Land North East of M42 Junction 10

784-B033920

Highways Statement of Common Ground between National Highways and Hodgetts Estates

Appeal Reference: APP/R3705/W/24/3336295

Application Number PAP/2021/0663

Hodgetts Estates

May 2024

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704

Tetra Tech Limited. Registered in England number: 01959704

Tetra Tech Newcastle, 2nd Floor, Cathedral Buildings, Dean Street, Newcastle upon Tyne, NE1 1PJ
Registered Office: 3 Sovereign Square, Sovereign Street, Leeds, United Kingdom, LS1 4ER

Document Control.

Document:	Highways Statement of Common Ground between National Highways and Hodgetts Estates
Project:	Land North East of M42 Junction 10
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\Proof of Evidence\SOCG\NH\Highways Statement of Common Ground Final v2.docx

Revision:	**0**	**Prepared by:**	**N Bunn**
Date:	17 May 2024	**Checked by:**	A Ashton
Status:	**Final**	**Approved by:**	N Bunn
Description of revision:			

Revision:	**1**	**Prepared by:**	**N Bunn**
Date:	29 May 2024	**Checked by:**	A Ashton
Status:	**Final**	**Approved by:**	N Bunn
Description of revision:	**Updated for drawing references**		

Revision:		**Prepared by:**	
Date:		**Checked by:**	
Status:		**Approved by:**	

Description of revision:	

Table of contents

Appendices

Appendix G: NH Email 2 May 2024

Appendix H: Agreed 2026 Reference Case TRANSYT Results

Appendix I: Agreed 2033 Reference Case TRANSYT Results

Appendix J: Agreed 2033 Local Plan Case TRANSYT Results

Appendix K: Agreed 2033 Local Plan Additional Mitigation TRANSYT Results

Appendix L: A5 Cycleway: TT drawings 784-B033920-TTE-00-ZZ-PL-H-0003-P03, 784-B033920-TTE-00-ZZ-PL-H-0004- P03, and 784-B033920-TTE-00-ZZ-PL-H-0005- P03

1.0 Introduction

1.1 This Highway Statement of Common Ground ('HSoCG') has been prepared by Tetra Tech on behalf of Hodgetts Estates ('the Appellant') and has been agreed with National Highways (NH) who are the highway authority for the Strategic Road Network in England; in relation to an appeal against non-determination of planning application on land north east of M42 Jn10, Dordon, Warwickshire (PAP/2021/0663 – the "Appeal site") by North Warwickshire Borough Council (NWBC) the local planning authority.

1.2 At the NWBC Development Board meeting of 4 March 2024, the council resolved to refuse the permission and three reasons were cited. Reason 3 is related to highway matters and states that:

The applicant has failed to demonstrate that the development would not result in an unacceptable impact on both the strategic and local highway networks or that the development can be accommodated in a manner that would not cause increased danger and inconvenience to highway users, including those travelling by sustainable modes. On this basis the proposed development would result in a severe impact on the road network contrary to policies LP23, LP27 and LP29(6) of the North Warwickshire Local Plan 2021 and paragraph 115 of the National Planning Policy Framework 2023.

1.3 This HSoCG has been prepared in association with NH in order to identify agreed areas as well as to facilitate the narrowing of issues in dispute, and to streamline the preparation of evidence.

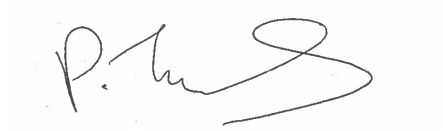
1.4 Matters to be agreed will be considered further between the parties in order to see if further areas of agreement can be reached, in which case this statement will be supplemented accordingly.

1.5 This HSoCG has been prepared jointly and agreed by:

Signed: Date: 29 May 2024

Dr Nick Bunn

Tetra Tech Ltd (on behalf of Hodgetts Estates)



Signed: Date: 29 May 2024

Patrick Thomas

National Highways

2.0 The Appeal Site and its Context

Appeal Site

2.1 The Appeal site is located to the north east of M42 Jn10. It has a western frontage to the M42 motorway and a southern frontage to the A5 Watling Street. To the northern boundary is the small settlement of Birchmoor, and the eastern boundary is farmland.

2.2 Tamworth lies to the west of the M42 and is a large town. To the east are the villages of Polesworth and Dordon. To the south of the A5 is Tamworth Logistics Park, Birch Coppice and Core 42. All three sites are large employment and logistics sites. Birch Coppice is also an intermodal rail freight facility. Tamworth Logistics Park is accessed from Trinity Way, whilst both Birch Coppice and Core 42 are directly accessed from the A5 via traffic signal controlled junctions.

Appeal Proposals

2.3 Outline planning permission is sought for the development of land for up to 100,000sqm within Use Class B2 (general industry), Use Class B8 (storage and distribution) and Use Class E(g)(iii) (light industrial), a 150 space overnight lorry park (including an associated 400sqm amenity block). All matters are reserved except for access.

2.4 The site is to be accessed from a new traffic signal controlled junction on the A5 located between the signal controlled M42 Jn10 and A5/ Birch Coppice junctions.

Highway Context

2.5 The M42 motorway together with A42 provided a high standard high speed connection between the M1 at Jn23A, and the M6Toll at Jn T1, M6 at Jns 4/4A, M40 at Jn3A and M5 at Jn4A. In the vicinity of the site, the M42 is a dual 2-lane motorway. NH is the highway authority for this road.

2.6 The A5 is a trunk road which provides a connection between the M1 at Jn 11a at Luton, and the M6 at Jn12 west of Cannock. The A5 is of variable standard some sections being rural dual carriageway, and some being urban single carriageways. In the vicinity of the site the A5 is a dual carriageway road between the M42 Jn10 and Dordon Roundabout. From M42 Jn 10 heading east the speed limit is 70mph for a distance of some 540m, where it reduces to 50mph for a distance of some 900m

where it reduces to 40mph. East of Dordon Roundabout the A5 is a single carriageway road subject to a 40mph speed limit. Between the M42 Jn10 and Dordon there are a number of private accesses and junctions with minor roads, particularly in Dordon.

2.7 The A5 crosses the M42 at a large grade separated roundabout junction. The roundabout is signal controlled and there are congestion issues particularly on the A5 eastbound approach in the AM and PM peak periods.

2.8 West of the M42 Jn10, the A5 is a dual carriageway road subject a 70mph speed limit and with grade separated junctions. Some 270m west of M42 Jn10 is a grade separated junction with the B5404 Quarry Hill to the south and the B5080 Pennine Way to the north.

2.9 In the vicinity of the site there are footways on both sides of the A5 which are of varying standard and some sections are also shared unsegregated cycle routes. There are signal controlled pedestrian and cycle crossings of the A5 at the Birch Coppice and Core 42 junctions as well as a number of uncontrolled crossings.

2.10 The A5 is bus route and adjacent to the site there is a bus stop and layby for eastbound buses. The nearest stop for westbound buses in on Danny Morson Way at Birch Coppice.

2.11 NH is the highway authority for the A5 including the slip roads to the roundabout with Quarry Hill and Pennine Way and for M42 Jn10.

2.12 On the northwestern quadrant of M42 Jn10 Green Lane provide access to Relay Park, a large employment and logistics site, as well as to Tamworth Services. Green Lane on its approach to M42 Jn10 is a dual carriageway road with a 30mph speed limit.

2.13 On the southeastern quadrant of M42 Jn10 Trinity Way provides access to Tamworth Logistics Park, Wood End and Kingsbury. It is a single carriageway road with a 50mph speed limit.

2.14 Warwickshire County Council is the responsible highway authority for the minor road junctions on the non-strategic highway network of Green Lane and Trinity Way.

2.15 The B5404 Quarry Hill and the B5080 Pennine Way provide access to the residential areas of Tamworth. Both roads are single carriageway with 30mph speed limits. Staffordshire County Council is the responsible highway authority for the B5404 Quarry Hill and the B5080 Pennine Way.

3.0 A5 Improvements

3.1 NH are developing a highway improvement scheme for the A5 between Dordon and Atherstone. This scheme is identified in the North Warwickshire Local Plan as being of critical importance. NH undertook a public consultation on scheme options in Autumn 2022 and the Department for Transport is yet to decide on whether the scheme progresses to Preferred Route Stage. There is limited certainty that any approved scheme would be delivered during Road Investment Strategy period 4 (2030 to 2035).

3.2 NH are currently investigating low level intervention options for the M42 J10. Improvements to this junction are required for the North Warwickshire Local Plan.

