land take and impact to biodiversity; Option B when considering the longer-term benefits relating to journey times, safety and congestion; and, 'No preference' when considering environmental impacts.

The open-format sections of the survey and email submissions, enable a deeper analysis of key issues, concerns and further considerations. This was completed through an analysis of common themes and sentiment.

In these sections, many consultees cite concerns relating to a perceived increase in congestion, slowing of journey times and the potential for a negative impact on air quality as a result of the proposals.

The rationale for these concerns include: congestion arising from double to single lane transitions; increased traffic using the route once upgrades are complete; and, the use of signals at junctions causing traffic to slow and vehicles to idle.

Another key theme to emerge in this part of the analysis is a request to include further walking and cycling provisions.

Whilst outside of the scope of the project, the previously publicised bypass of Grendon was the most common theme to arise. In many cases, respondents either expressed a preference for this bypass road over the current proposals or suggested a scheme of that nature be completed prior to dualling of the A5 between Dordon and Atherstone.

2. Introduction

2.1 Introduction to the scheme

The A5 is part of a key strategic route between London and Holyhead. It forms a significant east-west link across the South Midlands connecting the East and West Midlands and acts as a local distributor connecting a number of urban areas to the national motorway network (M1, M42, M69 and M6/M6 (Toll)).

The A5 Dordon to Atherstone project is located in North Warwickshire between the Dordon roundabout (A5 Watling Street / Long Street / Gypsy Lane), Spon Lane roundabout at Grendon and Holly Lane roundabout (A5 / Holly Lane / B1143 Merevale Lane).

The A5 Dordon to Atherstone project proposes improvements to this section of the A5 to increase capacity and provide opportunities for housing and employment to support North Warwickshire Borough Council and the wider West Midlands region. Three options have been developed and presented for public consultation, as part of the 'Options Selection' stage (Stage 2) in the project's development.



2.2 Background

2.2.1 Initial development of the scheme

The project was developed by Warwickshire County Council (WCC) through the application for a Housing Infrastructure Grant (HIG) in 2019 provided by the Department for Levelling Up, Housing and Communities.

The application was supported by National Highways, who were then asked to take the scheme forward to develop viable options.

2.2.2 Early engagement

Early engagement on the development of this project started in July 2021 with local MPs, North Warwickshire Borough Council, Warwickshire County Council, Homes England, and the A5 Partnership, together with county, borough and local parish councils.

These stakeholders provided valuable insights that have helped us understand the concerns affecting road users, business and residents. The learnings taken from this early engagement directly influenced the options developed and presented for public consultation.

2.3 Scheme aims and objectives

The scheme has been developed based on the following objectives:

Improve connectivity and support economic growth

- Enable the delivery of housing development at strategic sites along the A5 that are linked to the scheme's funding.
- Consider wider economic growth.

Provide faster and more reliable journeys

- Reduce queuing on the A5 Dordon, Spon Lane and Holly Lane roundabouts.
- Improve journey time reliability along this section of the A5.

Improve safety for all

- Maintain and improve road safety on the A5 between Dordon and Atherstone.
- Improve road worker safety.

Environment

- Minimise adverse impacts on the environment.
- Seek opportunities to protect and enhance the environment.

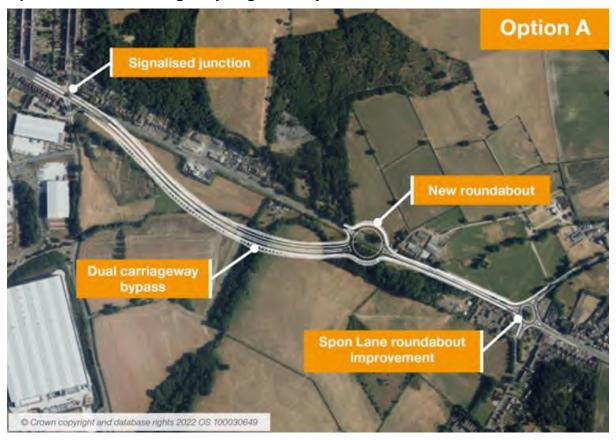
Meeting the needs of all users

 Improve accessibility and safety for local road users, cyclists, walkers, horse riders and other vulnerable users of the network.

2.4 Summary of options

The following three options were developed for public consultation, with varying levels of improvements against the scheme objectives.

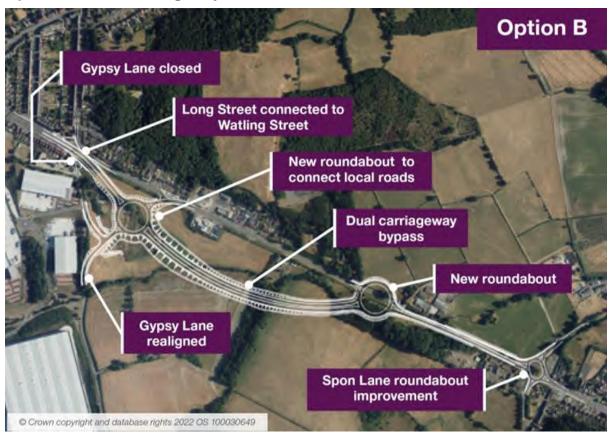
Option A - Dual carriageway, signalised junction and new roundabout



Summary:

Option A introduces a dual carriageway bypass to the south of the existing A5 corridor and ties into the A5 at the Dordon roundabout. The Dordon roundabout will be upgraded to a four-way signalised junction, maintaining access to Long Street and Gypsy Lane direct from the A5 mainline. A new roundabout is proposed at the eastern end of the bypass to tie back into the existing A5. The existing bypassed section of the A5 is proposed to be de-trunked and will be accessed via the new roundabout.

Option B - Dual carriageway and two new roundabouts



Summary:

Option B introduces a dual carriageway bypass to the south of the existing A5 corridor and ties into the existing alignment of the A5 at the Dordon roundabout, with the dual carriageway replacing the existing roundabout. The existing Gypsy Lane junction with the A5 will be closed, a new roundabout will be provided to the east, along the new bypass, providing links back to Gypsy Lane, Long Street and the bypassed section of the A5. A second new roundabout is proposed at the eastern end of the bypass to tie back into the existing A5. The existing bypassed section of the A5 is proposed to be de-trunked and will also be accessible via the new eastern roundabout.

Gypsy Lane closed

Coption C

Cop

Option C – Dual carriageway, new roundabout and new junction

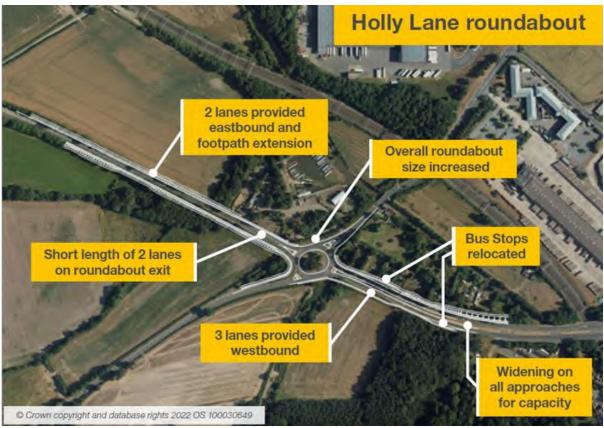
Summary:

Crown copyright and database rights 2022 OS 100030649

Option C introduces a dual carriageway bypass to the south of the existing A5 corridor and ties into the existing A5 at the existing Dordon roundabout, with the dual carriageway replacing the existing roundabout. The existing Gypsy Lane junction with the A5 will be closed, a new left off/left on at grade junction will be provided to the east, along the new bypass, providing a link to/from Gypsy Lane. No right turns will be permitted into or out of Gypsy Lane, resulting in vehicles having to travel to the next roundabout to perform a U-turn.

A new roundabout is proposed at the eastern end of the bypass to tie back into the existing A5. The existing bypassed section of the A5 is proposed to be de-trunked and will be accessible via the new eastern roundabout. Access to Dordon/Long Street will be via the newly de-trunked section of A5 carriageway.

Holly Lane roundabout - Improvements



Summary:

Improvements to Holly Lane will increase the size of the roundabout to provide additional capacity together with footpath and bus stop provision.

3. Consultation

3.1 What we did

The public consultation ran for seven and a half weeks from 5 September to 27 October 2022. The consultation period was initially planned for six weeks, which was extended to acknowledge the National Mourning Period following the death of Queen Elizabeth II.

The consultation sought to obtain the views of residents, businesses, key stakeholders, interested groups and the range of people who use the roads at and near the A5 between Dordon and Atherstone. The consultation was accessible through a range of in-person, virtual and remote forums to encourage as many people as possible to participate.

The consultation materials presented the project objectives and intended outcomes with detailed information provided on each of the three options. It also included comparative information on the impacts for each option across a range of areas, including transport, economy, and the environment.

The consultation materials contained as much information as possible in an easy-tounderstand format to ensure participants were fully informed on all aspects of the proposals and well-equipped to provide their views. In the case that more information was needed, a range of contact methods were available to speak to the project team.

3.1.1 Events, forums and publicity

National Highways recognise how important it is that local people are given the opportunity to provide their views and comments for consideration and undertook a series of events and promotional activities to engage as many people as possible throughout the consultation period.

Citizen Space

A dedicated Citizen Space webpage was developed to hold information about the proposed options and consultation. Details of consultation events, project contact details and the consultation submission portal were available throughout the consultation period.

Virtual exhibition

A virtual event space was hosted for the duration of the consultation which recreated the in-person experience of the consultation events, with 24-hour access for consultees to view at their convenience.

Public exhibitions

During the consultation period,

four exhibition events were held at community hubs where local people were invited to view and discuss the proposals, meet different technical leads from the project

team and ask questions about the options. More than 250 people attended across the four events.

The dates, venues and times for the events are as follows:

Date	Time	Location
Thursday 8 September 2022	2pm – 8pm	Dordon Village Hall
Wednesday 28 September 2022	11.30am – 5pm	Owen Street Community Arts Centre
Thursday 6 October 2022	2pm – 8pm	Dordon Village Hall
Thursday 20 October 2022	3pm – 8pm	Grendon Community Centre

Online events

Two online events were held where the project team presented the project and provided detail relating to the proposed options and key considerations. The forum enabled attendees to engage directly with key technical experts to have their questions answered and raise any concerns. Approximately 10 people attended the two events.

The dates and times for these online events were as follows:

- Tuesday 20 September 2022 from 6pm
- Thursday 13 October 2022 from 6pm



Engagement van

The National Highways
Engagement Van was positioned at
the Tamworth Services located at
Junction 10 of the M42 and on the
A5 at the Grendon Working Mens
Club at various times throughout the
consultation period.

Members of the project team were on-hand during set periods to answer any questions, listen to the public's views on the scheme and distribute consultation materials. Over 40 people visited the team at the engagement van throughout the consultation period.

Print and digital media

To generate awareness and reach as many people as possible, the consultation was advertised in local press publications, including:

- Coventry Telegraph
- Tamworth Herald
- Coventry Observer

The consultation was also advertised on National Highways social media



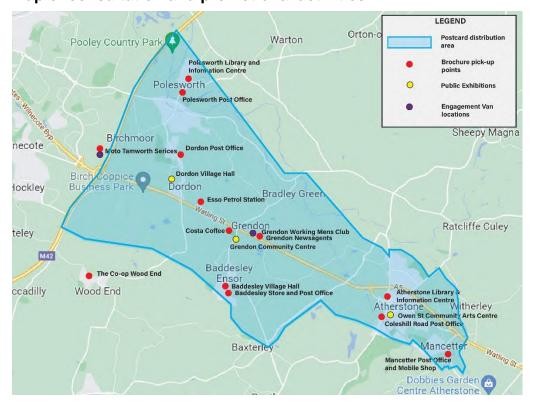
channels and stakeholder groups were encouraged to promote the consultation through their communications channels. These stakeholders included; Craig Tracey MP, North Warwickshire Borough Council, Warwickshire County Council, Midlands Connect, Coventry & Warwickshire Local Enterprise Partnership and, Dordon and Grendon parish councils.

Brochures and postcards

Consultation postcards were distributed to approximately 12,000 addresses along the scheme corridor. The postcards held information on where to access the consultation, along with times, locations, and dates for the in-person exhibitions.

Brochures were placed at 13 locations across the area, such as motorway service stations, community centres, libraries and local shops/post offices. Posters were also placed in shop-front windows to further promote the consultation and engage the passing public.

Map of consultation and promotional activities



Phone and email

Emails were received containing questions, comments and long-form responses to the consultation. A dedicated project phone line was live throughout the consultation period and staffed by the Project Team who were available to answer any questions and receive feedback.

3.1.2 Stakeholder engagement

Key project stakeholders were provided scheme briefings and meetings with the project team in the lead-up to, and during the consultation. During the briefings, the project team presented information on the consultation and were able to answer any questions relating to the proposed options.

In some cases, stakeholders were provided publicity materials to share through their channels and with members of the community. Feedback received at this stage helped shape consultation activities to reach as many people in the community as possible.

These stakeholders include:

- Local MPs
- North Warwickshire Borough Council
- Warwickshire County Council
- Homes England
- Midlands Connect
- Coventry & Warwickshire Local Enterprise Partnership
- A5 Partnership
- Grendon Parish Council
- Dordon Parish Council

4. Consultation Findings

4.1 Overview

Consultees were asked to share their views on the proposals through a questionnaire which could be submitted online, at in-person events or by Freepost. Freeform responses could be submitted by email, phone or by post.

The questionnaire asked consultees their views on the existing road layout and conditions; their sentiment relating to the proposed options; and any additional comments, concerns or issues they would like to have considered.

A total of **179 consultation** responses were submitted throughout the public consultation period.

The responses have been received via the following channels:

- CitizenSpace 108 responses
- Project inbox, letters and phone calls **36 responses**
- Hard copy surveys (received via freepost, email and at consultation events) –
 35 responses

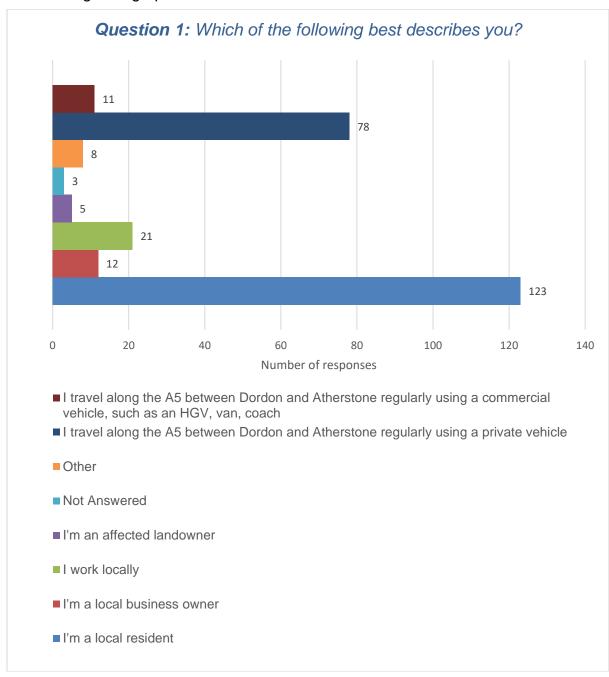
Feedback was obtained through a range of closed and open-answer question formats, resulting in a clear display of sentiment relating to key aspects of the proposals, whilst allowing for comments and suggestions for consideration.

The closed-answer responses have been quantified and displayed through graphs and percentages. The open-answer responses have been analysed according to theme and sentiment, and represented in numeric, summary, and graphical format.

4.2 Who we heard from

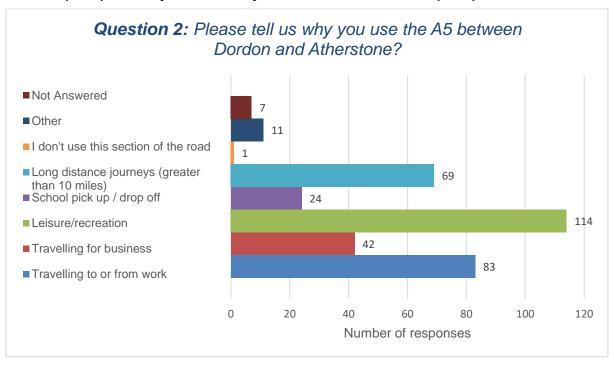
4.2.1 What describes you

Of those who responded to the questionnaire, **84% are local residents** and **14% told us they work locally.** Other responses to the multiple-choice question can be seen through the graph below.



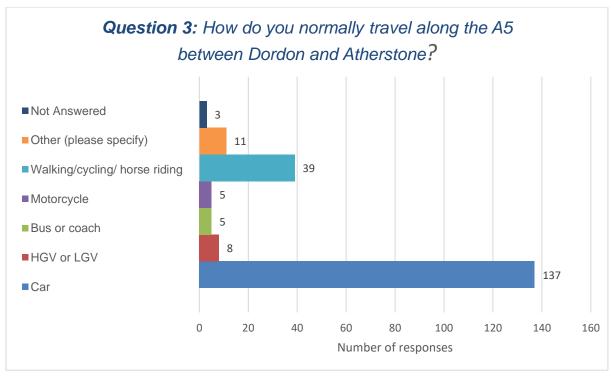
4.2.2 Why you use the A5

When asked why they use the A5, results varied, with many respondents ticking several applicable responses. Overall, leisure/recreation was the most common reason (79%), closely followed by travel to or from work (57%).



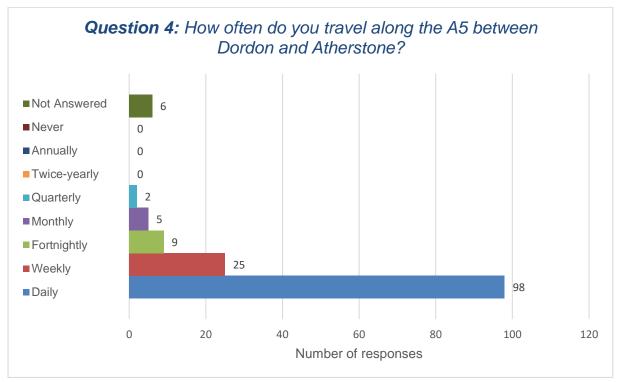
4.2.3 Mode of transport

When asked their mode of transport along the A5, **94% of consultees told us they travel by car**, with **27% walking, cycling or horse riding.**



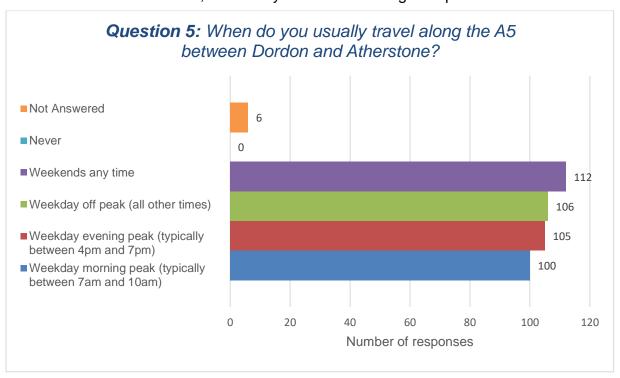
4.2.4 How often you travel

When asked how often they travel along the A5, **68% of consultees told us they travel daily,** with **17% travelling weekly.**



4.2.5 When you travel

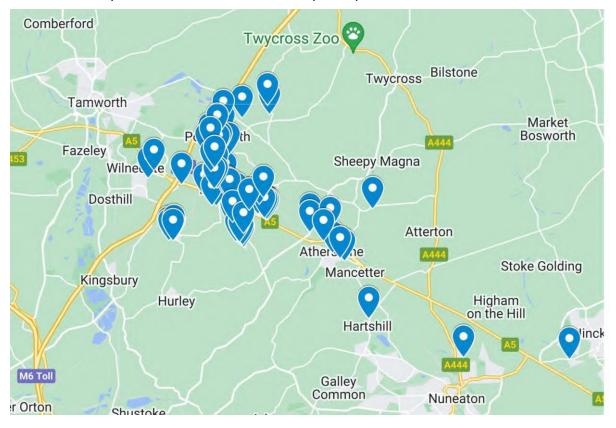
As can be seen below, there is a spread of travel times for those using the A5 during the week and on weekends, with many consultees listing multiple travel windows.



4.2.6 Response by location

Participants in the consultation were asked to share their address which shows a spread of response locations from across the scheme area.

The below map shows the locations of the participants of the consultation:

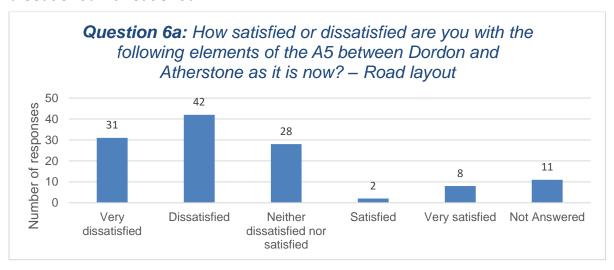


4.3 Views on the current road

To understand views relating to the current A5 road conditions, consultees were asked a series of closed-answer questions with an opportunity to provide further detail on any specific concerns or issues. The responses to these questions have been quantified to determine the current satisfaction levels for the stretch of road and the need for improvement.

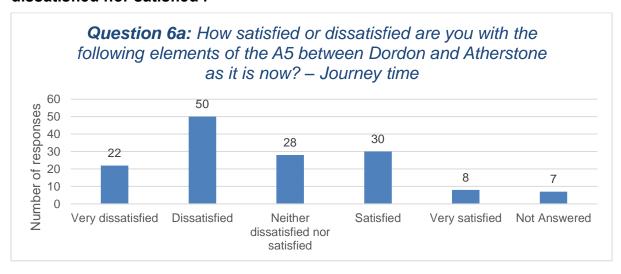
4.3.1 Road layout

When asked about the level of satisfaction for the existing A5 road in relation to road layout, the results show 50% of respondents are either 'dissatisfied' or 'very dissatisfied', 27% are 'satisfied' or 'very satisfied' and 19% are 'neither dissatisfied nor satisfied'.



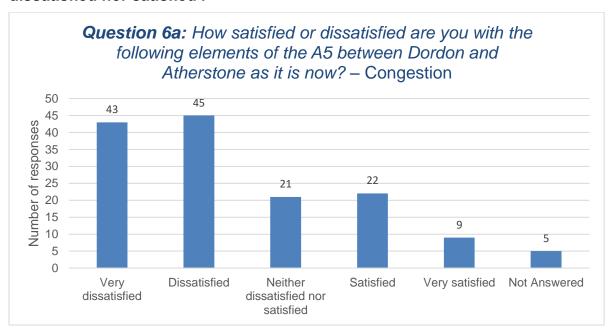
4.3.2 Journey time

When asked about the level of satisfaction for the existing A5 in relation to journey time, the results show 50% of respondents are either 'dissatisfied' or 'very dissatisfied', 26% are 'satisfied' or 'very satisfied' and 19% are 'neither dissatisfied nor satisfied'.



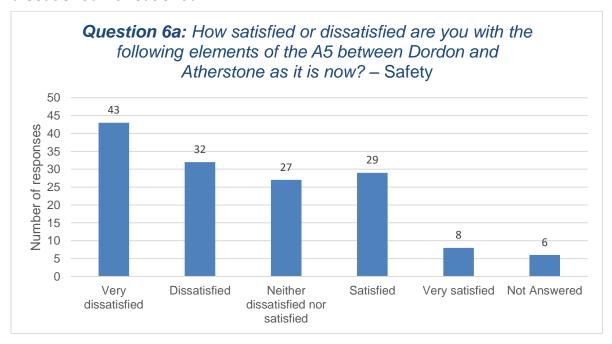
4.3.3 Congestion

When asked about the level of satisfaction for the existing A5 in relation to congestion, the results show 61% of respondents are either 'dissatisfied' or 'very dissatisfied', 21% are 'satisfied' or 'very satisfied' and 14% are 'neither dissatisfied nor satisfied'.



4.3.4 **Safety**

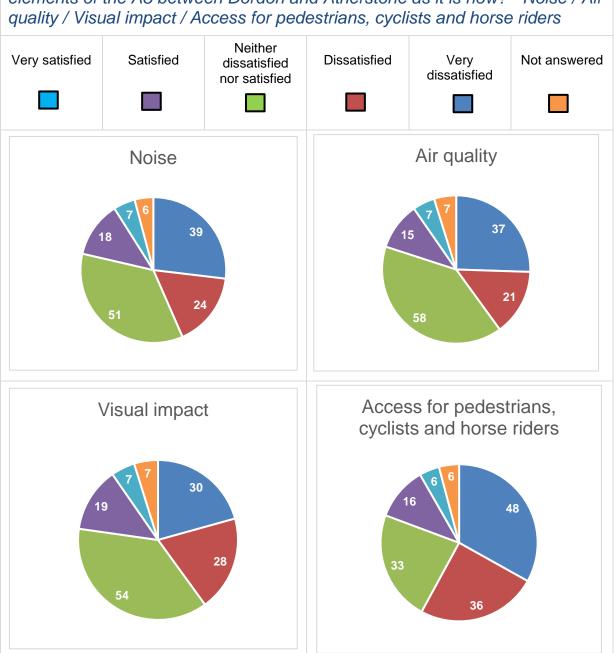
When asked about the level of satisfaction for the existing A5 in relation to road safety, the results show 52% of respondents are either 'dissatisfied' or 'very dissatisfied', 26% are 'satisfied' or 'very satisfied' and 19% are 'neither dissatisfied nor satisfied'.



4.3.5 Environment and access

When asked about the level of satisfaction for the existing A5 in relation to environment and access, the results by number of responses can be seen as follows:

Question 6a: How satisfied or dissatisfied are you with the following elements of the A5 between Dordon and Atherstone as it is now? - Noise / Air quality / Visual impact / Access for pedestrians, cyclists and horse riders



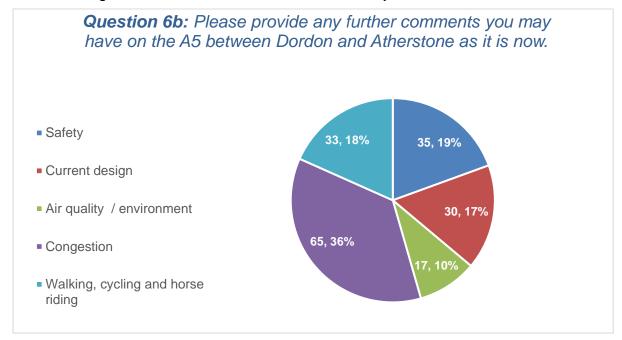
4.3.6 Key themes and priorities

Consultees were asked if they had any further comments in relation to the existing roadway which resulted in **106** responses. Of the responses that were submitted, we have identified several recurring themes.

The top five key themes by number of mentions include:

- Congestion
- Walking, cycling and horse riding
- Safety
- Current design
- Air quality / environment

The following chart shows the number of mentions by theme.



4.3.6.1 Extract of comments

"The congestion can lead to some drivers taking risks and driving dangerously"

"One of the biggest problems is getting out of Long Street, Dordon onto the A5. The parking on Long Street exacerbates the issue and creates nightmare queues. People are then so desperate to get out that they take risks."

"The noise levels are excessive due to the acceleration and speed of all passing vehicles."

"It flows absolutely fine. Slight build up of traffic during peak hours but absolutely no worse than any surrounding roads."

"The amount of HGV vehicles is on the increase air pollution is a concern and physical vibrations felt in the homes from heavy lorries. Accessing or crossing the A5 either on foot or by car is hindered from a constant stream of traffic."

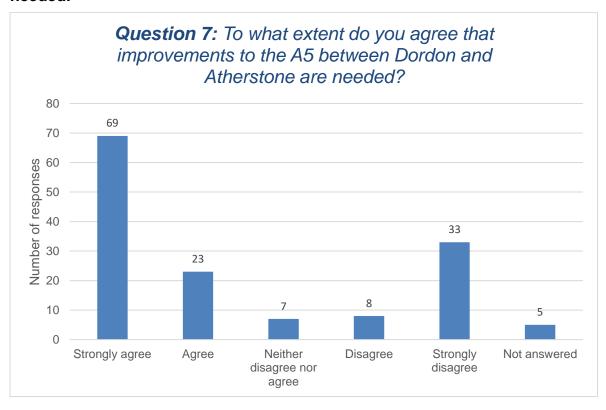
4.4 Views on the options to dual the route

Consultees were asked a series of closed-answer questions in relation to the proposed A5 improvements between Dordon and Atherstone with an opportunity to provide further detail on any specific concerns or issues. The outcomes of these questions have been quantified to determine the need for improvement and preference for the options presented.

The open-format sections of the survey and email submissions, enabled a deeper analysis of key issues, concerns and further considerations. This was completed through an analysis of common themes and sentiment.

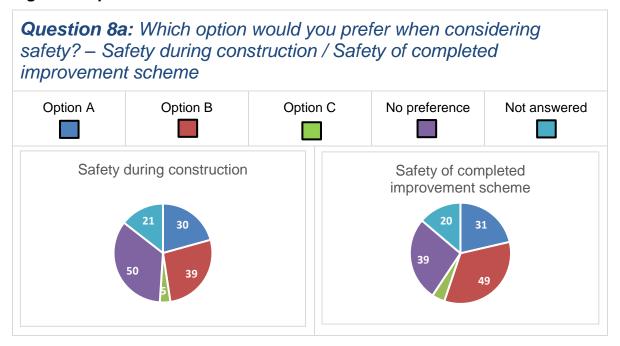
4.4.1 The need for change

When asked for their opinion, 63% of consultees told us they 'agree' or 'strongly agree' that improvements to the A5 between Dordon and Atherstone are needed.



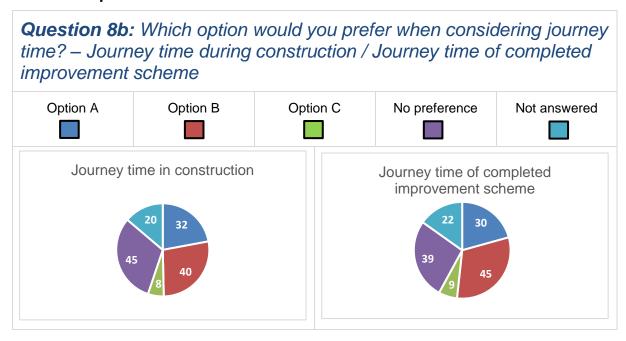
4.4.2 Safety of completed scheme / safety during construction

Consultees were asked to give their preference for the Options based on safety of the completed scheme and safety during construction. As can be see below, the highest response recorded for safety during construction is 'No preference' (34%). When considering safety of the completed scheme, 'Option B' had the highest response rate of 34%.



4.4.3 Journey time of completed scheme / during construction

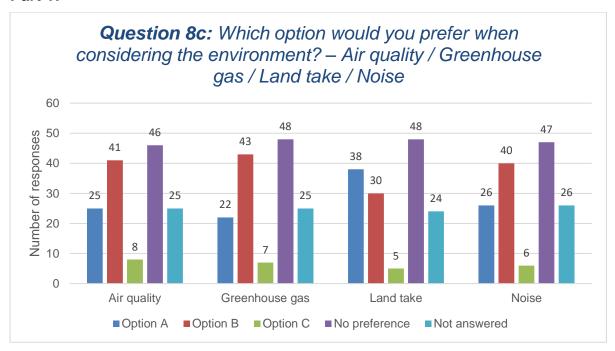
When asked to give their preference for the Options based on journey time of the completed scheme and during construction, respondents showed the strongest level of support for 'No preference' (31%) during construction and 'Option B' (31%) for the completed scheme.



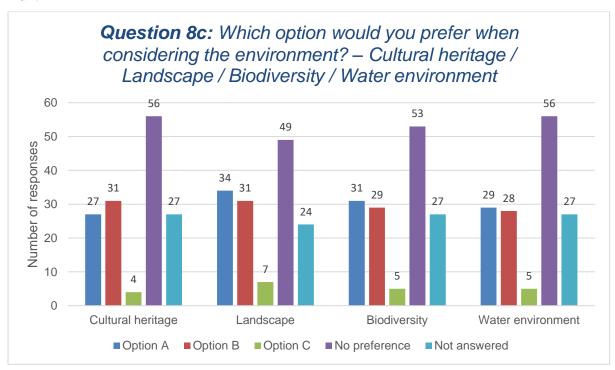
4.4.4 Environmental and heritage considerations

Consultees were asked to nominate their preferred route option when considering specific environmental and cultural heritage elements. The results of these questions have been collated and are presented below.

Part 1:

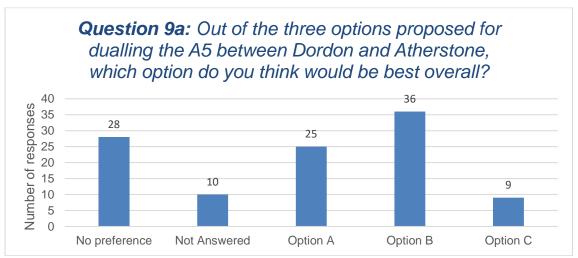


Part 2:



4.4.5 Preferred route

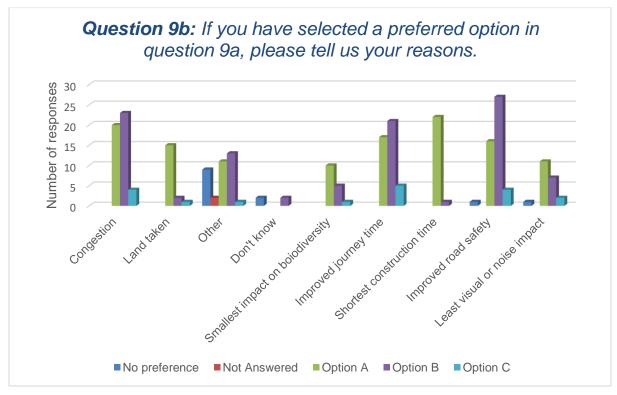
When asked about a preferred route overall, **Option B has the highest level of support, with a 34% response rate**. The results are shown below in percentage and graphical format.



Option A	Option B	Option C	No preference	Not answered
23%	34%	6%	21%	16%

4.4.6 Reason for route preference

Consultees were asked the reason(s) for choosing their preferred route. This question nominated a series of options for consultees to select in response to the question. The results can be seen below.



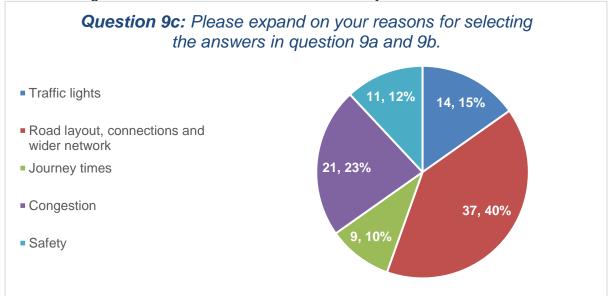
4.4.7 Key themes and priorities

Consultees were asked to expand on the reasons for their preferred route which resulted in **84** responses. These responses have been analysed to identify common themes and the frequency on mention. Many responses referenced more than one theme.

The top five key themes by number of mentions include:

- Road layout, connections and wider network
- Congestion
- Traffic lights
- Safety
- Journey times

The following chart shows the number of mentions by theme.



4.4.7.1 Extract of comments

"Option A is the speediest & cheapest construction project & provides a better solution for residents accessing Dordon from A5."

"Option B is the most comprehensive solution and considering the A5 is one of the busiest trunk roads in the UK, any proposed solution needs to be fit for the future."

"Option A in my opinion offers a straight forward solution to improve movement of traffic along the A5 without complicating the road system more than necessary and drawing vehicles away from built up areas."

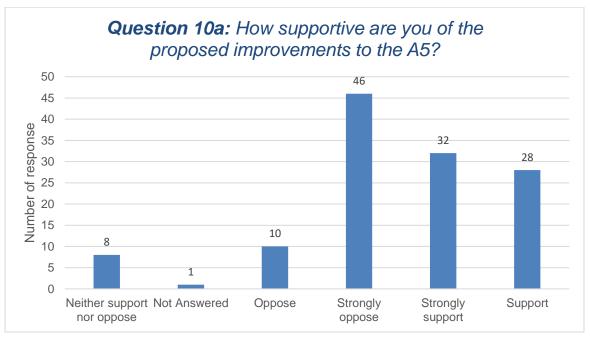
"B is the only option that satisfies all requirements for local traffic. Yes it's more expensive, bit if this is going to be done it needs to be done right."

"It seems option B takes into account the needs of local residents by still allowing access to frontages and business along the A5 whilst also taking the thoroughfare traffic away from these areas."

4.5 Views on proposed improvements to the A5

4.5.1 Support for the proposed scheme

When asked about levels of support for the proposed A5 improvements, 48% 'oppose' or 'strongly oppose' the proposed improvements, 44% 'support' or 'strongly support', and 8% 'Neither support nor oppose' or did not answer.



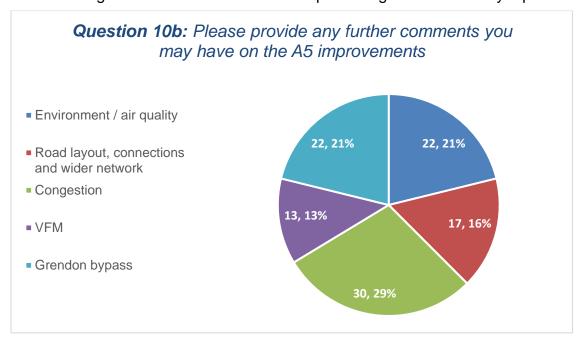
Key themes and priorities

Consultees were asked to provide any further comments on the proposed improvements which resulted in **94** responses. These responses have been analysed to identify common themes and the frequency on mention. Many responses referenced more than one theme.

Top five key themes by number of times mentioned include:

- Congestion
- Environment / air quality
- Grendon Bypass
- · Road layout, connections and wider network
- Value for money (VFM)

The following chart shows the number and percentage of mentions by topic.



4.5.1.1 Extract of comments

"Any construction project needs to maximise the planting of new trees & negate the loss of agricultural land. Too often, such projects take from local communities & give nothing back. Attempts must be made to reduce noise & air pollution & breaking up the visual impact of a new section of dual-carriageway."

"Better to bypass Grendon, improve road marking and signage at roundabouts, this would be as effective and way less money."

"The proposed scheme will induce an increase in long-distance commuting, thereby adding to bottlenecks on nearby roads."

"Would be wonderful if the improvements catered for cycling and walking - not just vehicles."

"Attempts must be made to reduce noise & air pollution & breaking up the visual impact of a new section of dual-carriageway."

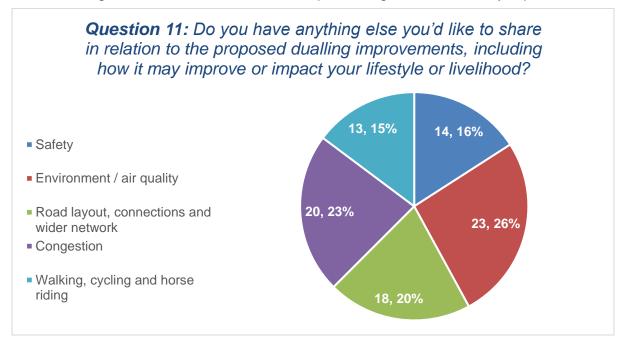
4.6 Any additional comments

Consultees were asked if they had anything else they'd like to share in relation to the proposed improvements, which resulted in **87** responses. These responses have been analysed to identify common themes and the frequency on mention. Many responses referenced more than one theme.

Top five key themes by number of times mentioned include:

- Safety
- Environment / air quality
- Road layout, connections and wider network
- Congestion
- Walking, cycling and horse riding

The following chart shows the number and percentage of mentions by topic.



4.6.1.1 Extract of comments

"These proposals will likely increase my commute time through the area as all 3 options would create a significant bottleneck around Dordon."

"I feel that all the options will be beneficial to travel time on this section of the A5, and also improve visual appeal."

"There will be more cars running through the area. Noise pollution and air quality will be severely impacted."

"Why not place a good quality, smooth, well maintained and segregated cycle lane along here? This villages are not far apart by bicycle and cycle lanes are many times cheaper than roads."

"Dualling of the A5 Option A will create a substantial distance between us and the traffic flow which will benefit our health, safety and physical/mental wellbeing."

4.7 Freeform responses

A further **36** summary and long-form responses were submitted to the project team through the project email address, letters and phone calls. Many of these responses included a great level of detail and insight from members of the local community which are being assessed alongside responses to the questionnaire.

Several key stakeholders submitted their views in this format, including the MP, county, borough and parish councils, landowners, and businesses in the area.

Many submissions contain questions, requests for further information, and technical notes relating to land ownership, future developments, impact to businesses and land take. The detail provided is being reviewed by the project team as part of the Options Assessment and further consultation will take place, should the project be taken forward to the next stage of development.

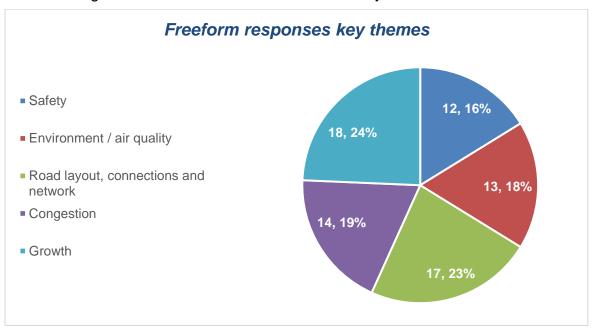
The freeform responses have been analysed to gauge the route preferences, which can be seen follows:

Option A	Option B	Option C	None
1	9	0	11

The top 5 key themes by number of times mentioned include:

- Safety
- Environment / air quality
- Road layout, connections and network
- Congestion
- Growth

The following chart shows the number of mentions by theme.



4.8 Change requests and alternative suggestions

There are 74 change requests and suggestions identified from all survey responses. Freeform responses contain a considerable number of change requests, alternative suggestions, and requests for information.

The main suggestion/recurring comment relates to a bypass around Grendon which consultees either cited as being a better solution, or one that should be undertaken before the proposed A5 improvement works to address flow-on congestion into Grendon.

While this proposal falls outside of the scope this project, the sentiment expressed by consultees has been acknowledged through this report and will be considered in relation to future development of the wider A5 corridor.

Other suggestions included alterations to connecting roads, parking facilities and general maintenance of this stretch of the A5. In addition, many consultees expressed a desire to see more development of walking, cycling and horse riding provisions in the proposals.

Change requests and alternative suggestions are reviewed by the project team as part of the Options Assessment and will be considered for inclusion, should the project be taken forward to the next stage of development.

4.9 Stakeholder participation

A total of **24 participants** in the consultation identified themselves as being a part of an organisation, authority, action group or local business.

We heard from representatives from **four councils** and one **MP** across the region through both formal letters, emails and survey responses, providing valuable insights from their experience and the communities they represent.

We also heard from **six transport groups and service providers**, including the **A5 Partnership** who provided detail on their views on the proposals in relation to the wider A5 network.

There were **seven responses from landowners, estates and developers** who expressed interest in the proposals in relation to future housing developments, planning applications and growth across the area.

We heard from **seven businesses** with an interest in the proposed scheme. The businesses who responded to the consultation have local offices, farms and estates, use the A5 between Dordon and Atherstone for transporting goods and services or have customers using this route.

The following organisations and stakeholder representatives submitted a response to the consultation:

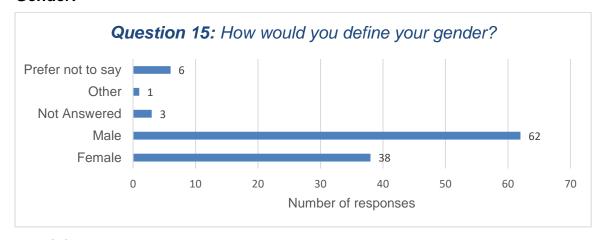
Landowners and Estates	Councils, MPs and Councillors
 Merevale Estates Cathedral Agricultural Partnership Hodgetts Estates Dairy House Farm IM Land Lincourt Strategic Land Church Commissioners for England 	 Craig Tracey MP Warwickshire County Council North Warwickshire County Council Dordon Parish Council Grendon Parish Council Dordon Ward Councillor
Businesses	Transport and Service Providers
 White Animal Feed White Farming Partnership Euro Garages Ltd MPK Garages Ltd Aldi Award Leisure AKF Contractors Ltd 	 A5 Partnership Atherstone Rails Users Group (ARUG) FedEx Express UK Transportation Limited Community and Action Groups Atherstone Forum

4.10 Equality and diversity

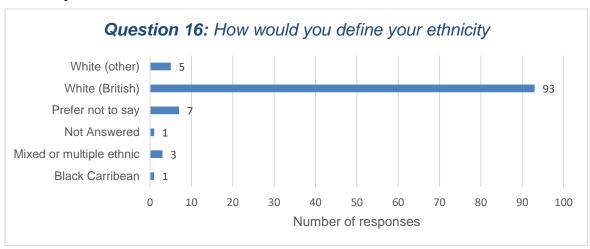
As part of the consultation survey, respondents were asked to provide demographic information, however, this was not mandatory. This information helps understand whether the consultation has been useful to people of different backgrounds and with different requirements, and to helps us to improve accessibility. Consent has been obtained for the presentation of this information.