3.3 Neither scheme has reached the level of certainty where it could be considered to be committed.

Matters Agreed

- There is uncertainty when or if the A5 Dordon to Atherstone scheme will proceed or the nature of low level intervention for M42 Jn10. Neither scheme could be considered to be committed.

Matters to be Agreed

- None

4.0 Lorry Parking

4.1 The National Survey of Lorry Parking 2017 (updated 2022) produced by the Department for Transport, identified seven national hotspots where the lorry parking shortfalls are most acute. One of the hotspot areas identified is between Hams Hall and Dordon, and includes the Appeal site.

4.2 A recent application for a 200 space lorry park at Curdworth (application number PAP/2020/0295) was refused planning permission by NWBC and an appeal was dismissed (Appeal Ref: APP/R3705 /W/23/ 3327296; CD K1) on 22 February 2024. The Inspector noted that although there was *"..compelling evidence of need for additional HGV parking and driver facilities, the provision of which would help to address a national shortage of HGV parking, improve driver welfare, would support the distribution sector generally and would have wider public benefits in reducing the levels of roadside parking..."* this did not overcome the adverse impacts on the green belt. As a result the strategic need for lorry parking in the Hams Hall – Dordon area remains.

4.3 The Appeal proposals, which provided a 150 space lorry park, results in the loss of 2 laybys on the A5 in the vicinity of the Appeal site access. Alternative driver rest facilities, including for HGVs, are provided at Tamworth Services a short distance to the west, and are well signed at M42 Jn10. There are also laybys on the A5 east of Grendon and at the Copper Kettle Café around 1km east of Mancetter Roundabout.

Matters Agreed

- The Appeal site lies within an area of identified national need for lorry parking.
- The Appeal proposals make a significant contribution to the identified need.
- The loss of the two laybys is acceptable given the Appeal proposals and alternative nearby provision.

Matters to be Agreed

- None

5.0 Sustainable Transport

5.1 In line with the requirements of Circular 01/2022, a Vision for the development was produced as part of a Vision Led Travel Plan (CD H24) and submitted to NH in September 2023.

5.2 This document sets out a range of sustainable transport measures to encourage the use of sustainable transport options and to reduce the vehicular trip generation of the Appeal proposals.

5.3 The measures comprise:

- Improvements to foot/cycleway connections along the A5 between Pennine Way, Green Lane, the site and A5/ Core 42 and Brown's Lane.
- Signal controlled pedestrian and cycle crossings on M423 Jn10 at Green Lane and at the M42 north facing slip roads, and at the site access junction.
- Signal controlled pedestrian crossing of the A5 at the site access junction.
- Improvements to the width and surface of existing Public Bridleways and Public Footpaths (AE45, AE46 and AE48), together with a new foot/cycle link to Barn Close, Dordon, to improve connectivity with Birchmoor, Tamworth, Polesworth and Dordon.
- Provision of cycle parking and as well as showers and changing facilities in all buildings, as well as publicly accessible facilities at the ancillary Hub Office.
- Extending the Stagecoach 766/ 767 Tamworth and Nuneaton services from the A5 into the proposed development has been agreed with Stagecoach, and suitable turning areas and waiting facilities will be provided.
- E.V. charging will be provided at 20% of all car, motorcycle and LGV spaces across the site and all parking spaces will be ducted for E.V. for future conversion. E.V. charging will be provided at 10% of all HGVs spaces and/or loading docks with ducting provided to the remaining 90% to future proof the development.
- A travel plan coordinator will be appointed and will promote sustainable transport choices.

5.4 The Vision Based Travel Plan estimated that the sustainable transport measures would lead to an 18% reduction in the car driver mode share.

5.5 The Vision Based Travel Plan also identified the likely traffic flow reductions arising from the travel plan, as well as from the proximity of the Brich Coppice Rail freight facility, and hence the residual traffic flows.

5.6 The Vision Based Travel Plan was agreed by NH in January 2024.

Matters Agreed

- The Appeal site is in a sustainable location for the use proposed.
- The Appeal site is rail served.
- An acceptable package of sustainable transport measures has been proposed.
- An acceptable travel plan has been proposed.
- An 18% reduction in car driver mode share is capable of being achieved.
- The proposed mitigation measures are acceptable and will result in there being no severe adverse impacts upon the strategic road network.

Matters to be Agreed

- None

6.0 Road Safety

6.1 Section 4 of the Transport Assessment Addendum (CD B9) assessed accident records for 2018, 2019, 2022 and up to September 2023, a total of 3¾ years, excluding 2020 and 2021 which were affected by COVID19. The TAA concluded the road network operates within acceptable levels of road safety.

6.2 The proposed site access junction and the M42Jn10 mitigation scheme included a number of measures with positive road safety benefits. These comprise:

- 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.
- Wider shared foot/cycleway on the north side of the A5 between the site access and the Pennine Way north roundabout with a separation strip.
- 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.

6.3 A safety risk assessment (CD H28) in accordance with DMRB GG104 has been carried out and was submitted to NH, Warwickshire County Council and Staffordshire County Council on 23 April 2024. The risk assessment has considered the change in road safety risk arising from the proposed access junction and the proposed mitigation measures. The assessment finds that the safety risks associated with the proposed works are at an acceptable level. That Safety Risk Assessment has not yet been agreed with National Highways, but discussions are ongoing.

Matters Agreed

- The current SRN network operates within expected road safety parameters. .

Matters to be Agreed

- The conclusion of the GG104 Safety Risk Assessment
- Stage 1 Road Safety Audit for the site access junction and proposed mitigation measures.
- That the Appeal proposals do not result in an unacceptable impact on road safety on the SRN.

7.0 Assessment of Highway Impact

7.1 The methodology to be used to assess the effect of generated traffic on the highway network is set out in the Consolidated Modelling Strategy v2 (CD H20). This was agreed by Warwickshire County Council in July 2023, by NH in November 2023 and by Staffordshire County Council in November 2023.

7.2 A 2023 Baseline TRANSYT model was prepared and its validation was agreed by NH in March 2024.

7.3 On 9 October 2023 NH advised that the TRANSYT modelling should use the development generated flows without the reduction for residual traffic identified in the Vision Led Travel Plan.

7.4 In December 2023 NH agreed that no additional assessment of impact at A5/ Longshoots and A5/ Dodwells was required.

7.5 For the Local Plan assessment the agreed infrastructure improvements comprise:

- a package of improvements at M42 Jn10 shown in Phil Jones Associates Drawing 02853-01 Rev A attached at Appendix A. The improvements comprise i) widening the A5 eastbound approach and widening the western circulatory carriageway, ii) a segregated left turn slip lane from the M42 southbound off slip to the A5 eastbound, and iii) widening of the southern overbridge and widening of the Trinity Way approach.
- The replacement of Dordon Roundabout by traffic signals using the drawing ID6 - 2026 Dordon Signals in Appendix C of the Vectos Strategic Transport Assessment dated 2017 (CD H19). The Vectos layout required further development for the TRANSYT assessments and the layout used is shown at TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0009 Rev P01 attached in Appendix B. It is agreed that this layout is suitable for the Local Plan TRANSYT assessments.

7.6 The Reference Case and Local Plan With Development assessments included a signal controlled site access junction as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0002 Rev P03 attached in Appendix C.

7.7 The 2026 and 2033 Reference Case With Development assessments both required mitigation for the impact on the A5 eastbound approach to M42 Jn10. The mitigation

scheme is shown at TT Drawing 784-B033920-TTE-00-ZZ-SK-H-1001 Rev P01 attached in Appendix D.

7.8 In the 2033 Local Plan With Development assessment, the Phil Jones Associates' proposals were amended to remove the segregated left turn slip and to amend the A5 eastbound approach, western circulatory and A5 westbound approach proposals to match those in the Reference Case mitigation scheme. The Local Plan With Development scheme is shown at TT Drawing 784-B033920-TTE-00-ZZ-DR-H-1002 Rev P01 attached in Appendix E.

7.9 The Transyt model showed that the Local Plan With Development result could be improved with additional mitigation comprising widening the A5 eastbound exit from 2 to 3 lanes. The Additional Mitigation scheme is shown on at TT drawing 784-B033920-TTE-00-ZZ-DR-H-1003-P01, attached at Appendix F.

7.10 The results of the 2026 and 2033 Reference Case flows, and with the 2033 Local Plan Case assessment were set out in a Transport Addendum Assessment report dated February 2024 (CD B39).

7.11 Comments were received from NH and amendments to the models were made as set out in TT Notes on AECOM TRANSYT Comments dated 8 March and 10 April 2024 (CD H25 and H26 respectively).

7.12 On 2 May 2024 NH confirmed (Appendix G refers) that the TRANSYT models are acceptable and that impact of the appeal proposals are acceptable.

7.13 Following the agreement of the TRANSYT models, the results in the TAA have been superseded. The agreed TRANSYT modelling results for 2026 Reference Case, 2033 Reference Case, 2033 Local Plan Case and 2033 Local Plan with Additional Mitigation are attached at Appendices H to K.

Matters Agreed

- The extent of the highway to be assessed using TRANSYT 16 comprises the A5 between and including its junctions with the B5404 Quarry Hill and the B5080 Pennine Way in the west and Dordon Roundabout in the east.
- The impact of the Appeal proposals elsewhere are not sufficient as to require assessment.

- That the TRANSYT modelling of the A5/ site access junction shows acceptable levels of queues at delays in both AM and PM peak hours in all assessment scenarios.
- The impact of the Appeal proposals in the 2026 and 2033 Reference Case with the proposed M42 Jn10 mitigation measures is acceptable, and do not result in a residual cumulative impacts on the road network which would be severe.
- The impact of the Appeal proposals in the 2033 Local Plan Case is acceptable and do not result in a residual cumulative impacts on the road network which would be severe. However, the impact can be further reduced with the additional mitigation measures shown at TT Drawing 784-B033920-TTE-00-ZZ-DR-H-1003 Rev P01 attached in Appendix F.

Matters to be Agreed

- None.

8.0 A5/ Site Access Junction

8.1 The layout of the proposed site access junction is shown on TT drawing 784-B033920-TTE-00-ZZ-PL-H-0002-P03, attached at Appendix C.

8.2 It comprises:

- a new 3-arm traffic signal junction on the A5,
- widening on the A5 to provide 3 lanes on the eastern approach,
- widening on the A5 to provide 3 lanes on the western approach,
- a new signal controlled pedestrian crossing of the A5,
- a new signal controlled pedestrian and cycle crossing of the site access,
- a relocated eastbound bus stop,
- widening the shared unsegregated pedestrian/ cycle way between the M42 Northbound off slip and the site access to 3.0m with a 2.5m separation strip.

8.3 A Safety Risk Assessment was submitted to NH on 24 April 2024.

8.4 NH in their email dated 2 May 2024 confirmed that the layout of the site access junction was acceptable in principle, and that the design comments could be addressed at subsequent design stages.

8.5 On 9 May NH confirmed that a Stage1 RSA Audit should be carried out and this is planned for 20 May.

Matters Agreed:

- The layout of the proposed junction shown at TT drawing 784-B033920-TTE-00-ZZ-PL-H-0002-P03 is acceptable in principle.
- The design comments identified in the review can be addressed at subsequent design stages.

Matters to be Agreed:

- A satisfactory S1 RSA which includes the proposed junction shown at TT drawing 784-B033920-TTE-00-ZZ-PL-H-0002-P03.

9.0 M42 Jn10 Mitigation Measures: Reference Case

9.1 As set out in the Consolidated Modelling Strategy v2 (CD H20), the Reference Case highway network comprises the existing layout.

9.2 The proposed mitigation measures to M42 Jn10 are shown on TT drawing 784-B033920-TTE-00-ZZ-PL-H-1001-P01, attached at Appendix D. Note the improvements shown on this drawing are the same as on TT drawing 784-B033920-TTE-00-ZZ-PL-H-0001-P05. The difference between the two drawings is the area of context provided, with the former drawing showing the whole of M42 Jn10, and the latter showing the northern part.

9.3 The proposed mitigation measures comprise

- Altering the Pennine Way merge from direct taper to lane gain.
- Increasing the length of the Kinsall Green diverge taper.

- Widening of the A5 eastbound approach from 2 lanes to 3 lanes east of the Pennine Way Roundabout on-slip, with the approach to the roundabout widened from 3 lanes to 4 lanes.
- Widening of the western section of the roundabout circulatory between the A5 westbound exit entry and the A5 eastbound entry from 3 lanes to 4 lanes.
- Widening of the western section of the roundabout circulatory between the A5 eastbound entry and the Green Lane exit from 4 lanes to 5 lanes.
- Widening of the western section of the roundabout circulatory adjacent to the Green Lane entry from 3 lanes to 4 lanes.
- The reduction of the Green Lane exit from the roundabout to a single lane.
- The addition of signalised crossing facilities on both the Green Lane exit from the roundabout and the Green Lane entry to the roundabout.
- Reduction of the M42 northbound exit from the roundabout to a single lane.
- The addition of signalised crossing facilities on both the M42 Northbound on-slip and the M42 Southbound off-slip.
- Widened foot/cycleway and improved separation between A5/ Pennine Way Roundabout and the M42 Southbound off-slip
- Extended lane 3 flare on the A5 westbound approach to M42 Jn10.
- A reduction in the speed limit from 70mph to 50mph on the A5 from a point 120m west of the Pennine Way overbridge to the existing 50mph speed limit east of the site access.

9.4 Owing to width constraints there is a pinch point on the A5 eastbound carriageway between the Pennine Way on-slip and Kensall Green where the A5 lanes are reduced to 3.1m in width, however the shared foot/cycleway is retained at 2.0m. The reduction in the lane widths is a departure from DMRB standard. Preliminary approval for the departure was agreed by NH in March 2024.

9.5 A Safety Risk Assessment was submitted to NH on 24 April 2024.

9.6 NH in their email dated 2 May 2024 confirmed that the layout of the M42 Jn10 mitigation measures shown on TT drawing 784-B033920-TTE-00-ZZ-PL-H-1001-P01

were acceptable in principle, and that the design comments could be addressed at subsequent design stages.

9.7 On 9 May NH confirmed that a Stage1 RSA should be carried out and this is planned for 20 May.

Matters Agreed

- The layout of the proposed mitigation measures shown at TT drawing 784-B033920-TTE-00-ZZ-PL-H-1001-P01 are acceptable in principle.
- The design comments identified in the review can be addressed at subsequent design stages.
- The proposed improvements to M42 Jn10 mitigate the impact of the appeal proposals on the highway network in both AM and PM peak hours in the Reference Case.

Matters to be Agreed

- A satisfactory S1 RSA which includes the mitigation measures shown on TT drawing 784-B033920-TTE-00-ZZ-PL-H-1001-P01.

10.0 M42 Jn10 Mitigation Measures: Local Plan Case

10.1 As set out in the Consolidated Modelling Strategy v2 (CD H20), the Local Plan Case highway network comprises the existing layout plus infrastructure identified for the Local Plan at M42Jn10 (the Phil Jones Associates drawing at Appendix A) and Dordon Roundabout (the traffic signal junction at Appendix B) as set out at para 7.5, above.

10.2 As noted in para 7.8 above the Phil Jones Associates' scheme was amended in the With Development assessment. The changes to the Phil Jones Associates scheme are summarised below:

- Lengthened diverge taper to Kinsall Green from A5 eastbound approach.
- The extra flared lane on the A5 eastbound approach has been switched from the nearside to the offside by altering the road markings.

- Widening of the western section of the roundabout circulatory between the A5 eastbound entry and the Green Lane exit from 4 lanes to 5 lanes.
- Realignment of the western section of the roundabout circulatory adjacent to the Green Lane entry with lane 2 destination markings changed from “M42 North and A5 East” to “A5 East”.
- The reduction of the Green Lane exit from the roundabout to a single lane.
- The addition of a signal controlled pedestrian / cycle crossing on the Green Lane entry and exit arms
- The M42 northbound on-slip exit from the roundabout sees the road markings reduce the slip road from 2 lanes to 1 lane, although the carriageway width remains unaltered.
- The addition of a signal controlled pedestrian / cycle crossing on the M42 northbound exit arm.
- Improved pedestrian/ cycle facilities from Pennine Way/ Pennymore Road along the north side of the A5 and western circulatory to the M42 Northbound on-slip.
- Removal of the segregated left turn slip lane between the M42 southbound off slip and the A5 eastbound entry arm.
- The addition of signalised pedestrian / cycle crossing facilities on the M42 southbound entry arm.
- Improved pedestrian/ cycle facilities from the M42 southbound off-slip to the A5 eastbound exit and along the north side of the A5.
- Extended lane 3 flare on the A5 westbound approach to M42 Jn10.
- A reduction in the speed limit from 70mph to 50mph on the A5 from a point 120m west of the Pennine Way overbridge to the existing 50mph speed limit east of the site access.