Responses to key demographic questions:

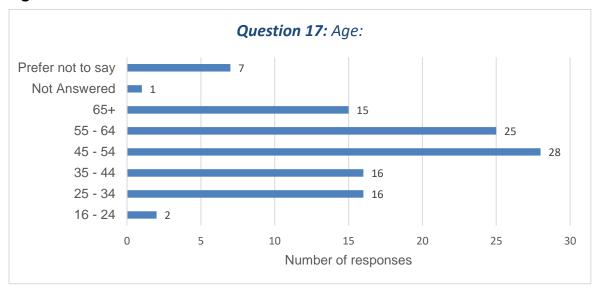
Gender:



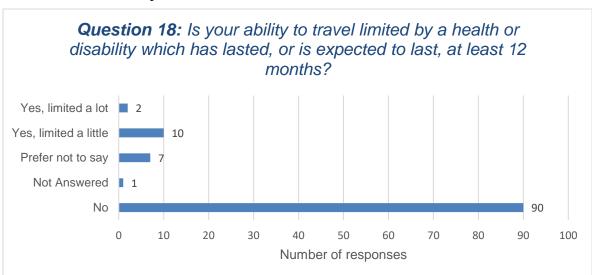
Ethnicity:



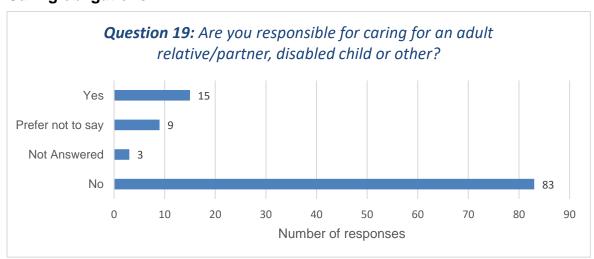
Age:



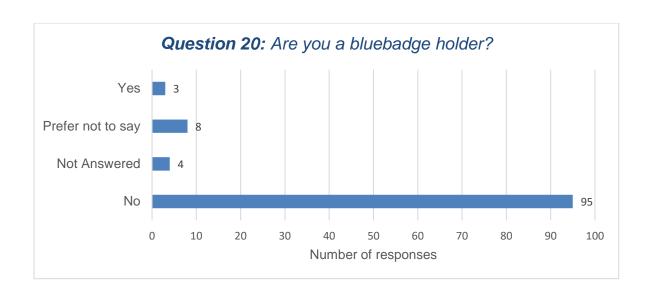
Health and disability:



Caring obligations:



Blue badge holders:



5. Conclusion

The public consultation has captured a wide range of views from local residents, authorities, business owners, local workers and those travelling along the A5 between Dordon and Atherstone on a regular basis. This has enabled a holistic view of the sentiments, key themes, concerns, and overall levels of support for the proposed improvements.

The feedback received relating to the existing A5 conditions show high levels of dissatisfaction relating to road layout, road safety, congestion, access for walking, cycling and horse riding, and journey times.

From the 179 responses to the consultation, there is a clear desire for change with 63% of consultees agreeing that improvements to the route are needed.

Overall, there is limited support for the proposals (44%), with majority of respondents opposed to the improvements (48%). Of the options presented, Option B has been shown to be the preferred route overall with 34% support from survey responses and 42% from the freeform responses.

It should be noted that while Option B is shown to be the preferred route, many consultees chose to not to answer or to list 'No preference' when asked for their preference of the three options. This can be seen in the 37% who submitted their views through the questionnaire and 52% through the freeform responses.

Many of the other objectives of the scheme show a similar response from consultees. For example, when asked specifically about the impact to journey times as a result of the proposed improvements, 31% of consultees selected Option B as their preferred option, with 42% answering 'No preference' or choosing not to answer.

When asked about environmental and heritage considerations, the 'No preference' response is the highest across all questions in this section.

Rationale for these results can be drawn from the open-format responses received with many consultees citing concerns relating to a perceived increase in congestion, slowing of journey times and the potential for a negative impact on air quality.

This reasoning comes from several points including: congestion arising from double to single lane transitions; increased traffic using the route once upgrades are complete; and, the use of signals at junctions causing traffic to slow and vehicles to idle.

Lastly, many consultees expressed a desire for a bypass road north of Grendon to be undertaken instead of, or prior to the proposed improvement works. While this suggestion is outside of the scope of this project, the feedback in this regard has been carefully documented and will be considered through assessments of the wider A5 corridor.

6. Next Steps

The feedback received during the consultation will now be considered as the A5 Dordon to Atherstone Project continues through the Options Stage. If the scheme is approved for the next stage of design (Stage 3 – Development Phase in the diagram below), there would be further opportunities for the public to have their say.

At that point we would develop the design in more detail, carry out more environmental assessments and look at further steps we can take to reduce environmental impacts. As part of this process, we would carry out another public consultation where the public would have the opportunity to review the chosen design and give more feedback.



Consolidated Modelling Strategy Note v2 Land Northeast of M42 Junction 10



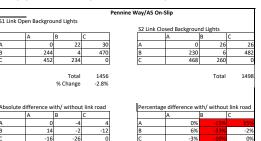
Client: Hodgetts Estates Limited Date: 1 November 2023

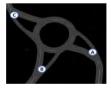
APPENDIX J

A5 to B5000 Link Road Effect Traffic Flows

Analysis of the A5 to B5000 link road effect in the Local Plan scenario case Cells highlighted red where the change in flow is +/- 50 and % change is +/- 10%

Time 08:00-09:00



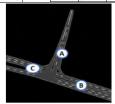


Pennine Way/A5 O

S1 Lin	k Open Backgro	und Lights		S2 Link (Closed Backgroui	nd Lights	
	Α	В	C		A	В	C
Α	2	76	184	A	0	80	
В	236	6	814	В	216	8	
С	364	222	0	С	370	220	
Ahsoli	ite difference w	ith/withou	link road	Percent	age difference w	ith/withou	t link r
Absolu	ute difference w	ith/ withou	: link road	Percent	age difference w	ith/ withou	t link n
Absolu			t link road C -10	Percent		В	С
		B -4	С		A	B -5%	С

Time **08:00-09:00**

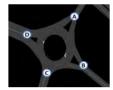
					ing Street/ Sit	e Access junc	tion	
S1 Lini	COpen Backg	our	na Lights		S2 Link Clos	sed Backgroui	nd Lights	
	Α	E	3	С		A	В	С
Α		0	0	0	A	0	0	
В		0	0	850	В	0	0	808
С		0	1036	0	С	0	1002	-
Absolu	ite difference		Total % Change h/ withou		Percentage	difference w	Total	181 t link road
	A	E		С		A	В	С
A		0	0	0	A	0%	0%	09
В		0	0	42	В	0%	0%	59
C		0	34	0	С	0%	3%	09



Time 17:00-18:0

					A5 Watling Street/	Site Access june	ction	
S1 Link	Open Ba	ckgro	und Lights					
					S2 Link	Closed Backgrou	nd Lights	
	А		В	С		A	В	C
A		0	0	0	A	0	0	
В		0	0	930	В	(0	92
С		0	1144	0	С		1098	
			Total % Change	2074 2.5%			Total	202
Absolut	e differe	nce w	ith/ withou	t link road	Percent	age difference w	ith/withou	t link road
, 1030101	A		В	С	rereem	A	В	С
A		0	0	0	A	0%	0%	09
					В	0%	0%	09
В		0	0	4	I D	070	0/0	07

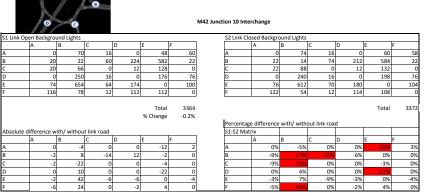
					Quarry Hill/Pennine	Way/Centur	rion Way		
S1 Link	Open Backgro	und Lights			S2 Link Cl	osed Backgro	ound Lights		
	Α	В	С	D		Α	В	С	D
A	10	46	0	204	A	14	62	0	21
В	98	0	0	66	В	108	0	0	6
С	0	0	0	0	C	0	0	0	
D	610	0	0	0	D	600	0	0	
			0/ Ch	1034				Total	10.
			% Change	-2.3%	Dorronto	a difforman	with/with		
Ahsolu	te difference w	ith/withou				ge difference	with/ with		105 d
Absolu	te difference w		t link road	-2.3%	Percenta S1-S2 Ma	trix			d
	te difference w	ith/ withou B -16	t link road				В		d D
A	A	B -16	t link road	-2.3% D	S1-S2 Ma	trix A	B -26%	out link roa C 0%	d D -59
Absolu A B C	A -4	B -16	t link road C	-2.3% D	S1-S2 Ma	trix A -29%	B -26%	C 0%	D -59



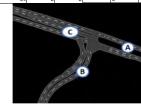
Quarry Hill/Pennine Way/Centurion Way

JI LIIIK	Open Backgro								
	A	В	C	D		A	В	C	D
A	18	32	0	254	A	26	0	0	
В	276	0	0	76	В	314	0	0	
С	0	0	0	0	C	0	0	0	
D	760	0	0	0	D	734	0	0	
			Total % Change					Total	1
Absolut	te difference w		% Change	0.9%		ntage difference		out link roa	d
Absolut	te difference w	ith/ withou B	% Change				with/ with	out link roa	
			% Change	0.9%				out link roa	d
Ą	A	В	% Change	0.9%	Perce	A	В	out link road	d D
Absolut A B C	A -8	B 32	% Change t link road C 0	0.9% D	Perce A	A -31%	B 0% 0%	out link road C 0%	

	Α	В	С	D	E	F		A	В	С	D	E
۹.	C	78	20	0	44	70	A	0	66	26	0	44
В	28	10	126	218	410	58	В	28	8	110	208	376
С	14	52	0	6	50	0	С	14	64	0	10	48
D	C	206	32	0	92	164	D	0	196	32	0	108
E	84	664	130	198	0	116	E	86	640	124	214	0
F	64	34	2	48	42	0	F	70	30	2	46	42
					Total % Change	3060 2.3%						Total
bsolu	te difference w	rith/ withou	t link road				Percenta	age difference	with/ with	out link roa	d	Total
Absolu	te difference w	rith/ withou	t link road	D	% Change		Percenta		with/ with			Total
			t link road C -6	D 0	% Change	2.3%	Percenta A			С		
A	Α	В	С		% Change	2.3%		A	В	С	D	E
A	A C	B 12	C -6	0	% Change	2.3% F 2	A	A 0%	B 18%	C -23%	D 0%	E 0%
A 3	A C	B 12 2 -12	C -6 16	0 10	% Change	2.3% F 2	A	A 0% 0%	B 18% 25%	C -23% 15%	D 0% 5%	E 0% 9% 4%
Absolu A B C D	A C	B 12 2 -12 10	C -6 16 0	0 10 -4	% Change E 0 34 2	2.3% F 2 -2 0	A	A 0% 0% 0%	B 18% 25% -19%	C -23% 15% 0%	D 0% 5% -40%	E 0% 9% 4% -15% 0%

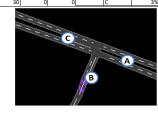


				Vatling Street/	Danny Morso	n Way	
S1 Lin	k Open Backgro	und Lights					
				S2 Link (Closed Backgro	ound Lights	
	Α	В	С		A	В	С
Α	0	0	846	Α	0	0	80
В	0	0	0	В	0	0	
С	1036	0	0	С	1002	0	_
		Total % Change				Total	180
Absolu	ute difference w	ith/ withou	t link road	Percenta	age difference	with/ with	out link ro
	Α	В	С		A	В	С
Α	0	0	44	Α	0%	0%	59
В	0	0	0	В	0%	0%	09
r —	34	0	0	C	3%	0%	09



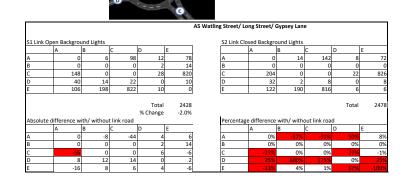
				A5 Watling Street/ Da	inny Morso	n Way	
S1 Link	k Open Backgro	und Lights		S2 Link Clo	sed Backgro	ound Lights	
	A	В	С		Α	В	С
Α	0	0	912	A	0	0	922
В	0	0	0	В	0	0	
С	1142	0	0	С	1098	0	(
		Total	2054			Total	2020
		% Change	1.7%				
Absolu	ite difference w	ith/ withou	t link road	Percentage	e difference	with/ with	out link roa
	A	В	С		Α	В	C
Α	0	0	-10	A	0%	0%	-1%
В	0	0	0	В	0%	0%	0%
					407	00/	- 00

	0 0 1		g Street/ M						
S1 Lini	Open Backgro	una Lights		S2 Link Closed Background Lights					
	A	В	С	A A	B E	С			
			-		_	-			
A	0	0	856	Α (_	804			
В	0	0	0	В (0	0			
C	1034	0	0	C 1004	. 0	0			
Absoli	ite difference w	ith/ withou	t link road	Percentage difference	with/with	out link roa			
	A	В	С	A	В	С			
	0	0	52	A 09	0%	6%			
A		0	0	B 09	5 0%	0%			
A B	0	0		C 39	0%	0%			



		und Lights					
				S2 Link Clo	sed Backgro	ound Lights	
	A	В	С		A	В	С
A	0	0	914	A	0	0	908
В	0	0	0	В	0	0	C
С	1128	0	0	С	1108	0	0
		•	•			•	•
		Total	2042			Total	2016
		% Change	1.3%				
Absolu	te difference w	ith/ withou	t link road	Percentag	e difference	with/ with	out link roa
	A	В	С		Α	В	С
A	0	0	6	A	0%	0%	1%
В	0	0	0	В	0%	0%	0%
^	20	0		-	20/	00/	00/

S1 Link	k Open Backgro	und Lights				S2 Link	k Closed Backgro	ound Lights			
	A	В	С	D	E		A	В	С	D	E
A	0	10	96	14	140	A	0	12	174	12	15
В	0	0	0	2	28	В	2	0	0	0	
0	114	0	0	22	686	C	130	0	0	22	63
D	20	2	8	0	8	D	28	0	8	0	
F	30	178	822	8	2		50	160	800	8	
	50	170	022		2	E	50	100	800		
Absolu				Total % Change	2190					Total	
Absolu	ite difference w			Total	2190		ntage difference		out link roa	Total	
Absolu	ite difference w	rith/ withou		Total % Change	2190 -0.6%		ntage difference	with/ with	out link roa	Total	220
Absolu A B	ite difference w	ith/ withou	t link road C	Total % Change D	2190 -0.6%	Percen	ntage difference	with/ with	out link roa	Total d D	220 E -9
Absolu A B	ite difference w	B -2	t link road C -78	Total % Change D	2190 -0.6% E	Percen	ntage difference A 0%	with/ with B	out link roa C -45%	Total d D	220 E -9:
Absolu A B C	ute difference w A 0 -2	ith/ withou B -2 0	t link road C	Total % Change D 2	2190 -0.6% E -14 28	Percen	ntage difference A 0%	with/ with B -17% 0%	out link roa C -45%	Total d D 17%	220 E -99



Transport Assessment Addendum	
APPENDIX H TABLE 5.1 2023 TRANSYT MODELLING RESULTS	

Land North-East of Jn10 M42 Motorway, North Warwickshire

Table 5.1a: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2023 Surveyed Year

				AM	Peak	PM I	Peak
Traffic	Lane	Saturation	Model	Observed	Results	Observed	Results
Stream(s)	DENON D	Flow pcu/hr	Output	Queue		Queue	
	Pennine Way North	Pennine Way No	Queue	ound On/ Off	Slip Road 4		1
54/1 + 55/1	Lane 1	N/A	Aver Delay	5	32 secs	0	14 secs
F 4 /0	Pennine Way South	N1/A	Queue	0	1		0
54/2	Lane 2	N/A	Aver Delay	2	7 secs	1	5 secs
60/1	A5 Eastbound Off Slip	N/A	Queue	0	0	0	0
	Lane 1	-	Aver Delay		4 secs		4 secs
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0	0 4 secs	0	0 4 secs
	Northbound Overbridge		Queue	_	1		2
64/1 + 66/1	Lane 1	N/A	Aver Delay	0	5 secs	1	8 secs
64/2	Northbound Overbridge	N/A	Queue	0	0	0	0
0.72	Lane 2		Aver Delay		4 secs	Ŭ	7 secs
68/1 + 59/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	4	9 1m 3s	0	0 2 secs
		e Way South/ A		On/ Off Slip F		Hill	2 3003
00/4	Southbound Overbridge		Queue		0		0
89/1	Lane 1	N/A	Aver Delay	0	5 secs	0	4 secs
89/2	Southbound Overbridge	N/A	Queue	0	0	0	0
	Lane 2		Aver Delay		5 secs		5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	0	0 6 secs	1	1 8 secs
	A5 Westbound Off Slip		Queue		0		3
76/2 + 75/1	Lane 2	N/A	Aver Delay	1	6 secs	1	16 secs
81/1	Centurion Way	N/A	Queue	0	0	2	0
01/1	Lane 1	IN/PA	Aver Delay	0	6 secs	_	7 secs
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0	0 4 secs	1	0 5 secs
	Quarry Hill		Queue		4 Secs		6
86/1	Lane 1	N/A	Aver Delay	1	6 secs	6	41 secs
86/2	Quarry Hill	N/A	Queue	0	0	0	0
00/2	Lane 2		Aver Delay		4 secs	U	4 secs
		N	//42 Junction 1	0		1	Ī
1/1 + 2/1	M42 Northbound Offslip Lane 1	1740	Queue Aver Delay	6	3 16 secs	15	18 1m 19s
	M42 Northbound Offslip		Queue		2		5
1/2	Lane 2	1740	Aver Delay	3	15 secs	5	32 secs
1/3	M42 Northbound Offslip	1740	Queue	2	1	2	2
1/3	Lane 3	1740	Aver Delay	2	13 secs	2	21 secs
3/1	M42 Northbound Offslip	1849	Queue	7	4	9	6
	Lane 4 M42 Northbound Offslip		Aver Delay Queue		17 secs		28 secs 6
3/2	Lane 5	1849	Aver Delay	8	17 secs	9	26 secs
7/4	M42 Northbound	0000	Queue	10	13	10	24
7/1	Circulating Lane 1	2039	Aver Delay	10	17 secs	16	22 secs
7/2	M42 Northbound	1840	Queue	7	10	14	15
8/1 + 9/1 +	Circulating Lane 2		Aver Delay		14 secs		18 secs
11/1 + 69/1	A5 Eastbound	1828	Queue	47	63	12	13
+ 70/1	Lane 1		Aver Delay		4m 30s		53 secs
8/2	A5 Eastbound	1900	Queue	10	3	9	5
8/3 + 9/2 +	Lane 2		Aver Delay		20 secs		20 secs
11/2 + 69/2	A5 Eastbound	1900	Queue	32	46	9	9
+ 70/2	Lane 3		Aver Delay		3m 5s		33 secs
12/1	A5 Eastbound	1846	Queue	5	2	3	4
12/1	Circulating Lane 1	1010	Aver Delay		14 secs	<u> </u>	18 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	6	4 15 secs	6	8 19 secs
	A5 Eastbound		Queue		2		7
12/3	Circulating Lane 3	1878	Aver Delay	6	14 secs	7	18 secs
12/4	A5 Eastbound	1878	Queue	2	1	2	2
14	Circulating Lane 4	10/0	Aver Delay	۷	12 secs		15 secs
14/1	Green Lane	1602	Queue	4	3	8	5
	Lane 1		Aver Delay		40 secs		37 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	4	5 55 secs	8	12 1m 37s
454	Green Lane	1050	Queue	-	7		9
15/1	Circulating Lane 1	1950	Aver Delay	7	4 secs	6	9 secs
15/2	Green Lane	1745	Queue	8	_ 4	6	8
10,2	Circulating Lane 2	., 10	Aver Delay		5 secs		11 secs

15/3	Green Lane	1745	Queue	2	1	1	1
	Circulating Lane 3 M42 Southbound Offslip		Aver Delay Queue		3 secs		3 secs
18/1	Lane 1	1804	Aver Delay	1	25 secs	3	19 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1	2 27 secs	3	4 33 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	2	1 26 secs	4	3 25 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	3	3 5 secs	5	4 7 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	4	7 6 secs	6	10 10 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	5	8 7 secs	5	7 9 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1	1 4 secs	3	1 5 secs
23/1	A5 Westbound	1930	Queue	7	6	6	4
	Lane 1 A5 Westbound		Aver Delay Queue	6	21 secs 3	F	20 secs 3
23/2	Lane 2 A5 Westbound	1851	Aver Delay Queue	6	18 secs 9	5	18 secs 18
+ 25/1	Lane 3	1851	Aver Delay	10	31 secs	13	58 secs
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	6	2 18 secs	6	4 22 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	6	4 14 secs	6	10 19 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	8	2 11 secs	5	2 14 secs
22/3	A5 Westbound	1902	Queue	2	2	5	3
	Circulating Lane 3 A5 Westbound		Aver Delay Queue		11 secs 2		13 secs 3
22/4	Circulating Lane 4	1902	Aver Delay Queue	1	11 secs	5	13 secs 7
28/1 + 29/1	Trinity Road Lane 1	1669	Aver Delay	8	30 secs	9	54 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	7	5 34 secs	7	4 32 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	3	9 9 secs	3	5 8 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	8	8 9 secs	6	5 10 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	3	13 10 secs	8	3 7 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	2	7 8 secs	4	3 8 secs
	A5 Eastbound Ahead	Α	5/ Birch Coppi Queue	ce	1		9
31/1	Lane 1	1814	Aver Delay	5	16 secs	9	25 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	4	1 13 secs	5	1 14 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	5	8 56 secs	4	5 55 secs
32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	8	10 1m 33s	4	4 50 secs
37/1	A5 Westbound Ahead Lane 1	1751	Queue Aver Delay	2	3 24 secs	2	1 22 secs
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	16	10 33 secs	13	12 47 secs
37/3 + 38/2	A5 Westbound Ahead	2015	Queue	14	11	13	18
+ 53/2 42/1	Lane 3 Birch Coppice	1695	Aver Delay Queue	5	47 secs 4	6	1m 13s 5
	Left Turn Lane 1 Birch Coppice		Aver Delay Queue		27 secs 3		22 secs 6
42/2	Left Turn Lane 2 Birch Coppice	1983	Aver Delay Queue	6	25 secs 2	9	21 secs 3
43/1	Right Turn Lane 3	1690	Aver Delay A5/ Core 42	3	27 secs	5	23 secs
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	2	2 3 secs	6	2 6 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1	1 1 sec	3	1 2 secs
47/1	A5 Eastbound	1667	Queue	2	2	1	1
49/1	Right Turn Lane 3 A5 Westbound Ahead &	1957	Aver Delay Queue	6	59 secs 7	8	1m 2s
49/2	Left Turn Lane 1 A5 Westbound Ahead	1909	Aver Delay Queue		9 secs 5	7	9 secs 4
49/2	Lane 2	1909	Aver Delay	4	8 secs	/	9 secs

51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	1	2 2m 35s	2	2 57 secs
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	0	0 8m 47s	1	1 3m 23s
		A5/ E	Oordon Round	about			
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	2	3 15 secs	2	7 18 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	0	0 5 secs	0	0 7 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	3	1 30 secs	2	1 34 secs
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	3	6 18 secs	1	4 13 secs
97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	0	1 12 secs	0	1 13 secs
100/1 + 100/2	Gypsy Lane	N/A	Queue Aver Delay	1	0 21 secs	1	0 19 secs
			Network PI	578	0.99	524	7.57

Table 5.1b: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2023 Surveyed Year

				AM	Peak	PM I	Peak
Traffic	Lane	Saturation	Model	Observed	Results	Observed	Results
Stream(s)	R5080 E	Flow pcu/hr Pennine Way No	Output	Queue	Slin Road	Queue	
	Pennine Way North	N/A	Queue	5	5	0	1
54/1 + 55/1	Lane 1	14/71	Aver Delay		1m 7s		5 secs
F 4/O	Pennine Way North	N/A	Queue	2	0	1	0
54/2	Lane 2		Aver Delay		7 secs		6 secs
60/1	A5 Eastbound Off Slip	N/A	Queue	0	0	0	0
00/1	Lane 1		Aver Delay		4 secs		4 secs
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0	0 4 secs	0	0 4 secs
	Northbound Overbridge	N/A	Queue	0	4 5005	1	3
64/1 + 66/1	Lane 1	14/71	Aver Delay		5 secs		8 sec
04/0	Northbound Overbridge	N/A	Queue	0	0	0	1
64/2	Lane 2		Aver Delay		4 secs		7 secs
68/1 + 59/1	A5 Eastbound	N/A	Queue	4	24	0	0
	On-Slip Merge	- W O II- / A	Aver Delay	O / O((O): F	2m 22s		3 secs
	Southbound Overbridge	e Way South/ A N/A	Queue	On/ Off Slip F	toad/ Quarry I	0	0
89/1	Lane 1	14/71	Aver Delay		5 secs		4 secs
00/0	Southbound Overbridge	N/A	Queue	0	0	0	1
89/2	Lane 2		Aver Delay		5 secs		5 secs
76/1	A5 Westbound Off Slip	N/A	Queue	0	1	1	1
, .	Lane 1	21/2	Aver Delay	4	6 secs	4	8 secs
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1	1 6 secs	1	4 15 secs
	Centurion Way	N/A	Queue	0	0 secs	2	0
81/1	Lane 1	14/71	Aver Delay		4 secs	_	7 secs
01/0	Centurion Way	N/A	Queue	0	0	1	0
81/2	Lane 2		Aver Delay		4 secs		6 secs
86/1	Quarry Hill	N/A	Queue	1	14	6	5
	Lane 1	N1/A	Aver Delay	0	6 secs		41 secs
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0	0 4 secs	0	0 4 secs
	Lane 2	l N	M42 Junction 1	0	4 3003		4 3663
	M42 Northbound Offslip	1740	Queue	6	3	15	17
1/1 + 2/1	Lane 1		Aver Delay		16 secs		1m 15s
1/2	M42 Northbound Offslip	1740	Queue	3	2	5	5
1/2	Lane 2		Aver Delay		15 secs		32 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue	2	1 13 secs	2	21 2222
	M42 Northbound Offslip	1849	Aver Delay Queue	7	4	9	21 secs 6
3/1	Lane 4	1040	Aver Delay	,	17 secs		28 secs
0/0	M42 Northbound Offslip	1849	Queue	8	4	9	5
3/2	Lane 5		Aver Delay		16 secs		27 secs
7/1	M42 Northbound	2039	Queue	10	13	16	25
	Circulating Lane 1	1040	Aver Delay	7	16 secs	14	22 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	/	9 14 secs	14	13 17 secs
8/1 + 9/1 +		1828					
11/1 + 69/1	A5 Eastbound Lane 1		Queue Aver Delay	47	53 4m 11s	12	12 53 secs
+ 70/1			•				
8/2	A5 Eastbound	1900	Queue	10	2	9	5
8/3 + 9/2 +	Lane 2	1900	Aver Delay		20 secs		20 secs
11/2 + 69/2	A5 Eastbound	1900	Queue	32	48	9	8
+ 70/2	Lane 3		Aver Delay		3m 9s	-	31 secs
12/1	A5 Eastbound	1846	Queue	5	2	3	5
12/1	Circulating Lane 1		Aver Delay		14 secs		18 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue	6	4 15 secs	6	8 19 secs
	A5 Eastbound	1878	Aver Delay Queue	6	2	7	7
12/3	Circulating Lane 3	1070	Aver Delay		14 secs	1	17 secs
10/4	A5 Eastbound	1878	Queue	2	1	2	1
12/4	Circulating Lane 4		Aver Delay		13 secs		14 secs
14/1	Green Lane	1602	Queue	4	3	8	4
. 1/ 1	Lane 1	4000	Aver Delay		40 secs		37 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	4	5 55 secs	8	15 1m 56s
	Green Lane	1950	Queue	7	6	6	10
15/1	Circulating Lane 1		Aver Delay	,	4 secs		9 secs
15/0	Green Lane	1745	Queue	8	3	6	8
15/2	Circulating Lane 2		Aver Delay		5 secs		11 secs

15/3	Green Lane	1745	Queue	2	1	1	1
13/3	Circulating Lane 3 M42 Southbound Offslip	1804	Aver Delay Queue	1	3 secs	3	3 secs
18/1	Lane 1		Aver Delay	'	25 secs	_	18 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1	1 27 secs	3	4 34 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	2	1 26 secs	4	3 25 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	3	3 5 secs	5	4 7 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	4	5 6 secs	6	9 10 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	5	5 7 secs	5	6 9 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1	1 4 secs	3	1 5 secs
23/1	A5 Westbound Lane 1	1930	Queue Aver Delay	7	5 21 secs	6	4 19 secs
23/2	A5 Westbound	1851	Queue	6	2	5	3
23/3 + 24/1	Lane 2 A5 Westbound	1851	Aver Delay Queue	10	17 secs 10	13	18 secs 16
+ 25/1	Lane 3	1851	Aver Delay	6	31 secs	6	55 secs 4
23/4 + 24/1	A5 Westbound Lane 4	1001	Queue Aver Delay	0	18 secs	6	22 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	6	4 14 secs	6	11 19 secs
22/2	A5 Westbound	1797	Queue	8	2	5	2
22/2	Circulating Lane 2 A5 Westbound	1902	Aver Delay Queue	2	11 secs 2	5	14 secs 2
22/3	Circulating Lane 3		Aver Delay	2	11 secs	3	12 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	1	2 11 secs	5	3 13 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	8	4 31 secs	9	8 55 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	7	5 34 secs	7	3 32 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	3	8 9 secs	3	5 8 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	8	8 9 secs	6	5 10 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	3	12 10 secs	8	3 8 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	2	7 8 secs	4	3 8 secs
	A5 Eastbound Ahead	1814	A5/ Birch Coppi Queue	ce 5	1	9	14
31/1	Lane 1		Aver Delay		16 secs		26 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	4	1 12 secs	5	1 14 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	5	8 56 secs	4	5 56 secs
32/2	A5 Eastbound	1667	Queue	8	11	4	4
37/1	Right Turn Lane 4 A5 Westbound Ahead	1751	Aver Delay Queue	2	1m 28s	2	50 secs 2
37/1	Lane 1 A5 Westbound Ahead	2015	Aver Delay	16	24 secs 10	13	21 secs 12
+ 53/1	Lane 2		Queue Aver Delay		41 secs		42 secs
37/3 + 38/2 + 53/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	14	10 45 secs	13	17 1m 3s
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	5	4 28 secs	6	5 22 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	6	3 25 secs	9	5 21 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	3	25 secs 2 27 secs	5	3 24 secs
	night fulli Lane 3		A5/ Core 42		27 Secs		24 Secs
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	2	2 3 secs	6	3 6 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1	1 1 sec	3	1 1 sec
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	2	2 59 secs	1	2 1m 6s
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue	6	9	8	5
40/0	A5 Westbound Ahead	1909	Aver Delay Queue	4	9 secs 5	7	11 secs 5
49/2	Lane 2		Aver Delay		7 secs		10 secs

51/1	Core 42	1695	Queue	1	1	2	1
51/1	Left Turn Lane 1		Aver Delay		2m 43s		44 secs
52/1	Core 42	1690	Queue	0	1	1	1
52/1	Right Turn Lane 2		Aver Delay		8m 3s		4m 18s
91/1	A5 Eastbound	N/A	Queue	2	2	2	8
91/1	Lane 1		Aver Delay		16 secs		18 secs
91/2	A5 Eastbound	N/A	Queue	0	0	0	1
91/2	Lane 2		Aver Delay		5 secs		7 secs
92/1 + 92/2	Lana Ctroat	N/A	Queue	3	2	2	1
+ 93/1	Long Street		Aver Delay		30 secs		31 secs
07/1 - 00/1	A5 Westbound	N/A	Queue	3	4	1	3
97/1 + 98/1	Lane 1		Aver Delay		16 secs		11 secs
07/0	A5 Westbound	N/A	Queue	0	0	0	1
97/2	Lane 2		Aver Delay		12 secs		13 secs
100/1 +	0	N/A	Queue	1	1	1	0
100/2	Gypsy Lane		Aver Delay		22 secs		20 secs
			Network PI	601	6.86	5190	0.70

APPENDIX I FLOW DIAG	RAMS	

Land North-East of Jn10 M42 Motorway, North Warwickshire

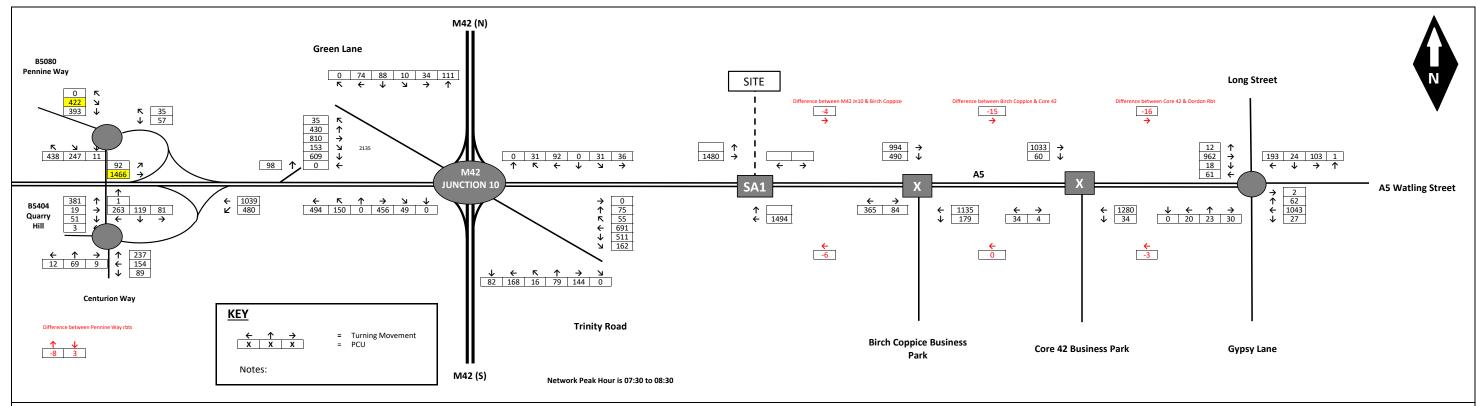


FIGURE 1

2023 AM PEAK (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

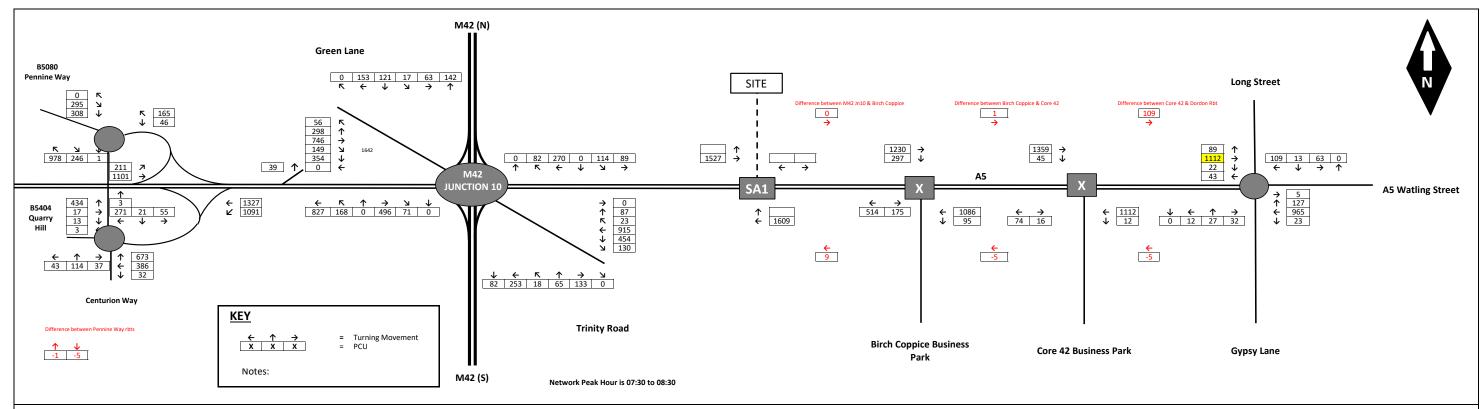


FIGURE 2

2023 PM PEAK (1645 TO 1745) - DEMAND FLOWS CORRECTED

Land North East of M42 Junction 10

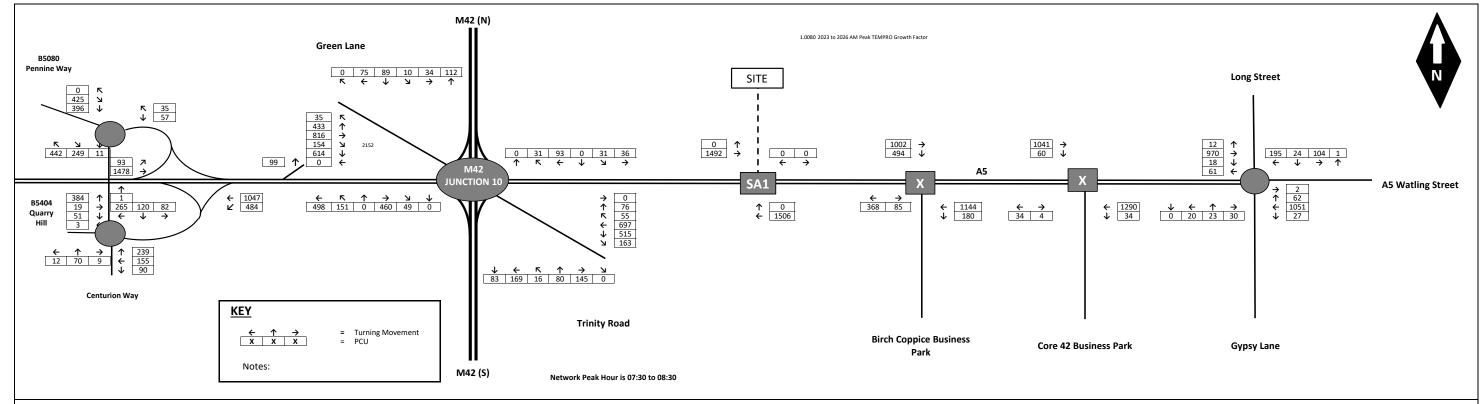


FIGURE 3

2026 AM PEAK REFERENCE CASE BASELINE (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

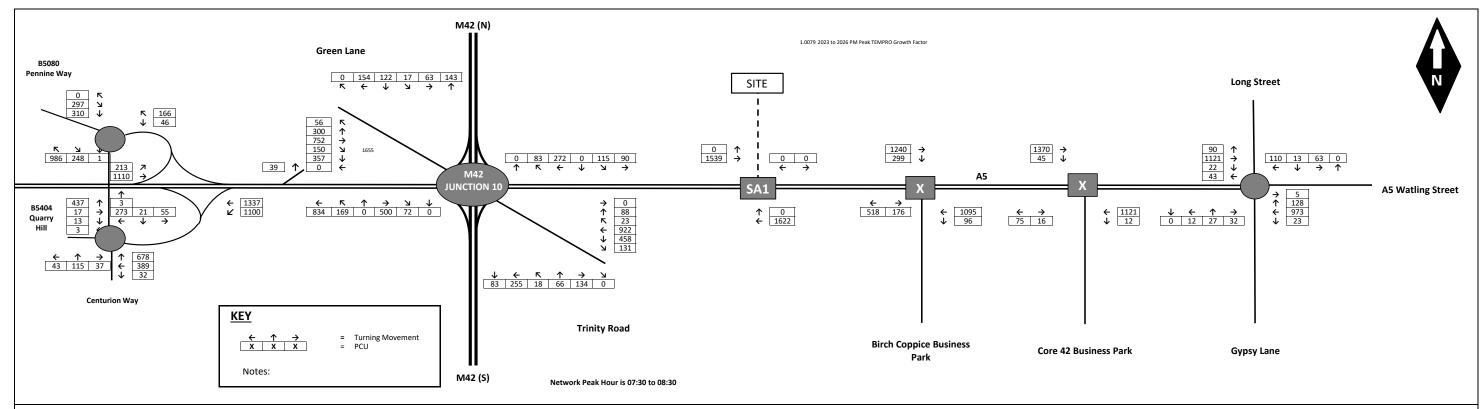


FIGURE 4

2026 PM PEAK REFERENCE CASE BASELINE (1645 TO 1745) - DEMAND FLOWS

Land North East of M42 Junction 10

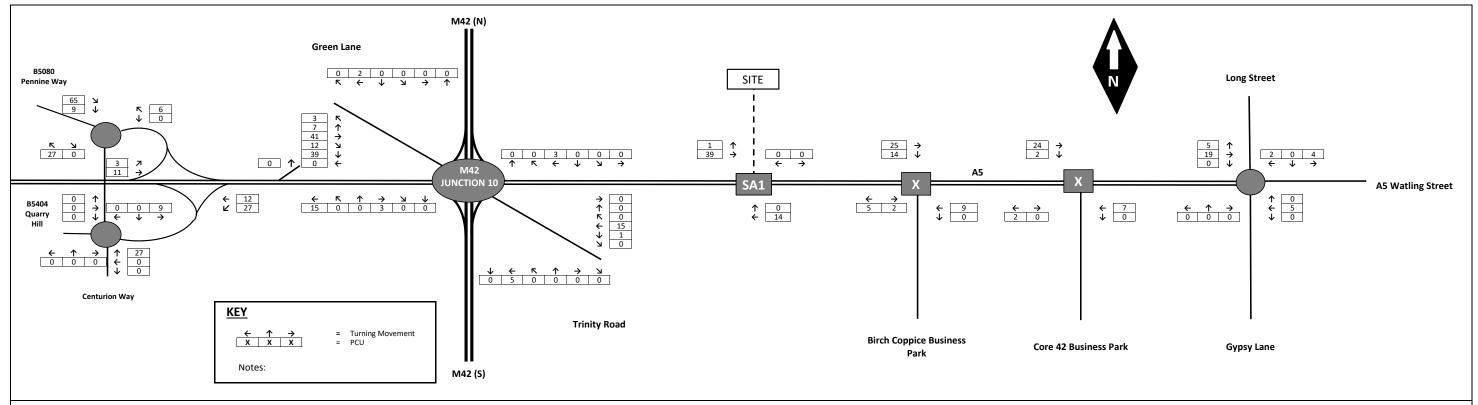


FIGURE 5

2026 AM Peak Total Committed Development Flows

Land North East of M42 Junction 10

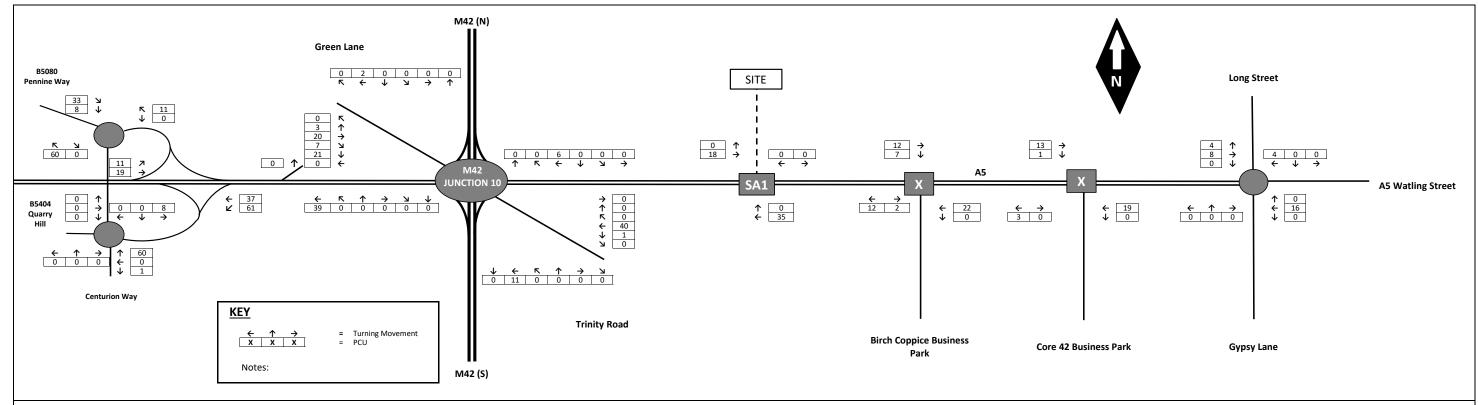


FIGURE 6

2026 PM Peak Total Committed Development Flows

Land North East of M42 Junction 10

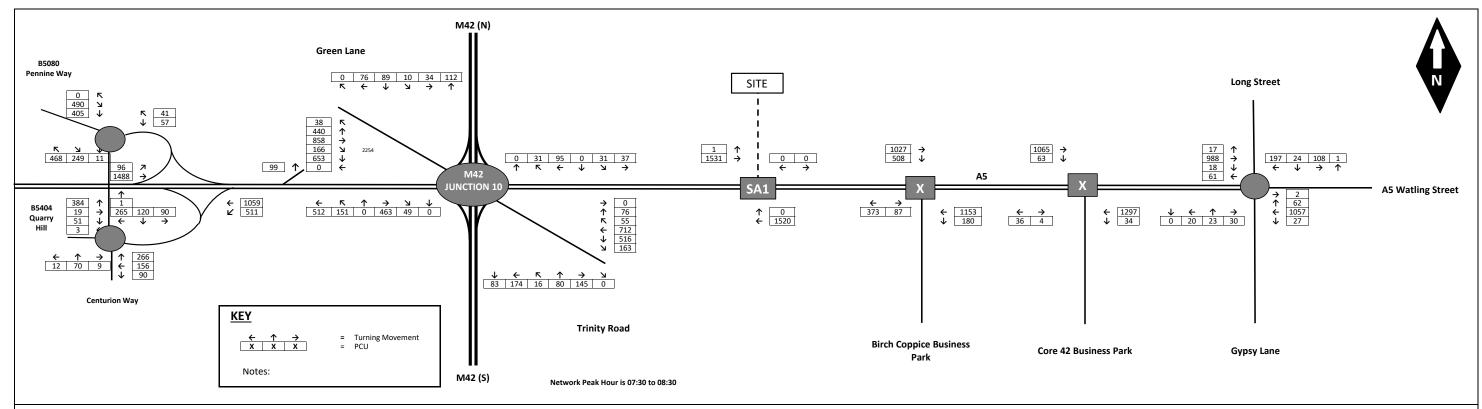


FIGURE 7

2026 AM PEAK NO DEVELOPMENT REFERENCE CASE (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

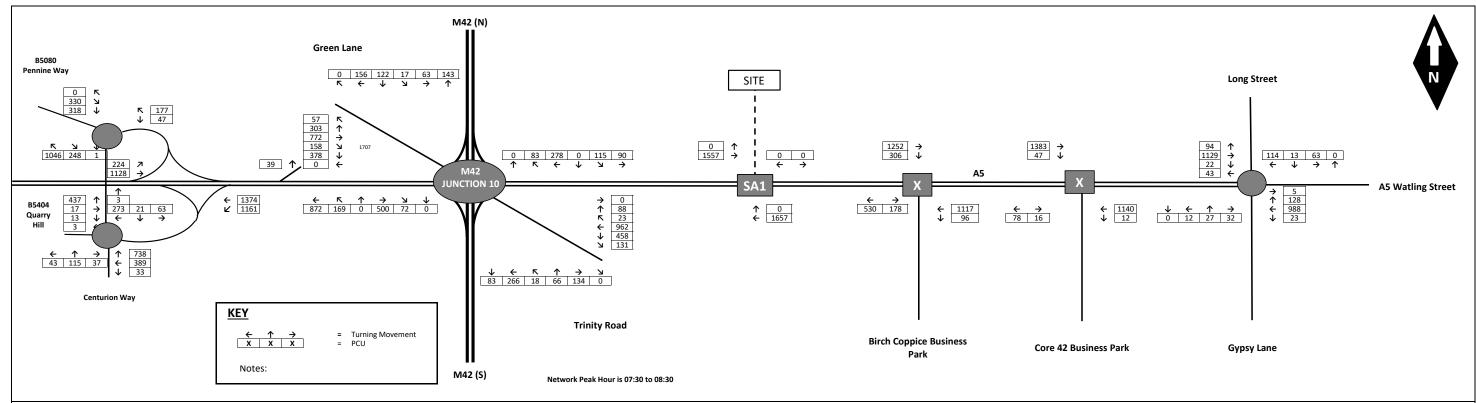
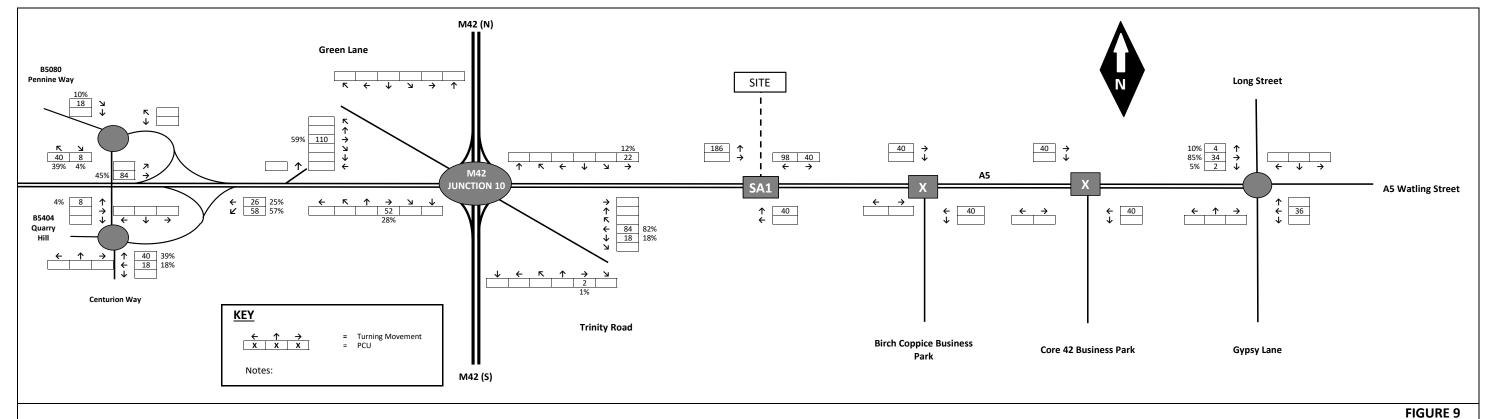