10.3 The combination of the retained Phil Jones Associates Local Plan measures plus the TT mitigation measures are shown on TT drawing 784-B033920-TTE-00-ZZ-DR-H-1002-P01, attached at Appendix E. Note the improvements shown on this drawing in bold black are the same as on TT drawing 784-B033920-TTE-00-ZZ-PL-H-1001-P01

(attached at Annex D). The retained Phil Jones Associates Local Plan measures are at the Southern Overbridge and Trinity Way and are shown in red.

10.4 The Appellant will provide the improvements shown on drawing 784-B033920-TTE-00-ZZ-DR-H-1002-P01 in bold black (that is to the A5 eastbound approach, the western circulatory, M42 southbound off slip, A5 eastbound exit and A5 westbound entry and speed limit reduction). The retained Phil Jones Associates Local Plan measures at the Southern Overbridge and Trinity Way shown in red remain to be provided as a Local Plan scheme.

10.5 The Transyt model identified that additional mitigation comprising widening the A5 eastbound exit from 2 to 3 lanes would be beneficial. The Additional Mitigation scheme is shown on at TT drawing 784-B033920-TTE-00-ZZ-DR-H-1003-P01, attached at Appendix F, and could be included in the Appellant mitigation package if required.

10.6 Owing to width constraints there is a pinch point on the A5 eastbound carriageway between the Pennine Way on-slip and Kensall Green where the A5 lanes are reduced to 3.1m in width, however the shared foot/cycleway is retained at 2.0m. The reduction in the lane widths is a departure from DMRB standard. Preliminary approval for the departure was agreed by NH in March 2024.

10.7 A Safety Risk Assessment was submitted to NH on 24 April 2024 for the Appellant's proposed works. .

10.8 NH in their email dated 2 May 2024 confirmed that the layout of the M42 Jn10 mitigation measures was acceptable in principle, and that the design comments could be addressed at subsequent design stages.

10.9 On 9 May NH confirmed that a Stage1 RSA Audit should be carried out and this is planned for 20 May.

Matters Agreed

- The amended Local Plan scheme at M42 Jn10 mitigates the impact of the appeal proposals on the highway network in both AM and PM peak hours in the Local Plan Case.
- The layout of the amended Local Plan scheme shown at TT drawing 784-B033920-TTE-00-ZZ-PL-H-1001-P01 and are acceptable in principle.
- The layout of the amended Local Plan scheme with additional mitigation shown at TT drawing 784-B033920-TTE-00-ZZ-DR-H-1003-P01 is acceptable in principle.
- The design comments identified in the review can be addressed at subsequent design stages.
- The proposed mitigation measures make a significant contribution to the Local Plan improvement scheme for M42.

Matters to be Agreed

- A satisfactory S1 RSA which includes the measures to be provided by the Appellant shown on TT drawing 784-B033920-TTE-00-ZZ-DR-H-1002-P01 in bold black.

11.0 A5 Cycleway Improvement to A5/ Core 42

11.1 A shared unsegregated foot/cycleway is provided along the north side of the A5. The route is of variable standard with some narrow sections. An alternate 3.0m wide foot/cycleway is proposed on the Appeal site and adjoining land under the control of the Appellant land between the proposed A5/ Site Access junction and the A5/ Core 42 junction which also links to an existing public footpath to Brown's Lane for access to Dordon.

11.2 The layout of the proposed improvements are shown on TT drawings 784-B033920-TTE-00-ZZ-PL-H-0003-P03, 784-B033920-TTE-00-ZZ-PL-H-0004- P03, and 784-B033920-TTE-00-ZZ-PL-H-0005- P03, copies of which are attached at Appendix L.

11.3 NH in their email dated 2 May 2024 confirmed that the layout cycleway was acceptable in principle, and that the design comments could be addressed at subsequent design stages.

11.4 On 9 May NH confirmed that a Stage1 RSA Audit should be carried out and this is planned for 20 May.

Matters Agreed:

- The layout of the proposed cycleway measures shown in the above TT drawings are acceptable in principle.
- The design comments identified in the review can be addressed at subsequent design stages.
- The cycleway improvement can be provided within land forming part of the A5, or land under the control of the Appellant.

Matters to be Agreed:

- A satisfactory S1 RSA which includes the measures shown the drawings in para 11.2 above.

Appendix A: M42 Jn10 Illustrative Local Plan Improvement Scheme: Phil Jones Associates Drawing 02853-01 Rev A

Drawing Status:
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 commencing works on site.

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

Rev / Date	Description	Drn	Chck'd

PHIL JONES ASSOCIATES
transport planning consultants

Unit 16 The Aquarium, 1-7 King Street,
Reading, RG1 2AN

Tel: 01189560909

reading@philjonesassociates.co.uk
www.philjonesassociates.co.uk

Client
Warwickshire County Council (WCC)

Project
02853 M42 Junction 10

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

Drawn by: AH 24/08/2017	Scale:
Checked by: MN 24/08/2017	1:2000 @ A1

Drawing No. 02853 - 01
Revision A

File: T:\Projects Current\#2800\02853 M42 J10 HS2 Impact\2. Drawings\Design\Preliminary Design\Level Intervention 2B&C&D&E&F\Level Intervention 2B+C+D+E+F.dwg

Appendix B: Dordon Roundabout Illustrative Local Plan Improvement Scheme: TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0009 Rev P01

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
3. THIS DRAWING IS BASED ON 'WCC M42 JUNCTION 10 INDICATIVE SOLUTION LEVEL INTERVENTION 2 B C D E F'
4. PLEASE NOTE THAT THE OIL PIPE AND GAS MAIN ARE DISPLAYED FOR INDICATIVE PURPOSES

PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App
P01	PRELIMINARY FIRST ISSUE	08.09.2023	JG LB GW

Document Control

Issuing Office

Tetra Tech Manchester

Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223

www.tetratecheurope.com

Client

Project Name

LAND NORTH EAST OF JUNCTION 10
M42, NORTH WARWICKSHIRE

Sheet Title

OPTION A - DUAL CARRIAGEWAY &
SIGNALISED A5/ LONG STREET/ GYPSY
LANE JUNCTION

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	JG	Nov '23	LB	Nov '23	GW	Nov '23	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	SK	H	0009	P01

TTE_MT_v1

Appendix C: Proposed A5/ Site Access Junction: TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0002 Rev P03

NOTES -

1. ALL DIMENSIONS IN METRES UNLESS STATED OTHERWISE.
2. THE INFORMATION SHOWN ON THIS DRAWING IS INTENDED TO PROVIDE A GENERAL OUTLINE OF THE HIGHWAY IMPROVEMENT WORKS.

KEY:

- PLANNING APPLICATION BOUNDARY
- ADJOINING LAND UNDER THE CONTROL OF THE APPLICANT
- INTERVISIBILITY ZONE

PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App
P03	MINOR AMENDMENTS DUE TO 3D DESIGN	01.02.2024	RN / DM / NB
P02	ADJUSTMENT TO SPEED LIMIT SIGNS & INTERVISIBILITY ZONE ADDED	04.12.2023	JG / GW / NB
P01	PRELIMINARY FIRST ISSUE	04.11.2022	LJB / LB / NB

Document Control

Issuing Office

Tetra Tech Manchester

Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223
www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

PROPOSED LAYOUT FOR A5 AND NEW SITE ACCESS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	RN	Feb'24	DM	Feb'24	NB	Feb'24	1:1000	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0002	P03

TTE_MT_v1

Appendix D: Reference Case. M42 Jn10 Proposed Improvements: TT Drawing 784-B033920-TTE-00-ZZ-SK-H-1001 Rev P01

N

PROPOSED 2.5m FOOTWAY/CYCLEWAY

SPEED CAMERA SIGNAGE TO BE RELOCATED

PENNINE WAY UNCONTROLLED CROSSSING POINT

EXISTING FOOTWAY

CYCLEWAY BOUNDARY PAVING-CORDUROY

POTENTIAL LOCATION FOR RELOCATED SPEED CAMERA SIGNAGE

EXISTING FOOTWAY

EXISTING HEDGES/VEGETATION TO BE TRIMMED BACK TO ACCOMMODATE PROPOSED 2.5m SHARED USE ARRANGEMENT

NEW 50mph SPEED LIMIT STARTS 120m WEST OF PENNINE WAY BRIDGE

SHARED USE CYCLEWAY TIES IN TO PROPOSED 2.0m SHARED USE ARRANGEMENT AND A CROSSING POINT IS PROVIDED ON THE OTHER SIDE OF THE ROUNDABOUT AT PENNINE WAY.

EXISTING 1m HARDSTRIP

PROPOSED SHARED USE CYCLEWAY

PENNINE WAY MERGE TO A5:
1m HARDSTRIP RETAINED WITH A 0.5m SEPARATION STRIP WHICH DELINEATES THE PROPOSED 2m SHARED USE CYCLEWAY/FOOTWAY

A5 WEST APPROACH:
LANE GAIN FROM PENNINE WAY MERGE, WIDENING TO THREE LANES CREATES A PINCH POINT DUE TO THE HIGHWAY BOUNDARY FENCING, THEREFORE A REDUCTION IN LANE WIDTHS TO 3.1m HAS BEEN IMPLEMENTED.

FACE OF WALL

EXTENT OF DEPARTURE

START OF ROUNDABOUT FLARE

A5 WEST APPROACH:
LANE GAIN FROM PENNINE WAY MERGE, WIDENING TO FOUR LANES AT J10 STOP LINE. REVISED KINSALL GREEN ACCESS. WIDENED SHARED USE ROUTE CONSIDERATIONS OF SIGNAGE AND LIGHTING ADJUSTMENTS WOULD NEED TO BE UNDERTAKEN AT A LATER STAGE.

PROPOSED UNCONTROLLED CROSSING

TIES INTO KINSALL GREEN PROPOSALS

GREEN LANE:
ROUNDABOUT EXIT REDUCED TO 1 LANE APPROACHING NEW TOUCAN CROSSING FOR SHARED USE ROUTE IN CENTRAL RESERVE. EXISTING FOOTWAY ROUTE TO BE UPGRADED.

TO ENSURE THE ROUNDABOUT IS CD143 COMPLIANT THE SHARED USE ROUTE REQUIRES WIDENING. ADDITIONAL WORK WILL BE REQUIRED REGARDING THE EXISTING NATIONAL HIGHWAYS EMBANKMENTS/SLOPES.

TO ENSURE THE ROUNDABOUT IS CD143 COMPLIANT THE SHARED USE ROUTE REQUIRES WIDENING. ADDITIONAL WORK WILL BE REQUIRED REGARDING THE EXISTING NATIONAL HIGHWAYS EMBANKMENTS/SLOPES.

PROPOSED SHARED USE CYCLEWAY

PROPOSED CONTROLLED CROSSING

RESTRICTED TO 2.74m ON THIS SIDE DUE TO THE BRIDGE DECK.

PROPOSED SHARED USE CYCLEWAY

PROPOSED CONTROLLED CROSSING

WIDENING TO FOUR LANES OPPOSITE GREEN LANE. SHARED USE ROUTE IMPROVED FROM A5 TO GREEN LANE WITH NEW TOUCAN CROSSINGS. REVISED ROAD MARKINGS, SIGNING AND SIGNALS.

PROPOSED SHARED USE ROUTE DEVELOPED AS PART OF THE A5 EAST IMPROVEMENT

3m MAINTENANCE TRACK AT BOTTOM OF EMBANKMENT

A5 EASTBOUND- REDUCED SPEED LIMIT TO 50mph

EXISTING EMBANKMENT TO BE RE-GRADED (MAX 1:3 SLOPE) TO ACCOMMODATE PROPOSED WIDENING

CARRIAGEWAY WIDENED TO INCLUDE AHEAD AND LEFT TURN LANE

SHARED USE CYCLEWAY UPGRADED (CD143)

3 LANE APPROACH TO JUNCTION TO INCORPORATE ACCESS TO NEW SITE

PLEASE REFER TO DRAWING B033920-TTE-00-ZZ-PL-H-0002 FOR SITE ACCESS DESIGN DETAILS

VRS SYSTEM OMITTED FROM THE DRAWING AT THIS STAGE. EVERY SHARED USED CYCLEWAY DEVELOPED ON THE ROUNDABOUT WILL REQUIRE NEW VRS INSTALLATION ONCE LAYOUT AGREED.

DRAWING BASED ON OS MAPPING, TOPOGRAPHICAL SURVEY REQUIRED TO OMIT ANY DISCREPANCIES

0 10 20 30 40 50m
SCALE 1:1000

NOTES

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.

PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App
P01	PRELIMINARY FIRST ISSUE	22.04.2024	LJB GW NB

Document Control

Issuing Office
Tetra Tech Manchester
2nd Floor,11 York Street,
Manchester, United Kingdom
M2 2AW
Tel: +44 (0)161 872 3223
www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10 ROUNDABOUT IMPROVEMENT

Sheet Title

PROPOSED APPEAL SITE IMPROVEMENTS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A0	Suitability
784-B033920	LJB	Apr '24	GW	Apr '24	NB	Apr '24	As Shown	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	SK	H	1001	P01

TTE_MT_v1

Appendix E: Local Plan Case. M42 Jn10 Proposed Improvements with Local Plan Improvements: TT Drawing 784-B033920-TTE-00-ZZ-DR-H-1002 Rev P01

N

PROPOSED 2.5m FOOTWAY/CYCLEWAY

SPEED CAMERA SIGNAGE TO BE RELOCATED

EXISTING FOOTWAY

PENNINE WAY UNCONTROLLED CROSSSING POINT

CYCLEWAY BOUNDARY PAVING-CORDUROY

POTENTIAL LOCATION FOR RELOCATED SPEED CAMERA SIGNAGE

EXISTING FOOTWAY

EXISTING HEDGES/VEGETATION TO BE TRIMMED BACK TO ACCOMMODATE PROPOSED 2.5m SHARED USE ARRANGEMENT

NEW 50mph SPEED LIMIT STARTS 120m WEST OF PENNINE WAY BRIDGE

SHARED USE CYCLEWAY TIES IN TO PROPOSED 2.5m SHARED USE ARRANGEMENT AND A CROSSING POINT IS PROVIDED ON THE OTHER SIDE OF THE ROUNDABOUT AT PENNINE WAY.

EXISTING 1m HARDSTRIP

PROPOSED SHARED USE CYCLEWAY

PENNINE WAY MERGE TO AS:
1m HARDSTRIP RETAINED WITH A 0.5m SEPARATION STRIP WHICH DELINEATES THE PROPOSED 2m SHARED USE CYCLEWAY/FOOTWAY

AS WEST APPROACH:
LANE GAIN FROM PENNINE WAY MERGE, WIDENING TO THREE LANES CREATES A PINCH POINT DUE TO THE HIGHWAY BOUNDARY FENCING, THEREFORE A REDUCTION IN LANE WIDTHS TO 3.1m HAS BEEN IMPLEMENTED.

PLEASE REFER TO INSERT C FOR FURTHER INFORMATION AT PINCH POINT

FACE OF WALL

EXTENT OF DEPARTURE

PROPOSED UNCONTROLLED CROSSING

START OF ROUNDABOUT FLARE

AS WEST APPROACH:
LANE GAIN FROM PENNINE WAY MERGE, WIDENING TO FOUR LANES AT J10 STOP LINE. REVISED KINSALL GREEN ACCESS. WIDENED SHARED USE ROUTE CONSIDERATIONS OF SIGNAGE AND LIGHTING ADJUSTMENTS WOULD NEED TO BE UNDERTAKEN AT A LATER STAGE.

TIES INTO KINSALL GREEN PROPOSALS

GREEN LANE:
ROUNDABOUT EXIT REDUCED TO 1 LANE APPROACHING NEW TOUCAN CROSSING FOR SHARED USE ROUTE IN CENTRAL RESERVE. EXISTING FOOTWAY ROUTE TO BE UPGRADED.

TO ENSURE THE ROUNDABOUT IS CD143 COMPLIANT THE SHARED USE ROUTE REQUIRES WIDENING. ADDITIONAL WORK WILL BE REQUIRED REGARDING THE EXISTING NATIONAL HIGHWAYS EMBANKMENTS/SLOPES.

PROPOSED SHARED USE CYCLEWAY

PROPOSED CONTROLLED CROSSING

RESTRICTED TO 2.74m ON THIS SIDE DUE TO THE BRIDGE DECK.

PROPOSED SHARED USE CYCLEWAY

PROPOSED CONTROLLED CROSSING

WIDENING TO FOUR LANES OPPOSITE GREEN LANE. SHARED USE ROUTE IMPROVED FROM AS TO GREEN LANE WITH NEW TOUCAN CROSSINGS. REVISED ROAD MARKINGS, SIGNING AND SIGNALS.