FIGURE 8

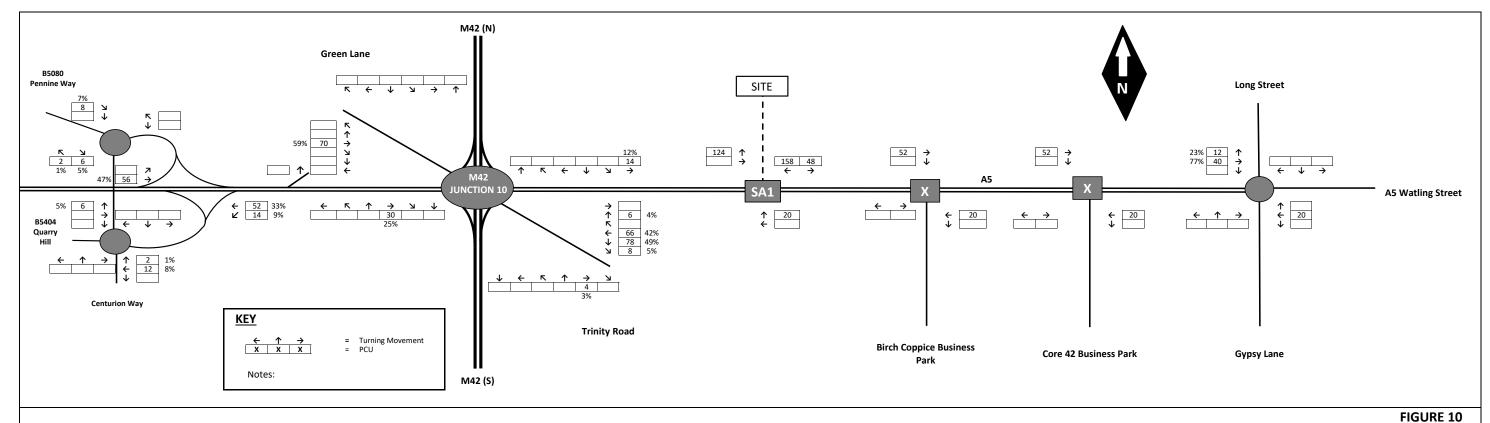
2026 PM PEAK NO DEVELOPMENT REFERENCE CASE (1645 TO 1745) - DEMAND FLOWS

Land North East of M42 Junction 10



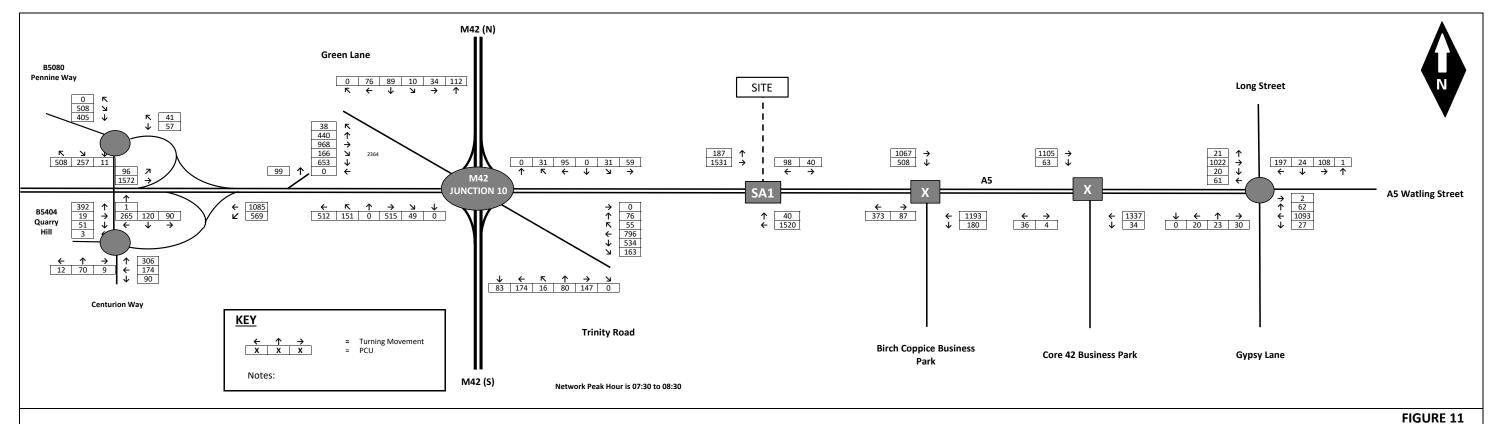
AM Peak Development Generated Traffic Flows (PCU)

Land North East of M42 Junction 10



PM Peak Development Generated Traffic Flows (PCU)

Land North East of M42 Junction 10



2026 AM PEAK WITH DEVELOPMENT REFERENCE CASE (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10



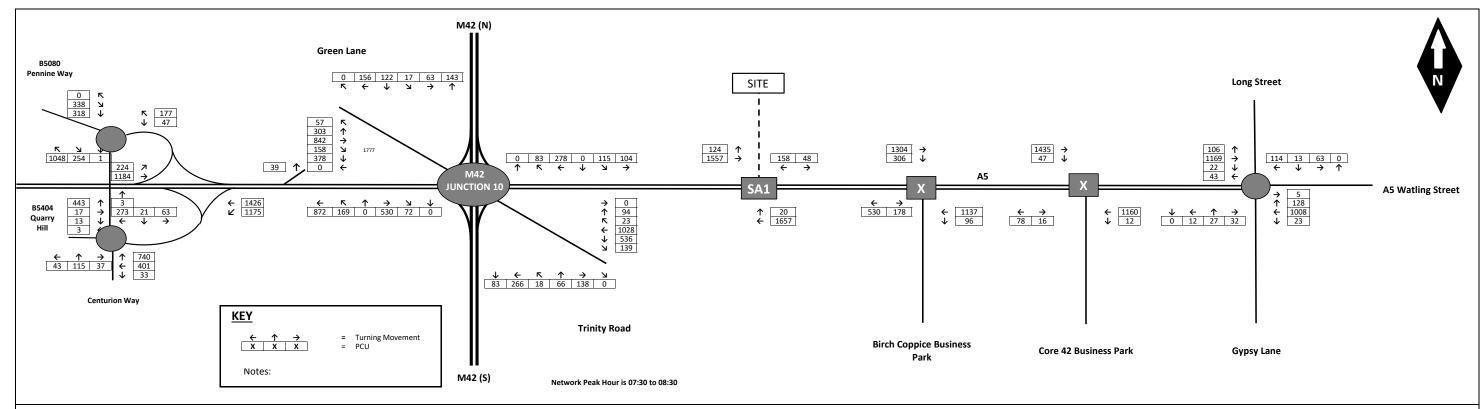


FIGURE 12

2026 PM PEAK WITH DEVELOPMENT REFERENCE CASE (1645 TO 1745) - DEMAND FLOWS

Land North East of M42 Junction 10



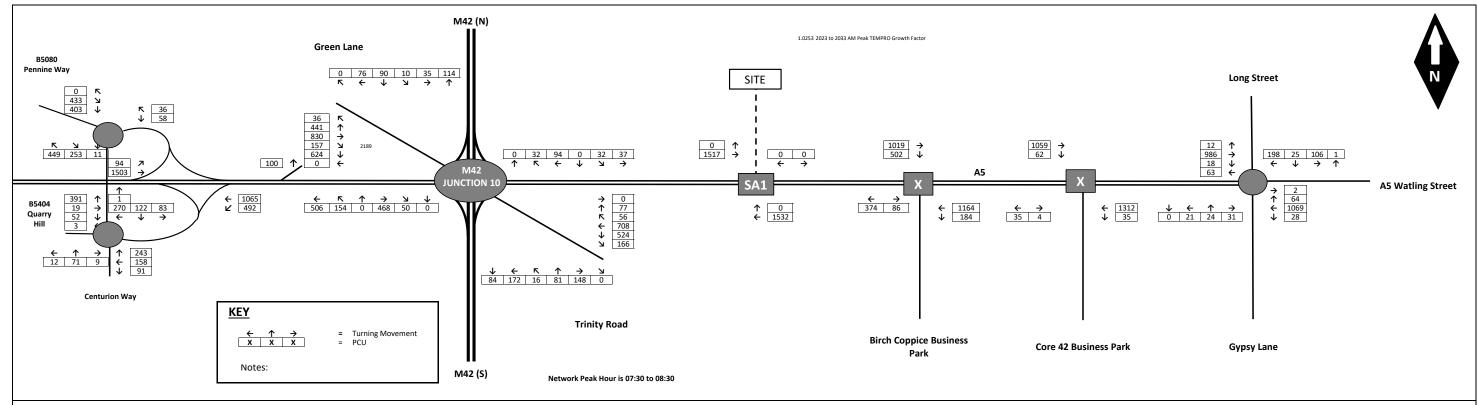


FIGURE 13

2033 AM PEAK REFERENCE CASE BASELINE (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

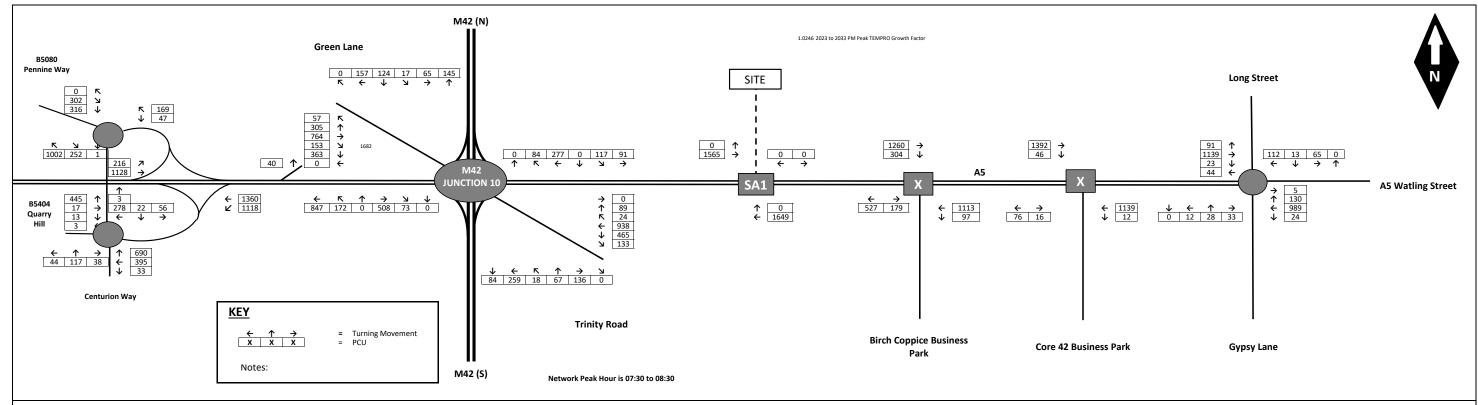
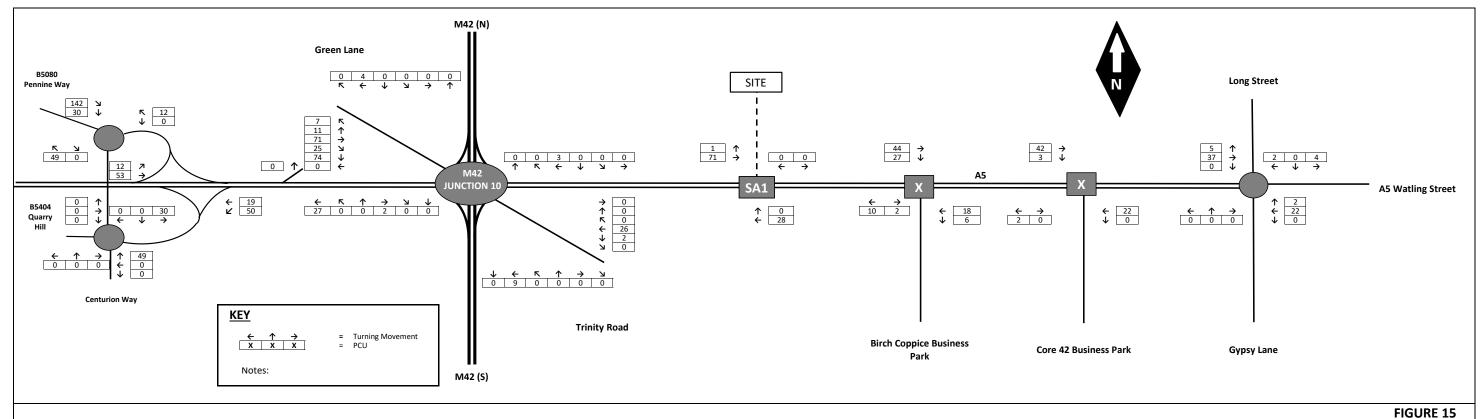


FIGURE 14

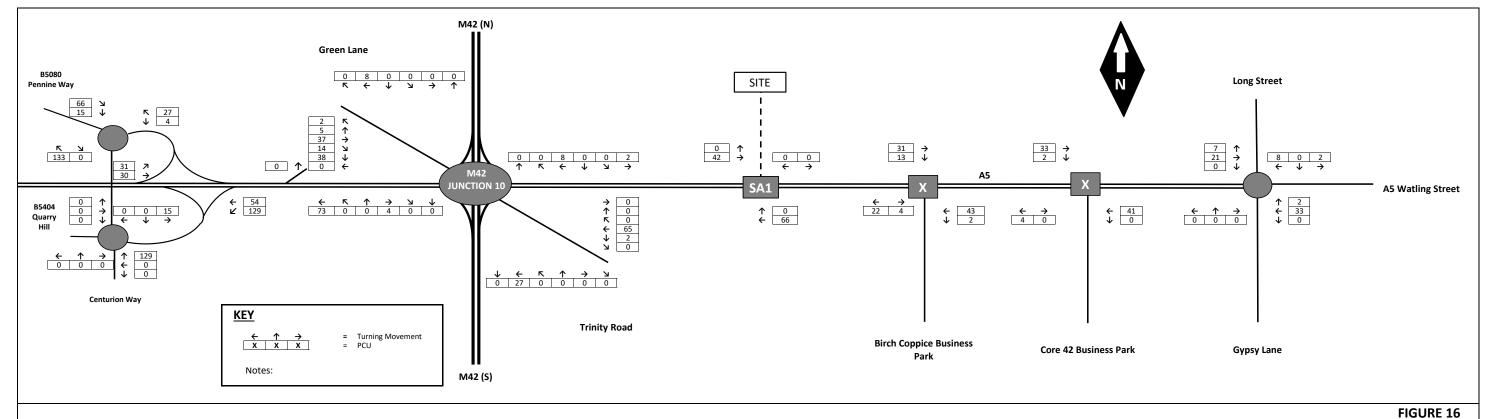
2033 PM PEAK REFERENCE CASE BASELINE (1645 TO 1745) - DEMAND FLOWS

Land North East of M42 Junction 10



2033 AM Peak Total Committed Development Flows

Land North East of M42 Junction 10



2033 PM Peak Total Committed Development Flows

Land North East of M42 Junction 10

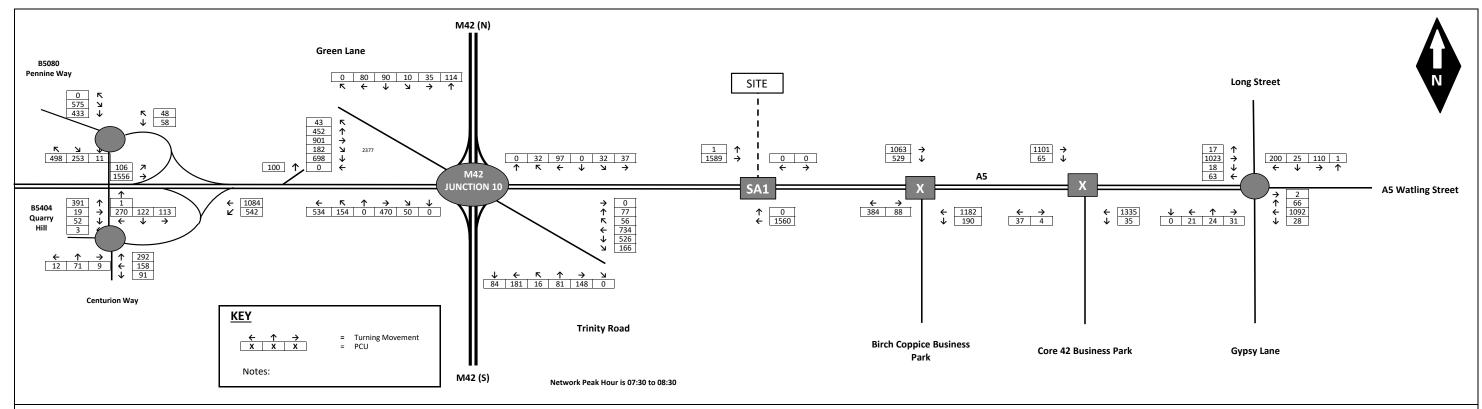


FIGURE 17

2033 AM PEAK NO DEVELOPMENT REFERENCE CASE (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

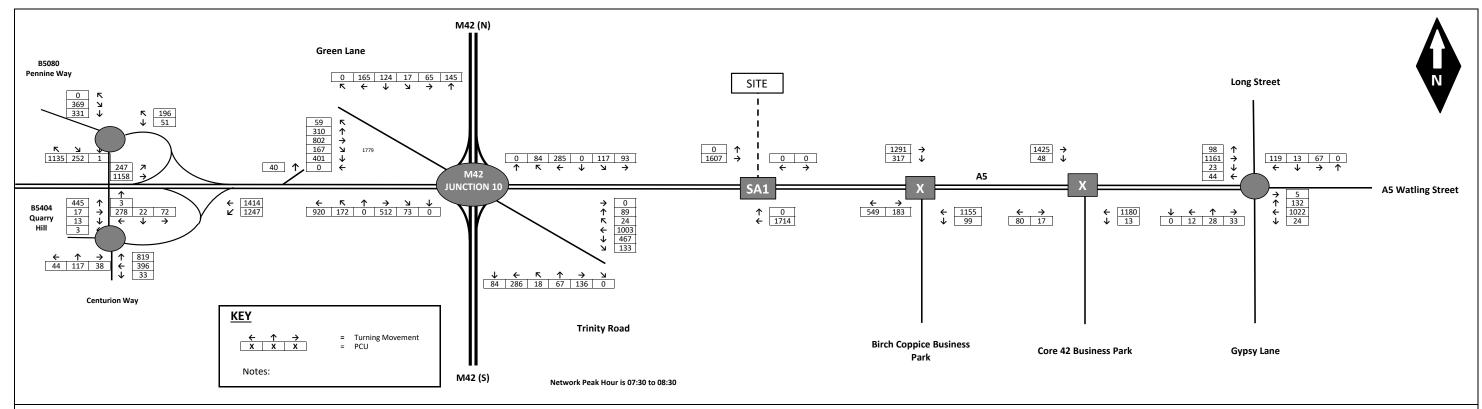
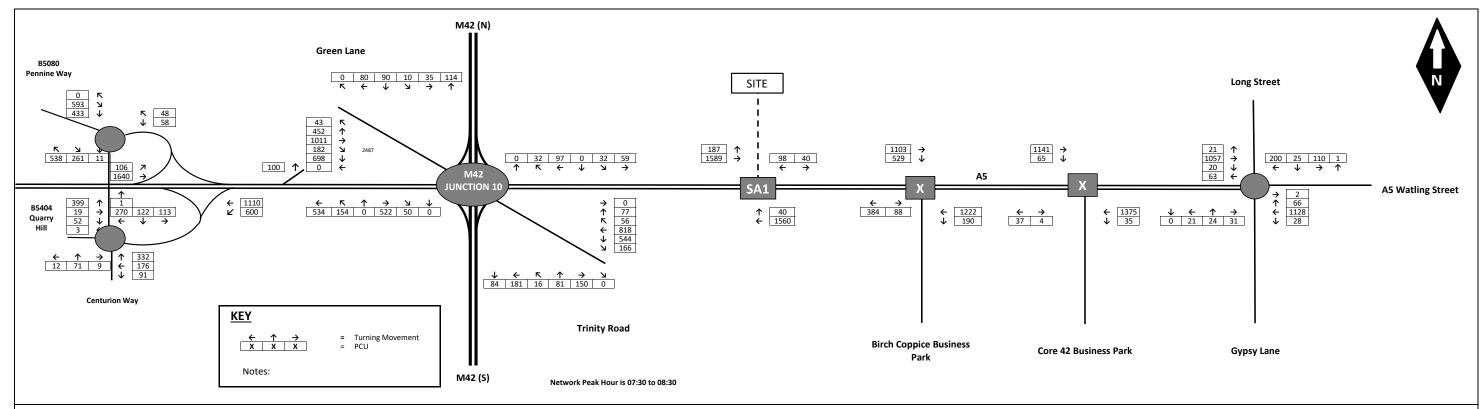


FIGURE 18

2033 PM PEAK NO DEVELOPMENT REFERENCE CASE (1645 TO 1745) - DEMAND FLOWS

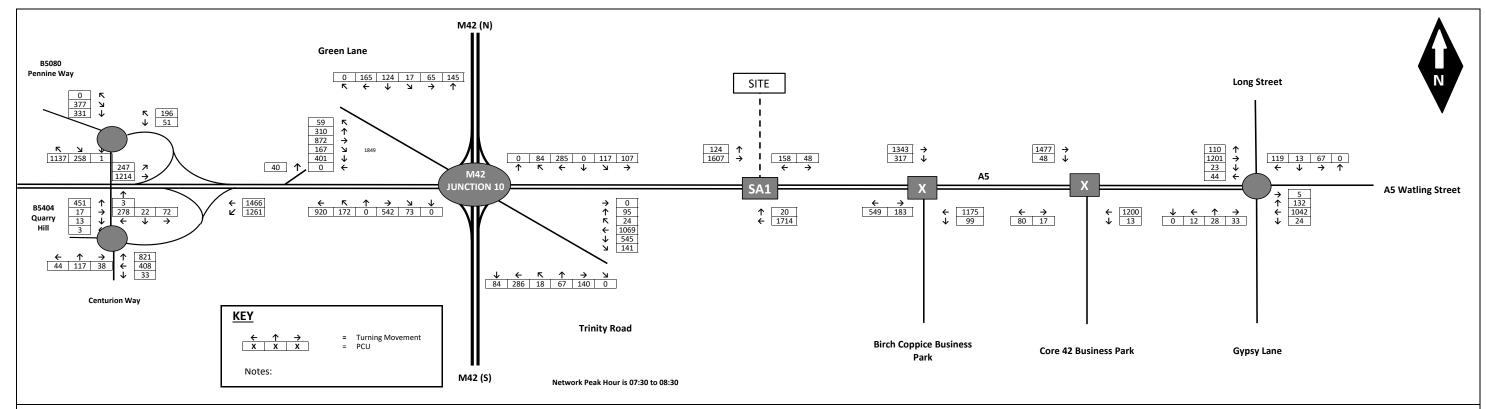
Land North East of M42 Junction 10



2033 AM PEAK WITH DEVELOPMENT REFERENCE CASE (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

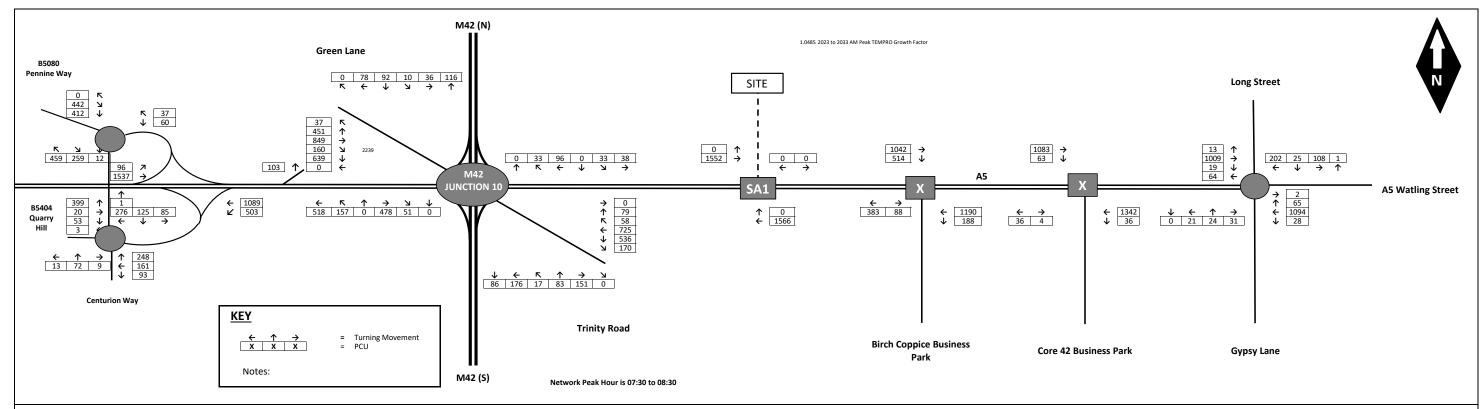




2033 PM PEAK WITH DEVELOPMENT REFERENCE CASE (1645 TO 1745) - DEMAND FLOWS

Land North East of M42 Junction 10

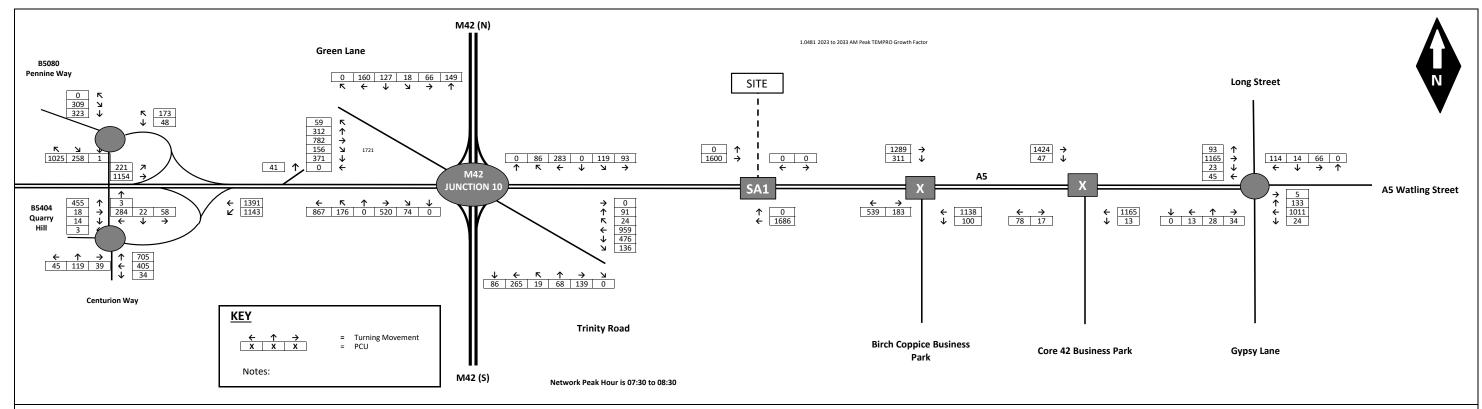




2033 AM PEAK LOCAL PLAN BASELINE (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

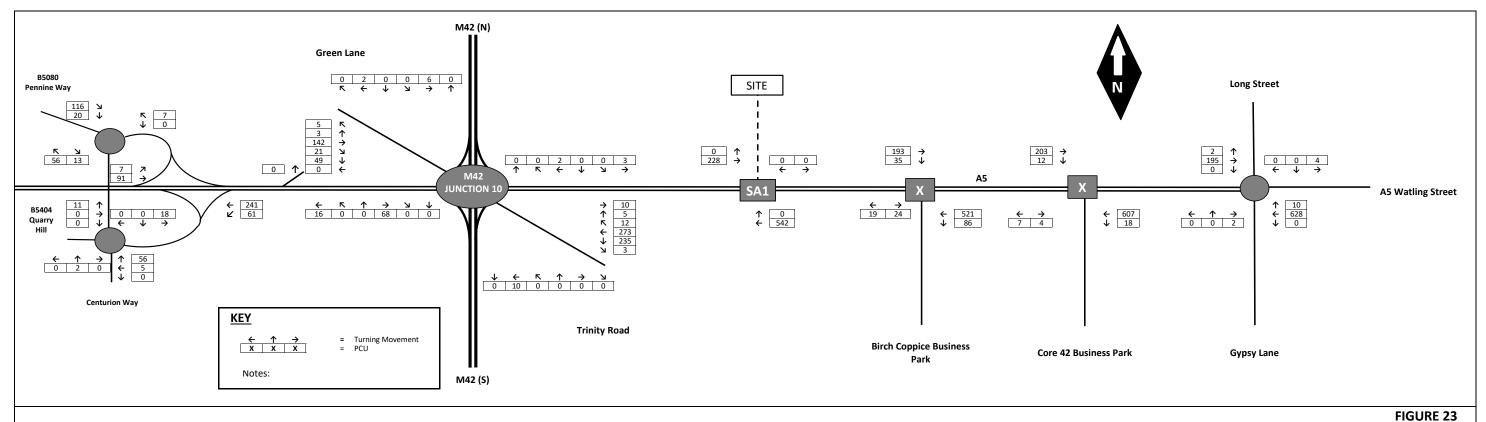




2033 PM PEAK LOCAL PLAN BASELINE (1645 TO 1745) - DEMAND FLOWS

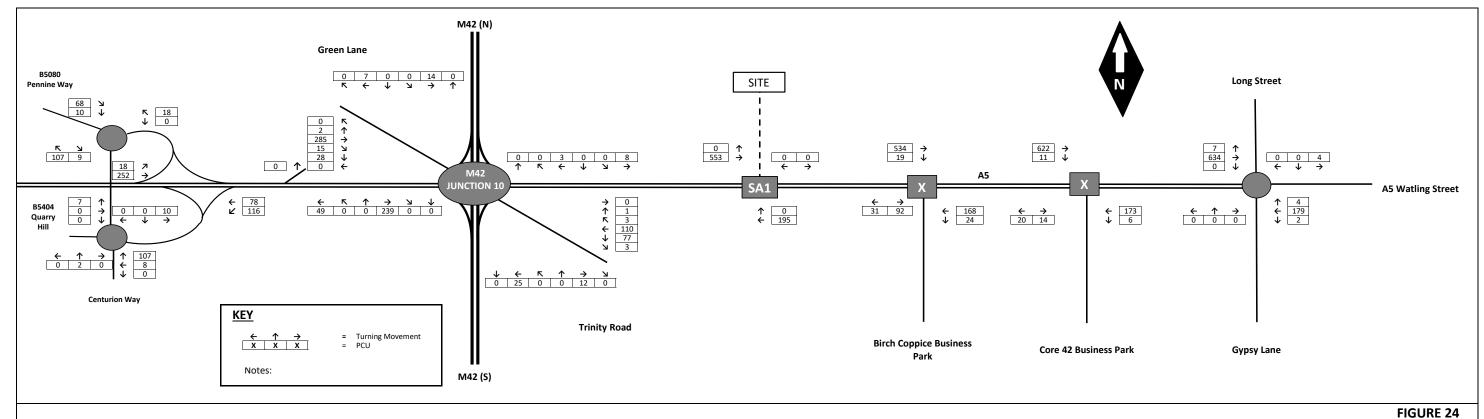
Land North East of M42 Junction 10





2033 AM Peak Total Local Plan Traffic Flows (PCU)

Land North East of M42 Junction 10



2033 PM Peak Total Local Plan Traffic Flows (PCU)

Land North East of M42 Junction 10

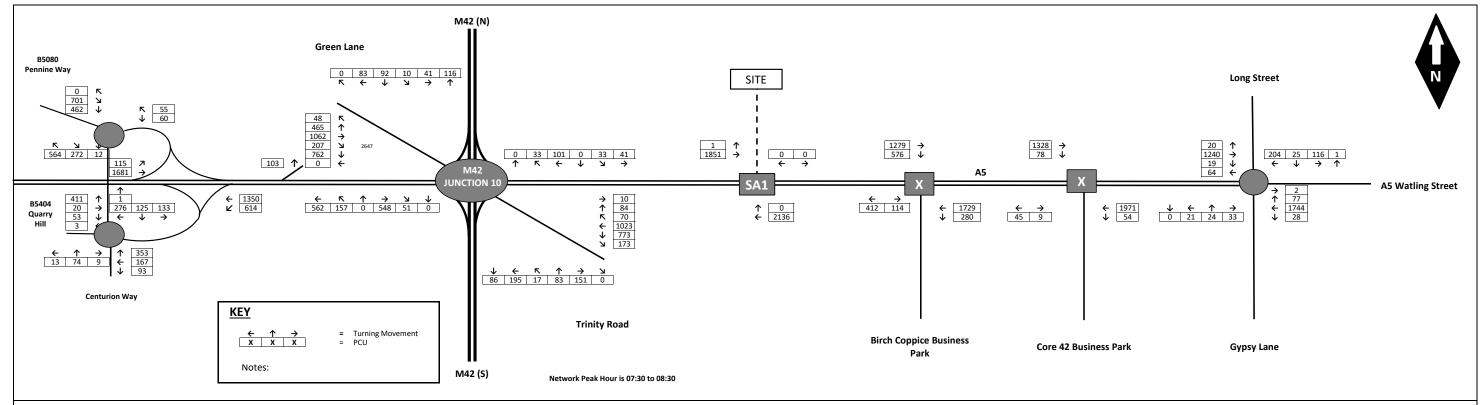


FIGURE 25

2033 AM PEAK NO DEVELOPMENT LOCAL PLAN (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10

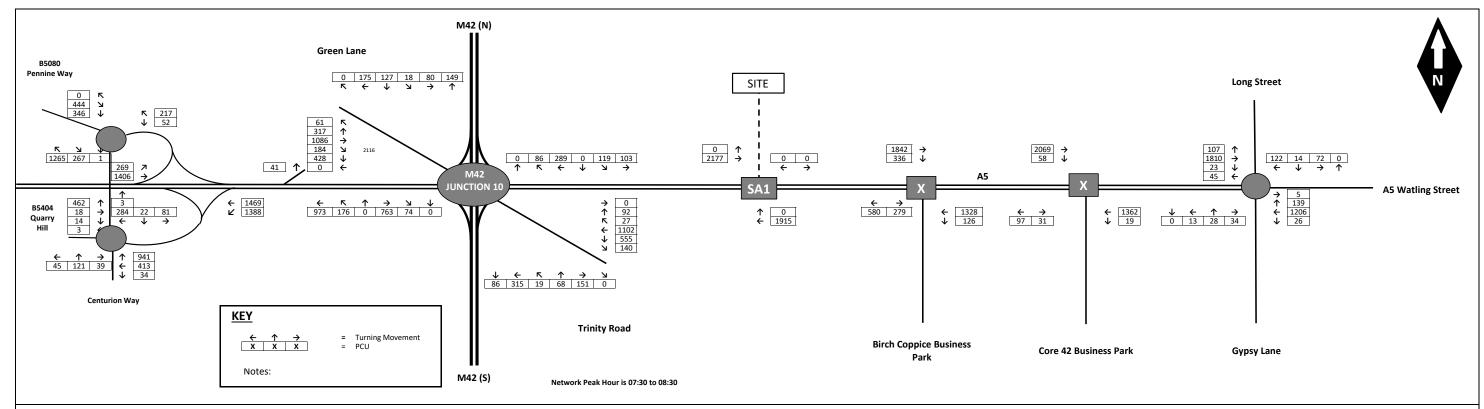
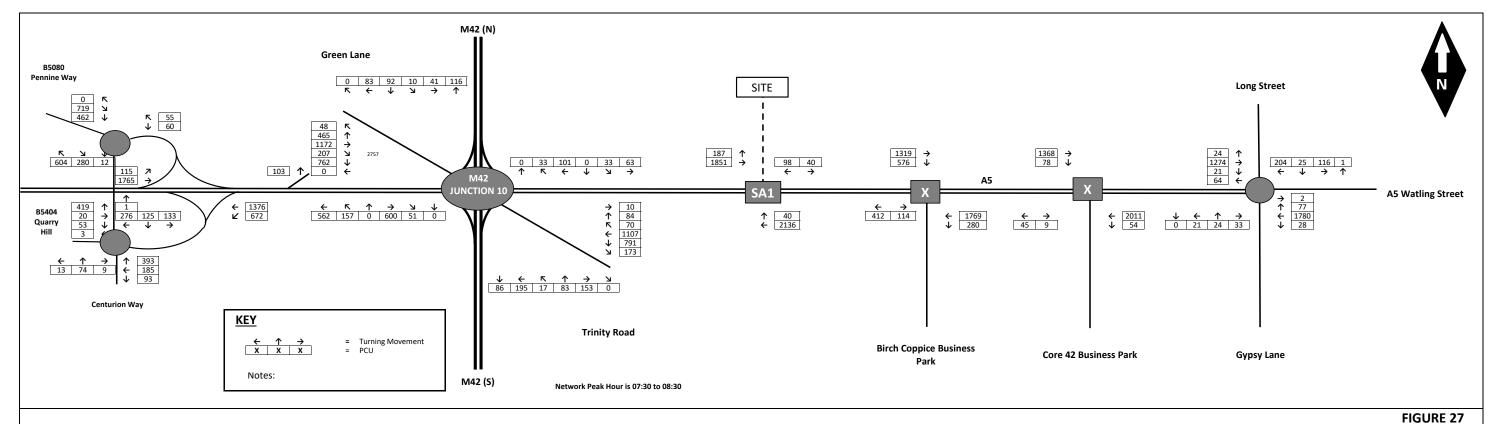


FIGURE 26

2033 PM PEAK NO DEVELOPMENT RLOCAL PLAN (1645 TO 1745) - DEMAND FLOWS

Land North East of M42 Junction 10



2033 AM PEAK WITH DEVELOPMENT LOCAL PLAN (0730 TO 0830) - DEMAND FLOWS

Land North East of M42 Junction 10



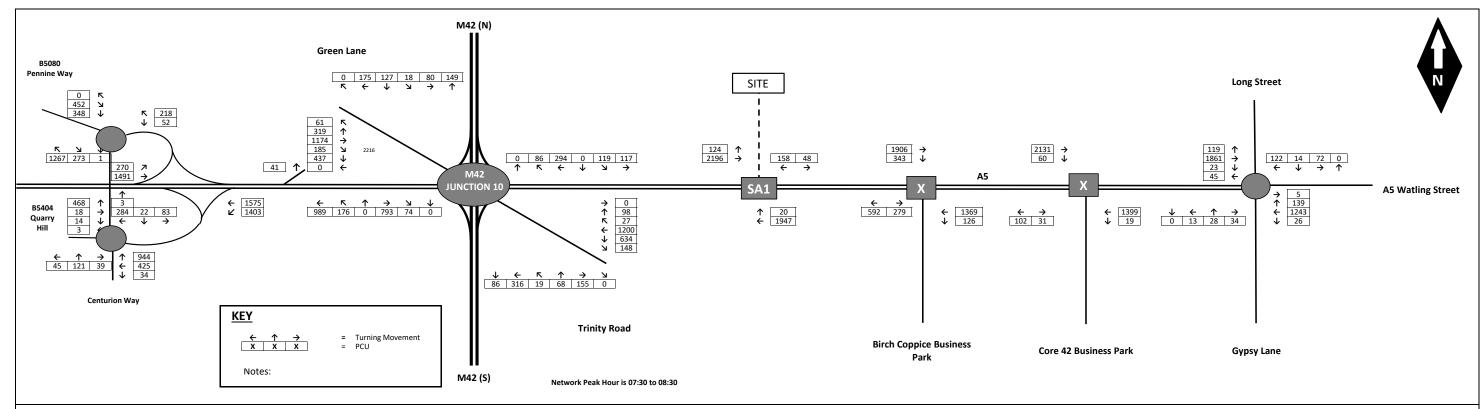


FIGURE 28

2033 PM PEAK WITH DEVELOPMENT LOCAL PLAN (1645 TO 1745) - DEMAND FLOWS

Land North East of M42 Junction 10

Transport Assessment Addendum
APPENDIX J TABLE 5.2 2026 REFERENCE CASE MODELLING RESULTS
APPENDIX 3 TABLE 5.2 2026 REFERENCE CASE MODELLING RESULTS

Table 4.2: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2026 Reference Case

				AM	Peak	PM	Peak			
Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	No Dev	With Dev + Improv.	No Dev	With Dev + Improv.			
	B5080 Pennine Way North/ A5 Eastbound On/ Off Slip Road									
54/1 + 55/1	Pennine Way North Lane 1	N/A	Queue Aver Delay	2 20 secs	1 8 secs	1 5 secs	1 6 secs			
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 6 secs	1 6 secs	1 6 secs	0 5 secs			
60/1	A5 Eastbound Off Slip Lane 1	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs			
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs			
64/1 + 66/1 + 86/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	1 5 secs	1 6 secs	4 10 secs	3 9 secs			
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 7 secs	0 7 secs			
68/1 + 59/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	12 34 secs	0 2 secs	1 4 secs	0 2 secs			
	B5080 P	ennine Way So	outh/ A5 West	oound On/ Of	f Slip Road					
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 4 secs	0 4 secs			
89/2	Southbound Overbridge Lane 2	N/A	Queue Aver Delay	0 5 secs	0 5 secs	1 5 secs	0 5 secs			
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	0 6 secs	0 6 secs	1 9 secs	1 9 secs			
76/2 + 75/1 + 71/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	0 7 secs	0 7 secs	7 17 secs	7 26 secs			
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 7 secs	0 7 secs			
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 6 secs	0 6 secs			
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	1 6 secs	1 6 secs	8 59 secs	9 1m 4s			
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs			
			M42 Junction 1	10						
1/1 + 2/1 + 4/1 + 5/1	M42 Northbound Offslip Lane 1	1740	Queue Aver Delay	3 16 secs	2 17 secs	11 43 secs	11 44 secs			
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 15 secs	1 22 secs	2 22 secs			
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	1 14 secs	1 13 secs	6 29 secs	8 28 secs			
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	4 17 secs	6 21 secs	7 27 secs	7 27 secs			
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	3 17 secs	3 17 secs	7 26 secs	8 30 secs			
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	15 18 secs	3 16 secs	19 17 secs	21 19 secs			
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	11 14 secs	8 19 secs	24 31 secs	25 34 secs			