3m MAINTENANCE TRACK AT BOTTOM OF EMBANKMENT

A5 EASTBOUND- REDUCED SPEED LIMIT TO 50mph

CARRIAGEWAY WIDENED TO INCLUDE AHEAD AND LEFT TURN LANE

EXISTING EMBANKMENT TO BE RE-GRADED (MAX 1:3 SLOPE) TO ACCOMMODATE PROPOSED WIDENING

SHARED USE CYCLEWAY UPGRADED (CD143)

PROPOSED SHARED USE ROUTE DEVELOPED AS PART OF THE A5 EAST IMPROVEMENT

3 LANE APPROACH TO JUNCTION TO INCORPORATE ACCESS TO NEW SITE

TO ENSURE THE ROUNDABOUT IS CD143 COMPLIANT THE SHARED USE ROUTE REQUIRES WIDENING. ADDITIONAL WORK WILL BE REQUIRED REGARDING THE EXISTING NATIONAL HIGHWAYS EMBANKMENTS/SLOPES.

AMENDED LAYOUT TAKEN FROM THE PJ ASSOCIATES DRAWING AS PART OF THE NH LOCAL PLAN IMPROVEMENTS

AMENDED LAYOUT TAKEN FROM THE PJ ASSOCIATES DRAWING AS PART OF THE NH LOCAL PLAN IMPROVEMENTS. ADDITIONAL LANE ADDED.

PLEASE REFER TO DRAWING B033920-TTE-00-XZ-PL-H-0002 FOR SITE ACCESS DESIGN DETAILS

VRS SYSTEM OMITTED FROM THE DRAWING AT THIS STAGE. EVERY SHARED USED CYCLEWAY DEVELOPED ON THE ROUNDABOUT WILL REQUIRE NEW VRS INSTALLATION ONCE LAYOUT AGREED.

DRAWING BASED ON OS MAPPING, TOPOGRAPHICAL SURVEY REQUIRED TO OMIT ANY DISCREPANCIES

NOTES

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.

0 10 20 30 40 50 m
SCALE 1:1000

PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App
P01	PRELIMINARY FIRST ISSUE	22.04.2024	LJB GW NB

Document Control

Issuing Office
Tetra Tech Manchester
2nd Floor,11 York Street,
Manchester, United Kingdom
M2 2AW
Tel: +44 (0)161 872 3223
www.tetratecheurope.com

TETRA TECH

Client
HODGETTS ESTATES

Project Name
M42 JUNCTION 10 ROUNDABOUT IMPROVEMENT SCHEME

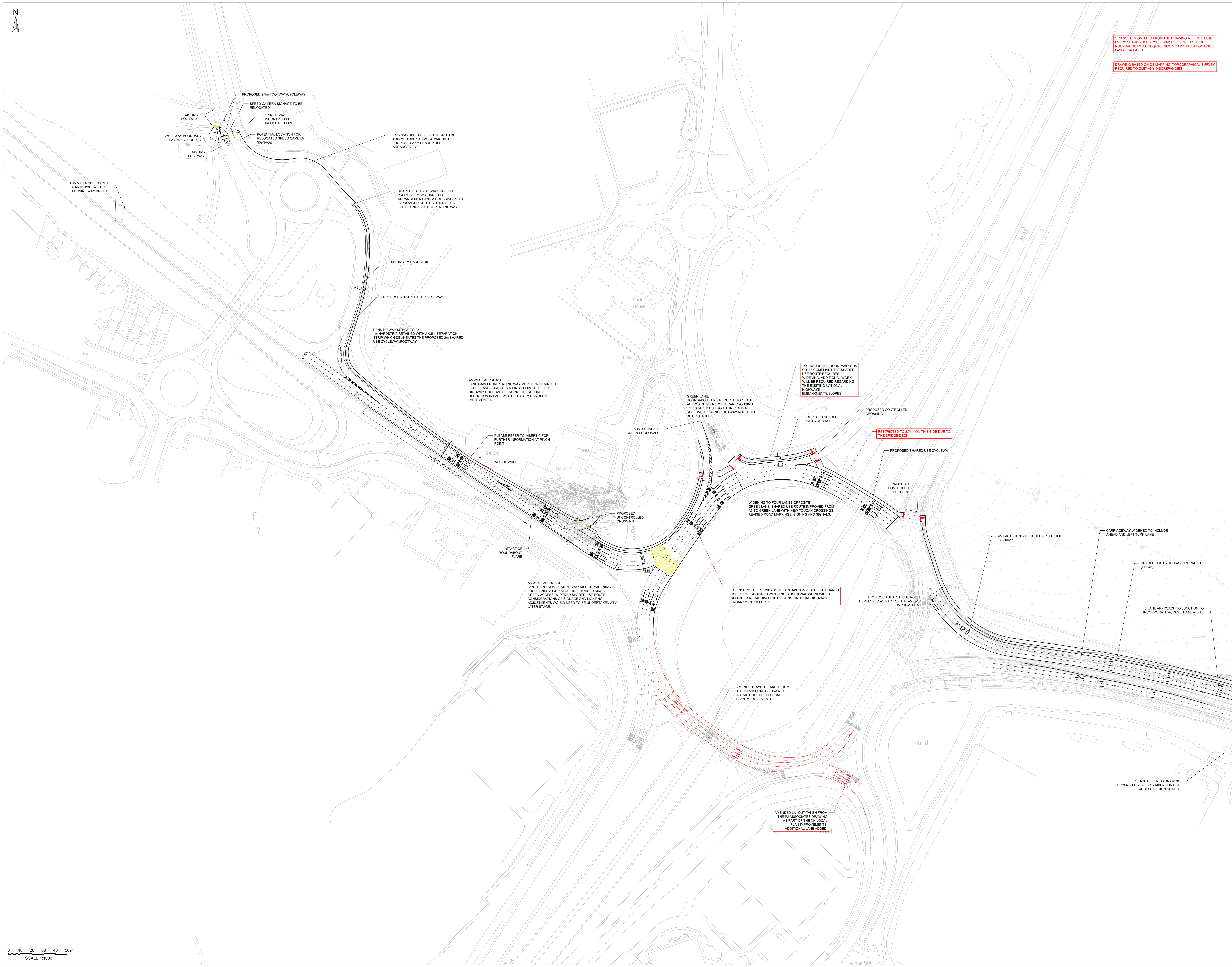
Sheet Title
PROPOSED APPEAL SITE IMPROVEMENTS AND NWBC LOCAL PLAN IMPROVEMENTS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A0	Suitability
784-B033920	LJB	Apr '24	GW	Apr '24	NB	Apr '24	As Shown	S0

Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00 - ZZ	DR	H	1002	P01

TTE_MT_v1

Appendix F: Local Plan Case. M42 Jn10 Proposed Improvements with Local Plan Improvements Plus Additional Mitigation: TT Drawing 784-B033920-TTE-00-ZZ-DR-H-1003 Rev P01