8/1 + 9/1 + 11/1+ 69/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	28 2m 17s	5 13 secs	12 1m 1s	5 15 secs
+ 70/1	A5 Eastbound Lane 2	1900	Queue	4	8 18 secs	5	10
8/3 + 9/2 +			Aver Delay	15 secs		22 secs	23 secs
11/2 + 69/2 + 70/2	A5 Eastbound Lane 3	1900	Queue Aver Delay	29 2m 23s	8 19 secs	11 44 secs	4 15 secs
8/4	A5 Eastbound Lane 4	1900	Queue Aver Delay	N/A	10 18 secs	N/A	9 17 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	3 19 secs	4 21 secs	5 18 secs	5 18 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	5 20 secs	3 19 secs	8 19 secs	2 16 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	5 18 secs	6 22 secs	7 18 secs	5 17 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	1 15 secs	6 23 secs	1 14 secs	8 20 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	3 40 secs	3 41 secs	4 38 secs	5 37 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	4 54 secs	5 59 secs	11 1m 35s	12 1m 42s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	9 7 secs	3 3 secs	8 8 secs	2 2 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	7 8 secs	13 12 secs	7 11 secs	10 7 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	1 3 secs	10 11 secs	1 3 secs	9 14 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	N/A	2 3 secs	N/A	2 3 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	N/A	1 2 secs	N/A	2 16 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 25 secs	1 26 secs	1 19 secs	1 21 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 28 secs	1 27 secs	5 33 secs	6 52 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	1 26 secs	1 26 secs	4 26 secs	4 34 secs
A16/1	Green Lane Toucan Crossing	2213	Queue Aver Delay	N/A	2 3 secs	N/A	2 2 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	5 5 secs	8 7 secs	4 7 secs	15 9 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	10 6 secs	7 7 secs	10 10 secs	9 7 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	9 7 secs	9 9 secs	6 10 secs	8 8 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 4 secs	1 3 secs	2 6 secs	1 5 secs
23/1	A5 Westbound Lane 1	1930	Queue Aver Delay	6 21 secs	9 20 secs	6 19 secs	7 19 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	2 18 secs	6 21 secs	4 17 secs	4 18 secs

23/3 + 24/1	A5 Westbound	1851	Queue	10	10	12	11
+ 25/1	Lane 3	1031	Aver Delay	34 secs	28 secs	30 secs	41 secs
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	3 18 secs	7 19 secs	9 32 secs	10 47 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	6 16 secs	4 14 secs	10 20 secs	8 16 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	2 12 secs	5 18 secs	2 14 secs	7 15 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 11 secs	2 11 secs	3 13 secs	2 13 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	2 11 secs	2 10 secs	3 13 secs	3 13 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	4 31 secs	4 32 secs	12 1m 5s	9 1m 44s
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	5 34 secs	5 32 secs	5 41 secs	6 43 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	9 9 secs	6 8 secs	5 8 secs	3 6 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	9 9 secs	7 11 secs	5 10 secs	10 12 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	13 10 secs	11 10 secs	3 7 secs	5 7 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	7 8 secs	9 9 secs	4 10 secs	5 12 secs
		A5/ P	roposed Site A	Access			
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	7 15 secs	N/A	10 12 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	N/A	6 14 secs	N/A	11 12 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	N/A	2 8 secs	N/A	5 7 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	N/A	1 9 secs	N/A	3 9 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	N/A	0 9 secs	N/A	3 9 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	N/A	1 42 secs	N/A	1 41 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	N/A	1 37 secs	N/A	1 35 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	N/A	1 41 secs	N/A	2 42 secs
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	N/A	1 42 secs	N/A	2 41 secs
		A	15/ Birch Copp		l :		
31/1	A5 Eastbound Ahead Lane 1	1814	Queue Aver Delay	1 17 secs	1 16 secs	2 18 secs	7 19 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 13 secs	2 17 secs	1 16 secs	3 17 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	10 1m 14s	9 1m 26s	4 57 secs	5 58 secs
32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	9 1m 15s	12 1m 58s	3 50 secs	4 53 secs

37/1	A5 Westbound Left Turn Lane 1	1751	Queue Aver Delay	3 23 secs	3 22 secs	1 18 secs	1 18 secs
37/2 + 38/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	10 43 secs	10 48 secs	18 1 min	15 1m 2s
37/3 + 38/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	11 48 secs	11 53 secs	16 58 secs	14 1m 6s
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	4 27 secs	5 27 secs	4 21 secs	4 22 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	3 25 secs	3 26 secs	5 21 secs	5 22 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	2 28 secs	2 28 secs	3 23 secs	3 24 secs
			A5/ Core 42				
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	2 3 secs	3 4 secs	3 7 secs	5 8 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 1 sec	1 1 sec	1 2 secs	2 2 secs
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	1 1 min	2 1m 4s	1 1m 21s	2 1m 27s
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	8 9 secs	8 10 secs	5 10 secs	5 10 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	5 7 secs	5 8 secs	4 9 secs	4 9 secs
51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	2 2m 49s	2 2m 31s	2 54 secs	2 58 secs
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	0 7m 56s	1 7m 8s	1 3m 58s	1 3m 57s
		A5 /	Dordon Round	about			
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	4 17 secs	7 21 secs	6 19 secs	13 23 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	0 4 secs	1 5 secs	0 7 secs	1 7 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	2 33 secs	3 37 secs	1 36 secs	1 37 secs
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	5 18 secs	8 22 secs	5 14 secs	5 13 secs
97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	0 12 secs	0 12 secs	1 12 secs	1 12 secs
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 21 secs	0 22 secs	0 20 secs	0 20 secs
	ı l		Network PI	5390.07	4592.34	5415.40	5688.67

KEY	
#	New traffic lanes as a result of the proposed development mitigation works
	Impact of development results in a reduction in queue of over 10pcu and/ or a reduction in delays of over 1
	minute.
	Impact of development results in an increase queue of 10pcu or over and/ or an increase in delay of over 1
	minute

Transport Assessment Addendum	
APPENDIX K TABLE 5.3 2033 REFERENCE CASE MODELLING RESULTS	
AFF LINDIA R TABLE 3.3 2033 REFERENCE CASE MODELLING RESULTS	

Table 5.3: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2033 Reference Case

				AM	Peak	PM	Peak			
Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	No Dev	With Dev + Improv.	No Dev	With Dev + Improv.			
	B5080 Pennine Way North/ A5 Eastbound On/ Off Slip Road									
54/1 + 55/1	Pennine Way North Lane 1	N/A	Queue Aver Delay	14 1m 44s	2 10 secs	1 6 secs	1 6 secs			
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 8 secs	1 7 secs	0 5 secs	1 6 secs			
60/1	A5 Eastbound Off Slip Lane 1	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs			
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs			
64/1 + 66/1 + 86/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	1 6 secs	1 6 secs	4 12 secs	4 12 secs			
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	1 7 secs	1 7 secs			
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	28 2m 6s	0 2 secs	0 5 secs	0 1 sec			
	, ,	ennine Way So		oound On/ Of	f Slip Road					
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 4 secs	0 4 secs			
89/2	Southbound Overbridge Lane 2	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs	0 5 secs			
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	0 6 secs	0 6 secs	1 9 secs	1 9 secs			
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1 7 secs	0 7 secs	14 42 secs	14 42 secs			
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 7 secs	0 7 secs			
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 6 secs	0 6 secs			
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	1 6 secs	1 6 secs	12 1m 33s	14 1m 36s			
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 5 secs	0 5 secs			
			M42 Junction 1							
1/1 + 2/1 + 4/1 + 5/1	M42 Northbound Offslip Lane 1	1740	Queue Aver Delay	3 17 secs	2 17 secs	10 51 secs	12 53 secs			
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 15 secs	2 24 secs	1 24 secs			
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	1 13 secs	1 13 secs	8 30 secs	8 30 secs			
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	4 18 secs	5 22 secs	7 28 secs	7 28 secs			
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	3 17 secs	3 17 secs	7 27 secs	9 31 secs			
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	15 19 secs	4 16 secs	20 18 secs	22 20 secs			
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	11 15 secs	7 20 secs	26 34 secs	27 35 secs			

8/1 + 9/1 +							_
11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	41 3m 5s	6 13 secs	10 58 secs	5 15 secs
8/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	3 15 secs	8 20 secs	4 23 secs	10 24 secs
8/3 + 9/2 + 11/2 + 69/2 + 70/2	A5 Eastbound Lane 3	1900	Queue Aver Delay	46 3m 24s	6 15 secs	8 37 secs	4 15 secs
8/4	A5 Eastbound Lane 4	1900	Queue Aver Delay	N/A	12 27 secs	N/A	8 18 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	3 19 secs	4 21 secs	4 18 secs	6 18 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	5 21 secs	2 19 secs	7 19 secs	2 16 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	5 19 secs	5 21 secs	7 18 secs	4 17 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	1 16 secs	5 23 secs	1 14 secs	9 20 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	3 41 secs	3 43 secs	5 37 secs	5 37 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	5 59 secs	5 59 secs	16 2m 16s	17 2m 17s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	9 7 secs	3 3 secs	8 8 secs	2 2 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	6 8 secs	13 12 secs	8 12 secs	11 8 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	1 3 secs	10 11 secs	1 3 secs	10 14 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	N/A	1 3 secs	N/A	3 3 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	N/A	1 2 secs	N/A	3 16 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 25 secs	1 26 secs	1 19 secs	2 20 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 28 secs	1 27 secs	5 36 secs	6 53 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	1 26 secs	1 27 secs	3 25 secs	4 36 secs
A16/1	Green Lane Toucan Crossing	2213	Queue Aver Delay	N/A	3 3 secs	N/A	2 2 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	4 5 secs	8 7 secs	3 7 secs	14 9 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	9 6 secs	7 7 secs	10 10 secs	10 7 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	10 8 secs	11 9 secs	7 10 secs	8 9 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 4 secs	1 3 secs	2 6 secs	1 5 secs
23/1	A5 Westbound Lane 1	1930	Queue Aver Delay	6 21 secs	9 20 secs	6 19 secs	8 19 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	2 18 secs	5 23 secs	4 18 secs	5 19 secs

23/3 + 24/1	A5 Westbound	1051	Queue	10	10	12	11
+ 25/1	Lane 3	1851	Aver Delay	35 secs	28 secs	35 secs	41 secs
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	3 18 secs	8 20 secs	8 2 secs	11 45 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	6 16 secs	4 14 secs	11 20 secs	8 17 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	2 12 secs	5 19 secs	3 14 secs	7 16 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 11 secs	2 11 secs	2 12 secs	2 13 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	2 11 secs	2 11 secs	3 13 secs	3 13 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	4 32 secs	4 33 secs	15 1m 32s	10 2m 3s
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	5 35 secs	5 33 secs	6 46 secs	6 47 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	9 9 secs	6 9 secs	5 8 secs	3 6 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	9 9 secs	7 12 secs	5 10 secs	9 12 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	13 10 secs	12 10 secs	3 7 secs	5 7 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	8 8 secs	9 9 secs	4 12 secs	5 13 secs
		A5/ P	roposed Site A	Access			
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	8 15 secs	N/A	11 12 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	N/A	5 14 secs	N/A	11 11 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	N/A	2 8 secs	N/A	5 7 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	N/A	0 9 secs	N/A	3 9 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	N/A	0 9 secs	N/A	3 9 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	N/A	1 43 secs	N/A	0 41 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	N/A	1 36 secs	N/A	1 36 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	N/A	1 40 secs	N/A	2 42 secs
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	N/A	2 41 secs	N/A	2 42 secs
		A	5/ Birch Copp	ice			
31/1	A5 Eastbound Ahead Lane 1	1814	Queue Aver Delay	1 16 secs	1 16 secs	3 18 secs	9 20 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 13 secs	1 20 secs	1 16 secs	5 17 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	10 1m 19s	11 1m 40s	5 54 secs	5 55 secs
32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	10 1m 19s	13 2m 8s	4 51 secs	4 53 secs

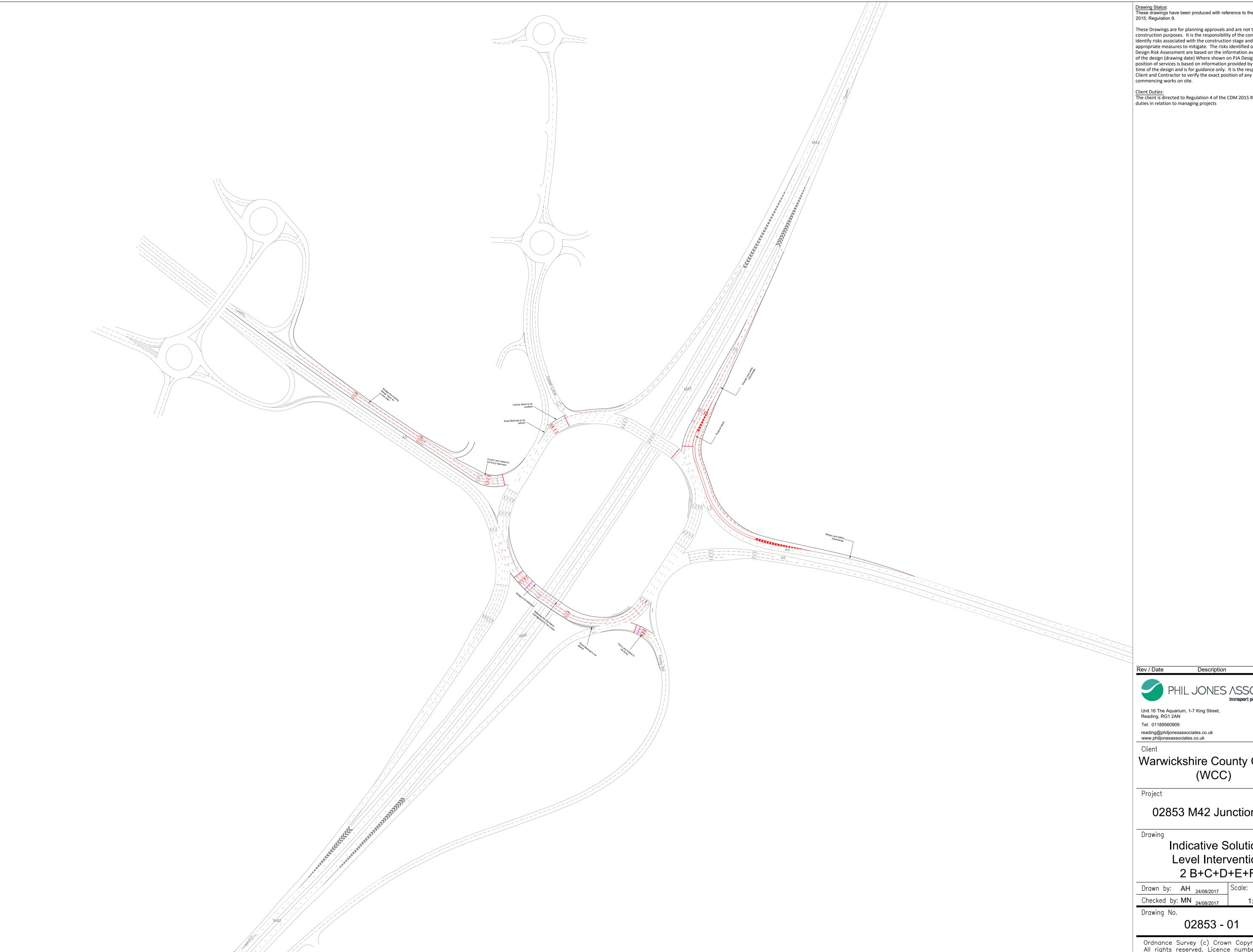
37/1	A5 Westbound Left Turn Lane 1	1751	Queue Aver Delay	3 23 secs	2 22 secs	1 17 secs	1 17 secs
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	11 45 secs	10 48 secs	25 1m 16s	18 1m 14s
37/3 + 38/2 + 53/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	11 51 secs	10 55 secs	18 1m 7s	17 1m 15s
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	4 27 secs	5 27 secs	5 22 secs	5 22 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	3 25 secs	3 25 secs	6 21 secs	5 22 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	2 27 secs	2 28 secs	3 24 secs	4 24 secs
			A5/ Core 42				
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	2 4 secs	3 5 secs	7 11 secs	9 12 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 1 sec	2 2 secs	3 4 secs	4 4 secs
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	1 57 secs	2 57 secs	1 51 secs	1 53 secs
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	8 10 secs	8 10 secs	7 13 secs	8 14 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	4 8 secs	4 8 secs	5 12 secs	7 13 secs
51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	2 2m 35s	2 2m 38s	1 59 secs	2 1m 3s
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	1 7m 29s	0 7m 20s	1 1m 35s	1 1m 42s
		A5 /	Dordon Round	about			
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	4 17 secs	7 23 secs	8 20 secs	14 26 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	0 5 secs	1 5 secs	0 7 secs	1 7 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	2 35 secs	2 41 secs	2 37 secs	2 40 secs
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	8 21 secs	9 28 secs	3 14 secs	4 14 secs
97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	0 12 secs	0 12 secs	0 12 secs	1 13 secs
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 23 secs	0 23 secs	0 21 secs	0 20 secs
			Network PI	6561.51	4929.41	6121.87	6338.70

KEY	
#	New traffic lanes as a result of the proposed development mitigation works
	Impact of development results in a reduction in queue of over 10pcu and/ or a reduction in delays of over 1
	minute.
	Impact of development results in an increase queue of 10pcu or over and/ or an increase in delay of over 1
	minute

Transport Assessment Addendum	
APPENDIX L LOCAL PLAN ASSOCIATED HIGHWAY WORKS	
ALL ENDIA E EGGAET EARL AGGGENTED ITTERMAT WORKS	

Appendix L1 – M42 Junction 10 Local Plan Improvements

Phil Jones Associates Drawing 02853-01 Rev A



<u>Drawing Status:</u>
These drawings have been produced with reference to the CDM Regulations 2015; Regulation 9.

These Drawings are for planning approvals and are not to be used for construction purposes. It is the responsibility of the contractor and client to identify risks associated with the construction stage and to design appropriate measures to mitigate. The risks identified on the PJA Scheme Design Risk Assessment are based on the information available at the time of the design (drawing date) Where shown on PJA Design Drawings, the position of services is based on information provided by other parties at the time of the design and is for guidance only. It is the responsibility of the Client and Contractor to verify the exact position of any services before

Client Duties:
The client is directed to Regulation 4 of the CDM 2015 Regulations: Client duties in relation to managing projects

Drn Chck'd Description

Warwickshire County Council (WCC)

02853 M42 Junction 10

Indicative Solution. Level Intervention 2 B+C+D+E+F

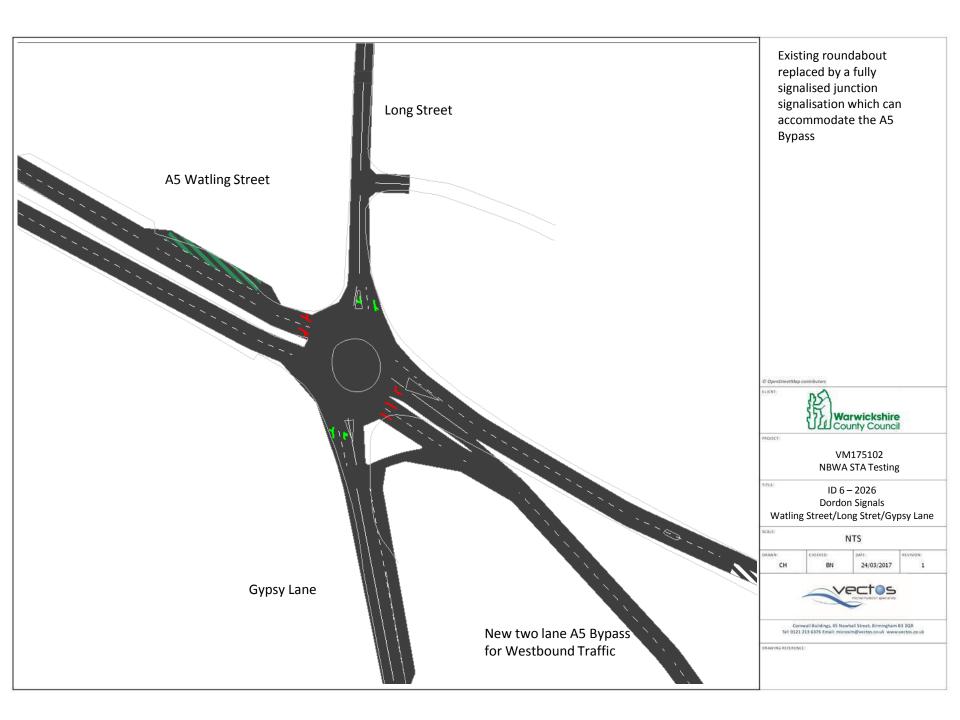
1:2000 @ A1

| Revision

Ordnance Survey (c) Crown Copyright 2014. All rights reserved. Licence number xxxxxxxxxx

Appendix L2 – A5/ Dordon Roundabout Upgrade to Traffic Signals

Vectos Strategic Transport Assessment – ID6 Dordon Signals



Appendix L3 – A5/ Dordon Roundabout Upgrade to Traffic Signals

TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0009



Transport Assessment Addendum
APPENDIX M TABLE 5.4 2033 LOCAL PLAN MODELLING RESULTS

Table 5.4: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2033 Local Plan

				AM Peak		PM Peak			
Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	No Dev	With Dev + Improv.	No Dev	With Dev + Improv.		
B5080 Pennine Way North/ A5 Eastbound On/ Off Slip Road									
54/1 + 55/1	Pennine Way North Lane 1	N/A	Queue Aver Delay	3 18 secs	5 27 secs	1 8 secs	2 16 secs		
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 7 secs	1 8 secs	1 6 secs	1 6 secs		
60/1	A5 Eastbound Off Slip Lane 1	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs		
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 5 secs	0 5 secs		
64/1 + 66/1 + 86/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	1 6 secs	1 6 secs	5 15 secs	5 14 secs		
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0 4 secs	1 4 secs	0 7 secs	1 7 secs		
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	4 17 secs	8 29 secs	5 25 secs	13 58 secs		
	B5080 P	ennine Way So	outh/ A5 Westh	oound On/ Of	f Slip Road				
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 4 secs	0 4 secs		
89/2	Southbound Overbridge Lane 2	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs	0 5 secs		
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	1 7 secs	1 7 secs	1 10 secs	1 10 secs		
76/2 + 75/1 + 71/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1 8 secs	1 8 secs	37 1m 27s	37 1m 37s		
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 4 secs	0 5 secs	0 8 secs	0 8 secs		
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 6 secs	0 6 secs		
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	1 6 secs	1 7 secs	25 2m 47s	25 2m 59s		
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 5 secs	0 5 secs		
			M42 Junction 1	10					
1/1 + 2/1 + 4/1 + 5/1	M42 Northbound Offslip Lane 1	1740	Queue Aver Delay	3 17 secs	3 17 secs	12 45 secs	12 45 secs		
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 15 secs	5 28 secs	5 28 secs		
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	1 13 secs	1 13 secs	4 1m 1s	4 1m 5s		
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	6 23 secs	6 27 secs	13 46 secs	13 53 secs		
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	3 17 secs	4 18 secs	11 39 secs	12 47 secs		
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	3 8 secs	3 8 secs	7 11 secs	8 11 secs		
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	11 17 secs	12 17 secs	18 23 secs	21 24 secs		

7.0	M42 Northbound	1010	Queue	13	15	17	18
7/3	Circulating Lane 3	1840	Aver Delay	18 secs	22 secs	47 secs	48 secs
7/4	M42 Northbound	1840	Queue	3	2	1	1
	Circulating Lane 4	1040	Aver Delay	9 secs	8 secs	10 secs	10 secs
8/1 + 9/1 +	A5 Eastbound		Queue	10	10	6	6
11/1	Lane 1	1828	Aver Delay	27 secs	31 secs	42 secs	42 secs
8/2 + 9/2 +	A5 Eastbound		Queue	27	34	30	49
11/2 + 69/1 + 70/1	Lane 2	1900	Aver Delay	1m 20s	1m 47s	2m 28s	3m 35s
	A5 Eastbound		Queue	4	5	8	9
8/3	Lane 3	1900	Aver Delay	17 secs	20 secs	38 secs	45 secs
8/4 + 9/3 +	A.E. Coothoused		0	28	31	20	31
11/3 + 69/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	∠8 1m 16s	1m 26s	20 1m 40s	3m 9s
+ 70/2			·			1111 403	0111 05
12/1	A5 Eastbound	1846	Queue	4	5	4	4
	Circulating Lane 1		Aver Delay	21 secs	23 secs	19 secs	19 secs
12/2	A5 Eastbound	1878	Queue	1	2	2	3
	Circulating Lane 2		Aver Delay	18 secs	20 secs	17 secs	17 secs
12/3	A5 Eastbound	1878	Queue	7 22 secs	7 25 secs	9 22 secs	8
	Circulating Lane 3		Aver Delay	7 22 Secs			21 secs 12
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	24 secs	8 29 secs	11 26 secs	27 secs
	Green Lane		Queue	4	4	6	5
14/1	Lane 1	1602	Aver Delay	43 secs	44 secs	42 secs	42 secs
	Green Lane		Queue	6	5	20	21
14/2	Lane 2	1602	Aver Delay	1m 4s	1m 6s	2m 58s	3m 2s
	Green Lane		Queue	1	2	2	2
15/1	Circulating Lane 1	1950	Aver Delay	2 secs	4 secs	2 secs	3 secs
15/0	Green Lane	1745	Queue	16	17	16	16
15/2	Circulating Lane 2	1745	Aver Delay	13 secs	13 secs	16 secs	15 secs
15/3	Green Lane	1745	Queue	9	12	16	18
13/3	Circulating Lane 3	1743	Aver Delay	11 secs	11 secs	17 secs	18 secs
15/4	Green Lane	1745	Queue	1	1	4	5
10, 1	Circulating Lane 4	.,	Aver Delay	3 secs	4 secs	5 secs	5 secs
A13/1	Green Lane	2272	Queue	N/A	2	N/A	4
	Toucan Crossing		Aver Delay		2 secs		16 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 25 secs	1	21 2222	2 21 secs
	M42 Southbound Offslip		Queue	20 8008	26 secs	21 secs 2	8
18/2	Lane 2	1813	Aver Delay	25 secs	27 secs	23 secs	o 1m 7s
	M42 Southbound Offslip		Queue	23 8668	27 3603	5	5
18/3	Lane 3	1813	Aver Delay	27 secs	26 secs	54 secs	54 secs
	Green Lane		Queue		2		2
A16/1	Toucan Crossing	1 2213	Aver Delay	N/A	3 secs	N/A	2 secs
47/4	M42 Southbound	4050	Queue	18	19	13	14
17/1	Circulating Lane 1	1956	Aver Delay	7 secs	7 secs	10 secs	11 secs
17/0	M42 Southbound	1056	Queue	16	17	13	14
17/2	Circulating Lane 2	1956	Aver Delay	6 secs	7 secs	11 secs	11 secs
17/3	M42 Southbound	1800	Queue	21	21	9	9
17/0	Circulating Lane 3	1000	Aver Delay	10 secs	11 secs	12 secs	11 secs
17/4	M42 Southbound	1 1800	Queue	1	1	1	1
,	Circulating Lane 4		Aver Delay	3 secs	3 secs	8 secs	10 secs

					1	
A5 Westbound Lane 1	1930	Queue Aver Delay	14 32 secs	8 35 secs	7 37 secs	15 46 secs
A5 Westbound Lane 2	1851	Queue Aver Delay	7 28 secs	5 29 secs	5 31 secs	7 33 secs
A5 Westbound	1851	Queue	9	6	8	13 43 secs
A5 Westbound	1851	Queue	12	8	8	8 1m 48s
A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	13 22 secs	12 22 secs	14 22 secs	14 21 secs
A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	6 18 secs	6 19 secs	6 15 secs	5 15 secs
A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	1 11 secs	1 11 secs	1 12 secs	1 12 secs
A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	2 11 secs	2 11 secs	5 33 secs	5 34 secs
Trinity Road Lane 1	1669	Queue Aver Delay	4 45 secs	4 44 secs	3 29 secs	3 29 secs
Trinity Road Lane 2	1669	Queue Aver Delay	2 40 secs	2 40 secs	2 26 secs	3 26 secs
Trinity Road Lane 3	1669	Queue Aver Delay	8 1m 1s	9 1m 2s	13 1m 26s	12 1m 33s
Trinity Road Circulating Lane 1	1846	Queue Aver Delay	11 8 secs	11 8 secs	6 9 secs	7 9 secs
Trinity Road Circulating Lane 2	1846	Queue Aver Delay	15 10 secs	15 10 secs	9 14 secs	9 14 secs
Trinity Road Circulating Lane 3	1878	Queue Aver Delay	11 7 secs	11 7 secs	2 6 secs	2 6 secs
Trinity Road Circulating Lane 4	1878	Queue Aver Delay	12 8 secs	13 8 secs	7 25 secs	6 26 secs
	A5/ F	Proposed Site A	Access			
A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	12 16 secs	N/A	16 14 secs
A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	N/A	11 15 secs	N/A	14 13 secs
A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	N/A	4 8 secs	N/A	5 8 secs
A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	N/A	1 12 secs	N/A	4 21 secs
A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	N/A	2 12 secs	N/A	3 21 secs
A5 Westbound Right Turn Lane	1597	Queue Aver Delay	N/A	1 42 secs	N/A	1 41 secs
Site Access Left Turn Lane	1624	Queue Aver Delay	N/A	1 36 secs	N/A	1 36 secs
Site Access Right Turn Lane 1	1619	Queue Aver Delay	N/A	1 41 secs	N/A	2 1m 10s
Site Access	1010	Queue	N/A	1	N/A	2
Right Turn Lane 2	1619	Aver Delay		41 secs		1m 6s
		Aver Delay A5/ Birch Copp		41 secs		1m 6s
				41 secs	2	1m 6s
	A5 Westbound Lane 2 A5 Westbound Lane 3 A5 Westbound Lane 4 A5 Westbound Circulating Lane 1 A5 Westbound Circulating Lane 2 A5 Westbound Circulating Lane 3 A5 Westbound Circulating Lane 4 Trinity Road Lane 1 Trinity Road Lane 2 Trinity Road Circulating Lane 1 Trinity Road Circulating Lane 1 Trinity Road Circulating Lane 2 Trinity Road Circulating Lane 3 Trinity Road Circulating Lane 2 Trinity Road Circulating Lane 3 Trinity Road Circulating Lane 3 Trinity Road Circulating Lane 3 A5 Eastbound Left & Ahead Lane 1 A5 Eastbound Ahead Lane 2 A5 Eastbound Ahead Lane 2 A5 Westbound Ahead Lane 2 A5 Westbound Ahead Lane 1 A5 Westbound Ahead Lane 2 A5 Westbound Ahead Lane 2	Lane 1 A5 Westbound Lane 2 A5 Westbound Lane 3 A5 Westbound Lane 4 A5 Westbound Circulating Lane 1 A5 Westbound Circulating Lane 2 A5 Westbound Circulating Lane 3 A5 Westbound Circulating Lane 3 A5 Westbound Circulating Lane 4 Trinity Road Lane 1 Trinity Road Lane 2 Trinity Road Circulating Lane 1 Trinity Road Circulating Lane 2 Trinity Road Circulating Lane 3 Trinity Road Circulating Lane 1 Trinity Road Circulating Lane 2 Trinity Road Circulating Lane 3 Trinity Road Circulating Lane 4 Trinity Road Circulating Lane 4 Trinity Road Circul	Lane 1 A5 Westbound Lane 2 A5 Westbound Lane 3 A5 Westbound Lane 4 A5 Westbound Lane 4 A5 Westbound Circulating Lane 1 A5 Westbound Circulating Lane 2 A5 Westbound Circulating Lane 3 A5 Westbound Circulating Lane 3 A5 Westbound Circulating Lane 3 A5 Westbound Circulating Lane 4 A5 Westbound Circulating Lane 3 A5 Westbound Circulating Lane 4 A5 Westbound Circulating Lane 4 Trinity Road Lane 1 Trinity Road Lane 2 Trinity Road Circulating Lane 1 A5 Westbound Circulating Lane 4 Trinity Road Lane 2 Trinity Road Circulating Lane 1 Trinity Road Circulating Lane 1 Trinity Road Circulating Lane 2 Trinity Road Circulating Lane 2 Trinity Road Circulating Lane 3 Trinity Road Circulating Lane 3 Trinity Road Circulating Lane 4 A5 Westbound Aver Delay Trinity Road Circulating Lane 3 Trinity Road Circulating Lane 4 A5 Eastbound Ahead Lane 1 A5 Eastbound Ahead Lane 2 A5 Eastbound Ahead Lane 3 A5 Westbound Ahead Lane 1 A5 Eastbound Ahead Lane 3 A5 Westbound Ahead Lane 1 A5 Westbound Ahead Lane 1 A5 Westbound Ahead Lane 2 A5 Westbound Ahead Lane 3 A5 Westbound Ahead Lane 1 A5 Westbound Ahead Lane 2 A5 Westbound Ahead Lane 3 A5 Westbound Ahead Lane 1 A5 Westbound Ahead Lane 2 A5 Westbound Ahead Lane 3 A5 Westbound Ahead Lane 4 A6 Westbound Ahead Lane 9 A5 Westbound Ahead Lane 1 A5 Westbound Ahead Lane 1 A5 Westbound Ahead Lane 1 A5 Westbound Ahead Lane 2 A5 Westbound Ahead Lane 3 A6 Westbound Ahead Lane 4 A6 Westbound Ahead Lane 9 A6 Westbound	Lane 1	Lane 1	As Westbound Lane 2 1851

0.1.6	A5 Eastbound Ahead		Queue	2	6	1	3
31/2	Lane 2	2082	Aver Delay	10 secs	9 secs	11 secs	12 secs
32/1	A5 Eastbound	1960	Queue	13	12	6	5
32/1	Right Turn Lane 3	1900	Aver Delay	1m 39s	1m 36s	1m 2s	1 min
32/2	A5 Eastbound	1667	Queue	16	13	4	4
	Right Turn Lane 4		Aver Delay	2m 14s	2m 8s	54 secs	53 secs
37/1	A5 Westbound Left Turn Lane 1	1751	Queue	3 14 secs	2 13 secs	2 15 secs	2 15 secs
07/0 00/4			Aver Delay	14 secs 10	13 secs	15 secs 12	
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	35 secs	37 secs	29 secs	12 32 secs
37/3 + 38/2	A5 Westbound		Queue	11	12	11	12
+ 53/2	Ahead Lane 3	2015	Aver Delay	42 secs	46 secs	28 secs	31 secs
	Birch Coppice	1005	Queue	7	7	6	6
42/1	Left Turn Lane 1	1695	Aver Delay	44 secs	44 secs	37 secs	39 secs
40/0	Birch Coppice	1000	Queue	5	4	7	7
42/2	Left Turn Lane 2	1983	Aver Delay	39 secs	39 secs	36 secs	38 secs
43/1	Birch Coppice	1690	Queue	3	3	8	8
40/1	Right Turn Lane 3	1000	Aver Delay	41 secs	42 secs	46 secs	47 secs
			A5/ Core 42			T	T
46/1	A5 Eastbound Ahead	1833	Queue	3	3	4	6
	Lane 1		Aver Delay	4 secs	4 secs	8 secs	8 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	2 1 sec	1 1 sec	4 6 secs	5 7 secs
	A5 Eastbound		Queue	2	2	0 Secs	2
47/1	Right Turn Lane 3	1667	Aver Delay	2 1m 4s	1m 3s	55 secs	54 secs
	A5 Westbound Ahead &	1957	Queue	14	15	9	9
49/1	Left Turn Lane 1		Aver Delay	25 secs	27 secs	19 secs	17 secs
	A5 Westbound Ahead		Queue	12	12	7	8
49/2	Lane 2	1909	Aver Delay	23 secs	24 secs	17 secs	16 secs
51/1	Core 42	1695	Queue	2	2	3	3
31/1	Left Turn Lane 1	1695	Aver Delay	2m 42s	2m 32s	1m 14s	1m 10s
52/1	Core 42	1690	Queue	1	1	1	2
32/1	Right Turn Lane 2		Aver Delay	7m 7s	8m 1s	1m 49s	1m 48s
		A5/ I	Dordon Round			T	T
91/1	A5 Eastbound	N/A	Queue	13	12	18	20
	Lane 1		Aver Delay	20 secs	20 secs	18 secs	19 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	13 19 secs	12 19 secs	21 17 secs	19 18 secs
92/1 + 92/2	Laile 2		Queue	7	7	7	7
+ 93/1	Long Street	N/A	Aver Delay	1m 14s	1m 15s	2m 12s	2m 12s
	A5 Westbound		Queue	0	0	0	0
98/1	Left Turn Slip	N/A	Aver Delay	5 secs	5 secs	5 secs	5 secs
07/4 00/4	A5 Westbound	N 1/A	Queue	5	5	3	3
97/1 + 98/1	Ahead Lane 1	N/A	Aver Delay	20 secs	20 secs	6 secs	6 secs
97/2 + 98/2	A5 Westbound	NI/A	Queue	4	4	3	3
3114 + 30/2	Ahead Lane 2	N/A	Aver Delay	17 secs	18 secs	6 secs	6 secs
111/1	A5 Westbound	N/A	Queue	2	2	5	4
1 1 1/ 1	Right Turn Lane 3	1 1// 1	Aver Delay	49 secs	48 secs	1m 4s	1m 5s
100/1	Gypsy Lane	N/A	Queue	2	2	2	2
	71 7 -		Aver Delay	28 secs	28 secs	42 secs	42 secs
KEY			Network PI	5806.65	6925.51	8634.57	10103.21

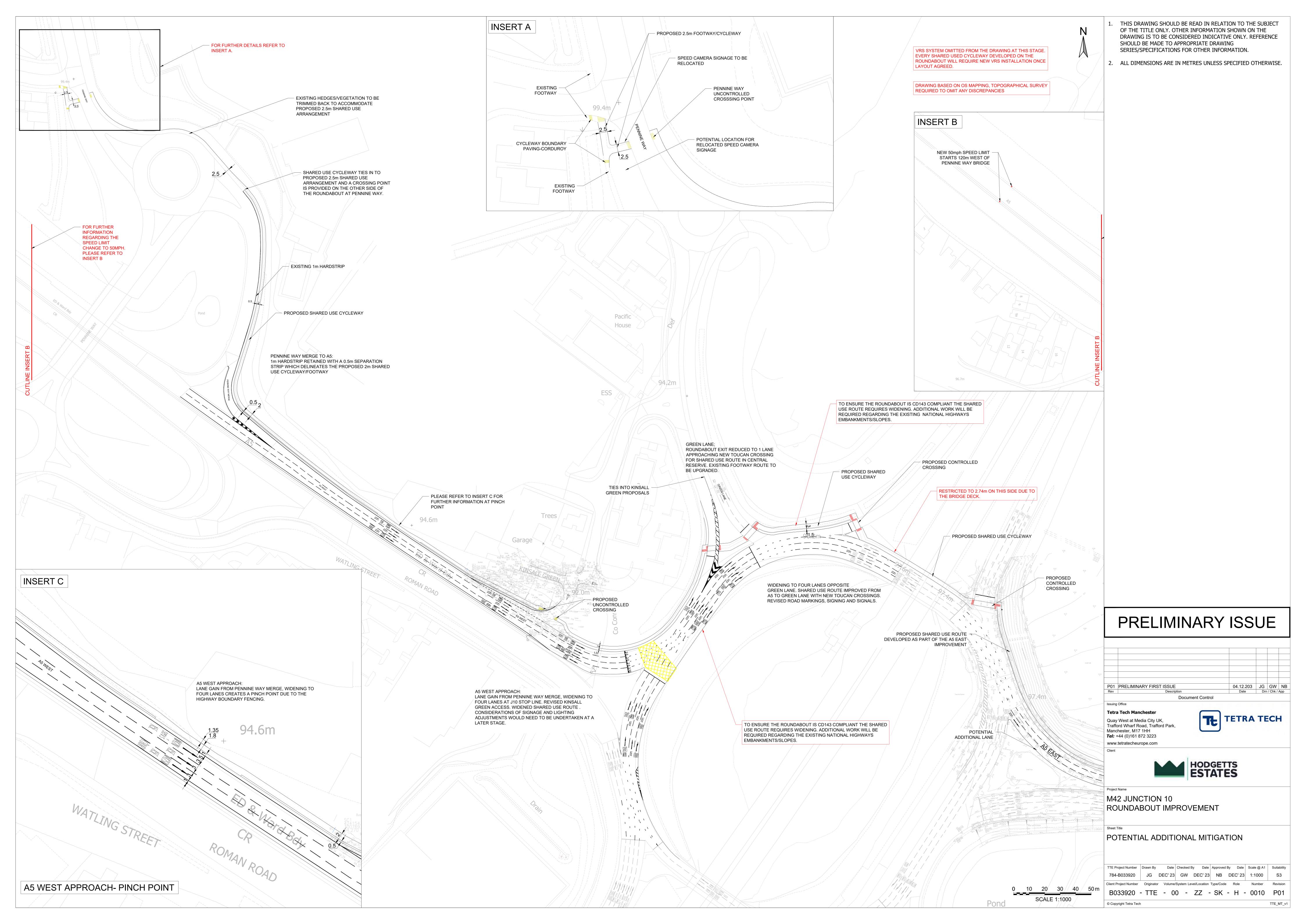
New traffic lanes as a result of the Local Plan works

#	New traffic lanes as a result of the proposed development mitigation works
	Impact of development results in a reduction in queue of over 10pcu and/ or a reduction in delays of over 1
	minute.
	Impact of development results in an increase queue of 10pcu or over and/ or an increase in delay of over 1
	minute

Transport Assessment Adde	endum			
APP	PENDIX N ADDITIC	DNAL MITIGATIO	N DRAWINGS	

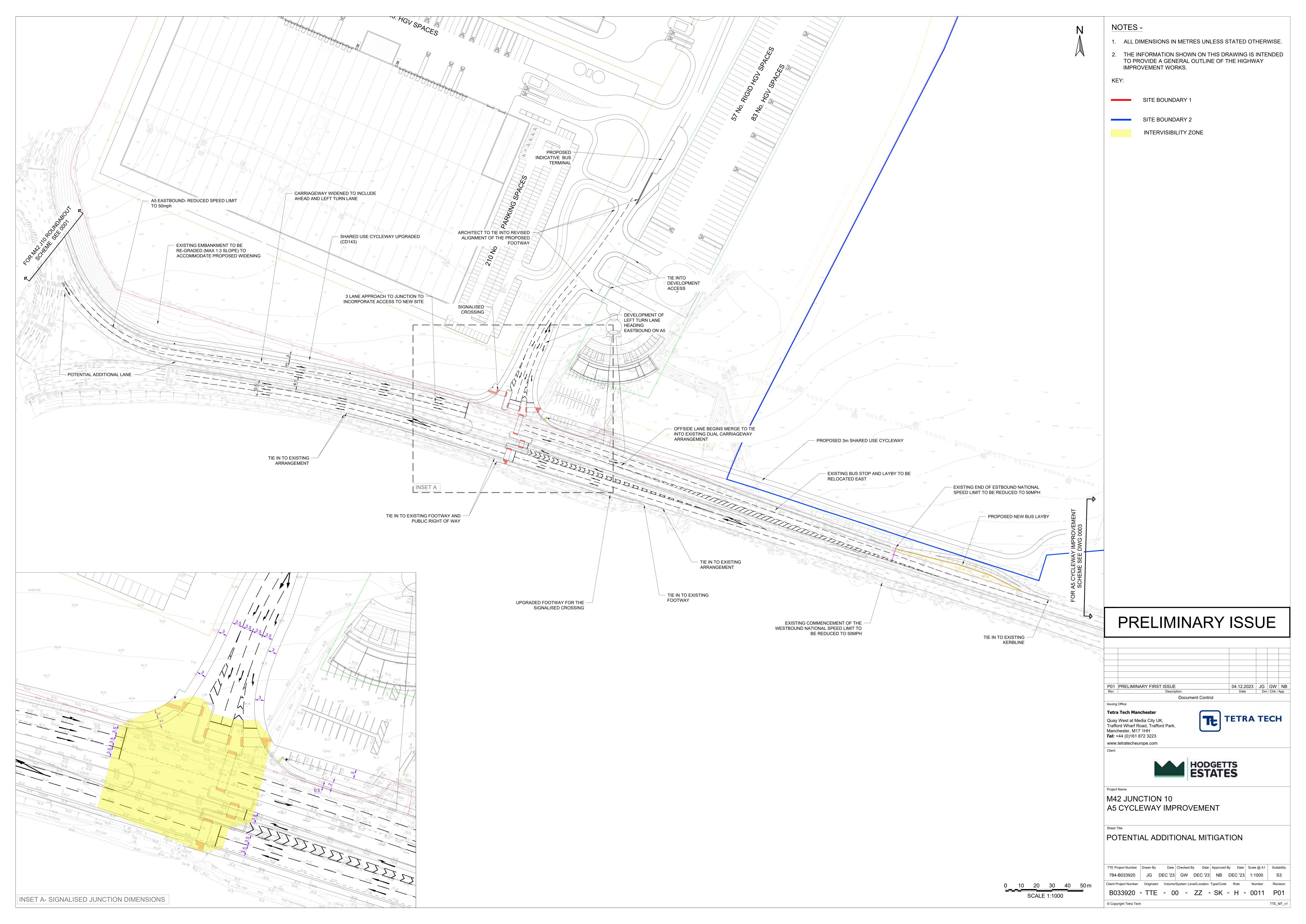
Appendix N1 – Potential Additional Mitigation at M42 Junction 10

TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0010



Appendix N2 – Potential Additional Mitigation at Site Access

TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0011



APPENDIX O	TABLE 5.5 203	3 LOCAL PLAN	MODELLING	RESULTS WITH
	ADD	ITIONAL MITIG	ATION	

Land North-East of Jn10 M42 Motorway, North Warwickshire

Table 5.5: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2033 Local Plan + Additional Mitigation

				AM Peak		PM Peak	
Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	No Dev	With Dev + Improv.	No Dev	With Dev + Improv.
	B5080 F	Pennine Way N	orth/ A5 Eastb	ound On/ Off	Slip Road		
54/1 + 55/1	Pennine Way North Lane 1	N/A	Queue Aver Delay	3 18 secs	3 16 secs	1 8 secs	1 7 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 7 secs	1 7 secs	1 6 secs	1 6 secs
60/1	A5 Eastbound Off Slip Lane 1	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 5 secs	0 5 secs
64/1 + 66/1 + 86/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	1 6 secs	1 6 secs	5 15 secs	6 15 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 7 secs	1 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	4 17 secs	4 11 secs	5 25 secs	1 3 secs
		ennine Way So		oound On/ Of			
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 4 secs	0 4 secs
89/2	Southbound Overbridge Lane 2	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs	0 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	1 7 secs	1 7 secs	1 10 secs	1 10 secs
76/2 + 75/1 + 71/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1 8 secs	1 8 secs	37 1m 27s	37 1m 34s
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 4 secs	0 5 secs	0 8 secs	0 8 secs
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 6 secs	0 6 secs
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	1 6 secs	1 7 secs	25 2m 47s	24 2m 54s
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 5 secs	0 5 secs
			M42 Junction	10			
1/1 + 2/1 + 4/1 + 5/1	M42 Northbound Offslip Lane 1	1740	Queue Aver Delay	3 17 secs	3 17 secs	12 45 secs	12 45 secs
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 15 secs	5 28 secs	5 27 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	1 13 secs	1 13 secs	4 1m 1s	4 54 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	6 23 secs	8 33 secs	13 46 secs	14 53 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	3 17 secs	3 18 secs	11 39 secs	13 45 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	3 8 secs	2 8 secs	7 11 secs	5 10 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	11 17 secs	13 20 secs	18 23 secs	22 28 secs

7/3	M42 Northbound Circulating Lane 3	1840	Queue Aver Delay	13 18 secs	17 31 secs	17 47 secs	21 44 secs
7/4	M42 Northbound	1840	Queue	3	2	1	1
8/1 + 9/1 +	Circulating Lane 4 A5 Eastbound	1000	Aver Delay Queue	9 secs 10	8 secs 20	10 secs 6	9 secs 10
11/1	Lane 1	1828	Aver Delay	27 secs	52 secs	42 secs	40 secs
8/2 + 9/2 + 11/2 + 69/1 + 70/1	A5 Eastbound Lane 2	1900	Queue Aver Delay	27 1m 20s	19 52 secs	30 2m 28s	17 1m 8s
8/3	A5 Eastbound Lane 3	1900	Queue Aver Delay	4 17 secs	9 30 secs	8 38 secs	7 30 secs
8/4 + 9/3 + 11/3 + 69/2 + 70/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	28 1m 16s	18 1m 1s	20 1m 40s	7 31 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	4 21 secs	5 22 secs	4 19 secs	4 19 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	1 18 secs	6 24 secs	2 17 secs	7 19 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	7 22 secs	4 21 secs	9 22 secs	4 18 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	7 24 secs	7 26 secs	11 26 secs	11 25 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	4 43 secs	3 40 secs	6 42 secs	5 42 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	6 1m 4s	7 1m 36s	20 2m 58s	19 3m 2s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	1 2 secs	14 9 secs	2 2 secs	5 6 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	16 13 secs	7 7 secs	16 16 secs	6 7 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	9 11 secs	16 13 secs	16 17 secs	15 18 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	1 3 secs	1 4 secs	4 5 secs	1 4 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	N/A	2 2 secs	N/A	4 16 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 25 secs	1 26 secs	2 21 secs	1 21 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 25 secs	2 34 secs	2 23 secs	4 34 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	2 27 secs	1 26 secs	5 54 secs	9 1m 36s
A16/1	Green Lane Toucan Crossing	2213	Queue Aver Delay	N/A	3 3 secs	N/A	2 2 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	18 7 secs	7 4 secs	13 10 secs	3 6 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	16 6 secs	18 7 secs	13 11 secs	13 11 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	21 10 secs	19 8 secs	9 12 secs	14 15 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 3 secs	10 18 secs	1 8 secs	3 13 secs

			_	1			Т
23/1 + 24/1 + A25/1	A5 Westbound Lane 1	1930	Queue Aver Delay	14 32 secs	15 1m 3s	7 37 secs	15 48 secs
	A5 Westbound		Queue	7	6	5	7
23/2	Lane 2	1851	Aver Delay	28 secs	45 secs	31 secs	37 secs
23/3 + 24/2	A5 Westbound Lane 3	1851	Queue Aver Delay	9 24 secs	8 32 secs	8 41 secs	11 35 secs
20/4 04/0			•			ł	
23/4 + 24/3 + A25/2	A5 Westbound Lane 4	1851	Queue Aver Delay	12 30 secs	8 34 secs	8 1m 23s	9 1m 57s
	A5 Westbound		Queue	13	4	14	10
22/1	Circulating Lane 1	1797	Aver Delay	22 secs	16 secs	22 secs	19 secs
	A5 Westbound		Queue	6	16	6	8
22/2	Circulating Lane 2	1797	Aver Delay	18 secs	46 secs	15 secs	19 secs
00/0	A5 Westbound	1000	Queue	1	1	1	2
22/3	Circulating Lane 3	1902	Aver Delay	11 secs	11 secs	12 secs	13 secs
00/4	A5 Westbound	1902	Queue	2	2	5	6
22/4	Circulating Lane 4	1902	Aver Delay	11 secs	12 secs	33 secs	33 secs
28/1	Trinity Road	1669	Queue	4	4	3	3
ZO/ 1	Lane 1	נטטו	Aver Delay	45 secs	44 secs	29 secs	29 secs
28/2	Trinity Road	1669	Queue	2	2	2	3
20/2	Lane 2	1003	Aver Delay	40 secs	39 secs	26 secs	28 secs
28/3 + 29/1	Trinity Road	1669	Queue	8	9	13	16
20/3 + 29/1	Lane 3	1009	Aver Delay	1m 1s	1m 4s	1m 26s	1m 40s
27/1	Trinity Road	1846	Queue	11	10	6	5
27/1	Circulating Lane 1	1040	Aver Delay	8 secs	8 secs	9 secs	8 secs
27/2	Trinity Road	1846	Queue	15	16	9	12
21/2	Circulating Lane 2	1040	Aver Delay	10 secs	13 secs	14 secs	17 secs
27/3	Trinity Road	1878	Queue	11	12	2	4
27/3	Circulating Lane 3	1070	Aver Delay	7 secs	8 secs	6 secs	8 secs
27/4	Trinity Road	1878	Queue	12	13	7	8
21/4	Circulating Lane 4		Aver Delay	8 secs	8 secs	25 secs	25 secs
		A5/ F	Proposed Site /	Access			
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	14 18 secs	N/A	17 15 secs
1 = 0 (0	A5 Eastbound		Queue		11		18
A56/2	Ahead Lane 2	1738	Aver Delay	N/A	16 secs	N/A	16 secs
A56/3	A5 Eastbound	1995	Queue	N/A	4	N/A	5
A36/3	Ahead Lane 3	1995	Aver Delay	IV/A	8 secs	IN/A	7 secs
A59/1	A5 Westbound	1930	Queue	N/A	2	N/A	3
	Ahead Lane 1		Aver Delay		13 secs		20 secs
A59/2	A5 Westbound	1930	Queue	N/A	2	N/A	3
1.00, 2	Ahead Lane 2		Aver Delay		13 secs	,, .	18 secs
A60/1	A5 Westbound	1597	Queue	N/A	1	N/A	1
	Right Turn Lane		Aver Delay		41 secs		42 secs
A54/1	Site Access	1624	Queue	N/A	1	N/A	1
	Left Turn Lane		Aver Delay		36 secs		36 secs
A55/1	Site Access	1619	Queue	N/A	1 1	N/A	2 1m 10a
	Right Turn Lane 1		Aver Delay		43 secs		1m 10s
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	N/A	1 43 secs	N/A	2 1m 6s
	Tugut Turri Lane 2		A5/ Birch Copp	ica	40 SECS		1111 05
	AE Easthaund Abasel	<i>F</i>		1	3	2	3
31/1	A5 Eastbound Ahead	1814	Queue		_		
1	Lane 1		Aver Delay	9 secs	11 secs	13 secs	15 secs

31/2	A5 Eastbound Ahead	2082	Queue	2	7	1	3
01/2	Lane 2	2002	Aver Delay	10 secs	10 secs	11 secs	12 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	13 1m 39s	12 1m 41s	6 1m 2s	6 1m 5s
32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	16 2m 14s	12 2m 7s	4 54 secs	4 56 secs
37/1	A5 Westbound Left Turn Lane 1	1751	Queue Aver Delay	3 14 secs	3 14 secs	2 15 secs	2 15 secs
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	10 35 secs	10 39 secs	12 29 secs	12 31 secs
37/3 + 38/2 + 53/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	11 42 secs	12 47 secs	11 28 secs	11 33 secs
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	7 44 secs	6 45 secs	6 37 secs	6 39 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	5 39 secs	5 39 secs	7 36 secs	7 39 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	3 41 secs	3 42 secs	8 46 secs	8 47 secs
	and the second second		A5/ Core 42			10000	
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	3 4 secs	3 4 secs	4 8 secs	5 9 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	2 1 sec	2 2 secs	4 6 secs	4 7 secs
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	2 1m 4s	2 1m 1s	1 55 secs	1 53 secs
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	14 25 secs	16 26 secs	9 19 secs	9 18 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	12 23 secs	14 24 secs	7 17 secs	8 16 secs
51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	2 2m 42s	2 2m 42s	3 1m 14s	3 1m 11s
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	1 7m 7s	1 7m 41s	1 1m 49s	1 1m 46s
		A5/ I	Dordon Round	about			
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	13 20 secs	12 20 secs	18 18 secs	21 20 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	13 19 secs	12 19 secs	21 17 secs	22 18 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	7 1m 14s	7 1m 17s	7 2m 12s	7 2m 15s
98/1	A5 Westbound Left Turn Slip	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs	0 5 secs
97/1 + 98/1	A5 Westbound Ahead Lane 1	N/A	Queue Aver Delay	5 20 secs	5 20 secs	3 6 secs	3 6 secs
97/2 + 98/2	A5 Westbound Ahead Lane 2	N/A	Queue Aver Delay	4 17 secs	5 17 secs	3 6 secs	3 6 secs
111/1	A5 Westbound Right Turn Lane 3	N/A	Queue Aver Delay	2 49 secs	2 48 secs	5 1m 4s	4 1m 6s
100/1	Gypsy Lane	N/A	Queue Aver Delay	2 28 secs	2 28 secs	2 42 secs	2 42 secs
KFY			Network PI	5806.65	6978.02	8634.57	8995.13

New traffic lanes as a result of the Local Plan works

#	New traffic lanes as a result of the proposed development mitigation works
	Impact of development results in a reduction in queue of over 10pcu and/ or a reduction in delays of over 1
	minute.
	Impact of development results in an increase queue of 10pcu or over and/ or an increase in delay of over 1
	minute

 endum			
APPENDIX P VIS	ION BASED TRAV	EL PLAN	

Land North-East of Jn10 M42 Motorway, North Warwickshire

Land North-East of Jn10 M42 Motorway, North Warwickshire

784-B033920

Vision-Based Travel Plan

Hodgetts Estates

December 2023



DOCUMENT CONTROL

Document:	Vision-Based Travel Plan
Project:	Land North-East of Jn10 M42 Motorway, North Warwickshire
Client:	Hodgetts Estates
Project Number:	784-B033920
File Origin:	\\lds-dc-vm-101\Data\Projects\784-B033920 Land NE of M42 Jn10\60 Project Output\61 Work in Progress\Draft Documents\Vision Led Travel Plan

Revision:	0	Prepared by:	Gareth Wakenshaw
Date:	15.09.2023	Checked by:	Nick Bunn
Status:	Draft	Approved By:	Nick Bunn
Description of Revision:			

Revision:	1	Prepared by:	Gareth Wakenshaw		
Date:	18.09.2023	Checked by:	Nick Bunn		
Status:	Final	Approved By:	Nick Bunn		
Description of Revision:	Updated following client review				

Revision:	2	Prepared by:	Gareth Wakenshaw		
Date:	7.12.2023	Checked by:	Nick Bunn		
Status:		Approved By:	Nick Bunn		
Description of Revision:	Updated following National Highway Comments				

Revision:	Prepared by:
Date:	Checked by:
Status:	Approved By:
Description of Revision:	

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	VISION	6
3.0	ACCESSIBILITY	13
4.0	CURRENT MODE SHARE	23
5.0	TRAVEL PLAN ADMINISTRATION	26
6.0	COMMITTED MEASURES TO REDUCE CAR USE	27
7.0	TARGET MODE SHARE	32
8.0	RESIDUAL TRIPS	34
9.0	MONITORING OF SUCCESS	37
10.0	POLICY REQUIREMENTS	38
11.0	ACTION PLAN	40

APPENDICES

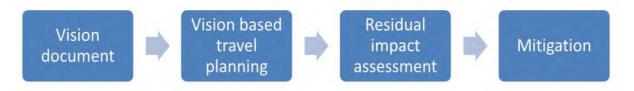
Appendix A1: Figures
Appendix A2: Drawings

Appendix B: TT Report – how far do people walk?
Appendix C: TAG Unit M5.2 Modelling Smarter Choices

Appendix D: Drawings by others
Appendix E: TT connectivity plans

1.0 INTRODUCTION

- 1.1 Tetra Tech have been engaged by Hodgetts Estates to produce a Vision-Based Travel Plan (TP) in support of a major development consisting of 100,000sqm of employment uses and a 150-space overnight lorry park with 400sqm amenity block, located off the A5 Watling Street, north-east of the M42 Junction 10 (M42 Jn10) interchange, in Warwickshire. Figure 1 at Appendix A1 shows the site location.
- 1.2 An outline planning application for the development site was submitted to North Warwickshire Borough Council (NWBC). The application (ref: PAP/2021/0663) was validated on 2 December 2021. The application was initially supported by a TA and FTP produced by Bancroft Consulting.
- 1.3 Tetra Tech (TT) was engaged by Hodgetts Estates in January 2022 to assess the impact of the proposed development on the highway network and provide additional information requested by National Highways (NH). The revised TA produced by TT also explored the opportunities to provide sustainable transport access to and though the site. A Walking Cycling and Horse-riding Assessment was undertaken by specialist subconsultants Drummond Black in accordance with GG142, and a Public Transport Strategy (PTS) was prepared in consultation with the bus operator Stagecoach and Warwickshire County Council (WCC) Public Transport team.
- 1.4 At the meeting held on 23rd May 2023 with WCC, NWBC and SCC, NH confirmed that although the planning application was submitted in December 2021, the polices set out in DfT circular 01/2022 Strategic Road Network and the Delivery of Sustainable Development would apply because the local road network was to be remodelled using new traffic survey data.
- 1.5 The circular advises that:
 - new developments should give priority to walking, wheeling and cycle movements and facilitate access to high-quality public transport where possible (para 42).
 - enable a reduction in the need to travel by private car and prioritise sustainable transport opportunities ahead of capacity enhancements and new connections on the SRN (para 43).
 - [in travel plans] development promoters must put forward clear targets and commitments to manage down the traffic impact of development and maximise the accessibility of and within sites by walking, wheeling, cycling, public transport and shared travel. Targets for achieving a modal shift to sustainable transport will need to be subject to sustained monitoring and management by an appointed travel plan coordinator (para 44)
 - [a transport assessment] should start with a vision of what the development is seeking to achieve and then test a set of scenarios to determine the optimum design and transport infrastructure to realise this vision (para 48)
- 1.6 In discussions with NH elsewhere an iterative process is suggested in line with national planning policy which comprised the flow chart shown below, but noting that the first two blocks can be combined.



- 1.7 NH have suggested that the vision-based travel plan will need to show how the vision can be achieved, and should include suitable multi-modal (person) trip rates, clear targets and commitments to manage down the traffic impact of development and maximise the accessibility of the site by walking, wheeling, cycling, public transport and shared travel.
- 1.8 This TP has been produced having due regard for the advice contained in:
 - National Planning Policy Framework (NPPF) published by the Department for Communities & Local Government (DCLG).
 - MHCLG's Transport Assessment and Travel Plan guidelines set out in Planning Practice Guidance.
 - North Warwickshire Borough Council Local Plan.
 - Department for Transport Circular 01/2022 Strategic Road Network and the Delivery of Sustainable Development
- 1.9 The applicant is committed to the principle of sustainable development, and is seeking to influence the travel choices of employees and visitors to the site with the implementation of a Full TP. This TP provides the approach to encourage the use of sustainable modes which will inform the Full Travel Plan.
- 1.10 In accordance with local and national policies to protect and enhance the environment, and to encourage sustainable development and travel patterns, this report reviews the current situation in the vicinity of the development site and proposes measures to encourage accessibility via a choice of transport modes. This report also includes the proposals for public transport improvements as outlined in the Public Transport Strategy.

2.0 VISION

2.1 The vision for Land North-East of Jn10 M42 is set out in www.landne-j10m42.co.uk to create:

The Greenest Business Park in the West Midlands

- 2.2 It is derived from Hodgetts Estates' commitment to achieving the highest possible level of sustainability and design and to mitigate possible climate change impacts. The vision will be achieved through:
 - Sustainability Strategy
 - Sustainable Transport & Highways

Sustainability Strategy

- 2.3 Hodgetts Estates is committed to sustainability and has set a very high target to achieve its vision, the proposals incorporate, inter alia, the following features and building standards:
 - Targeting a BREEAM 'Excellent' Rating for all buildings;
 - Energy Performance Certificate 'A' Rating for all buildings;
 - Speculative buildings to be built to UK Green Building Council's 'Net Zero Carbon Ready' standard for construction;
 - At least 10% of energy generated from on-site renewable or low carbon sources, electricity to sitewide infrastructure to be 100% renewable and ensuring all buildings can be adapted to accommodate existing and future technologies, e.g., solar panels and battery storage;
 - Air and ground source heat pumps to provide heating to all offices;
 - Recyclable structure and cladding system;
 - Use of low environmental impact and bio-based materials that also provide good insulation;
 - Rainwater harvesting to reduce water consumption, for measures such as flushing toilets, landscape watering and vehicle/interior cleaning;
 - Minimise construction waste;
 - Substantial biodiversity net gains of +26.5% for habitats and +298% for linear features far in excess of the 10% policy requirement;
 - At least 10,000 trees to be planted in on and offsite locations;
 - Up to 100% of electric vehicle charging from on-site renewable energy sources;
 - **Electric vehicle charging points and 'rapid' charging points**, with ducting provided to all parking spaces to future proof the development;
 - Electric vehicle charging points and 'rapid' charging points to HGV and LGV parking

spaces and loading docks for battery electric and hybrid electric commercial vehicles;

- **Ducting provided to all remaining lorry parking spaces**, to future proof all service yards and the overnight lorry parking facility;
- Channels to be left clear throughout the site to provide **future hydrogen mains supply to all premises and the overnight lorry park**, to future proof the proposals;
- Hydrogen tanking (bunkers) to be provided to all buildings, subject to occupier requirements, to allow re-fuelling of HGVs onsite;
- Develop a **Sustainable Travel Plan** to minimise single occupancy vehicle trips to and from the site:
- Cycle parking provided to all units at in excess of the North Warwickshire Borough standard;
- Cycle parking to comprise a range of parking facilities, including indoor/ outdoor parking, secure parking, covered parking and electric bike charge points, all located at or close to pedestrian entrances;
- Showers and changing facilities provided to all buildings;
- Communal cycle parking, showers and changing facilities at ancillary Hub Office, available to the general public including employees of neighbouring employment sites; and
- Extensive new and existing public footpaths, public bridleways, footway/ cycleways and pavements, all designed to be the Equalities Act 2010 compliant to provide "Access for All" (e.g. mobility impaired, mothers with prams, etc).

Sustainable Transport & Highways

2.4 From the outset, the transport strategy is to take holistic and inclusive approach to minimise trips to and from the site by single occupancy private vehicles, promotion of sustainable forms of transport and reducing the volume of freight arriving solely by road. This will be achieved by:

Proximity to the SRN

- 2.5 Proximity to the SRN is important for SRN dependent sectors such as logistics and manufacturing, which are the primary uses at this site, and such proximity is supported by Circular 01/2022.
- 2.6 The development includes a 150 space lorry park. Circular 01/2022 is also supportive of providing such facilities, especially where there is an identified need for such¹.

Walking & Cycling Connectivity

- 2.7 Throughout the site, 3m wide shared foot/cycleways will be provided. Fully-signalised pedestrian/cycle crossings will be provided across the mouth of the proposed access junction with the A5 and a fully-signalised pedestrian crossing of the A5 carriageway is to be introduced.
- 2.8 Externally, enhancements will be made to the pedestrian/ cycle path on the A5 eastbound carriageway together with improving the pedestrian and cycle facilities on the northern part of the M42 Jn10. Signalised crossings will replace uncontrolled crossings on the north facing slips and

¹ HGV Parking Facility Need Assessment, November 2021, MDS Transmodal.



784-B033920

- also on Green Lane. From Green Lane to the A5/ Pennine Way north roundabout the existing narrow footway/ cycleway will be widened and improved providing a key link into Stoneydelph and onwards to Tamworth.
- 2.9 The site will provide connections onto the existing Bridleways and Footpaths adjacent to the site (AE45, AE46 and AE48) whilst these paths will also be upgraded to make them wider and higher quality, providing excellent connectivity from the site to/ from Birchmoor (with connections to Tamworth, and to/ from Polesworth and Dordon. Footpath AE46 will be upgraded and diverted to provide a more direct route between Birchmoor / Polesworth / Tamworth and the A5 opposite the entrance to Birch Coppice Business Park. There will also be new footpaths/ cycleways (new Public Rights of Way), running parallel with the A5 between the site (at Footpath AE46) and Dordon and between Footpath AE46 and the A5 opposite the entrance to Core 42 Business Park. All of these will significantly enhance the sustainable routes available to both local residents in the area and also employees of both the development site and surrounding employment centres as shown on the Chetwoods drawings 00801/P3, 00802/P3 and 00803/P6 attached in Appendix D.
- 2.10 All of the new and improved existing public Footpaths, Bridleways, cycleways and pavements will be designed to be the Equalities Act 2010 compliant, to provide access to all (subject to the agreement of WCC Rights of Way Team).
- 2.11 To encourage walking and cycling uptake, showers and changing facilities will be provided to all employment units. In addition, communal cycle parking, showers and changing facilities will also be provided at the ancillary Hub Office, available to the employees of all site occupiers and the general public including staff from neighbouring business parks.

Public Transport Connectivity

- 2.12 As part of the site access works, the A5 eastbound bus stop has to be relocated approx. 130m further east. The layby is lengthened to meet current standards, and a bus shelter with seating, associated street furniture and segregated footway/ cycleway is to be provided. The potential for a green bus shelter (i.e., made from recycled materials with green roof and solar panels to power digital information board) is to be explored, subject to agreement from the highway authority(s).
- 2.13 The extension of the Stagecoach 766/ 767 Tamworth and Nuneaton services from the A5 into the proposed development has been agreed with Stagecoach and WCC. The 766/ 767 bus service provides connections to a number of residential areas which draw employees by both car and bus to the area in which the application site lies. The whole of the application site would be within a 400m walk of the proposed on-site bus stop and shelter.

Rail-Served Site

2.14 MDS Transmodal were appointed by Hodgetts Estates to assess the potential for linkage with the Birmingham Intermodal Freight Terminal (BIFT) at Birch Coppice. A copy of their report is available on the planning file, and relevant extracts are attached at Appendix B. In their report, MDS estimated that around 10% of loaded inbound and outbound traffic from the site could be expected to move by rail freight via the Terminal. The effect would be to reduce the volume of HGVs travelling from the site along the SRN – the A5 and M42, and typically these are long distance trips. There would be an increase in very short distance HGV movements between the site and the terminal at Birch Coppice, although this means the route has potential for the implementation

highly sustainable battery electric vehicles (E.V.) as opposed to traditional HGVs. Overall, there are significant vehicle mileage and emissions savings.

Car Sharing

2.15 Employees who live close to one another can potentially share cars for their journey to the proposed development.

Electrical Vehicles

- 2.16 E.V. charging will be provided at 10% of all car and motorcycle spaces across the site and all parking spaces will be ducted for E.V. for future conversion.
- 2.17 A proportion of electric vehicle charging points and 'rapid' charging points are also proposed for HGV and LGV parking spaces and/or loading docks for battery electric and hybrid electric vehicles. Ducting would also be provided to all remaining HGV/LGV lorry parking spaces, to future proof all service yards and the overnight lorry parking facility.
- 2.18 Cycle parking facilities to incorporate electric bike charging points.

Publicity and Promotion via the Site Travel Plan

- 2.19 The accessibility of the site is to be actively promoted to prospective employees alongside suggestions to encourage walking, wheeling, cycling or use of public transport.
- 2.20 So that employees are fully aware of the transport options available to them, a website will be set up and a Sustainable Travel Pack will be provided to all employees. Also, employees can benefit from personalised journey planning sessions which will be provided by the TP Co-ordinator on request.
- 2.21 The Sustainable Travel Pack will comprise the following:
 - Information on the TP, its targets, and the health, financial and environmental benefits.
 - Information about the local area, e.g., location, distance and directions to local shops and destinations for staff on their meal breaks, Banks and other local amenities.
 - Public transport details, including stop locations and routes, up-to-date timetables for bus services, fares, information on discounted tickets, how to access the Journey Planner online and links to live timetable information, e.g., www.stagecoach.com.
 - Cycle maps showing the key surrounding routes in relation to local facilities, as well as local bike shops and where cycle maintenance training can be obtained.
 - Walk maps showing the key surrounding routes to local facilities and services.
 - Details on how to gain access to local car share websites/databases.
 - Details of discounted bus taster tickets for employees of site occupiers.
 - Details of emergency lift home scheme, e.g., provision of alternative means of transport for staff of site occupiers that travel to site by foot, wheel or bicycle.
 - Name of the TP Co-ordinator, along with contact details by telephone, email or in person.
- 2.22 Any major changes to travels services, such as bus routes/services, rail routes will be circulated by the TP Co-ordinator via e-mail or a mail drop.

Policy Compliance

2.23 The vision for the site accords with the following key policies in relation to sustainability:

1. NPPF:

- Para 105, the proposed development is significant in scale and is located adjacent to the SRN
 which is suitable for the anticipated type of development. Sustainable access to the site is
 improved with the provision of foot/cycle and public transport connections to nearby
 settlements including Tamworth, Polesworth, Dordon, Atherstone and Nuneaton.
- para 110, a) appropriate opportunities to promote sustainable transport modes have been taken up with an appropriate mix of uses, and a choice of sustainable transport modes with high quality networks supporting pedestrians, cyclists and public transport users is provided and b) safe and suitable access to the site can be achieved for all users including people with disabilities and reduced mobility (e.g., wheelchair users and mothers with prams).
- para 112, a) priority is given to pedestrian and cycle movements with a network of routes
 providing connections within the site and to external areas, including access to public
 transport, c) the site creates a place and routes that are safe, secure and attractive; e) the site
 enables charging of plug-in and other ultra-low emission vehicles in safe, accessible and
 convenient locations.
- para 113, a travel plan is provided which sets out a series of measures, targets and a monitoring procedure.

2. DfT Circular 01/2022:

- para 12, the site is in a sustainable location for the uses proposed and its transport sustainability will be improved with a choice of sustainable transport modes with high quality networks supporting pedestrians, those wheeling, cyclists and public transport users.
- para 15, the developer recognises the need to move away from transport planning based on
 predicting future demand to provide capacity ('predict and provide') to planning that sets an
 outcome communities want to achieve and provides the transport solutions to deliver those
 outcomes (vision-led approaches including 'vision and validate,' 'decide and provide' or
 'monitor and manage').
- para 16, the site creates high-quality sustainable buildings and sustainable transport networks.
- para 17, the site provides a movement network that makes connections within and beyond the site with a network of routes providing connections within the site and to external areas, including access to bus and freight rail services.
- para 28 is supportive of new accesses onto the Strategic Road Network (SRN) for roadside facilities or SRN-dependent sectors (such as logistics and manufacturing).
- para 30 states that in order to operate efficiently, the freight and logistics sector requires land for distribution and consolidation centres at multiple stages within supply chains including the need for welfare facilities for the drivers of commercial vehicles. The proposals respond directly to this.

- para 42, priority is given to walking, wheeling, cycling and high quality public transport with high quality networks supporting pedestrians, people with disabilities / reduced mobility, cyclists and public transport users.
- para 43, to minimise the number and length of journeys, the site has an appropriate mix of
 uses. Businesses will be provided with high-speed broadband. A clear movement network is
 provided with sustainable transport choices. Secure cycle parking is provided, both at
 workplaces and communal facilities. Electric vehicle charging points and "rapid" charging
 points with ducting to all parking spaces, including for commercial vehicle parking spaces,
 service yards and the overnight lorry parking facility.
- para 44, a travel plan will be provided which sets out a series of measures, targets and a monitoring procedure.
- paras 49-51, a transport assessment will be provided.
- para 79, the roadside facilities proposed are critical to ensure drivers of heavy goods vehicles have easy access to facilities.
- para 80, the new facility is located immediately off the M42, providing essential daytime and overnight parking facilities for HGV drivers.
- para 82, the proposed overnight lorry park addresses an identified unmet need for HGV parking.
- 3. North Warwickshire Borough Council Local Plan:
- 2.24 Policy LP23 of the North Warwickshire Borough Council (NWBC) Local Plan sets out the requirements for Travel Plans:

The Assessments should assess the impact on level crossings in the vicinity of the development.

Travel Plans will be required to be submitted alongside these Assessments.

Travel Plan

Development will be expected to link with existing road, cycle and footpath networks. Developments that are likely to generate significant amounts of traffic and particularly larger developments will be expected to focus on the longer-term management of new trips; encourage the use of public and shared transport as well as appropriate cycle and pedestrian links. Increasing the opportunity to access these developments for all sections of the community should be addressed. This will be secured through a Travel Plan and/or financial contributions which will be secured either through planning conditions or the provisions of Section 106.

2.25 Policy LP34 of the NWBC Local Plan sets out the requirement for Parking and E.V. Charging points:

LP34 Parking

Adequate vehicle parking provision commensurate to a proposed development will be expected, as guided by the standards in the Document "Parking Standards". Greater emphasis will be placed on parking provision in areas not served by public transport whilst lower provision within the main towns may be appropriate.

Electric Vehicle Charging points

Electric charging points will be provided as part of all relevant developments to an agreed specification and location dependent on the scheme proposed and applicable technical guidance. Rapid charging points will be provided on sites when located in the public realm. On housing sites homes with on- site parking will provide an electric charging point in an accessible location close to the parking space(s). On commercial sites there will be employee and visitor rapid charging points.

Lorry Parking

Proposals which reduce lorry parking (either informal or formal parking areas) should be accompanied by evidence to support its loss and explore opportunities for alternative provision. In recognition of the Borough's strategic location and demand for lorry parking, the Council will give weight to lorry parking provision and facilities, and opportunities for alternative provision and for improved management in decision-taking.

12

3.0 ACCESSIBILITY

- 3.1 NPPF was updated and revised in September 2023, replacing the July 2021 version of the Framework. At Paragraph 104 c) NPPF identifies "opportunities to promote walking, cycling and public transport use are identified and pursued" for development proposals and at Paragraph 105 it indicates "opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making". The accessibility of the proposed development has been considered based on the policies in the NPPF.
- 3.2 Some details for this section, including photos, have been taken from the Bancroft TA.

Walking

- 3.3 In the vicinity of the site, a narrow 1.2m 1.5m wide footway extends along the southern edge of the A5 carriageway. This may also be a shared unsegregated cycleway, although the signing is somewhat ambiguous. Along the northern edge of the carriageway, a typically 2m wide shared unsegregated footway / cycleway exists, although this is reduced to c.1m by street furniture at the entrance to Birch Coppice.
- 3.4 To the west, these facilities extend to Jn10 interchange where, the M42 slip road and the Green Lane arms include unsignalized dropped kerbs and tactile paving crossings. There are no pedestrian crossings over the A5 approaches to Jn10. Photos showing the above are provided below.





Existing crossing facilities at M42 Junction 10: Green Lane (left), Sbd Off-Slip (right)





Existing footways at site frontage on A5 (left) and at northern overbridge of M42 Junction 10 (right)

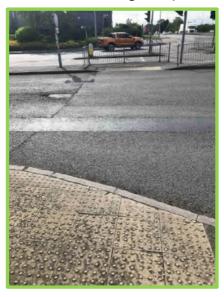
- 3.5 Figure 2, Appendix A1, identifies opportunities for pedestrian travel to the site, based on a 1.95km walking distance. This was based on research using NTS data of walking distances and published in Local Transport Today in October 2017. This is a 24-minute walk at a typical walking speed of 1.3m per second. The catchment area extends to the B5000 to the north, encompassing Birchmoor and the southwestern part of Polesworth which includes a significant amount of allocated residential development, approximately a 16-17 minute walk from the centre of the proposed site using the new footpath from the site entering Birchmoor through Cockspur Street, before heading east along Birchmoor Road, then south on Dordon Road.
- 3.6 The eastern edge of the catchment drops down from the B5000/Common Lane junction to the west of Common Lane. It then extends further to the east encompassing most of Dordon, including Browns Lane and the southern end of Long Street. This includes local shops and restaurants at the designated Browns Lane & New Street Shopping parade 'Neighbourhood Centre' along with further residential development. For example, Spar, Happy Dinner, FOCHA Turkish Kitchen and Dordon Fish Bar can all be accessed within a 22-23 minute walk from the centre of the site. This would involve exiting the site to the south and heading eastbound on the proposed foot/ cycleway alongside the A5 and the public footpath link to Browns Lane in Dordon. It is also important to note that many of the local roads within Polesworth and Dordon are traffic calmed, helping to keep speeds low and thereby improving conditions for pedestrian movement. Photos showing the above are provided below. A new Co-operative Food store at the corner of Whitehouse Road and Roman Way would also be within a 20-21 minute walk from the centre of the site, via the proposed new Public Right of Way (PROW) connecting Footpath AE46 and Barn Close.





Local shops at Browns Lane (left) and traffic calming on Whitehouse Road (right)

- 3.7 South of the site, the majority of the Birch Coppice and whole of Core 42 business park sites are within a reasonable walking distance. The two bus stops located within Birch Coppice can be accessed by a 16-17 minute walk from the centre of the proposed site whilst the entrance to Core 42 can be accessed within a 17-18 minute walk from the proposed site. Access to these areas requires crossing of the A5, which can be done via controlled crossing at the Birch Coppice or Core 42 junctions, or the uncontrolled crossing of the A5 dual carriageway opposite the existing bus stop layby. The proposed new site access would provide a further controlled crossing across the A5.
- 3.8 Each of these sites has comprehensive internal pedestrian and cyclist infrastructure to facilitate movement. Photos showing examples of these existing crossing facilities are provided below.





Crossing facilities at the Birch Coppice access (left) and Core 42 access (right)

3.9 The catchment then extends further west via Watling Street to include part of the adjacent residential area.

3.10 The area covered by the catchment north of the A5, west of Jn10 M42, comprises a mixture of residential and employment uses. It is connected to the site via Birchmoor using Cockspur Street and Green Lane, with footways along the entire length of the route and some sections with a footway on both sides of the carriageway. At the western end of Green Lane, the speed limit changes from 30 mph to national speed limit restrictions as the road splits to the north and south. The existing footway facilities at Green Lane are shown below.



Footways on Green Lane (bridge over M42 motorway)

3.11 Continuing south from this junction the route is via a Permissive Footpath that extends through to the northern edge of the Tamworth Moto service area as a traffic free route, where shops and restaurants including M&S Food, WHSmith, Greggs, Pret a Manger, Burger King, Costa Coffee and KFC can be found. From this, the catchment extends west to include additional residential development within Tamworth including the wards of Stonydelph, Glascote and Wilnecote. Photos showing parts of the pedestrian route to the south are provided below.





Pedestrian facilities on route south from Green Lane

3.12 Turning right and heading north from the Green Lane junction there is a foot/cycleway which provides various opportunities to cut into the adjacent residential areas and access the Tamworth

foot/cycle network, including the wards of Stonydelph, Glascote and Amington. The first of these is a segregated footpath/cycle path which extends through to the eastern edge of the residential estate and then offers convenient access to Pennine Way (B5080).





Pedestrian facilities on route north from Green Lane

- 3.13 There are a number of PROW within the surrounding area. Bancroft TA Figure 23, reproduced in Figure 3 Appendix A1, shows the designated PROWs in the area.
- 3.14 Bridleway 166/AE45/1 runs though the site parallel to the eastern site boundary in a north / south direction between Birchmoor and the A5, which will be diverted at the southern end to accommodate the new site access as shown in Figure 3 at Appendix A1. In addition, Figure 3 in Appendix A1 also shows how an existing Public Footpath (166/AE46/1) which extends east from the site and arches around to the south will be slightly diverted so as to provide a more direct route to the entrance to Birch Coppice Business Park. The footpath presently connects onto the A5, between the Birch Coppice and Core 42 accesses. In addition, the existing farm track which connects public footpath 166/AE46/1 with the A5 adjacent the Core 42 access junction will be upgraded as a new PROW (footway / cycleway). Continuing further east, the northern side of the A5 leads to another Footpath 166/AE48/2 that connects north-east into Browns Lane, Dordon.
- 3.15 A number of foot/cycle improvements are proposed for the A5 are proposed.
- 3.16 The existing shared unsegregated pedestrian/ cycle path on the A5 eastbound carriageway is substandard and will be improved to comply with CD143 "Designing for Walking, Cycling and Horse-riding". This entails widening the path to 3.0m and providing a 2.0m separation strip. As the cycleway approaches the M42 Jn10 interchange, the improvement requires alterations to the highway embankment, as shown at TT Drawings 784-B033920-TTE-00-ZZ-PL-H-0003-P02, 784-B033920-TTE-00-ZZ-PL-H-0004-P01 and 784-B033920-TTE-00-ZZ-PL-H-0005-P01 attached in Appendix A2. The drawings also show the eastbound connectivity enhancement with a 3m shared foot/ cycleway connecting to the existing A5 opposite Core 42, near Dordon.
- 3.17 To provide continuity and connectively for both pedestrians and cyclists it is also proposed to improve pedestrian and cycle facilities at Jn10 to comply with CD143. Signalised crossing of the north facing M42 slip roads (northbound on-slip and southbound off-slip) and of the Green Lane

arm will be provided to replace the current uncontrolled crossing points. There is no space on the north overbridge to improve pedestrian and cycle facilities, but between Green Lane and the A5/ Pennine Way north roundabout the existing narrow footway/ cycleway is to be widened to 2.0m with a 1.5m separation strip where achievable. There is a short pinch point section (circa 33m) on the A5 westbound approach to Jn10 where, owing to land constraints, a maximum 1.0m separation strip and 1.8m foot/ cycleway is achievable, refer to TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0001-P04 attached in Appendix A2, which shows the complete set of improvement works.

- 3.18 In addition to the improvements discussed above, Bridleway 166/AE45/1 will be upgraded and a new PROW (footpath / bridleway) introduced between Birchmoor and Dordon, significantly enhancing the sustainable routes available to local residents in the area. The new and upgraded bridleways and footpaths are shown at Figure 3 in Appendix A1 and the connectivity plans attached at Appendix D, and are also listed below for completeness:
 - Bridleway AE45;
 - Footpath AE46, part diverted;
 - Footpath AE48.
- 3.19 With the above new infrastructure and enhancements to existing routes in place, not only do they benefit potential users of the proposed development, but they also offer an enhancement for existing residents and people travelling to work in the area as discussed below.

Birchmoor to Dordon

3.20 A community integration route plan showing the connectivity between Birchmoor and Dordon is attached at Appendix E. Without the proposed development it would take an 11 minute cycle ride or 27½ min walk to get from Birchmoor to Dordon and vice versa via Polesworth. With the Bridleway, and Footpath improvements the journey time for cyclists is reduced to 10 minutes and walkers to 25 minutes.

Dordon to Relay Park

3.21 A commuter point to point plan showing the available route choices between Dordon and Relay Park is attached at Appendix E. There are two existing route choices to get to Relay Park, one via Polesworth and Birchmoor and the other via the A5 and M42 Jn10. The latter provides the most direct route, taking a cyclists 15 minutes, although they would have to cross the busy M42 Jn10 at 4 uncontrolled crossings. With the proposed development enhancements, cyclists could use the new cycle path, separated from the A5 carriageway and it would also provide 4 signal controlled crossings at the M42 Jn10. The improvements would also reduce the journey time by 1 minute.

Stoneydelph to Core 42

3.22 A commuter point to point plan showing the available tarmacked route choices between Stoneydelph and Core 42 is attached at Appendix E. There are two existing route choices to get to Core 42, one via Birchmoor, Polesworth and Dordon and the other via the Tamworth Services, M42 Jn10 and the A5. The latter provides the most direct route, taking a cyclists 20 minutes, although they would have to cross the busy M42 Jn10 at 4 uncontrolled crossings. With the proposed development enhancements, cyclists could use the new cycle path, separated from the A5 carriageway and it would also provide 4 signal controlled crossings at the M42 Jn10, or the

upgraded Bridleways. Although the improvements wouldn't reduce the journey time for cyclists, they would offer safer and more pleasant routes.

Polesworth to St Modwen Park

3.23 A commuter point to point plan showing the available tarmacked route choices between Polesworth to St Modwen Park is attached at Appendix E. There are two existing route choices to get to Relay Park, one via Birchmoor, Relay Park and M42 Jn10 and the other via Dordon & the A5. The latter provides the most direct route, taking cyclists 23½ minutes, although they would have to cross the A5 at two uncontrolled crossing points. With the proposed development enhancements, cyclists could use the new cycle path running through the centre of the development and the signal controlled crossing points on the A5 (dismounted) at the site access junction. The improvements would make a substantial journey time saving for cyclists to 16½ mins.

Cycle Travel

- 3.24 Figure 4, Appendix A1, shows a 7.2km cycle catchment area centred on the site. It demonstrates how a large number of the surrounding residential areas would be within a reasonable cycling distance. This includes the densely populated residential areas of eastern Tamworth, such as Kettlebrook, Glascote, Glascote Heath, Belgrave, Wilnecote, and Stoneydelph, as well as the majority of Tamworth other than the residential areas on its western edge. To the northeast and east, residential areas within Polesworth, Dordon, Grendon, Baddesley Ensor, and the western residential areas of Atherstone would also be well within a comfortable cycling distance of the site. The four largest housing allocations in the NWBC Local Plan are also within a comfortable cycling distance of the site; namely, site allocations H1 (620 dwellings) and H2 (1,282 dwellings) at Atherstone, H4 (1,675 dwellings) at Polesworth and Dordon and H5 (1,270 dwellings) at Tamworth, refer to Figure 4.
- 3.25 Figure 5, Appendix A1, shows an extract from 'Cycling in Lichfield' map published online by Staffordshire County Council. It shows how the site is surrounded by a network of cycle facilities, ranging from traffic-free cycle paths through to advisory cycle routes along quiet roads. In the immediate vicinity of the site these facilities include advisory cycle routes at Birchmoor Road and Trinity Road, shared footway/cycleway at the northern edge of the A5 (including a Toucan crossing at the Birch Coppice access), and further cycle paths routing through the residential areas of Stoneydelph and Glascote Heath. This demonstrates how the proposed development would be well connected to the surrounding local cycle network, ensuring that cycling trips to and from the surrounding site area are within a comfortable distance and with suitable facilities.



Cyclists using existing facilities at A5 passing the site frontage

3.26 There are a number of cycle improvements proposed for the A5 which are outlined in paragraph 3.15 onwards above and illustrated by the connectivity plans at Appendix E.

Bus Travel

3.27 The closest bus stop is located at the northern edge of the A5, approximately 200m to the east of the proposed site access, and 650m from the centre of the site. This comprises a bus layby with no flag and pole (photo below refers) and serves eastbound services for Routes 766 and 767. To access westbound services, the closest existing bus stop is located within the Birch Coppice Business Park, a further 400m east.