N
PROPOSED 2.5m FOOTWAY/CYCLEWAY
SPEED CAMERA SIGNAGE TO BE RELOCATED
EXISTING FOOTWAY
PENNINE WAY UNCONTROLLED CROSSSING POINT
CYCLEWAY BOUNDARY PAVING-CORDUROY
POTENTIAL LOCATION FOR RELOCATED SPEED CAMERA SIGNAGE
EXISTING FOOTWAY
EXISTING HEDGES/VEGETATION TO BE TRIMMED BACK TO ACCOMMODATE PROPOSED 2.5m SHARED USE ARRANGEMENT
NEW 50mph SPEED LIMIT STARTS 120m WEST OF PENNINE WAY BRIDGE
SHARED USE CYCLEWAY TIES IN TO PROPOSED 2.5m SHARED USE ARRANGEMENT AND A CROSSING POINT IS PROVIDED ON THE OTHER SIDE OF THE ROUNDABOUT AT PENNINE WAY.
EXISTING 1m HARDSTRIP
PROPOSED SHARED USE CYCLEWAY
PENNINE WAY MERGE TO A5: 1m HARDSTRIP RETAINED WITH A 0.5m SEPARATION STRIP WHICH DELINEATES THE PROPOSED 2m SHARED USE CYCLEWAY/FOOTWAY
A5 WEST APPROACH: LANE GAIN FROM PENNINE WAY MERGE, WIDENING TO THREE LANES CREATES A PINCH POINT DUE TO THE HIGHWAY BOUNDARY FENCING, THEREFORE A REDUCTION IN LANE WIDTHS TO 3.1m HAS BEEN IMPLEMENTED.
PLEASE REFER TO INSERT C FOR FURTHER INFORMATION AT PINCH POINT
FACE OF WALL
EXTENT OF DEPARTURE
WATLING STREET
ROMAN ROAD
PROPOSED UNCONTROLLED CROSSING
START OF ROUNDABOUT FLARE
A5 WEST APPROACH: LANE GAIN FROM PENNINE WAY MERGE, WIDENING TO FOUR LANES AT J10 STOP LINE. REVISED KINSALL GREEN ACCESS. WIDENED SHARED USE ROUTE. CONSIDERATIONS OF SIGNAGE AND LIGHTING ADJUSTMENTS WOULD NEED TO BE UNDERTAKEN AT A LATER STAGE.
Pacific House
Trees
Garage
TIES INTO KINSALL GREEN PROPOSALS
GREEN LANE: ROUNDABOUT EXIT REDUCED TO 1 LANE APPROACHING NEW TOUCAN CROSSING FOR SHARED USE ROUTE IN CENTRAL RESERVE. EXISTING FOOTWAY ROUTE TO BE UPGRADED.
TO ENSURE THE ROUNDABOUT IS CD143 COMPLIANT THE SHARED USE ROUTE REQUIRES WIDENING. ADDITIONAL WORK WILL BE REQUIRED REGARDING THE EXISTING NATIONAL HIGHWAYS EMBANKMENTS/SLOPES.
PROPOSED SHARED USE CYCLEWAY
PROPOSED CONTROLLED CROSSING
RESTRICTED TO 2.74m ON THIS SIDE DUE TO THE BRIDGE DECK.
PROPOSED SHARED USE CYCLEWAY
PROPOSED CONTROLLED CROSSING
WIDENING TO FOUR LANES OPPOSITE GREEN LANE. SHARED USE ROUTE IMPROVED FROM A5 TO GREEN LANE WITH NEW TOUCAN CROSSINGS. REVISED ROAD MARKINGS, SIGNING AND SIGNALS.
TO ENSURE THE ROUNDABOUT IS CD143 COMPLIANT THE SHARED USE ROUTE REQUIRES WIDENING. ADDITIONAL WORK WILL BE REQUIRED REGARDING THE EXISTING NATIONAL HIGHWAYS EMBANKMENTS/SLOPES.
A5 EASTBOUND- REDUCED SPEED LIMIT TO 50mph
CARRIAGEWAY WIDENED TO INCLUDE AHEAD AND LEFT TURN LANE
SHARED USE CYCLEWAY UPGRADED (CD143)
PROPOSED SHARED USE ROUTE DEVELOPED AS PART OF THE A5 EAST IMPROVEMENT
3 LANE APPROACH TO JUNCTION TO INCORPORATE ACCESS TO NEW SITE
A5 EAST
M 42
AMENDED LAYOUT TAKEN FROM THE PJ ASSOCIATES DRAWING AS PART OF THE NH LOCAL PLAN IMPROVEMENTS
Pond
PLEASE REFER TO DRAWING B033920-TTE-00-ZZ-PL-H-0002 FOR SITE ACCESS DESIGN DETAILS
AMENDED LAYOUT TAKEN FROM THE PJ ASSOCIATES DRAWING AS PART OF THE NH LOCAL PLAN IMPROVEMENTS. ADDITIONAL LANE ADDED.
El Sub Sta
VRS SYSTEM OMITTED FROM THE DRAWING AT THIS STAGE. EVERY SHARED USED CYCLEWAY DEVELOPED ON THE ROUNDABOUT WILL REQUIRE NEW VRS INSTALLATION ONCE LAYOUT AGREED.
DRAWING BASED ON OS MAPPING. TOPOGRAPHICAL SURVEY REQUIRED TO OMIT ANY DISCREPANCIES.
0 10 20 30 40 50m
SCALE 1:1000

NOTES

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.

PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App		
P01	PRELIMINARY FIRST ISSUE	22.04.2024	LJB	GW	NB

Document Control

Issuing Office

Tetra Tech Manchester
2nd Floor,11 York Street,
Manchester, United Kingdom
M2 2AW
Tel: +44 (0)161 872 3223
www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10 ROUNDABOUT IMPROVEMENT SCHEME

Sheet Title

PROPOSED APPEAL SITE IMPROVEMENTS WITH ADDITIONAL MITIGATION AND NWBC LOCAL PLAN IMPROVEMENTS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A0	Suitability
784-B033920	LJB	Apr '24	GW	Apr '24	NB	Apr '24	As Shown	S0

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920 -	TTE -	00 -	ZZ -	DR -	H -	1003	P01

TTE_MT_v1

Appendix G: NH Email 2 May 2024

Bunn, Nick

From: Patrick Thomas <Patrick.Thomas@nationalhighways.co.uk>
Sent: 02 May 2024 09:05
To: Bunn, Nick; Wakenshaw, Gareth; dwh@hodgettsestates.co.uk
Cc: Baran, Lukasz; Morris, Chris; roger.dickinson@aecom.com; Broad, Mike; 'Warrington, James'; Alice Langford
Subject: RE: M42 Jn10 A5/ Site access drawings
Attachments: L W Dordon Rd Design Feedback_V1 Issue.docx; Combined Feb 2024 Drawing Pack_MDM Comments.pdf; B033920-TTE-00-ZZ-SK-H-1001 Overall LayoutA.pdf; B033920-TTE-00-ZZ-SK-H-1002 Local Plan.pdf; B033920-TTE-00-ZZ-SK-H-1003 Local Plan with Additional Lane.pdf

Nick,

We have completed a review of the revised proposed improvements, which include the site access drawings.

Please see attached word document detailing our feedback on the site access drawings. In addition to design feedback in relation to the additional local plan design drawings.

In summary, our comments on the local plan design drawings conclude that the improvement scheme is acceptable in principle. Notwithstanding, our comments include recommended changes that we consider could improve the scheme, but these can be dealt at the next stage of the design process.

In relation to our review of the updated TRANSYT models, we are content that they now mitigate the impact of the development from a modelling perspective. As part of this, we have reviewed the Technical Note that has been submitted along with the Local Plan model.

We understand that the M42 J10 scheme been modelled both separately and in conjunction with Local Plan improvements at the M42 J10:

- As such, the following model was submitted in March 2024 to replicate the proposed highway layout if the Local Plan improvements were not implemented:
  - 2. M42 Jn10 and A5 – Exist With Ref Case Pen Way & Dordon v7 Site Access & Mitig With Development.t16

- The following updated model has then been submitted in April 2024 to replicate the proposed highway layout if the Local Plan improvements were implemented:
  - 5a. M42 Jn10 and A5 – Local Plan Model v7 with Site Access & Addl Mitigation With Dev.t16

Asset Lead feedback

I have approached National Highways Asset Leads who have also undertaken a review of the proposals on the various asset types, the summary of their feedback is provided below:

Vehicle Restraint System

No VRS details appear to be on the drawings provided. A Road Restraint Risk Assessment Process (RRRAP) should be carried out for the extent of the Works and VRS drawings provided based on the RRRAP output.

Earthworks/Retaining structures

As indicated on the sections, some new embankment shoulders, abutting the existing A5 embankment, have been proposed to create space for the cycleway and additional lane. A review of the cross section drawings indicate the proposed side slope gradient is 1v in 3h, which is sensible from a geotech perspective. Since the proposal involves modification of the SRN and geotechnical assets, the applicant should provide a geotechnical report in accordance with design standard CD622, outlining their intentions and confirming that they will not impose any geotechnical risk to SRN assets. It is worth noting that there appears to be a number of minor structures (signs, lighting columns). Considerations will be required for the foundation design and the interaction with the embankment shoulders.

Other considerations:

- With regard to the proposed cycle route, it would be useful to understand if there is an intention to extend the signalisation of the crossing points to include M42 J10 to provide a continuous safe route. This looks to be the case having looked at the additional drawing – But needs confirmation.
- The plans indicate that both laybys on the East and Westbound A5 will be removed. There is currently limited provision for rest breaks along the A5. It would be useful to understand the proposal for alternative provision for drivers.
- With only one entrance and exit directly onto the A5, future maintenance of the A5 will involve closing access to the business park.
- Concerns over additional signalisation possibly causing queueing onto M42 J10 and the slip roads. In addition, what are the queues like from the M42 J10 in to the area of this junction. We don't want right turners out of the development blocking the eastbound movement at peak times.
- Is there a proposal to improve the footway to the westbound carriageway? Is the proposal for the new foot/cycleway to be privately maintained? If so, we will have two facilities parallel to each other?
- The potential link of the footway to Birch Coppice should be a definite link, and the footway should also tie into Core 42. As both these traffic signals have crossing facilities for both pedestrians and cyclists.