Existing bus stop facilities at A5 eastbound

3.28 Table 3.1 below lists the services which call at the A5 Watling Street eastbound bus stop.

Table 3.1: Bus Routes – A5 Watling Street

Route No.	Route Description	Monday to Friday		Saturday	Sunday
Houte No.	noute Description	Daytime	Evening	Daytime	Juliuay
Stagecoach 766/767	Tamworth to Nuneaton Via Birch Coppice, Dordon, Baddesley Ensor, Grendon, Atherstone, Mancetter, Hartshill	Every 1-2 hours	No Service	Every 1-2 hours	Every 1-2 hours

- 3.29 The 766/767 provide direct journey opportunities to a range of large residential areas, where employees may live including Tamworth, Atherstone and Nuneaton.
- 3.30 There are a pair of bus stops served by the 766 and 767 services at Birch Coppice Business Park, which are approximately 1,300m from the centre of the application site (well within walking distance). These stops can be reached by footway along the northside of Watling Street, the controlled pedestrian crossing facility on the A5 and footway through the business park.
- 3.31 There are two bus stops on Birchmoor Road to the north of the application site which can be reached within an approximate 800m walk from the centre of the application site. The stops can be reached via a proposed footway connection to Cockspur Street / public bridleway AE45 and then continuous footway on Cockspur Street and Birchmoor Road. The eastbound stop provides a flag/ pole arrangement, and the westbound stop provides a flag/ pole arrangement and timetable information. Table 3.2 below lists the services which call at the Birchmoor Road stops.

Table 3.2: Bus Routes - Birchmoor Road

Route No.	Route Description	Monday to Friday		Saturday	Constant
noute No.	noute Description	Daytime	Evening	Daytime	Sunday
Arriva 785/ 786	Tamworth to Austrey Via Arrington, Shuttington, Newton Regis, Wartyon, Polesworth	5 morning services then every 2 hours approx	No Service	5 morning services then every 2 hours approx	7 services

3.32 The 785/ 786 services provide direct journey opportunities to Tamworth and other residential areas where employees may live, including Polesworth and Shuttington. The proposed improvements to bus services, bus stop facilities and integration into the site are discussed in more detail at paras 6.18 to 6.27.

Rail Travel

- 3.33 Polesworth Station is located approximately 2.8km to the north of the site and has an extremely limited train service with only one train, early morning, per day (Monday to Saturday), and only in one direction (northbound) because the southbound platform is inaccessible.
- 3.34 Wilnecote Train Station is approximately 3.5km to the west of the site and could be cycled to as part of a shared journey, a route which would benefit from the proposed offsite infrastructure enhancements. Tamworth Station is approximately 7km northwest and is at the limit of a reasonable cycle ride, but could be used as part of a shared journey. Both Tamworth and Wilnecote Train Stations operate regular services to key surrounding towns that could fit with conventional working times for employees at the site.

3.35 For freight activities, the site is also close to the Birmingham Intermodal Freight Terminal (BIFT) at Birch Coppice Business Park. This is operated by Maritime Transport and provides a 24/7 operation with capacity for holding 3,000 containers. On a typical weekday, the terminal receives three trains a day from the Port of Felixstowe and two trains a day from the Port of Southampton. This provides a clear opportunity for goods associated with the proposed development to be delivered by rail rather than road, thereby reducing highway impact and increasing accessibility by sustainable modes. Maritime Transport (September 2022) has confirmed that, based on existing infrastructure, BIFT could accommodate eight trains per day meaning there is significant capacity for growth in throughput of freight at the facility.

Summary

- 3.36 The proposed development has good levels of accessibility on foot and by cycling to a range of useful local destinations. With the proposed bus service diversions, the majority of the site will be within an accessible walk distance to bus services that provide regular journey opportunities to a number of useful destinations. The nearby BIFT rail terminal provides an excellent opportunity for rail-road intermodal freight, which could replace 10% of HGV movements thereby reducing both HGV milage and CO2 emissions.
- 3.37 Overall, the accessibility of the site, taking into account the proposed connectivity improvements outlined elsewhere in this report is considered to be very good.

4.0 CURRENT MODE SHARE

- 4.1 The vehicle trip rates have been previously agreed by Bancroft Consulting with WCC and NH. The agreed trip rates focused on vehicles (light vehicles and HGVs) and there was no discussion regarding the trip rates for other modes of travel (i.e., via foot, wheel, bicycle, motorcycle or public transport).
- 4.2 The light vehicle and HGV flows predicted to be generated from the 90,000sqm B8 development and 10,000sqm E (g)(iii)/ B2/ B8 development using the agreed trip rates are shown below at Table 4.1, extracted from the Bancroft Consulting TA Rev C, dated November 2021. It was also agreed with NH and WCC that the trips associated with the proposed Truck Stop are all pass-by trips and it does not generate additional vehicles on the surrounding road network.

Table 4.1: Total Vehicle & HGV Trip Generation, 100,000sqm Employment

Time Period		Arrivals	Departures
	Lights	126	34
Weekday AM Peak Hour 08:00 to 09:00	HGV	50	52
00.00 to 03.00	Total	176	86
	Lights	40	150
Weekday PM Peak Hour 17:00 to 18:00	HGV	52	28
11.00 to 10.00	Total	92	178

4.3 In order to predict the arrivals and departures at the 100,000sqm employment of other modes of travel during the peak hours, data extracted from the 2011 Census for journeys from home to work has been analysed, excluding working from home. The Middle Super Output Area (MSOA) North Warwickshire 002 (which includes the development) was used to estimate the current mode share among employees who work in the area. This level of detail has been released for the 2021 Census but is affected by Covid travel restrictions and so the 2011 Census is viewed as the most reliable published data. The Census-derived employment mode shares are shown at Table 4.2 below.

Table 4.2: Mode of Travel to Work to MSOA North Warwickshire 002

Mode of Travel	Percentage Split
Car Driver	78%
Car Passenger	11%
Light rail/ Tram	0%
Train	0%
Bus	2%
Taxi	0%
Motorcycle	1%
Cycle	3%
Walk	5%
Other	0%

- To predict the quantum of people likely to use the other modes of travel during the peak hours, the numbers of light vehicles from Table 4.1 have been assumed to make up 78% of the employees at the proposed development (Table 4.2). So, for example, as there are 126 light vehicle arrivals in the AM peak (representing 78% of the whole), therefore (100%/78%) x 126 = 162 total people arrivals. The 36 employees not arriving by light vehicles have been split between the other modes of travel based on the respective mode shares set out at Table 4.2.
- 4.5 It should be noted that the above calculations have not included the HGV trips each peak hour as they are vehicles associated with the development operations rather than journeys to work by the employees. Table 4.3 below shows the derived multi modal trip generations among employees at the 100,000sqm employment floorspace at the proposed development.

Table 4.3: Multi-Modal Trips, Combined Employment

Time Period	Arrivals	Departures				
Car Driver/ Light Vehicles						
Weekday AM Peak Hour 08:00 to 09:00	126	34				
Weekday PM Peak Hour 17:00 to 18:00	40	150				
Car Passenger						
Weekday AM Peak Hour 08:00 to 09:00	18	5				
Weekday PM Peak Hour 17:00 to 18:00	6	21				
E	Bus					
Weekday AM Peak Hour 08:00 to 09:00	3	1				
Weekday PM Peak Hour 17:00 to 18:00	1	4				
Motorcycle						
Weekday AM Peak Hour 08:00 to 09:00	2	0				
Weekday PM Peak Hour 17:00 to 18:00	1	2				
Cycle						
Weekday AM Peak Hour 08:00 to 09:00	5	1				
Weekday PM Peak Hour 17:00 to 18:00	2	6				
Walk						
Weekday AM Peak Hour 08:00 to 09:00	8	2				

Weekday PM Peak Hour 17:00 to 18:00	3	10		
HGV				
Weekday AM Peak Hour 08:00 to 09:00	50	52		
Weekday PM Peak Hour 17:00 to 18:00	52	28		

5.0 TRAVEL PLAN ADMINISTRATION

- 5.1 Experience has shown there are certain key elements to the successful implementation of a Travel Plan:
 - Commitment and involvement of the developers.
 - Regular audit of travel patterns to monitor travel behaviours.
 - Active promotion of the TP from the outset.
 - A named TP Co-ordinator responsible for its management day to day site wide. It is envisaged some of the larger occupiers might have their own TP Co-ordinator who would report to the Site TP Co-ordinator.
 - Co-operation of and communication with employees at all stages of the TP.
- 5.2 David Groves will be appointed TP Co-ordinator for the proposed development and his contact details are set out below.

David Groves, Principal Transport Planner, Tetra Tech, 4th Floor, Rotterdam House, 116 Quayside, Newcastle upon Tyne, NE1 3DY

T: 07966298053; email: david.groves@tetratech.com

- 5.3 The Site Co-ordinator will:
 - Support, oversee and implement the requirements of the Travel Plan upon the users first occupation;
 - Provide travel advice and guidance to employees in the early stages of occupation and throughout the development process;
 - Organise the distribution of the work place Sustainable Travel Packs to employees upon first occupation;
 - Ensure the travel information made available is current and up to date;
 - Ensure cycle storage, showers and changing facilities are functional upon first occupation and promote use throughout the life of the development;
 - Assist the end occupiers to deliver the stated TP commitments;
 - Monitoring usage of the car parking and cycle parking facilities on site;
 - Organise Travel Surveys, analyse these and submit regular Monitoring Reports summarising
 the results to Warwickshire County Council transport planning officers, together with an
 assessment of the success of the Travel Plan in reducing the number of trips by private car and
 details of any additional measures necessary to achieve the targets set within the Travel Plan.
- 5.4 The developer will commit to providing a budget for the Travel Plan (TP) Co-ordinator to implement measures and initiatives to encourage sustainable travel at the site.
- 5.5 If David Groves were to leave his post, then the LPA will be informed within 10 days with the details of the new TP Co-ordinator.

26

6.0 COMMITTED MEASURES TO REDUCE CAR USE

6.1 The prime objective of the TP is to reduce the number of single occupancy car trips generated by the development. A series of measures are proposed below to address this objective by encouraging greater use of public transport, car-share, walking, wheeling and cycling. Specific measures can be designed with the Full TP, when the end occupiers are better known, and can build on the below measures.

Infrastructure Improvements

- 6.2 There are a number of infrastructure improvement being implemented through the delivery of the development site which are outlined below:
 - Between the B5080 Pennine Way (north) roundabout and M42 J10 a 2.0m wide foot/cycle way with a 1.5m separation strip will be provided.
 - On M42 Jn10 a 2.0m wide foot/cycleway with a 1.5m separation strip is provided between the A5 (west) arm and the M42 northbound on-slip as well as controlled pedestrian/ cycle crossings of the two north facing M42 slip roads and at the Green Lane arm.
 - Between the M42 southbound off slip and the site access the existing foot/cycleway will be widened to 3.0m and a 2.0m separation strip will be provided, as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0003-P02, 784-B033920-TTE-00-ZZ-PL-H-0004-P01 and 784-B033920-TTE-00-ZZ-PL-H-0005-P01.
 - Between the site access and the A5 at Browns Lane an off-carriageway 3.0m foot/cycleway will be provided as shown at TT Drawings 784-B033920-TTE-00-ZZ-PL-H-0003-P02, 784-B033920-TTE-00-ZZ-PL-H-0004-P01 and 784-B033920-TTE-00-ZZ-PL-H-0005-P01.

Publicity and Promotion

- 6.3 The accessibility of the site is to be actively promoted to prospective employees alongside suggestions to encourage walking, wheeling, cycling or use of public transport.
- 6.4 So that employees are fully aware of the transport options available to them, a website will be set up and a Sustainable Travel Pack will be provided to all employees. Also, employees can benefit from personalised journey planning sessions for all types of journey purposes, e.g., travelling to/from work and will be provided by the TP Co-ordinator on request subject to GDPR.
- 6.5 The Sustainable Travel Pack will comprise the following:
 - Information on the TP, its targets, and the health, financial and environmental benefits.
 - Information about the local area, e.g., location, distance and directions to local shops and destinations for staff on their meal breaks, Banks and other local amenities.
 - Public transport details, including stop locations and routes, up-to-date timetables for bus services, fares, information on discounted tickets, how to access the Journey Planner online and links to live timetable information, e.g., <u>www.stagecoach.com</u>.
 - Cycle maps showing the key surrounding routes in relation to local facilities, as well as local bike shops and where cycle maintenance training can be obtained.

27

Walk maps showing the key surrounding routes to local facilities and services.



- Details on how to gain access to local car share websites/databases.
- Details of discounted bus taster tickets for employees of site occupiers.
- Details of emergency lift home scheme, e.g., provision of alternative means of transport for staff of site occupiers that travel to site by foot, wheel or bicycle.
- Name of the TP Co-ordinator, along with contact details by telephone, email or in person.
- 6.6 Any major changes to travel services, such as bus routes/services, rail routes will be circulated by the TP Co-ordinator via e-mail or a mail drop.

Measures to Improve Walking

- 6.7 In addition to the proposed foot/cycleways within the development site, linking to the existing footway on the network, walking is to be encouraged by the information within the Sustainable Travel Pack advising of recommended routes to destinations on meal breaks and bus stops and rail stations. The health benefits associated with walking will be promoted by the TP Co-ordinator.
- 6.8 In line with Manual for Streets, the internal layout will be designed to encourage safe routes within the development to provide clear, coherent, and attractive routes for pedestrians to encourage walking to destinations within a short walk which may replace short car journeys.
- 6.9 There are a number of infrastructure improvements being delivered through the development which are outlined in Chapter 2.0 and 3.0 above and Chapter 6 below, and illustrated at the plans attached at Appendix D.
- 6.10 With the above new infrastructure and enhancements to existing routes in place, not only do they benefit potential users of the proposed development, but they also offer an enhancement for existing residents and people travelling to work in the area as discussed below.

Measures to Improve Cycling

- 6.11 Cycle parking will be provided at all units at an excess of the North Warwickshire Borough Council standard, incorporating a range of parking facilities to include indoor/outdoor parking, secure parking and covered parking, and electric bicycle charging points, all located at or close to pedestrian entrances.
- 6.12 Showers and changing facilities will be provided at all units and in the ancillary Hub Office which would also be available to members of the public to encourage walking, wheeling and cycling to work at neighbouring business parks.
- 6.13 In addition to the proposed shared foot/cycleways within the site, and improvements to and connections to the wider footway network, cycling is to be encouraged by the information within the Sustainable Travel Packs including local cycle maps showing recommended routes. The health benefits associated with cycling will be promoted by the TP Co-ordinator.
- 6.14 In line with Manual for Streets, the internal layout will be designed to encourage safe routes within the development to provide clear, coherent and attractive routes for cyclists to encourage cycling.
- 6.15 The TP Co-ordinator will make endeavours on behalf of staff to agree discounts at local cycle shops and investigate and publicise cycle training courses and cycle check services. The TP Co-ordinator



- will explore setting up a Bicycle User Group (BUG) for the development and encourage regular meetings to discuss issues and problems.
- 6.16 At the request of Staffordshire County Council, any staff members who have walked, wheeled or cycled into work are entitled to a taxi fare if an emergency visit is required.
- 6.17 The TP Co-ordinator will liaise with individual operators to encourage staff to participate in the 'Cycle to Work' scheme, which will allow employees of companies to purchase bikes and cycle equipment tax-free through their employer.

Measures to Improve Public Transport

- 6.18 The development proposals include improvements to bus provision. As part of the site access works, the A5 eastbound bus stop has to be relocated approx. 130m further east to comply with CD169 as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0002-P02 attached in Appendix A2. The layby is lengthened, and facilities are improved, including the provision of a modern shelter with seating, associated street furniture and a separated cycle bypass behind the waiting area. The potential for a green bus shelter (i.e., made from recycled materials with green roof and solar panels to power digital information board) is to be explored, subject to agreement from the relevant highway authority(s).
- 6.19 The existing pedestrian connection and informal crossing over the A5 that serves the bus layby is extended to the new location.
- 6.20 A Public Transport Strategy (PTS) has been prepared and has been agreed by WCC and Stagecoach.
- 6.21 The Public Transport Strategy for the site is predicated on the extension of the Stagecoach 766/767 Tamworth Nuneaton services into the proposed development. The 766/767 bus service provides connections to a number of residential areas which draw employees by both car and bus to the area in which the application site lies. These areas include Tamworth, Dordon, Atherstone and Nuneaton. The 766/767 already serves Birch Coppice Business Park as a diversion from the A5 and clearly is considered to provide a suitable level of service to this large employment site.
- 6.22 A bus turning area is proposed within the proposed development site, which would be located approximately 200m from the A5/ Site Access junction. The proposed bus turning area would be deliberately located close to the site access junction to reduce the length of the diversion and thereby reduce the impact on existing passengers. The length of the diversion from the site access junction and out onto the A5 would be approximately 400m.
- 6.23 The whole of the application site would be within a 400m walk of the proposed bus stop at the bus turning area, which accords with local policy requirements for new developments. The bus extension and proposed bus turning area has been agreed in principle with WCC's Transport Operations team and with Stagecoach. The proposals for the site at M42 Jn10 comply with local and national standards and, if approved, would provide attractive sustainable public transport travel options for employees travelling to and from the site.
- 6.24 There are also two bus stops on Birchmoor Road to the north of the application site which can be reached within an approximate 800m walk from the centre of the application site via a proposed footway connection to Cockspur Street / public bridleway AE45 and then continuous footway on Cockspur Street and Birchmoor Road.

29

- 6.25 Any service changes will be circulated by the TP Co-ordinator via e-mail or mail drop. Awareness is to be raised among residents and workers of the public transport options available to them by making easy-to-understand timetables and maps for operators supplied by the TP Co-ordinator.
- 6.26 A map showing the nearest bus stops, walk distances to each, and times by bus to the most common destinations near to the proposed development will be distributed by the TP Coordinator.
- 6.27 The TP Co-ordinator will also liaise with Stagecoach to determine whether discounted bus tickets can be provided to employees as taster tickets, which could help to encourage bus use to/ from the site.

Car Sharing

- 6.28 Employees who live close to one another can potentially share cars for their journey to the proposed development.
- 6.29 Car sharing will be encouraged with information provided by the TP Co-ordinator on how to gain access to local car share websites/databases, e.g., www.liftshare.com.
- 6.30 The financial and social benefits associated with car sharing are to be promoted by the TP Co-Coordinator.

Electrical Vehicles

- 6.31 In terms of electronic vehicle (E.V.) charging spaces, these are proposed to be provided for 10% of all car and motorcycle spaces across the site with ducting installed so that all spaces are capable of being converted to E.V. charging spaces if required in the future.
- 6.32 A proportion of electric vehicle charging points and 'rapid' charging points are also proposed for HGV and LGV parking spaces and/or loading docks for battery electric and hybrid electric vehicles. Ducting would also be provided to all remaining HGV/LGV lorry parking spaces, to future proof all service yards and the overnight lorry parking facility.
- 6.33 Finally, electric bike charging points would be provided to all units.
- 6.34 Full details of the E.V. charging provision would be set out in any final scheme layout, in full compliance with these levels of provision.

New Recruits

- 6.35 When people move jobs, they often reconsider their travel behaviour. Consequently, when taking on new recruits, there is an opportunity to encourage them to consider travelling by more environmentally friendly modes than they usually do.
- 6.36 The Site TP Co-ordinator would arrange personalised journey planning, if requested, and provide Welcome Packs to the end occupiers for them to distribute among new recruits prior to their first day. Details of pedestrian, wheel, cycle links and bus routes, including their associated timetables, would be made available to employees as part of the packs.

Heavy Goods Vehicles

- 6.37 Research undertaken has forecast that around 10% of loaded inbound and outbound traffic from the site could be expected to move by rail freight via BIFT. The use of rail freight will be promoted to minimise the volume of HGV movements.
- 6.38 As noted above, the proposals would incorporate a proportion of E.V. charging points and 'rapid' charging points for HGV and LGV parking spaces and/or loading docks, with ducting to all remaining HGV/LGV lorry parking spaces to future proof the development.
- 6.39 The application scheme has also been assessed against its preparedness for the transition to zeroemission goods vehicles and a series of design measure incorporated to ensure the scheme is 'netzero ready'. The report concludes that the scheme would make a significant contribution to the process of decarbonising the road transport sector along a section of the Strategic Road Network (the A5) identified as being deficient at the present time.

7.0 TARGET MODE SHARE

- 7.1 This Travel Plan proposes a variety of methods to reduce the mode share of car driver trips while increasing the mode share of sustainable modes, such as public transport, walking, wheeling and cycling. As described above, these include extensive infrastructure provision for pedestrians and cyclists, improvements to the existing PROW network, and the extension of bus routes into the site.
- 7.2 The good accessibility of the site when complete can be expected to produce a shift in mode choice for journeys to work for all purposes, over and above what would be expected without any sustainable transport interventions together with the publicity and promotion of the Travel Plan.
- 7.3 Ultra-low and zero emission vehicles are considered to be sustainable modes of transport in the NPPF and the proportion of such vehicle in the national fleet is expected to rise in the coming years.
- 7.4 Recent research by the UK's Society of Motor Manufacturers and Traders, shows electric vehicles accounted for 16% of new car sales in 2022. By 2030 it is estimated that 30% of the second-hand car market will be electric vehicles. Taken alongside the Government's Decarbonisation plan which prohibits the manufacture of fossil fuel cars after 2030, this trend is only going to increase.
- 7.5 Targets are measurable goals which are set in order to assess whether the objectives of the plan have been achieved. They need to be realistic and consider the particular circumstances and location of the development.
- 7.6 The prime objective of the TP is to reduce the number car trips by employees to work. Several of the TP measures are implemented before, or as the first employees move to site, therefore the Census mode share for home to work shown at Table 4.2 is considered a good initial base.
- 7.7 For the proposed employment element of the scheme, a target of 18% car driver reduction is suggested based on guidance in TAG Unit M5.2². Relevant extracts from M5.2 are attached at Appendix C. An 18% reduction in the mode share for Car Driver recorded in the Baseline Survey is proposed as an Initial Target. This is not considered unreasonable to seek to achieve that over the first 5-year period of the TP. An 18% reduction on 78% is a 14-percentage point reduction, so the car driver mode share target is 64%.
- 7.8 The modal shift of 14-percentage points are therefore anticipated to be attributed wholly to bus, walking, wheeling, cycling and car passenger. With the measures discussed in Chapter 6 to increase these modes of travel, the shift to any of these modes is immaterial so long as the reduction in car driver is reduced by 14-percentage points. Nevertheless, a target of the mode shares is provided in Table 7.1 below.

 $^{^{\}rm 2}$ TAG Unit M5.2 Modelling Smarter Choices, January 2014 Department for Transport



32

Table 7.1: Current and Target Mode Share, Employment

Mode of Travel	Residential		
	Current	Target	
Car Driver	78%	64%	
Car Passenger	11%	16% (+5%)	
Bus	2%	7% (+5%)	
Cycle	3%	5% (+2%)	
Walk (inc. Wheeling)	5%	7% (+2%)	
Motorcycle	1%	1%	

- 7.9 The TP will endeavour to achieve the modal shift targets shown in Table 7.1 among staff journeys to work over 5 years.
- 7.10 It will be at the discretion of the TP Co-ordinator to identify where measures should be focussed year on year and amend the table accordingly. However, the focus must always be to reduce single occupancy private car use which must always have a Target which represents year on year reduction.
- 7.11 These Targets will not be omitted or changed without prior consultation with NH and WCC's Travel Plan Officers

HGV

7.12 As previously discussed, research undertaken by MDS Transmodal in November 2021 has forecast that around 10% of loaded inbound and outbound traffic from the site could be expected to move by rail freight via BIFT. It is therefore a target to reduce the longer distance HGV movements by 10%. However, there would be corresponding increase in movements between the site and Birch Coppice.

8.0 RESIDUAL TRIPS

- 8.1 The residual employment trip rates for each mode of travel have been calculated by applying the TP target mode shares at Table 7.1 (i.e., after travel planning measures have had an impact) to the initial trips as shown at Table 4.3.
- 8.2 Likewise, the residual HGV trips can be calculated by applying the TP target reduction of 10% to the initial trips as shown at Table 4.3.

Residual Multi-Modal Trips

8.3 Table 8.1 below shows the volume of trips generated by the proposed development, by mode, for the weekday AM and PM peak hours, after the TP measures have been taken into account. It also shows the comparison between the initial generated trips and proposed generated trips, by mode.

Table 8.1: Current and Target Multi Modal Trips

	Arrivals		Departures			
Time Period	Current	Target	Difference	Current	Target	Difference
		Car Driver/	Light Vehicle	s		
Weekday AM Peak 08:00 to 09:00	126	104	-22	34	28	-6
Weekday PM Peak 17:00 to 18:00	40	33	-7	150	122	-28
		Car P	assenger			
Weekday AM Peak 08:00 to 09:00	18	26	+8	5	7	+2
Weekday PM Peak 17:00 to 18:00	6	8	+2	21	31	+10
			Bus			
Weekday AM Peak 08:00 to 09:00	3	11	+8	1	3	+2
Weekday PM Peak 17:00 to 18:00	1	4	+3	4	14	+10
		Mot	orcycle			
Weekday AM Peak 08:00 to 09:00	2	2	0	0	0	0
Weekday PM Peak 17:00 to 18:00	1	1	0	2	2	0
Cycle						
Weekday AM Peak 08:00 to 09:00	5	8	+3	1	2	+1
Weekday PM Peak 17:00 to 18:00	2	3	+1	6	10	+4
Walk						

Weekday AM Peak 08:00 to 09:00	8	11	+3	2	3	+1
Weekday PM Peak 17:00 to 18:00	3	4	+1	10	14	+4
HGV						
Weekday AM Peak 08:00 to 09:00	50	45	-5	52	47	-5
Weekday PM Peak 17:00 to 18:00	52	47	-5	28	25	-3

Note: No change in total HGV movement at the site access, the reduction of trips on the wider network go to/ from the Freight Rail at Birch Coppice.

8.4 The TP measures and the subsequent reduction in car driver trips results in 28 fewer vehicle trips in the AM peak hour and 35 fewer in the PM peak hour, whilst there is a reduction of 10 HGV trips in the AM and 8 in the PM peak hour.

Flow Diagrams

8.5 To understand the effect of the Travel Plan measures and resultant vehicle reductions on the local road network, this section discusses in more detail.

Current Traffic Flows (Prior to Travel Plan Effects)

8.6 Figure 6 attached in Appendix A1 shows the AM peak development generated traffic flows for light vehicles and Figure 7 shows the PM Peak equivalent. Figure 8 shows the AM Peak development generated HGV flows and Figure 9 shows the PM peak equivalent. The traffic flows have been extracted from WCC's A5 Atherstone Paramics model, provided by Vectos.

Car Passenger Effect (Light Vehicles)

8.7 Table 8.1 shows the predicted increase in the car passenger share and this has been applied to the light vehicles traffic flows. The reductions in light vehicle trips on the network have been broadly based on the distribution and assignment shown at Figures 6 and 7. Figure 10 shows the predicted reductions in light vehicles in the AM peak as a result of the increase in car passenger trips. Figure 11 shows the PM peak equivalent.

Bus Effect (Light Vehicles)

8.8 Table 8.1 shows the predicted increase in the bus share and this has been applied to the light vehicles traffic flows. The Stagecoach 766/767 which will serve the development site serves Tamworth City Centre and Atherstone, therefore the light vehicle trips have been reduced on these routes, broadly based on the distribution and assignment shown at Figures 6 and 7. Figure 12 shows the predicted reductions in light vehicles in the AM peak as a result of the increase in bus trips. Figure 13 shows the PM peak equivalent.

Walk/ Cycle Effect (Light Vehicles)

8.9 Table 8.1 shows the predicted increase in the walk/ cycle share and this has been applied to the light vehicles traffic flows. The improvement to foot/ cycleways connecting the development site to the east, north and west have been considered and how it will translate to a reduction in car trips. Upon review of Figures 6 and 7 it is clear that car trips to/ from residential areas within walking/

cycling distance are Tamworth and Wilnecote to the west of the M42/ Junction 10. There are no arrival car trips from the Grendon area (via Long Street). Therefore, all of the walk/ cycle trips are expected to be from these areas, therefore the light vehicle trips have been reduced on these routes. Figure 14 shows the predicted reductions in light vehicles in the AM peak as a result of the increase in walk/ cycle trips. Figure 15 shows the PM peak equivalent.

Total Effect (Light Vehicles)

8.10 Figure 16 attached in Appendix A1 shows the total AM peak reductions in light vehicles as a result of the Travel Plan measures, and Figure 17 shows the PM peak equivalent. Figure 18 shows the total AM peak light vehicle traffic flows with the effects of the Travel Plan and Figure 19 shows the PM peak equivalent.

Birmingham Intermodal Fright Terminal Effect (HGV's)

- 8.11 Table 8.1 shows the predicted decrease in the HGV's. The 10% reduction in HGV trips on the network have been applied based on the distribution and assignment shown at Figures 8 and 9. It is also necessary to assign the HGV trips from the fright terminal (within Birch Coppice) to the development site and so the reductions in HGV's on the wider network have been transferred to this Terminal. Figure 20 shows the AM peak reductions (and increase) in HGV movements and Figure 21 shows the PM peak equivalent.
- 8.12 Figure 22 shows the total AM peak HGV traffic flows with the effects of the Freight Terminal and Figure 23 shows the PM peak equivalent.

Total Residual Traffic Flows (PCU)

8.13 The total residual traffic flows for modelling purposes have been derived by converting the traffic flows into passenger car units (pcu). The light vehicles represent 1pcu and a HGV represents 2pcu, therefore the HGV flows have been multiplied by 2 and added to the light vehicles. Figure 24 attached in Appendix A1 shows the total AM peak development generated traffic flows in pcu and Figure 25 shows the PM peak equivalent.

9.0 MONITORING OF SUCCESS

- 9.1 The most effective way of monitoring the progress of a TP is to regularly survey employees to identify their travel behaviours over time.
- 9.2 The Travel Plan measures discussed at Chapter 6 will be implemented prior to occupation, therefore when employees start working on site most if not all of the Travel Plan measures are in place, therefore the 1st survey to establish mode of travel should not be taken as the baseline for which to achieve the targets identified at Chapter 7. The 2011 Census mode share to work provides a good estimate of the likely mode of travel, prior to the effect of Travel Plan measures.
- 9.3 The 1st travel surveys of employees can be undertaken during a neutral month on a date post-occupation agreed with NH and WCC to determine revealed travel patterns during the AM and PM peaks (7:30am-9:30am and 4:00pm-6:00pm, respectively). The surveys can be undertaken by mail drop of leaflets with QR codes and/or paper questionnaires with pre-paid envelopes. Traffic surveys would also be undertaken at the site access and the separate pedestrian/ cycle access points. The data will provide the trip generation of the site, and will allow a direct comparison to the residual trip rates outlined in Chapter 8.
- 9.4 If the survey results reveal the mode share for car driver exceeds 64%, then the TP Co-ordinator can consult with NH, WCC and site developer to discuss remedial options that may be deemed necessary and viable to reduce single occupancy car drivers.
- 9.5 These surveys would seek to identify any changes in travel behaviours and would also be a means of identifying areas in which the efforts of the Site TP Co-ordinator should be best directed. The survey results and TP outcomes would be shared with the NH and WCC within 1 month of the data being received.
- 9.6 Subsequent surveys are to follow on an annual basis thereafter until 5 years following occupation of the whole site. After 5 years a thorough review of the plan will be carried out and revised targets set if necessary.

10.0 POLICY REQUIREMENTS

10.1 As discussed in Chapter 2.0 above the NWBC Local Plan sets out the requirements for Travel Plans:

The Assessments should assess the impact on level crossings in the vicinity of the development.

Travel Plans will be required to be submitted alongside these Assessments.

Travel Plan

Development will be expected to link with existing road, cycle and footpath networks. Developments that are likely to generate significant amounts of traffic and particularly larger developments will be expected to focus on the longer-term management of new trips; encourage the use of public and shared transport as well as appropriate cycle and pedestrian links. Increasing the opportunity to access these developments for all sections of the community should be addressed. This will be secured through a Travel Plan and/or financial contributions which will be secured either through planning conditions or the provisions of Section 106.

10.2 Table 10.1 below summarises how the Local Plan requirements have been met by this Travel Plan:

Table 10.1: Travel Plan Compliance with NWBC Local Plan Requirements

Local Plan - Travel Plan Requirement	Travel Plan Compliance
Development linking with existing road, cycle and footpath networks	Fully-signalised pedestrian/ cycle crossings at site access junction. Fully signalised crossing of the A5 carriageway. Pedestrian/ cycle connections to Cockspur Street to the north and the A5 to the south. Pedestrian/ cycle connections to Bridleway 166/AE45/1 and Public Footpath 166/AE46/1 to the east.
Longer term management of new trips	Five-year targets for the Travel Plan have been set.
Encourage the use of public transport	Diversion of Stagecoach 766/ 767 service into the development site providing connections to surrounding residential areas. Provision of shelter with seating and information within the site. Provision of replacement bus stop on the A5, upgraded to comply with design standards.
Appropriate cycle and pedestrian links	Enhanced pedestrian/ cycle connections along the north side of the A5. Enhanced pedestrian/ cycle connections across the north side of M42 Jn10. Upgraded bridleways and footpaths and new footway / cycleways in the vicinity of the site – see Proposed Connectivity Plan (ref. 00803/P3) attached at Appendix D
Access for all sections of the community	Mobility impaired car parking spaces will be provided at the site and located close to the entrances. Tactile paving and dropped kerbs will be provided at all proposed crossing facilities.

Routes through the site and other land under the control of the applicant will be improved to facilities walking, wheeling and cycling through the site to nearby employment areas such as Brich Coppice. All new and existing public footpaths, public bridleways, footway/ cycleways and pavements to be designed to be Equalities Act 2010
compliant.

- 10.3 As discussed in Chapter 2.0 above, the Department for Transport sets out requirements for Travel Plans in its Policy paper; 'Strategic road network and the delivery of sustainable development'.
- 10.4 Table 10.2 below summarises how the DfT Policy paper requirements have been met by this Travel Plan:

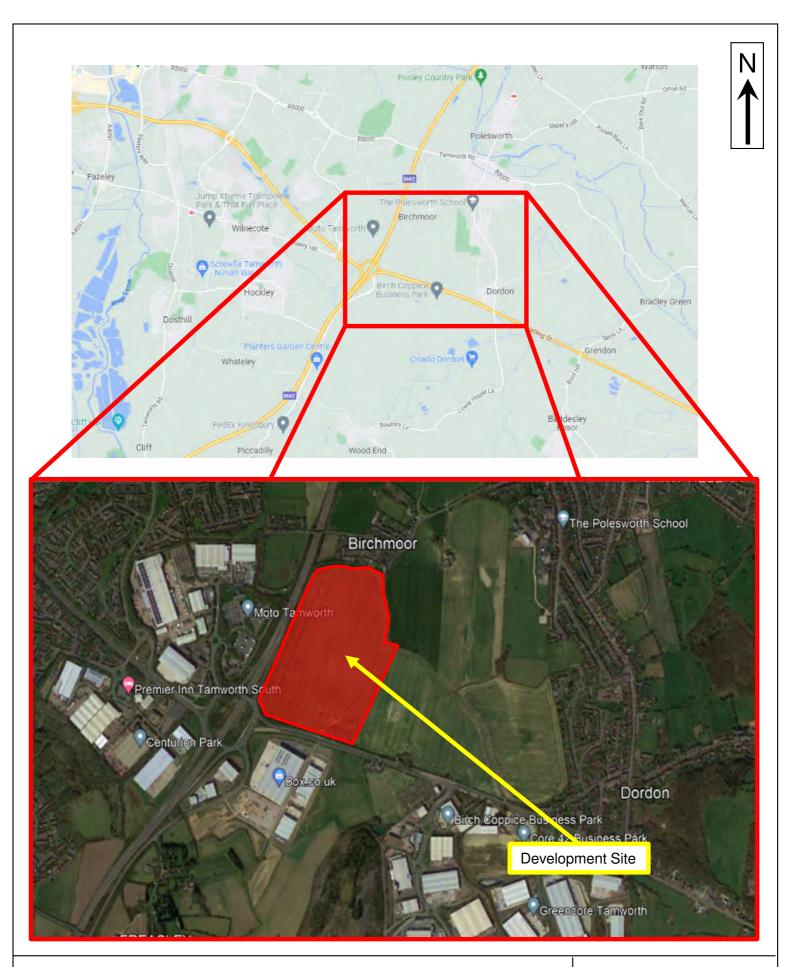
Table 10.2: Travel Plan Compliance with DfT Policy Paper Requirements

Local Plan - Travel Plan Requirement	Travel Plan Compliance
Clear targets to manage down the traffic impacts of the scheme	Five-year targets for the site wide Travel Plan have been set.
Maximise the sustainability of and within the site by walking, wheeling, cycling, public transport and shared travel	A series of measures are to be introduced to encourage walking, wheeling, cycling, public transport and shared travel. Enhanced pedestrian/ cycle connections along the north side of the A5. Enhanced pedestrian/ cycle connections across the north side of the M42 Jn10. Upgraded bridleways and footpaths and new footway / cycleways across the site, and surrounding area. Diversion of Stagecoach 766/ 767 service into the development site providing connections to surrounding residential areas. Provision of shelter with seating and information within the site.
Sustained monitoring	Monitoring surveys and reports will be produced annually for the duration of the travel plan
Appointment of a Travel Plan Co-ordinator	A Travel Plan Co-ordinator will be appointed prior to first occupation.

11.0 ACTION PLAN

Measure	Objective	Responsibility	Deadline
Produce Full TP to be agreed with Local Planning Authority	Refine TP to site conditions	ТТ	Post planning permission
Provide on-site pedestrian and cyclist facilities	Promote walking and cycling	The developer	During construction
Appoint Travel Plan Co-ordinator	Provide person responsible for plan	The developer	Prior to first occupation
Issue employees with Sustainable Travel Pack	Promotion of sustainable travel	Travel Plan Co-ordinator	At first occupation
Set up sustainable travel website	Promotion of sustainable travel	Travel Plan Co-ordinator	At first occupation
Offer personalised journey planning to employees	Promotion of sustainable travel	Travel Plan Co-ordinator	At first occupation
Investigate car sharing	Promotion of sustainable travel	Travel Plan Co-ordinator	From first occupation
Investigate BUG groups	Promotion of sustainable travel	Travel Plan Co-ordinator	From first occupation
Carry out Baseline Survey and Report to NH, WCC and the LPA	Determine baseline travel patterns	Travel Plan Co-ordinator	Date agreed with NH, WCC and the LPA after first occupation
Carry out Follow Up Surveys and Reports to NH, WCC and the LPA	Monitor plan progress towards targets	Travel Plan Co-ordinator	12 months after Baseline Survey and then on annual basis thereafter
Produce TP Review Report and agree TP for next 5 years with NH, WCC and the LPA	Tailor TP to site conditions and progress for targets	Travel Plan Co-ordinator	5 years after first occupation and thereafter every 5 years until targets met.

APPENDIX A1: FIGURES



M42 Junction 10, Tamworth

Site Location Plan

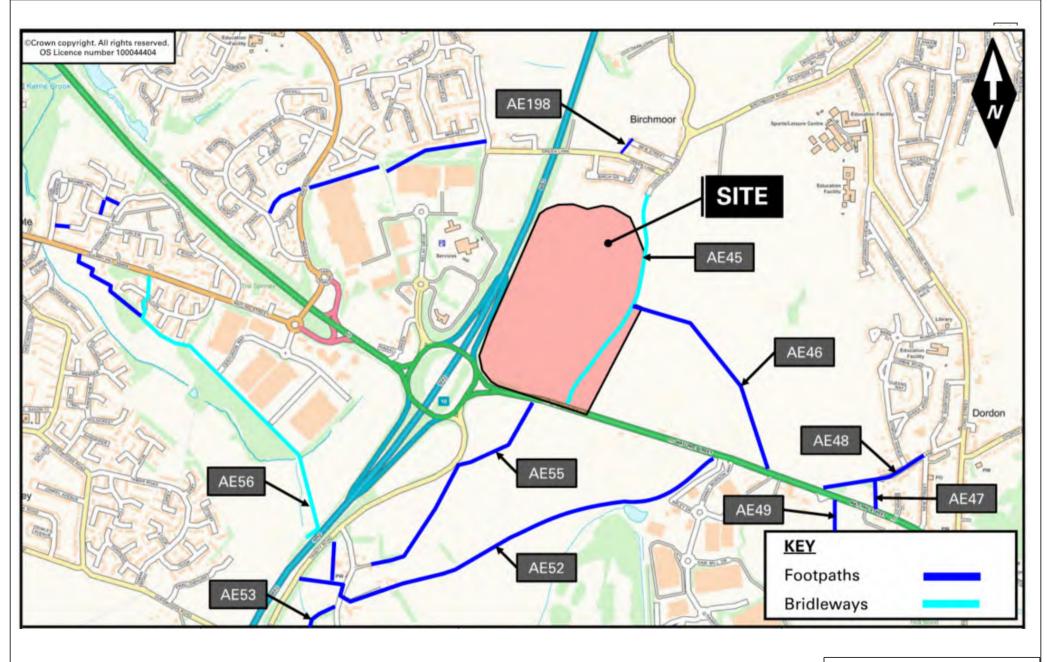




Proposed Employment Land NE of J10 M42

Walk Accessibility Plan



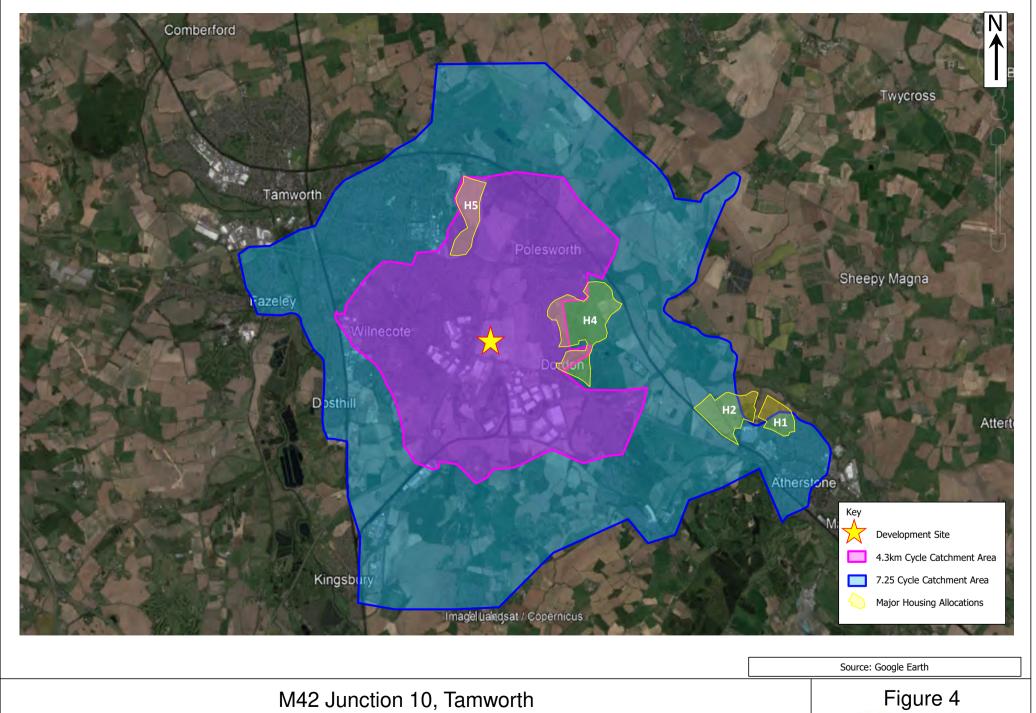


Source: Bancroft Figure 23

M42 Junction 10, Tamworth

Local Public Rights of Way

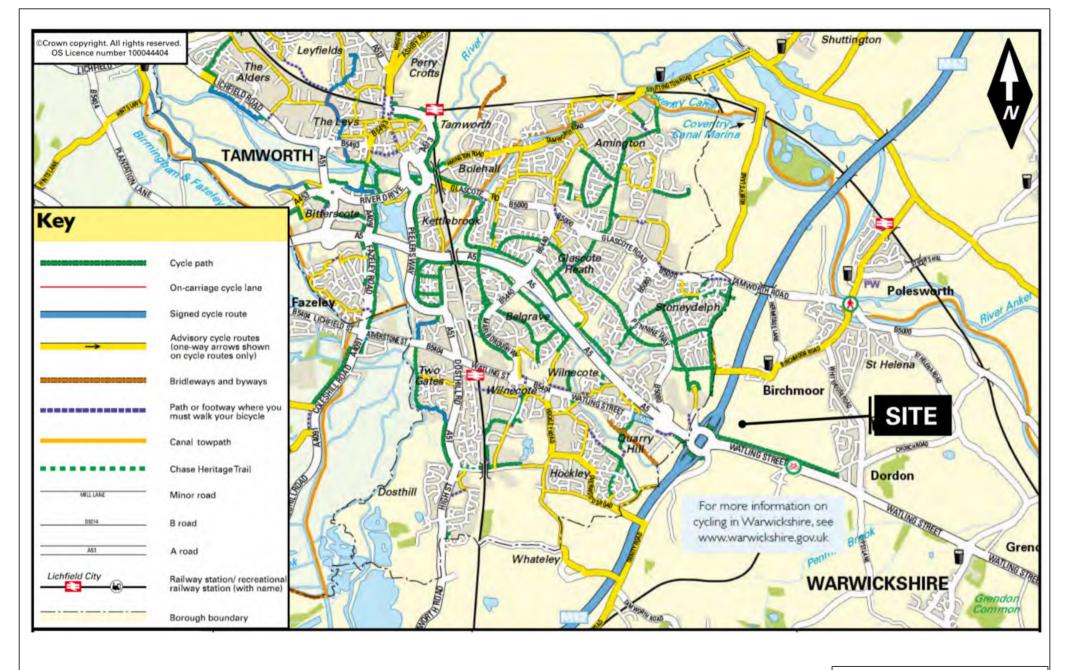




Cycling Accessibility Plan

Figure 4





Source: Bancroft Figure 25

M42 Junction 10, Tamworth

Cycling in Lichfield Map



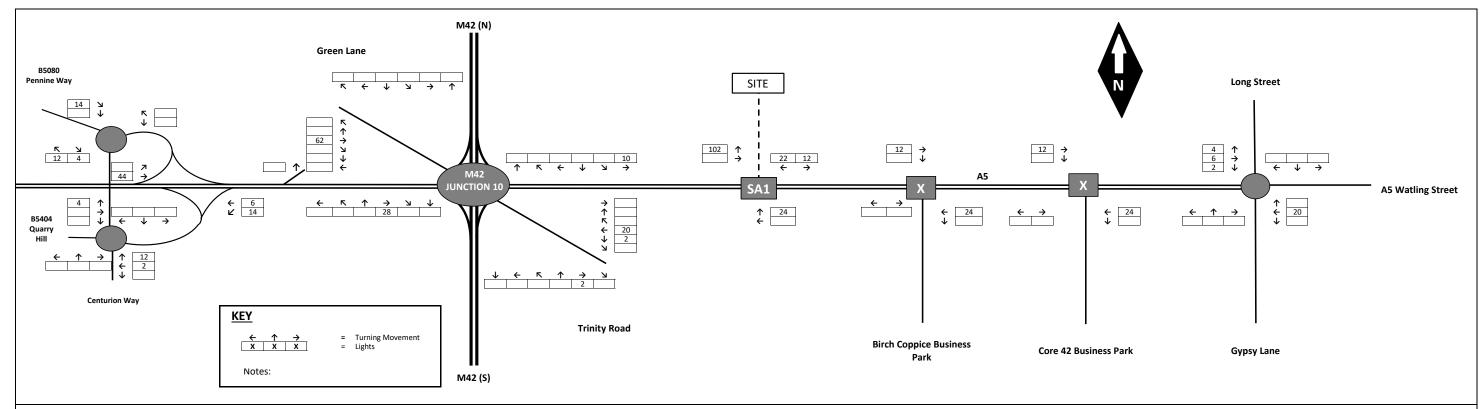
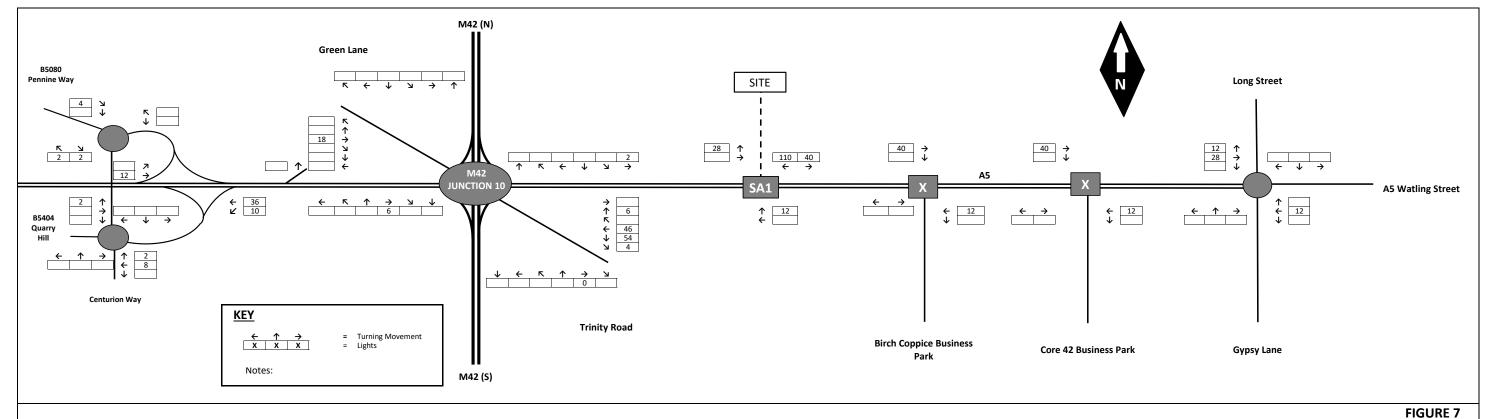


FIGURE 6

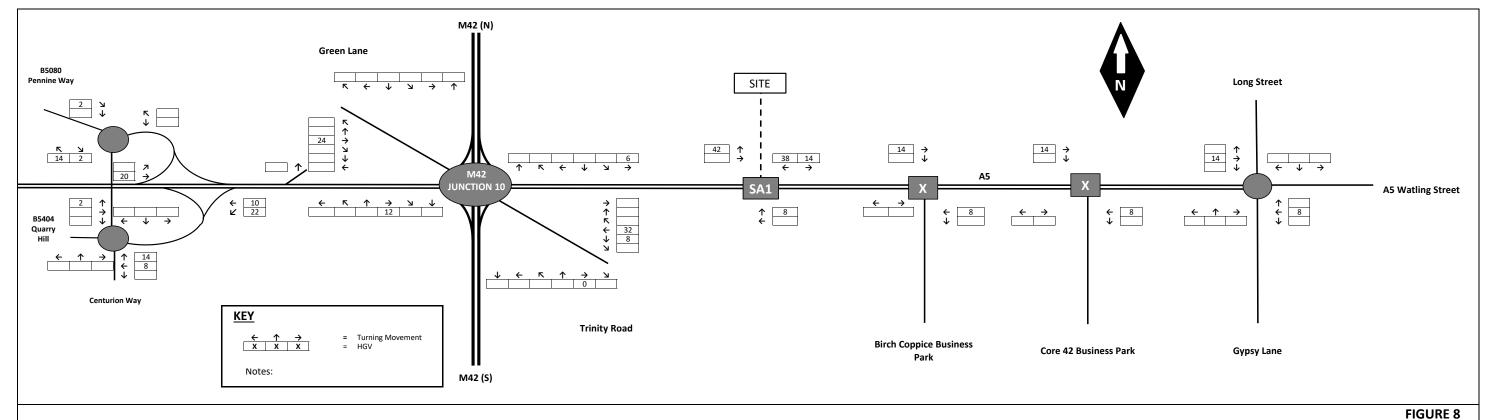
AM Peak Development Generated Traffic Flows (Lights)

Land North East of M42 Junction 10



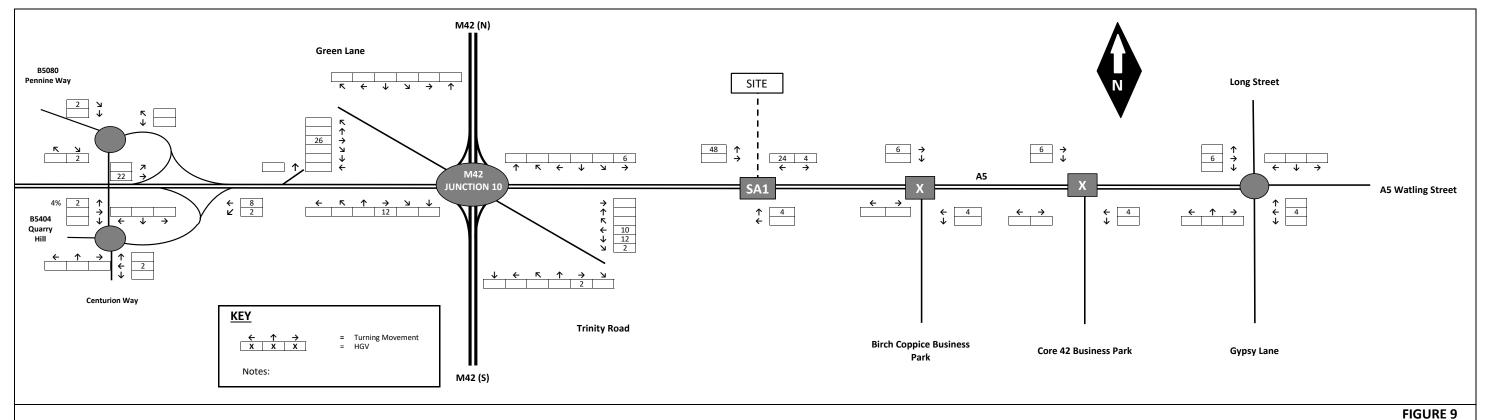
PM Peak Development Generated Traffic Flows (Lights)

Land North East of M42 Junction 10



AM Peak Development Generated Traffic Flows (HGV)

Land North East of M42 Junction 10



PM Peak Development Generated Traffic Flows (HGV)

Land North East of M42 Junction 10

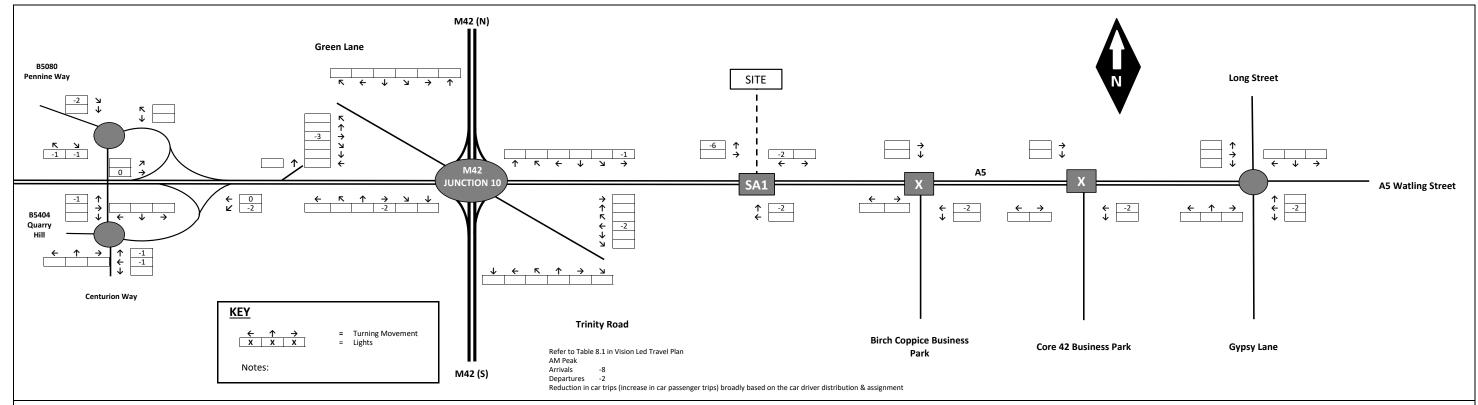


FIGURE 10

AM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Car Passenger

Land North East of M42 Junction 10

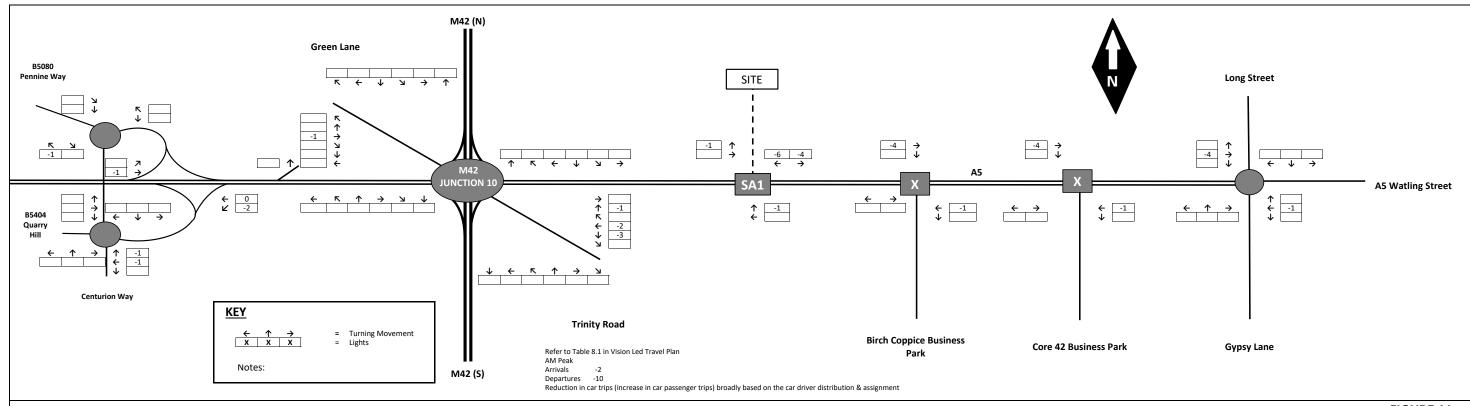


FIGURE 11

PM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Car Passenger

Land North East of M42 Junction 10

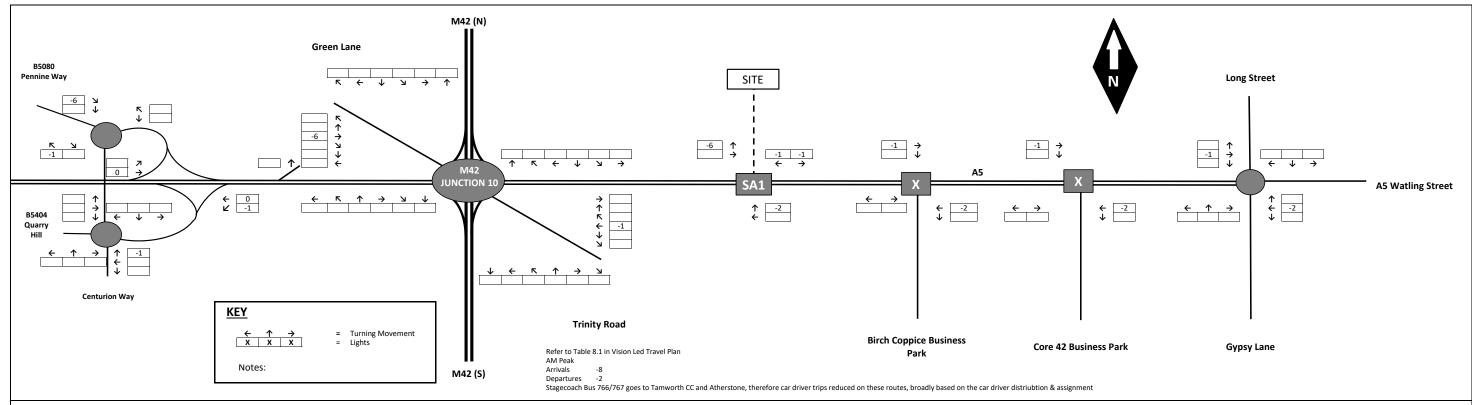


FIGURE 12

AM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Bus

Land North East of M42 Junction 10

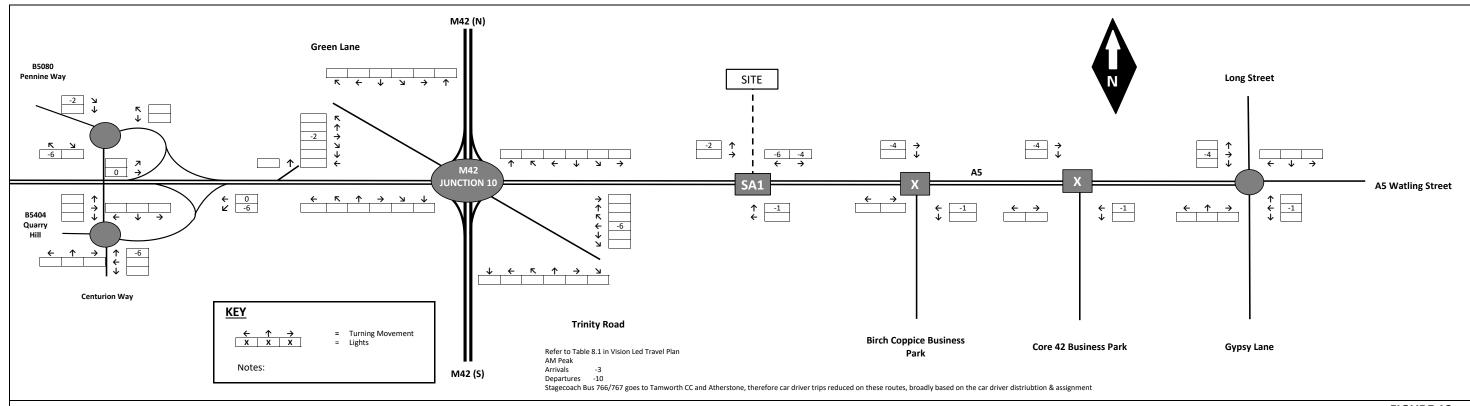


FIGURE 13

PM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Bus

Land North East of M42 Junction 10

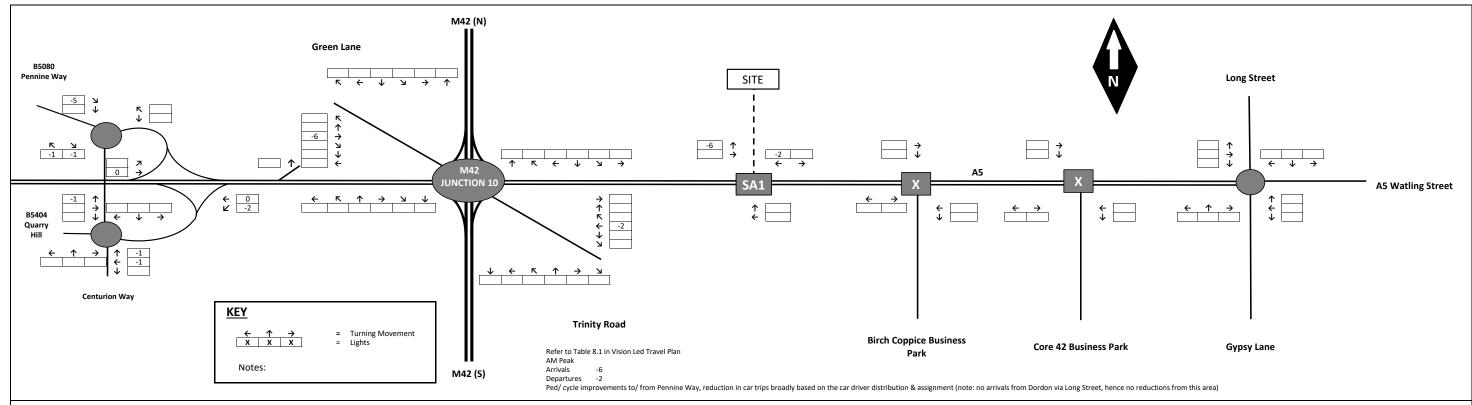


FIGURE 14

AM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Walk/ Cycle

Land North East of M42 Junction 10

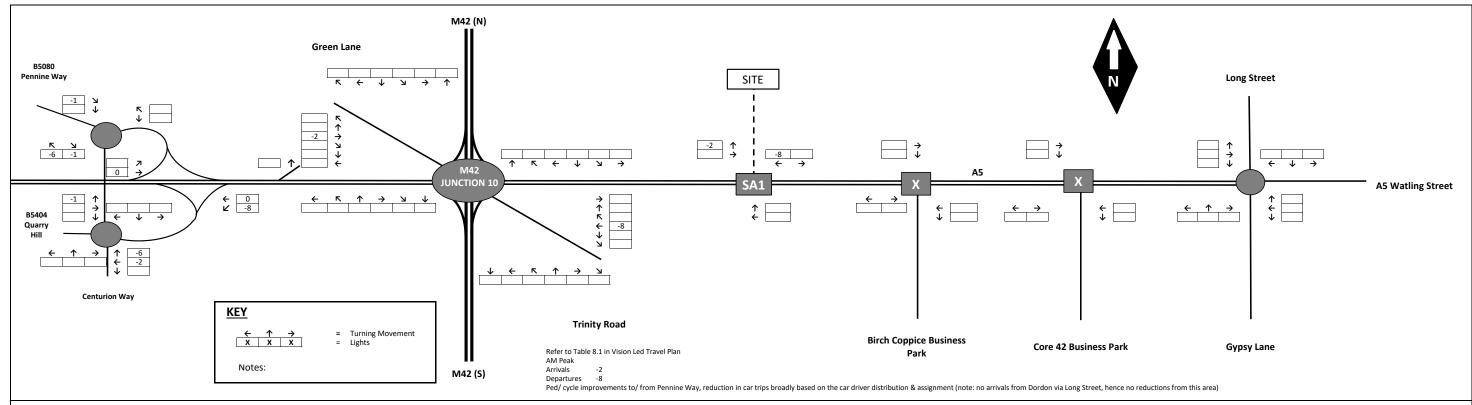


FIGURE 15

PM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Walk/ Cycle

Land North East of M42 Junction 10

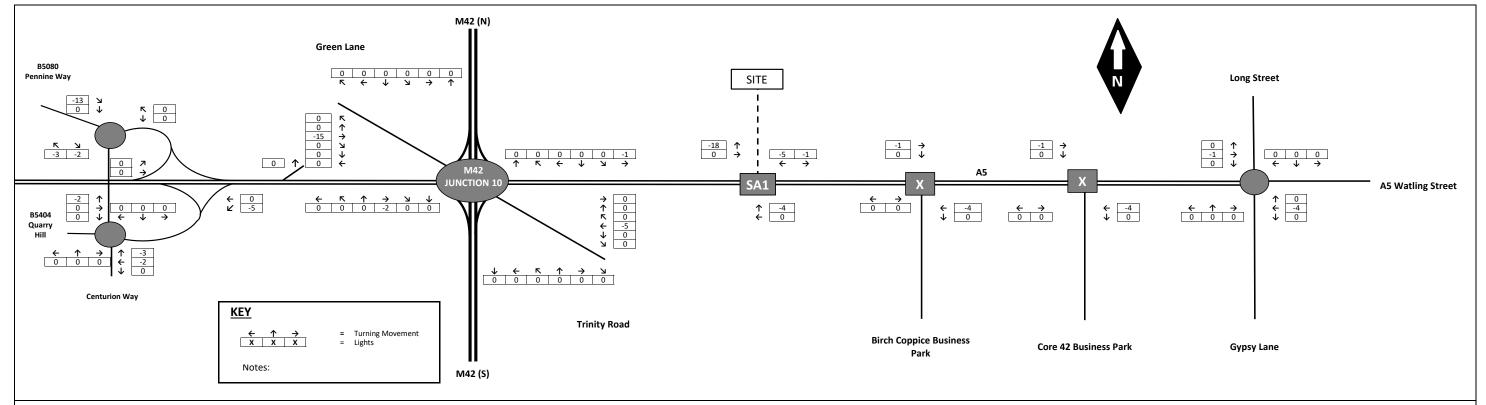
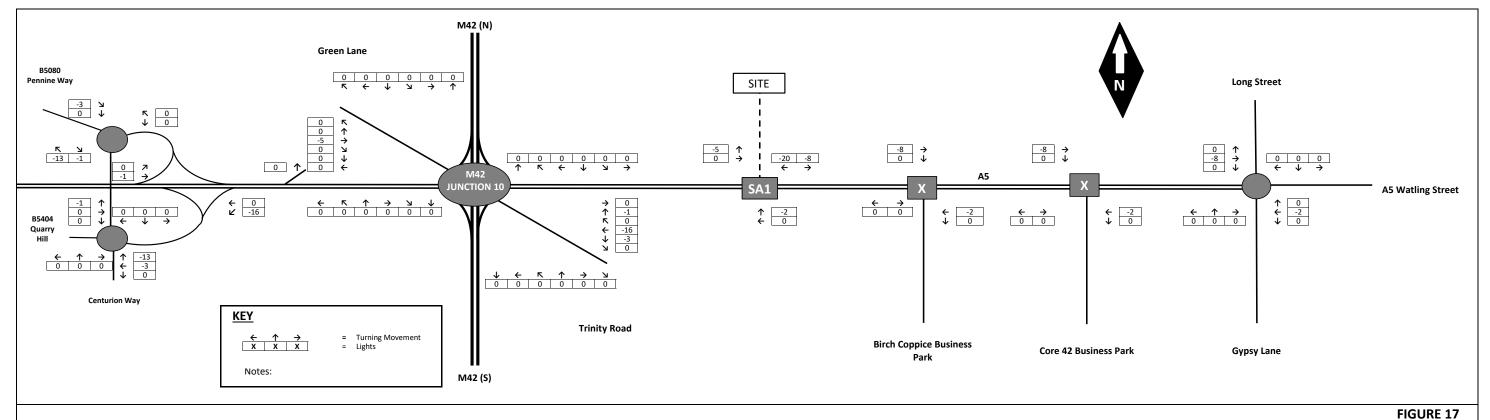


FIGURE 16

AM Peak Development Generated Traffic Flows (Lights) - Overall Reductions in Light Vehicles

Land North East of M42 Junction 10



PM Peak Development Generated Traffic Flows (Lights) - Overall Reductions in Light Vehicles

Land North East of M42 Junction 10



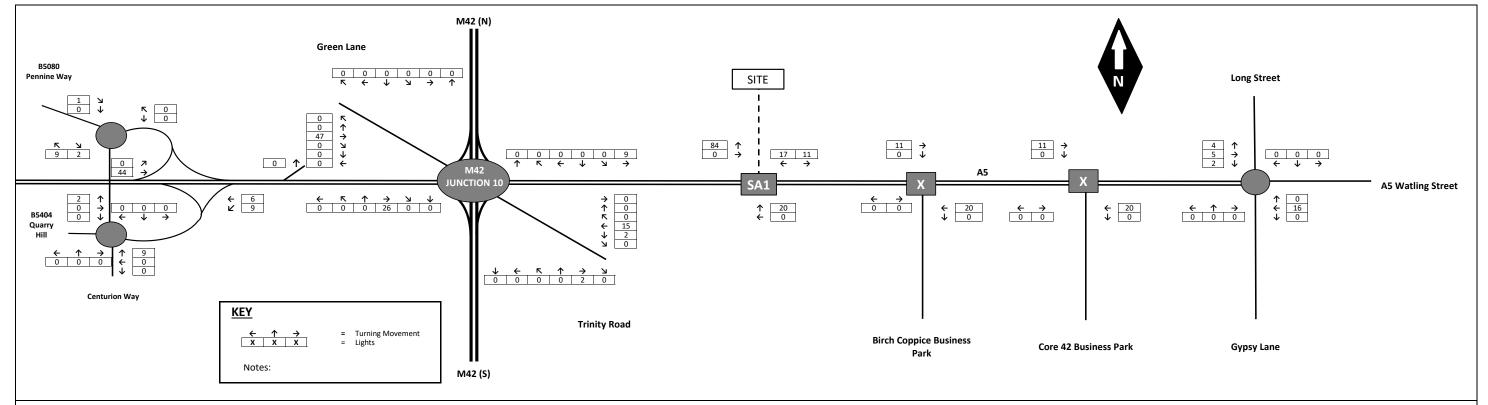


FIGURE 18

AM Peak Development Generated Traffic Flows (Lights) with Travel Plan Effect

Land North East of M42 Junction 10



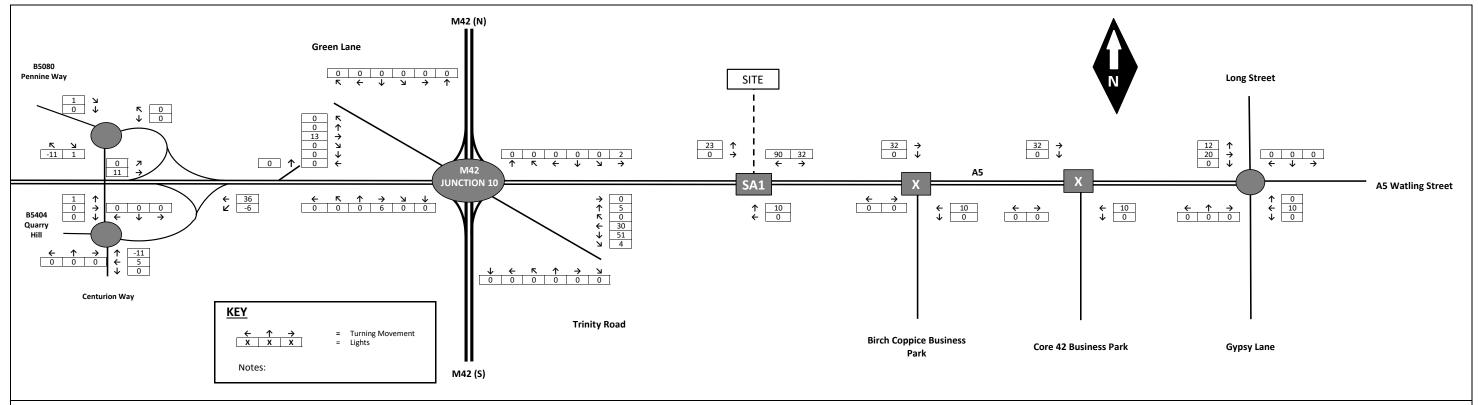


FIGURE 19

PM Peak Development Generated Traffic Flows (Lights) with Travel Plan Effect

Land North East of M42 Junction 10

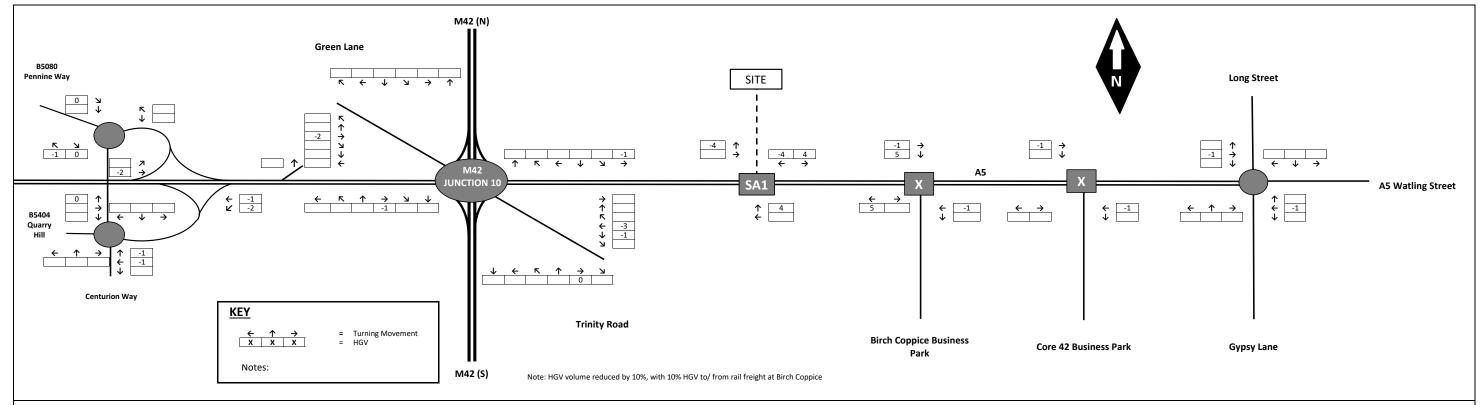


FIGURE 20

AM Peak Development Generated Traffic Flows (HGV) Reduction with Travel Plan Effect

Land North East of M42 Junction 10

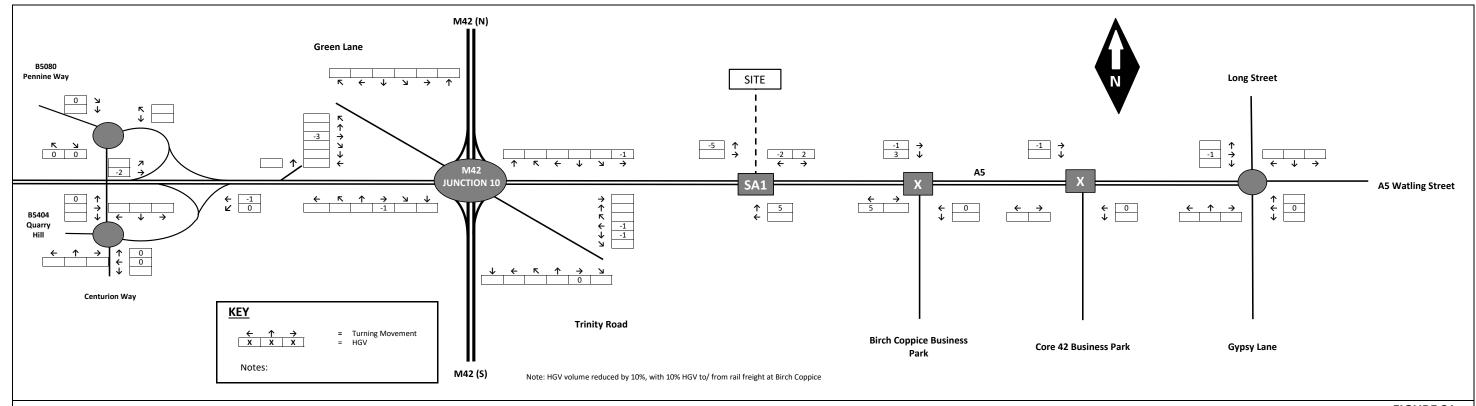


FIGURE 21

PM Peak Development Generated Traffic Flows (HGV) Reduction with Travel Plan Effect

Land North East of M42 Junction 10



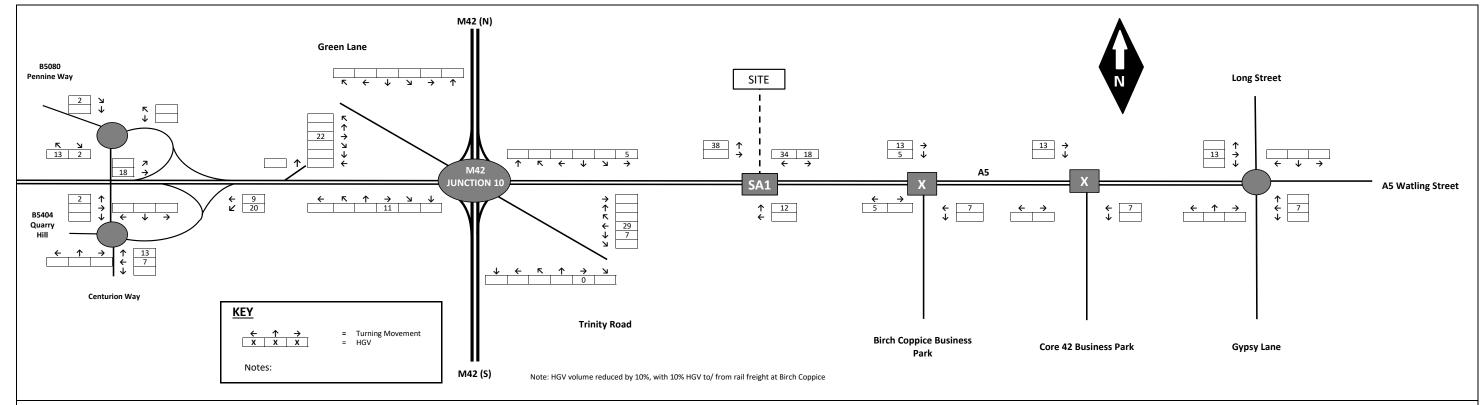
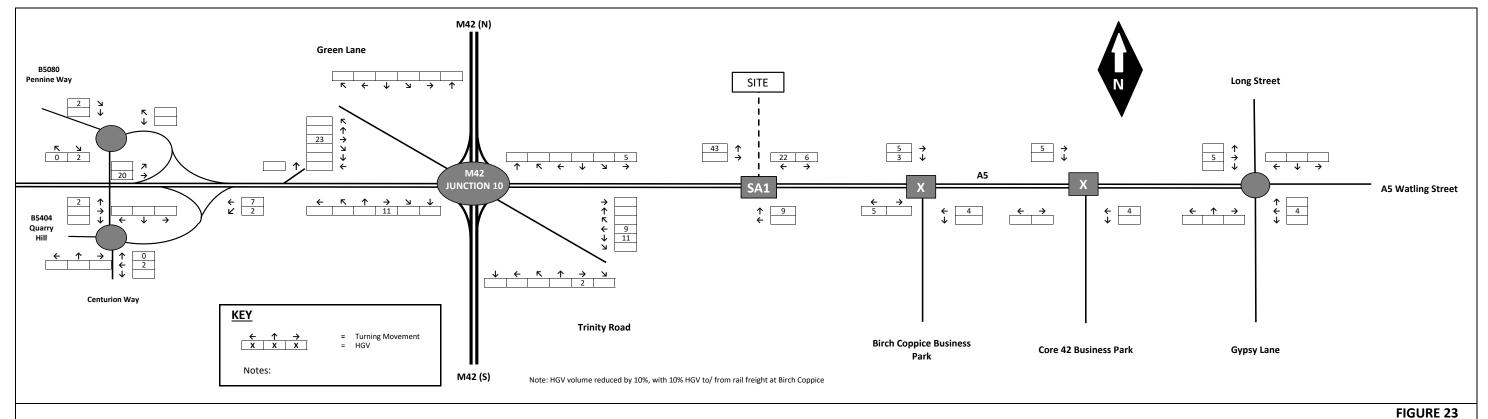


FIGURE 22

AM Peak Development Generated Traffic Flows (HGV) with Travel Plan Effect

Land North East of M42 Junction 10



PM Peak Development Generated Traffic Flows (HGV) with Travel Plan Effect

Land North East of M42 Junction 10

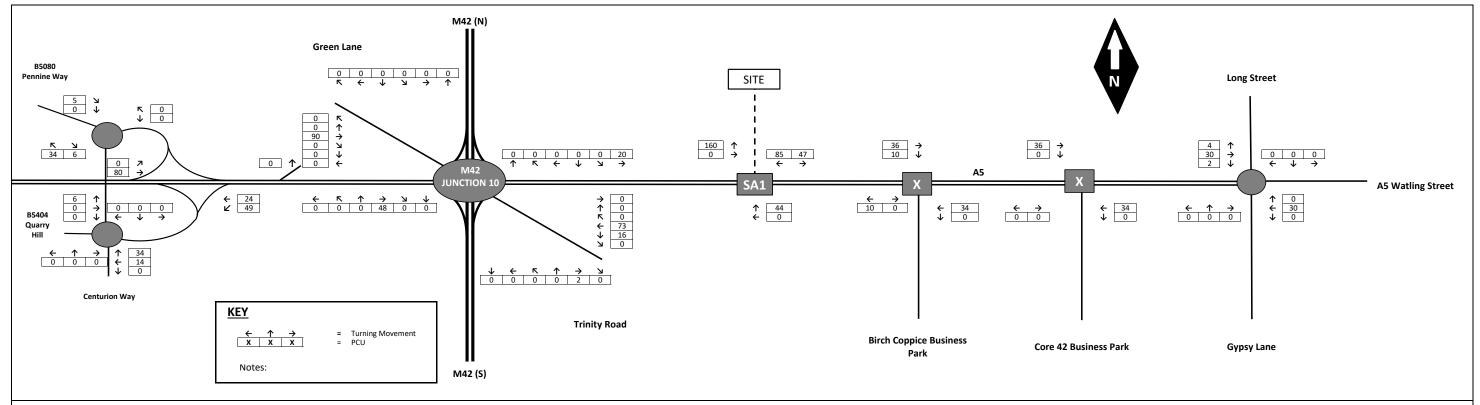


FIGURE 24

AM Peak Development Generated Traffic Flows (PCU) with Travel Plan Effect

Land North East of M42 Junction 10

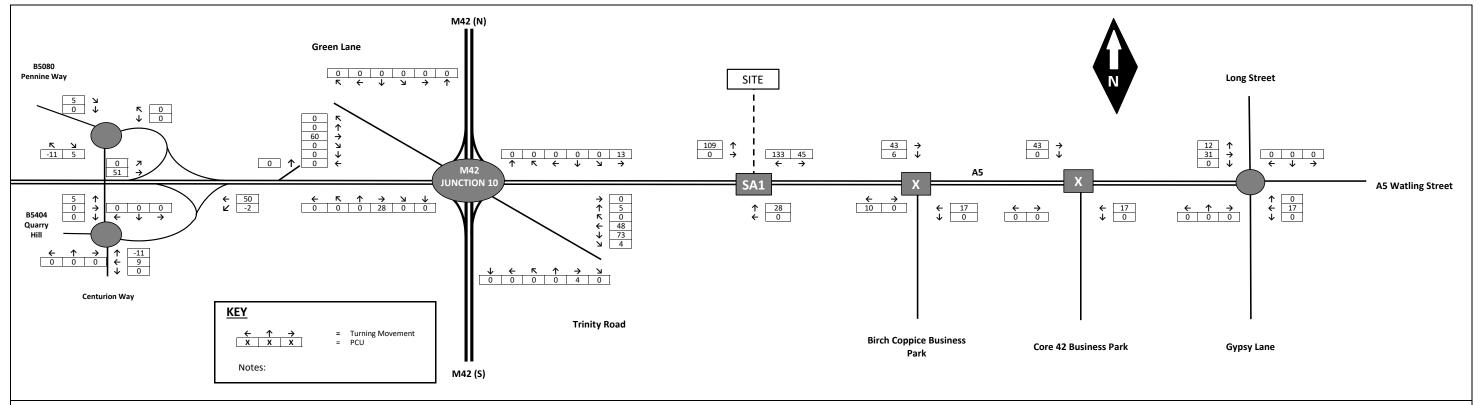
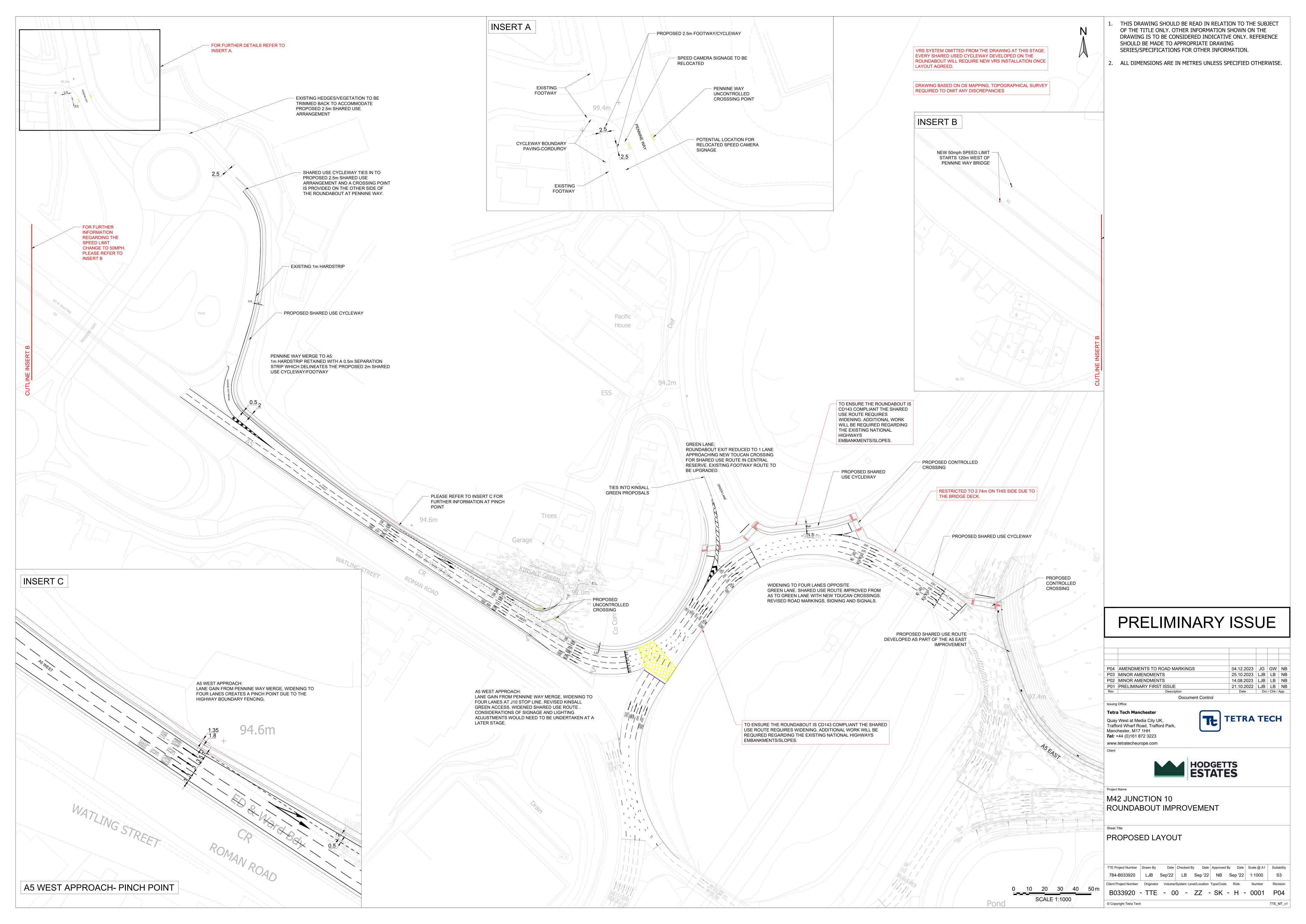


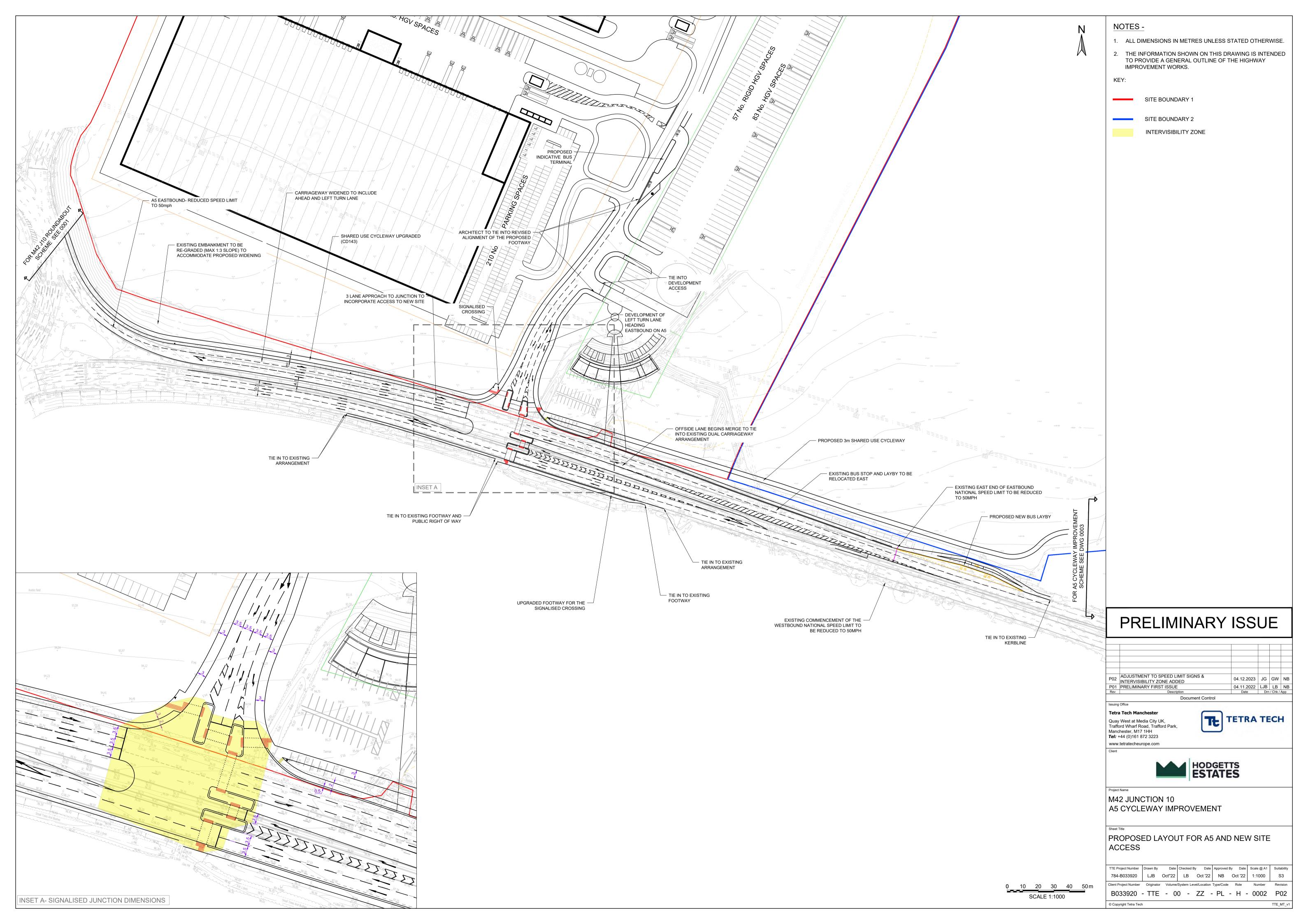
FIGURE 25

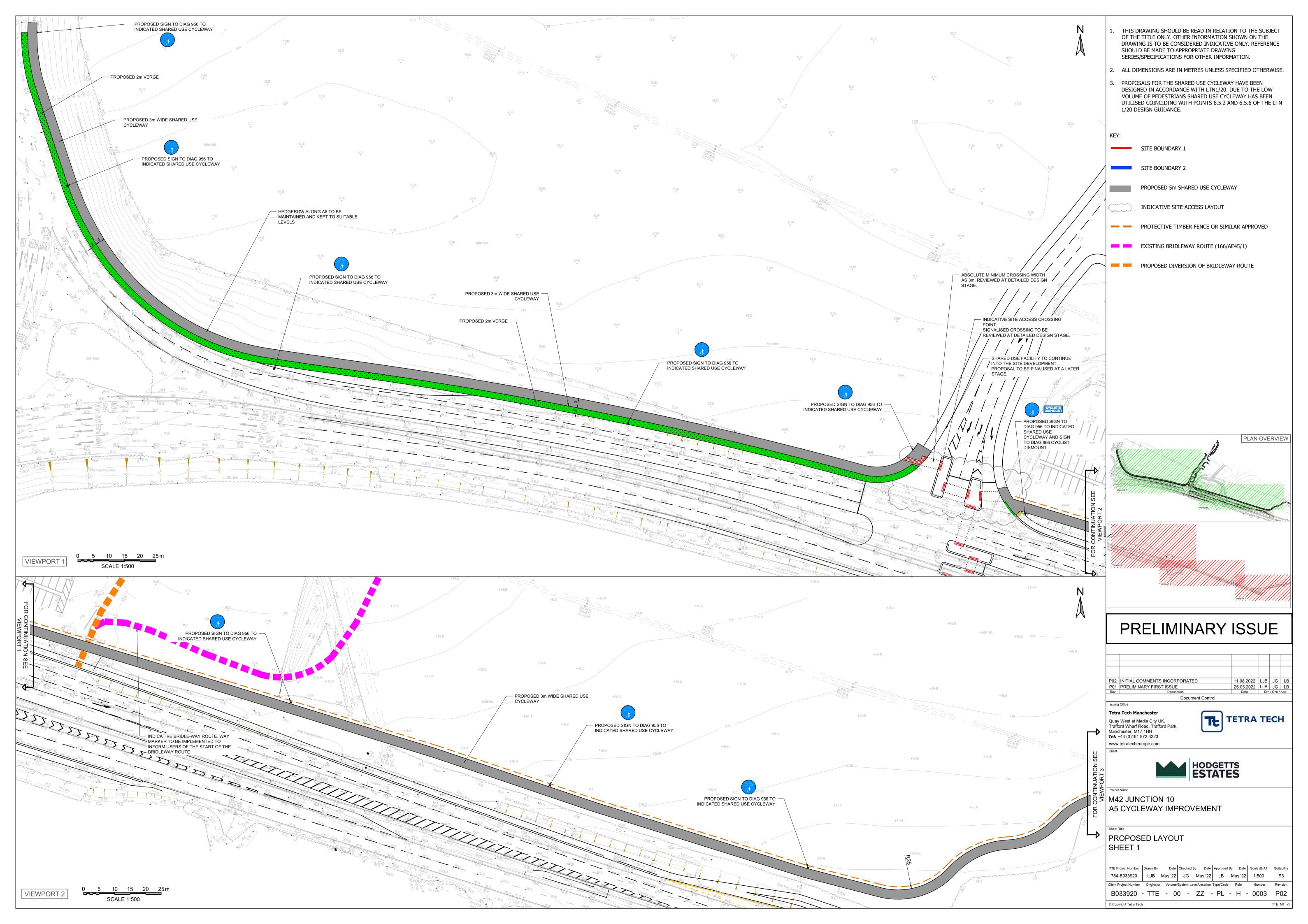
PM Peak Development Generated Traffic Flows (PCU) with Travel Plan Effect

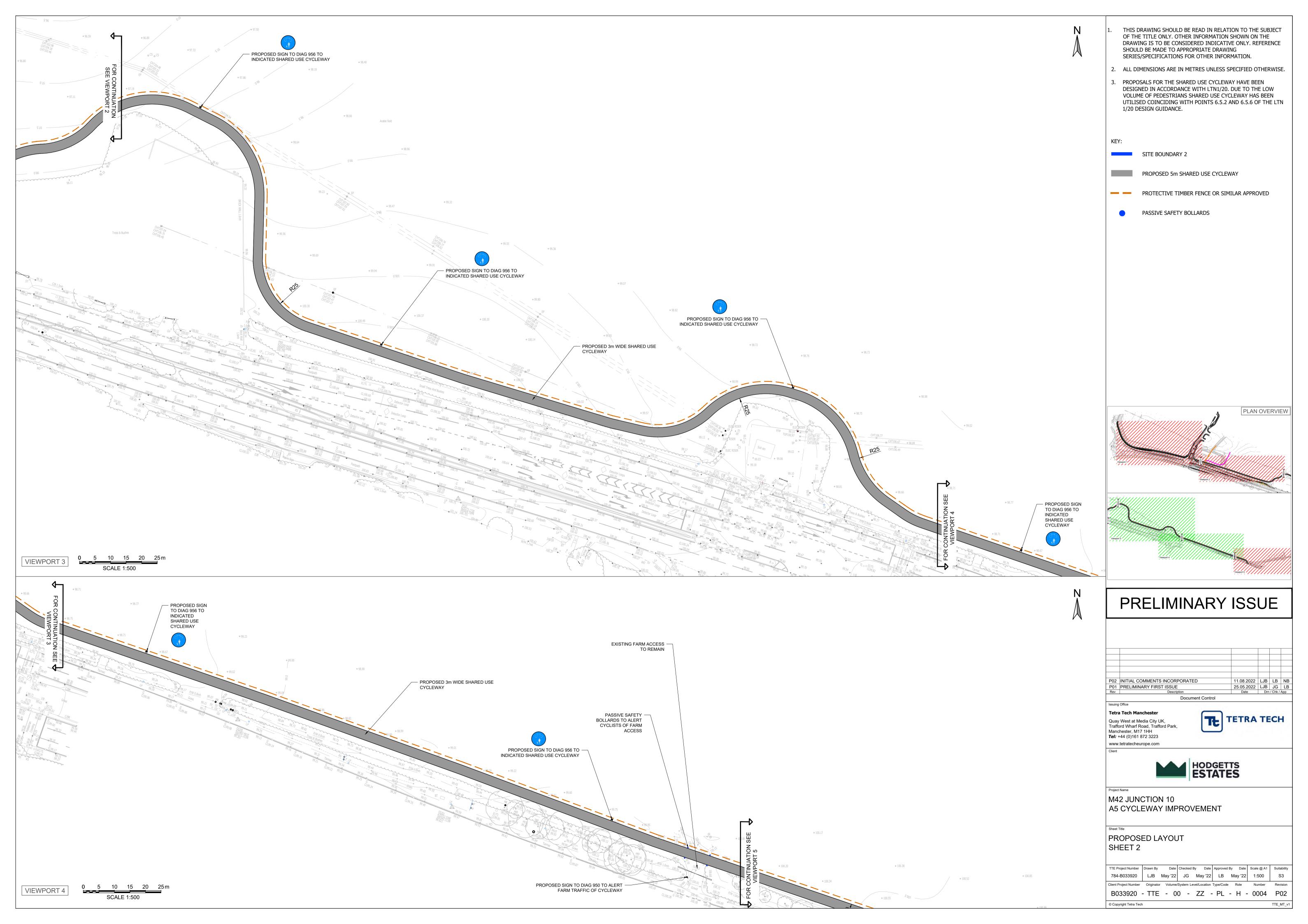
Land North East of M42 Junction 10

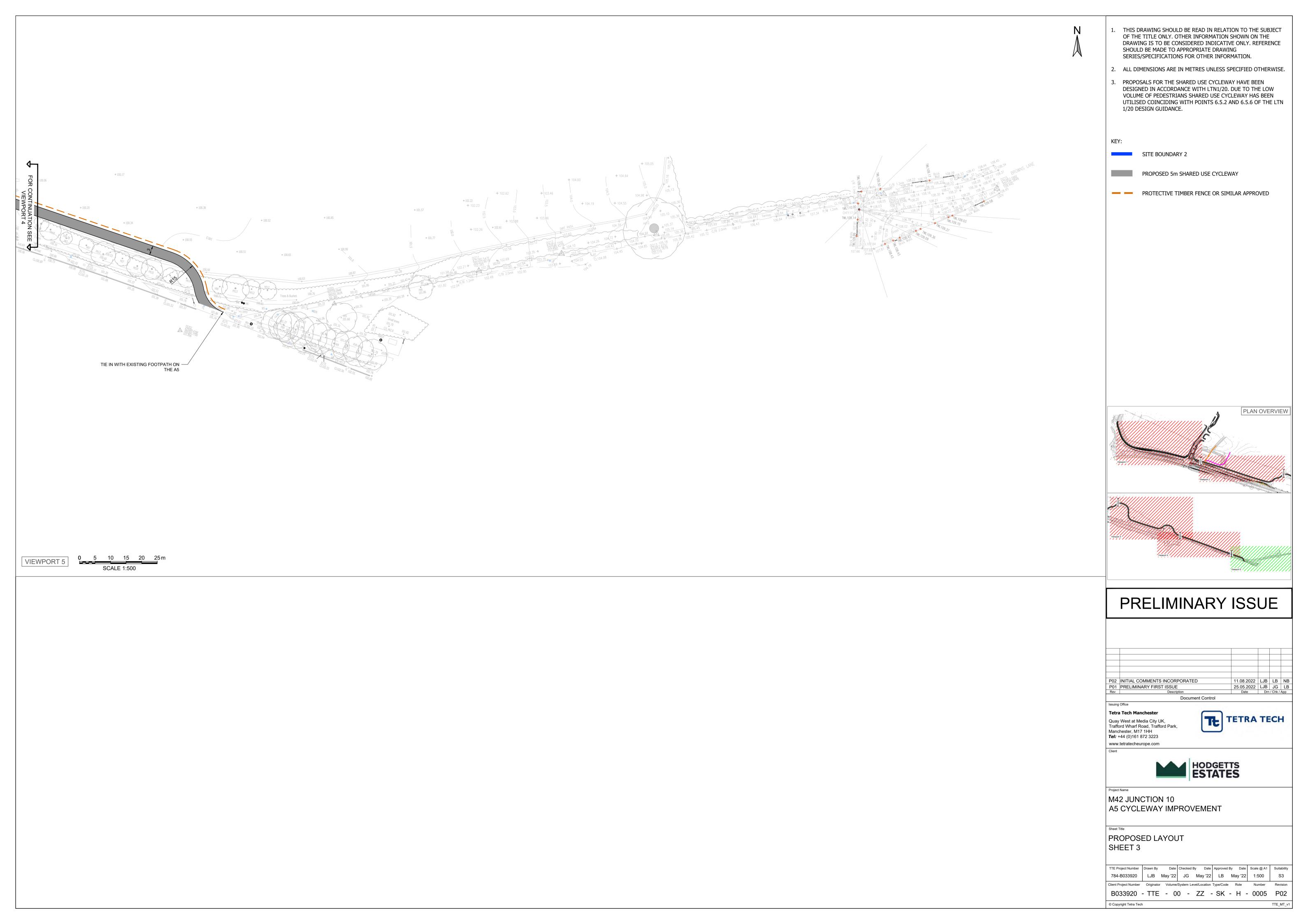
APPENDIX A2: DRAWINGS











Land North-East of Jn10 M42 Motorway, North Warwickshire Vision-Based Travel Plan				
APPENDIX B: TT REPORT – HOW FAR DO PEOPLE WALK?				







Gareth Wakenshaw and Nick Bunn
WYG

Is current guidance on walking and cycling distances in need of an overhaul? And, if so, why does this matter? These distances form the basis of many decisions about where we live and work. Distances are used as criteria in assessing land allocations in Local Plans and in determining planning applications. They are also used in decision-making around transport infrastructure, including bus stops.

We decided, firstly, to investigate the distances on which existing guidance is based and then, secondly, to research the National Travel Survey (NTS) data to find out how far people actually walk and cycle.

The old *Planning Policy Guidance 13*: Transport advised that walking and cycling could replace short car trips of 2km and 5km respectively. In 2012, PPG13 was withdrawn and replaced with the *National Planning Policy Framework*, which does not provide any specific guidance on walking or cycling distances.

The Institute of Highways & Transportation 2000 Guidelines for Providing for Journeys on Foot provided 'suggested acceptable' walking distances but gave no evidence in support.

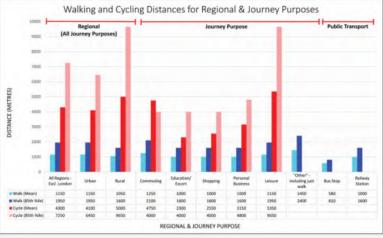
The Chartered Institute of Highways & Transportation (CIHT's) current 2015, *Planning for Walking* offers no firm guidance either other than: "Most people will only walk if their destination is less than a mile away". But it does recognise the lack of supporting evidence and that more work is needed.

CIHT's 2014 *Planning for Cycling* guidance also provides limited guidance. So, it is clear that existing guidance is limited for walking, missing for cycling, and backed by out of date evidence.

The NTS is a UK-wide survey of around 15,000 households and around half fully co-operate. This is around 18,000 individuals (Department for Transport, 2010, 2011 and 2012). We used the 2010 to 2012 NTS dataset, which provides more than 30,000 records for walking and over 15,000 records for cycling from home for a range of journey purposes.

VIEWPOINT

Distance guidelines not fair reflection on how far people are willing to cycle and walk



We then reported the mean and 85th percentile walking and cycling distances. The mean establishes the average distance people walk and cycle, whilst the 85th percentile can be taken as the distance people are prepared to walk or cycle and beyond which they are less likely to do so.

We first explored the walking and cycling distances for regional variation and then for journey purpose.

The graph above summarises the reported walking and cycling distances in different regions and different journey purposes. Perhaps surprisingly, it shows that people walk further in urban areas compared to rural areas, particularly at the 85th percentile level.

There is variation in the mean and 85th percentile walk distance for different journey purposes, with commuting and 'other', including just walk purposes having the longest walking distances.

Walking is mainly used for leisure and 'other' purposes, which together account for 40% of all walking journeys. Education and shopping each account for just under 20% of walking trips, with mean and 85th percentile walking distances of 1,000m and 1,600m respectively. The walking distance for commuting is longer, with an 85th percentile of 2,100m, but only 7% of walking journeys are for commuting.

People cycle much further in rural areas compared with urban areas, particularly at the 85th percentile

level. There is variation in the distances cycled at the average and 85th percentile distances for all journey purposes. Cycling is mainly used for commuting and leisure, accounting for 68.3% of all trips, and the longest distances of 8,050m and 9,650m respectively at the 85th percentile.

Shopping and education account for 11.6% and 10.6% of all trips and have the lowest cycled distances of 4,000m at the 85th percentile.

What does this mean, particularly for the accessibility of

development sites? Based on our research, the catchment for accessibility to a range of facilities should be based on the 85th percentile for the relevant journey purpose, e.g. an employment development should use the commuter distance of 2,100m, a new school should use 1,600m (education/escort education), whilst a residential development should use 1,950m (all journey purposes). Likewise for cycling, an employment development should use a catchment of 9,150m; a new school should use 4,000m; whilst a residential development should use 7,250m.

Our other research on walking distances to public transport stops has shown the mean walking distance to a bus stop is 580m and 810m at the 85th percentile, notably longer than CIHT's 400m maximum distance. The average walk distance to a railway station is 1,000m and 1,600m is the 85th percentile, again notably longer than CIHT's guidance of 800m.

From our research, it is clear that current guidance distances do not reflect those which people are prepared to walk and cycle to different facilities. That is why we believe there should be new distances, taking into account journey purpose using up-to-date information.

Nick Bunn and Gareth Wakenshaw are transport planners at professional services firm WYG

In Passing

This month marks the 50th anniversary of the introduction of the maximum legal blood alcohol drink-driving limit in the UK (80mg of alcohol per 100ml of blood, then and now) and official statistics on alcohol-related road deaths, which began in 1979, indicate that the number of fatalities caused by drink-driving has fallen from 1,640 in that year to 200 in 2015 – a drop of 88%. It hardly feels like a cause for celebration when more than 1,800 people are still being killed on or roads each year. Nevertheless, it would seem churlish not to raise a small glass in honour of the DfT's 50-year plus THINK! campaign to drastically reduce the amount of drink-driving, given its manifest success. But please give us your car keys first.

The phrase 'replacement bus service' is one that will chill the blood of any regular user of our nation's railways but *The Daily Mail*, which never knowingly passes up an opportunity to terrify its readers, recently warned said readers that, due to the recent shenanigans at Ryanair,

the phrase could soon become all too familiar to airline passengers. "Ryanair could replace flights with buses as it offers 'comparable transport' in order to limit its £1bn compensation bill," the paper warned. "The airline has promised to ensure refunds to 750,000 passengers after cancelling 20,000 flights, which means that customers stranded after their flights were cancelled can fly for free with rivals if there are no Ryanair seats available. However, rules dictate that if this is impossible then they could also offer to pay for trains, car hire or even buses." Oh, the

News that a city of close to a million people is planning to start handing out free public transport passes to every city centre worker, regardless of income or intent to actually use the things, in order to reduce road traffic congestion and pressure on inner city parking spaces, might cause some readers to speculate on where this city might me. Sweden, perhaps? Or maybe the Netherlands? Nope

- the city in question is Columbus, Ohio, in the good ol' car-loving US of A. So is this move a game changer for car use across the Atlantic? We'll have to wait and see, unfortunately, as a two-year trial of the scheme isn't due to begin until the summer of 2018. So watch this (parking)

When is a bus not a bus? When it's art, at least according to Reading Buses, which is supporting a local artist's plans to turn one of its double-deckers into a mobile art gallery. Local artists are being invited to contribute ideas exploring the theme of public mobility and how it relates to the sense of place and community by October 16, which is next Monday, so any Reading residents who fancy getting involved had better get their skates on. Once galleried up, the bus in question will be operational on regular routes operated by Reading Buses, according to the company, although it doesn't say where the passengers are going to go to make room for the art.



Land North-East of Jn10 M42 Motorway, North Warwickshire Vision-Based Travel Plan				
APPENDIX C: TAG UNIT M5.2 MODELLING SMARTER CHOICES				



TAG UNIT M5.2

Modelling Smarter Choices

January 2014

Department for Transport

Transport Analysis Guidance (TAG)

https://www.gov.uk/transport-analysis-guidance-tag

This TAG Unit is guidance for the MODELLING PRACTITIONER

This TAG Unit is part of the family M5 - ADVANCED MODELLING TECHNIQUES

Technical queries and comments on this TAG Unit should be referred to:

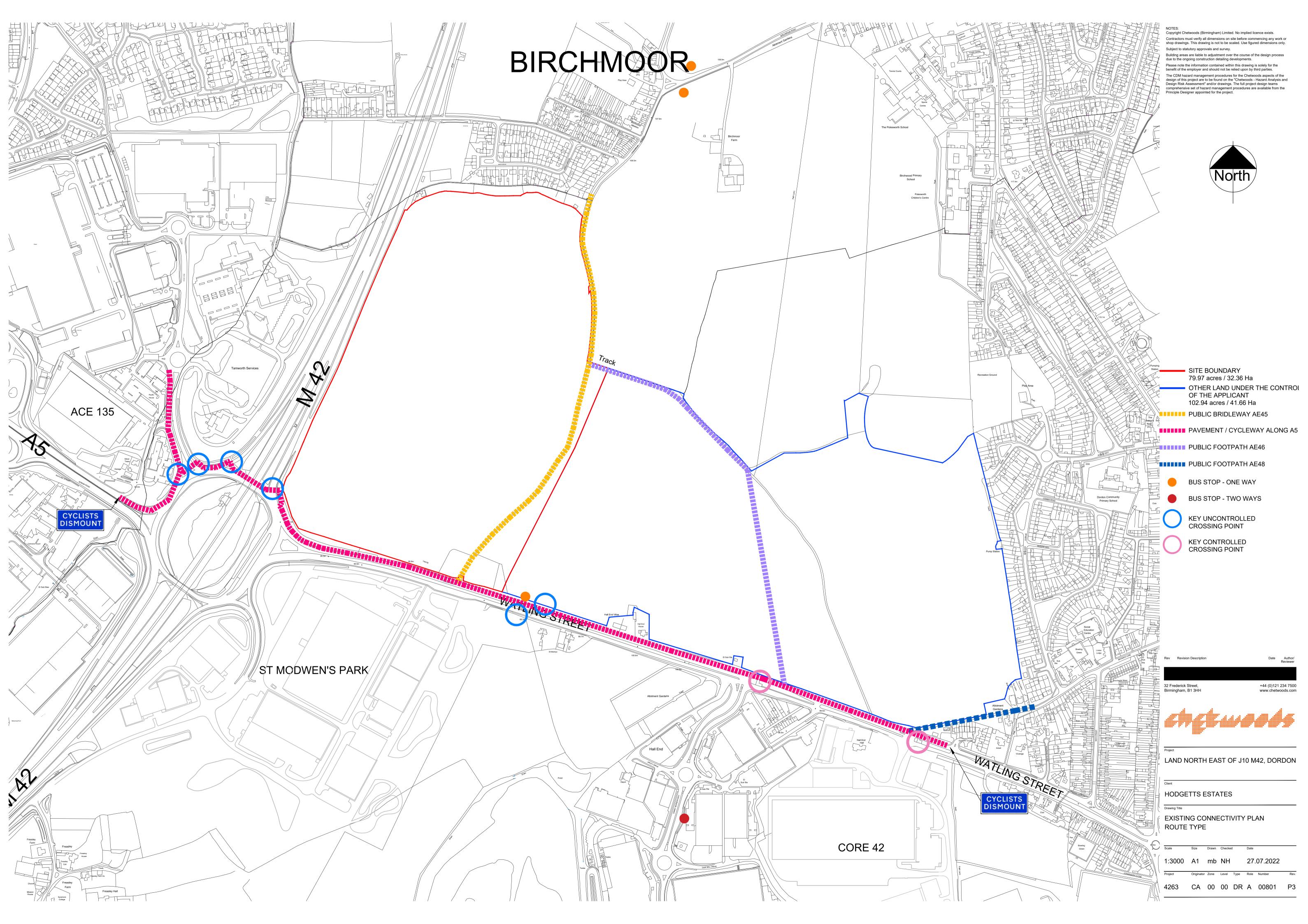
Transport Appraisal and Strategic Modelling (TASM) Division Department for Transport Zone 2/25 Great Minster House 33 Horseferry Road London SW1P 4DR tasm@dft.gov.uk

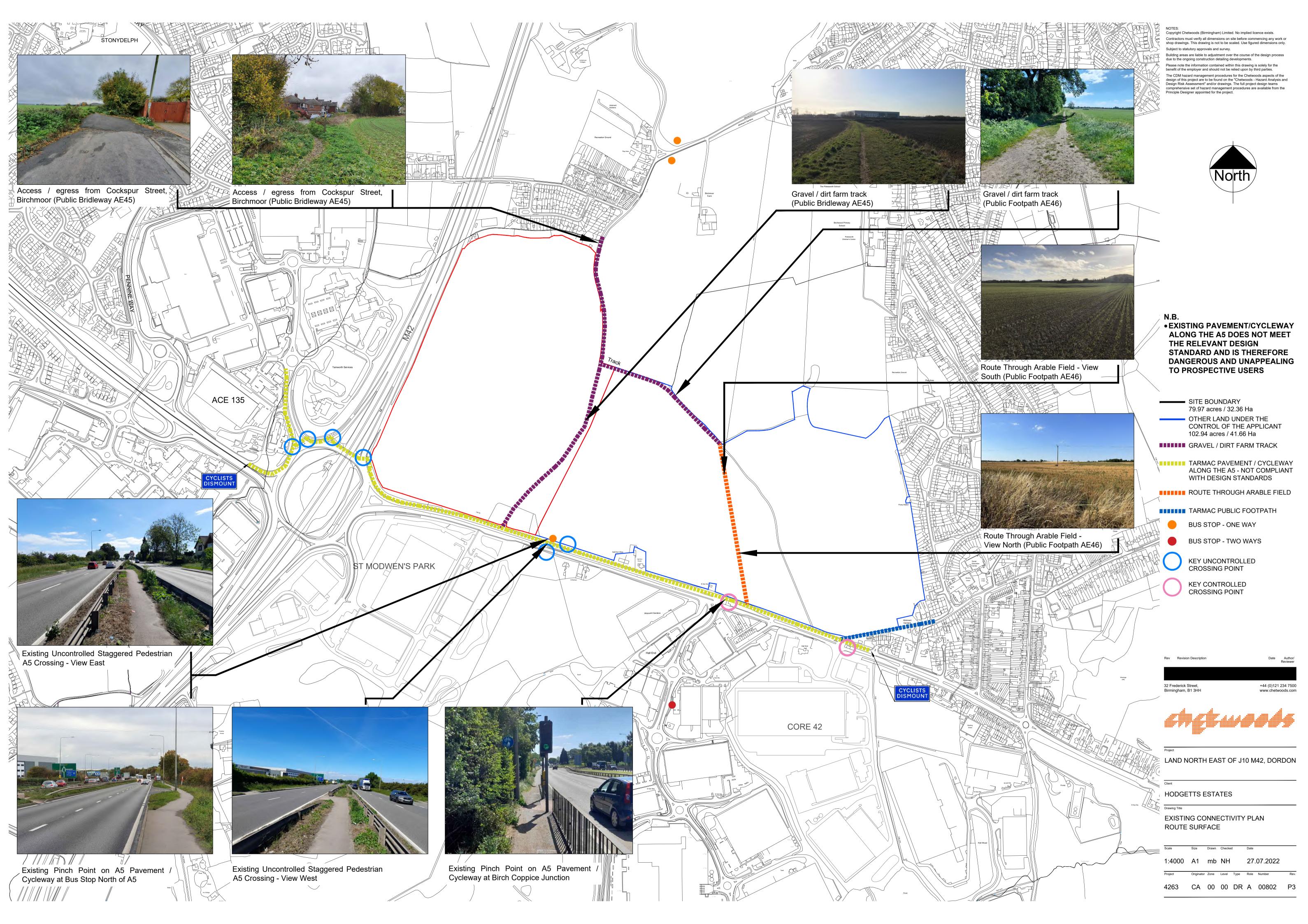
Contents

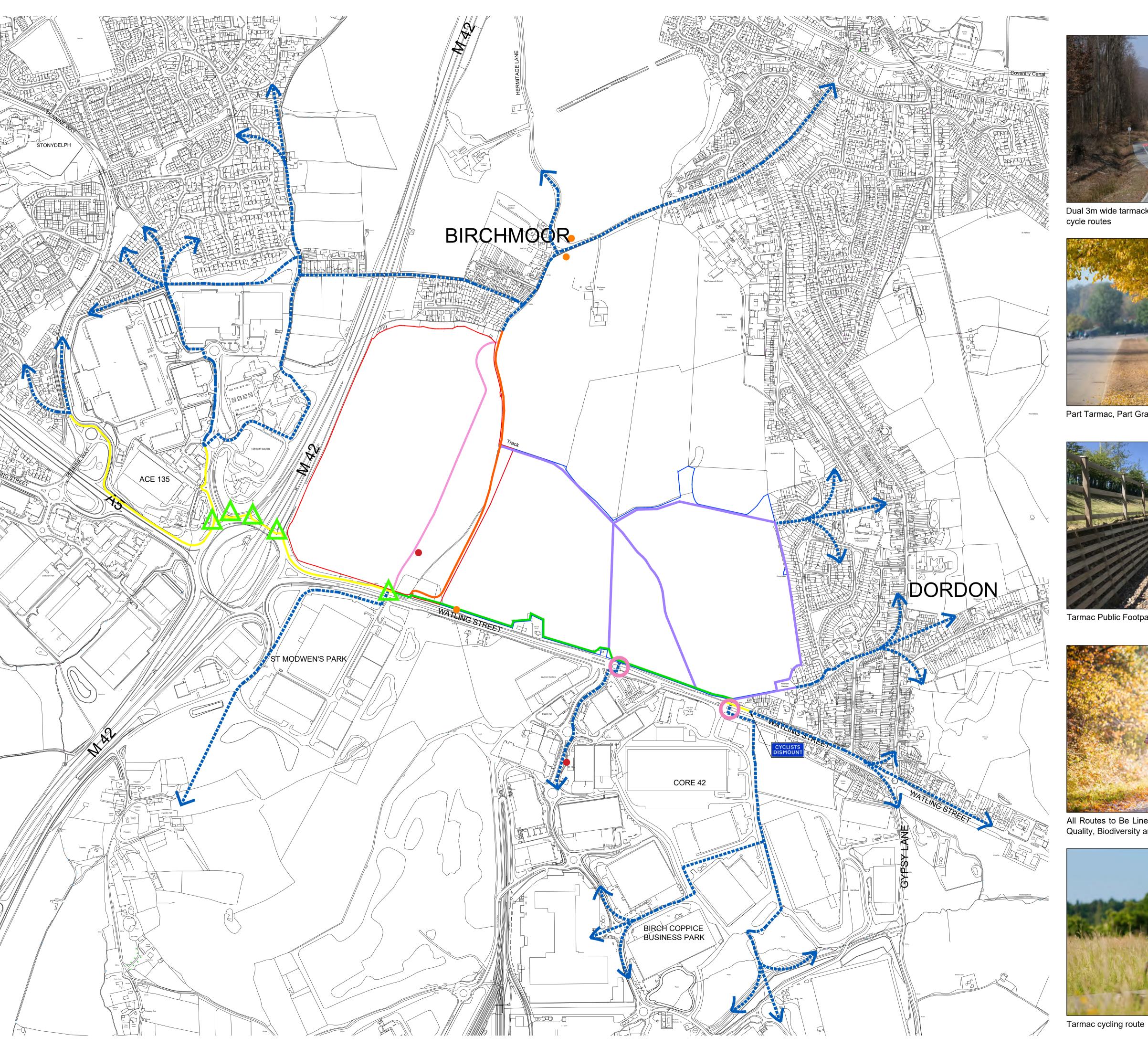
1	Modelling Smarter Choices	1
1.1	Introduction	1
1.2	Classification of Smarter Choice Initiatives	2
1.3	General Approach to Modelling Smarter Choice Initiatives	3
1.4	Benchmarking Expected Impacts of Smarter Choice Initiatives	4
1.5	Modelling the 'Hard' Components of Smarter Choice Packages	5
1.6	Modelling 'Soft' Components of Smarter Choice Packages	6
1.7	Modelling Specific Smarter Choice Measures	g
1.8	Reporting Requirements	11
1.9	Considerations when Appraising Smarter Choices	12
2	Document Provenance	12
Арр	endix A References and Sources of Evidence	13
Appendix B Overview of Möser and Bamberg Meta Analysis		

- B1.6 Although the Möser and Bamberg analysis shows that Smarter Choice measures may be successful in reducing travel by car, there are some important caveats that need to be borne in mind. These include all the issues noted earlier, along with the following:
 - The indicator of modal shift used in this work is the modal share expressed in terms of trips made by people directly targeted by the Smarter Choice measures, and there is no indication of changes in either trip-km or the vehicle-km of road traffic;
 - The average non-car mode shares before application of Smarter Choices measures in the metaanalysis may differ from the existing non-car mode shares in the model study area. This would need to be borne in mind when extrapolating the results to the wider population. It should be noted that the base non-car mode share for targeted marketing measures is similar to the average Great Britain level for all trips; and
 - It is well known that meta-analysis is likely to overstate the effects because studies with no
 significant or negative effects are much less likely to be published or to become accessible for
 retrieval. The effects revealed by Möser and Bamberg are therefore likely to be close to the
 upper limit in the possible range of impacts.
- B1.7 However, even bearing in mind the above caveats, the results still give some idea about the average levels of impact.
 - For workplace travel plans, the effects are the combined effects of both 'soft' and associated 'hard' measures (e.g. public transport improvements and parking measures). The analysis suggests that workplace travel plans would increase the overall non-car mode share by 12 percentage points. Given the base mode share, this implies an increase in the number of non-car trips by 34%, or a reduction in the number of car trips by 18% on the assumption that the total number of trips stays unchanged.
 - For **school travel plans**, the sample reviewed by Möser and Bamberg could be divided into a small group of six best-practice schools where a lot had been achieved, and the rest, where the impacts were marginal, perhaps due to the lack of intensity of application or coordination with the 'hard' measures involved (in those cases the 'hard' measures were 'Yellow' buses). This means that the average increase in the number of non-car trips of 7% (as suggested in Table B1), or the implied reduction in the number of car trips of 10%, would have under-estimated the best-practice examples, but over-estimated the others in the school travel sample.
 - For **targeted marketing**, the analysis suggests that predominantly information and promotional campaigns would increase the overall non-car mode share by 5 percentage points. Given the base mode share, this implies an increase in the number of non-car trips by 14%, or a reduction in the number of car trips by 8%.
- B1.8 The Möser and Bamberg paper does not provide any information about effects on traffic or induced traffic. Indeed, it has been a common feature of the Smarter Choice studies to examine the impacts on a limited group of the targeted travellers, rather than the road network as a whole.

APPENDIX D: DRAWINGS BY OTHERS









Dual 3m wide tarmacked footway/cycleways for the new pedestrian/



Part Tarmac, Part Grass/Sand Public Bridleway



Tarmac Public Footpath

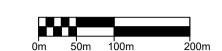


All Routes to Be Lined With Trees / Hedgerows to Enhance Rural Quality, Biodiversity and Wayfinding



Copyright Chetwoods (Birmingham) Limited. No implied licence exists. Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only. Subject to statutory approvals and survey.

Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments. Please note the information contained within this drawing is solely for the benefit of the employer and should not be relied upon by third parties. The CDM hazard management procedures for the Chetwoods aspects of the design of this project are to be found on the "Chetwoods - Hazard Analysis and Design Risk Assessment" and/or drawings. The full project design teams comprehensive set of hazard management procedures are available from the Principle Designer appointed for the project.





SITE BOUNDARY

79.97 acres / 32.36 Ha

OTHER LAND UNDER THE CONTROL OF THE APPLICANT 102.94 acres / 41.66 Ha

3M WIDE TARMAC SHARED PAVEMENT / CYCLEWAY ALONG SITE ROAD AND NORTH TO

BIRCHMOOR PART TARMAC, PART GRASS/SAND PUBLIC

BRIDLEWAY (AE45) 3M WIDE TARMAC OFFLINE SHARED FOOT / CYCLEWAY

3M WIDE TARMAC SHARED FOOT / CYCLEWAY ALONG ROUTE OF EXISITING AND PROPOSED PUBLIC RIGHTS OF WAY **NETWORK**

ENHANCED TARMAC PAVEMENT / CYCLEWAY ALONG A5

POSSIBLE INBOUND / ONWARD JOURNEY **ROUTE OPTIONS**

BUS STOP - ONE WAY

BUS STOP - TWO WAYS

KEY CROSSING POINT UPGRADED TO SIGNAL CONTROLLED

KEY CONTROLLED CROSSING POINT

32 Frederick Street, Birmingham, B1 3HH +44 (0)121 234 7500 www.chetwoods.com



LAND NORTH EAST OF J10 M42, DORDON

HODGETTS ESTATES

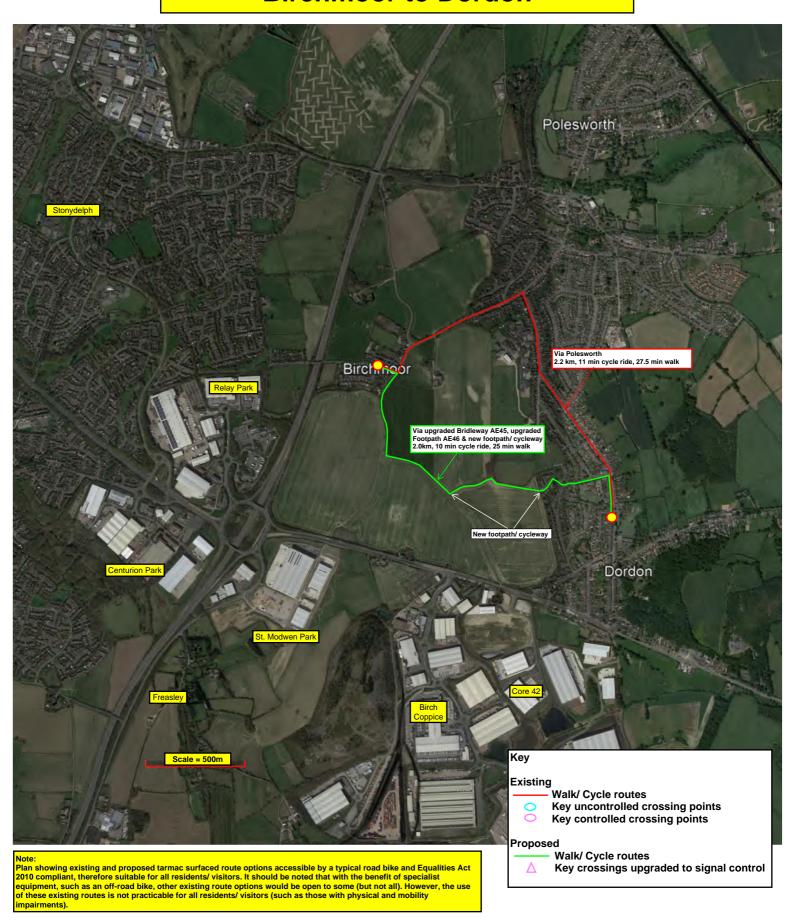
PROPOSED CONNECTIVITY PLAN -

ROUTE TYPE & SURFACE

4263 CA 00 00 DR A 00803 P6

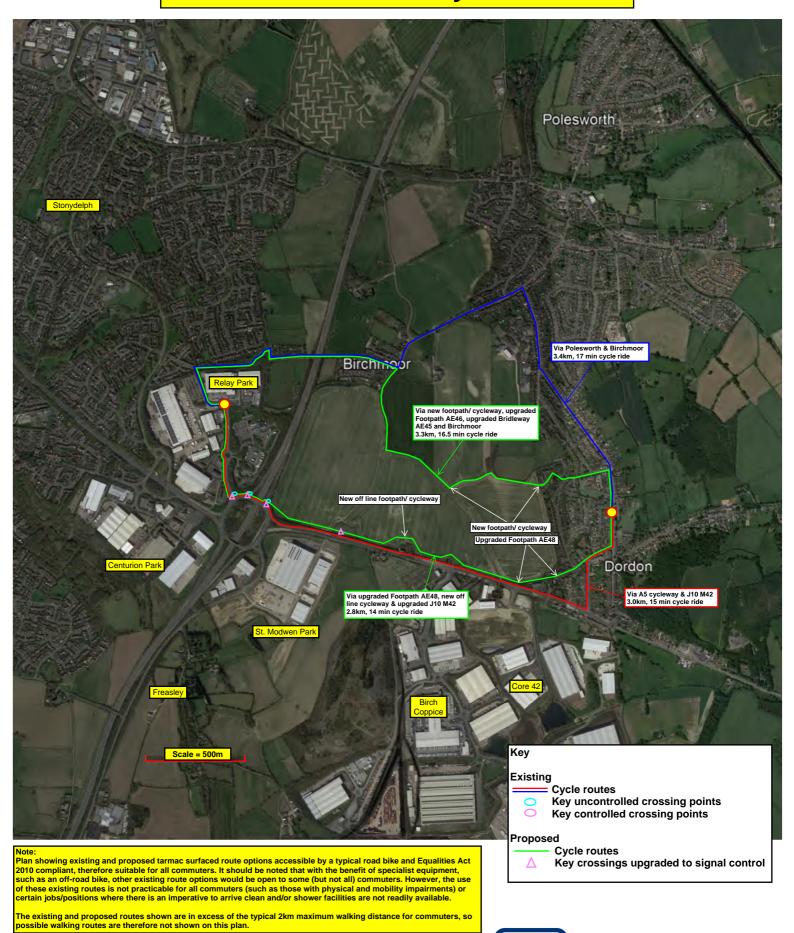
APPENDIX E: TT CONNECTIVITY PLANS

Community Integration Route Plan: Birchmoor to Dordon



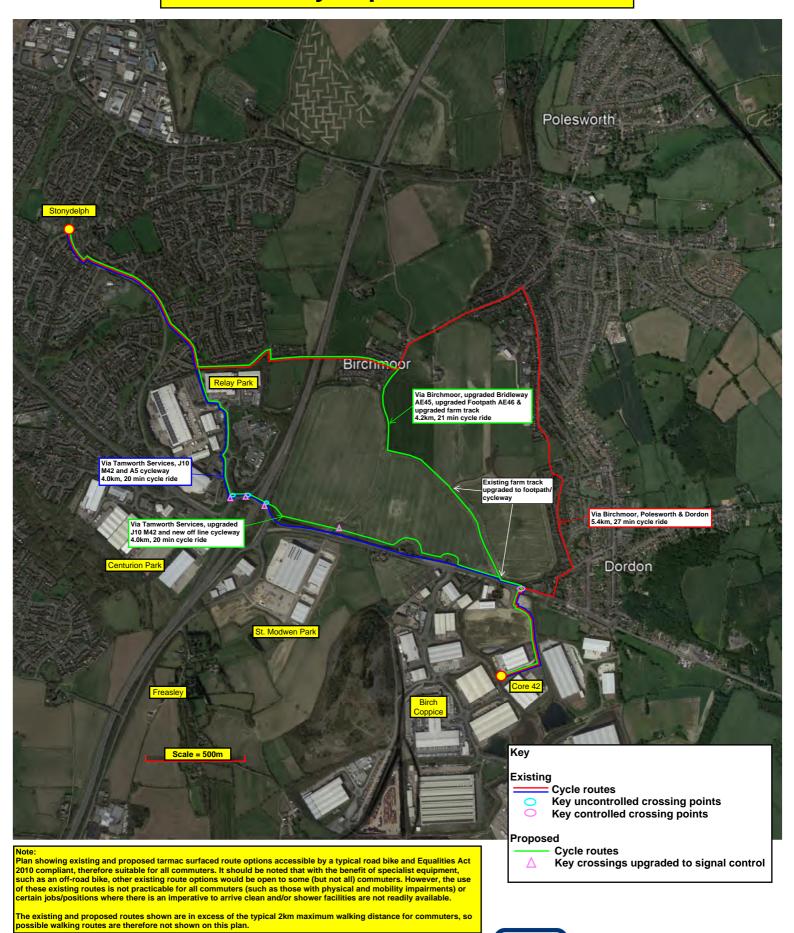


Commuter Point-to-Point Plan: Dordon to Relay Park





Commuter Point-to-Point Plan: Stonydelph to Core 42





Commuter Point-to-Point Plan: Polesworth to St. Modwen Park