Kind Regards
Patrick

Patrick Thomas, Spatial Planner
Operations Directorate (Midlands)
National Highways | The Cube | 199 Wharfside Street | Birmingham | B1 1RN
Mobile: + 44 (0) 7500 099649
Web: www.nationalhighways.co.uk

From: Baran, Lukasz <Lukasz.Baran@tetratech.com>
Sent: Tuesday, April 2, 2024 2:29 PM
To: Bunn, Nick <Nick.Bunn@tetratech.com>; Patrick Thomas <Patrick.Thomas@nationalhighways.co.uk>; Morris, Chris <chris.morris1@aecom.com>; roger.dickinson@aecom.com; Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>; dwh@hodgettsestates.co.uk
Cc: 'Warrington, James' <james.warrington@wsp.com>; Broad, Mike <MIKE.BROAD@tetratech.com>
Subject: RE: M42 Jn10 A5/ Site access drawings

Hi Patrick,

Appendix H: Agreed 2026 Reference Case TRANSYT Results

Table 5.2a: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2026 Reference Case (v7 models)

Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	AM Peak		PM Peak	
				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	0 6 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 6 secs	1 6 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 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	4 10 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 1 secs
B5080 Pennine Way South/ A5 Westbound On/ Off 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	1 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	0 6 secs	0 6 secs	1 9 secs	2 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	6 25 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	10 1m 9s
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 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	10 46 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	6 27 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	23 19 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	11 14 secs	8 19 secs	24 31 secs	27 35 secs
8/1 + 9/1 + 11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	28 2m 17s	5 13 secs	12 1m 1s	5 16 secs

8/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	4 15 secs	8 18 secs	5 22 secs	9 22 secs
8/3 + 9/2 + 11/2 + 69/2 + 70/2	A5 Eastbound Lane 3	1900	Queue Aver Delay	29 2m 23s	8 19 secs	11 44 secs	4 14 secs
8/4	A5 Eastbound Lane 4	1900	Queue Aver Delay	N/A	10 18 secs	N/A	8 17 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	3 19 secs	4 21 secs	5 18 secs	6 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	9 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 47s
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	1 3 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	N/A	1 2 secs	N/A	2 2 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 25 secs	1 26 secs	1 19 secs	1 20 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 28 secs	1 27 secs	5 33 secs	5 50 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	1 26 secs	1 26 secs	4 26 secs	4 36 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	16 9 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	10 6 secs	7 7 secs	10 10 secs	10 7 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	9 7 secs	9 9 secs	6 10 secs	6 8 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 4 secs	1 3 secs	2 6 secs	1 4 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 + 25/1	A5 Westbound Lane 3	1851	Queue Aver Delay	10 34 secs	10 28 secs	12 30 secs	12 45 secs
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	3 18 secs	7 19 secs	9 32 secs	11 50 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	6 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 45 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	9 12 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	13 10 secs	11 10 secs	3 7 secs	4 7 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	7 8 secs	9 9 secs	4 10 secs	5 13 secs
A5/ Proposed Site Access							
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	7 15 secs	N/A	11 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	4 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	0 41 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	N/A	1 37 secs	N/A	1 36 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	N/A	1 41 secs	N/A	2 41 secs
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	N/A	1 42 secs	N/A	2 42 secs
A5/ Birch Coppice							
31/1	A5 Eastbound Ahead Lane 1	1814	Queue Aver Delay	1 17 secs	1 16 secs	2 18 secs	8 20 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 13 secs	2 17 secs	1 16 secs	2 17 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	10 1m 14s	9 1m 26s	4 57 secs	6 55 secs
32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	9 1m 15s	12 1m 58s	3 50 secs	3 52 secs
37/1	A5 Westbound Left Turn Lane 1	1751	Queue Aver Delay	3 23 secs	3 22 secs	1 18 secs	1 16 secs
37/2 + 38/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	10 43 secs	10 48 secs	18 1 min	18 1m 11s
37/3 + 38/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	11 48 secs	11 53 secs	16 58 secs	16 1m 10s
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	4 27 secs	5 27 secs	4 21 secs	5 22 secs

42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	3 25 secs	3 26 secs	5 21 secs	5 21 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	2 28 secs	2 28 secs	3 23 secs	3 23 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 7 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 30s
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	8 9 secs	8 10 secs	5 10 secs	5 9 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	5 7 secs	5 8 secs	4 9 secs	5 9 secs
51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	2 2m 49s	2 2m 31s	2 54 secs	2 57 secs
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	0 7m 56s	1 7m 8s	1 3m 58s	1 3m 59s
A5/ Dordon Roundabout							
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	4 17 secs	7 21 secs	6 19 secs	12 22 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 14 secs
97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	0 12 secs	0 12 secs	1 12 secs	1 13 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

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

Appendix I: Agreed 2033 Reference Case TRANSYT Results

Table 5.3a: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2033 Reference Case (v7 models)

Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	AM Peak		PM Peak	
				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	12 1m 58s	2 8 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	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 6 secs	1 6 secs	4 10 secs	4 12 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0 4 secs	1 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 7s	0 2 secs	1 9 secs	0 1 sec
B5080 Pennine Way South/ A5 Westbound On/ Off Slip Road							
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	0 5 secs	1 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 6 secs	0 7 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	1 7 secs	15 42 secs	10 38 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	0 6 secs	1 6 secs	12 1m 26s	16 1m 44s
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 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 1m 1s	12 58 secs
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 15 secs	2 25 secs	2 24 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	1 13 secs	1 13 secs	8 33 secs	7 31 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	4 18 secs	6 23 secs	7 28 secs	7 28 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	4 17 secs	3 17 secs	7 27 secs	8 31 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	16 19 secs	3 16 secs	20 19 secs	23 20 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	12 15 secs	8 21 secs	26 36 secs	27 36 secs

8/1 + 9/1 + 11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	46 3m 15s	7 13 secs	16 1m 20s	5 15 secs
8/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	3 15 secs	10 31 secs	5 23 secs	10 25 secs
8/3 + 9/2 + 11/2 + 69/2 + 70/2	A5 Eastbound Lane 3	1900	Queue Aver Delay	53 3m 50s	9 28 secs	12 55 secs	4 15 secs
8/4	A5 Eastbound Lane 4	1900	Queue Aver Delay	N/A	11 21 secs	N/A	8 18 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	3 19 secs	3 21 secs	4 18 secs	6 18 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	5 21 secs	3 19 secs	7 19 secs	2 16 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	5 18 secs	5 22 secs	7 18 secs	5 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 41 secs	5 39 secs	5 38 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	5 58 secs	5 1m 2s	17 2m 14s	15 2m 10s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	9 7 secs	4 3 secs	8 9 secs	2 2 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	5 8 secs	12 12 secs	8 11 secs	10 8 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	1 3 secs	11 11 secs	1 3 secs	9 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	2 2 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 25 secs	1 26 secs	1 19 secs	1 20 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 28 secs	1 26 secs	5 36 secs	6 57 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	1 25 secs	1 26 secs	3 27 secs	4 37 secs
A16/1	Green Lane Toucan Crossing	2213	Queue Aver Delay	N/A	2 2 secs	N/A	2 2 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	5 5 secs	8 7 secs	3 7 secs	15 9 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	8 6 secs	7 7 secs	10 11 secs	10 7 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	9 8 secs	12 9 secs	8 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	8 20 secs	6 20 secs	7 19 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	2 18 secs	6 24 secs	4 18 secs	5 19 secs

23/3 + 24/1 + 25/1	A5 Westbound Lane 3	1851	Queue Aver Delay	10 35 secs	10 28 secs	12 38 secs	14 56 secs
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	3 18 secs	8 19 secs	13 56 secs	14 1m 11s
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	8 16 secs	5 14 secs	12 20 secs	8 17 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	3 12 secs	5 21 secs	3 14 secs	7 15 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 11 secs	2 11 secs	2 13 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	5 32 secs	4 33 secs	18 1m 52s	13 2m 29s
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	5 35 secs	5 32 secs	6 48 secs	6 49 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	10 9 secs	6 9 secs	6 8 secs	3 6 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	9 9 secs	9 12 secs	6 10 secs	10 12 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	14 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 13 secs	5 14 secs
A5/ Proposed Site Access							
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	8 16 secs	N/A	11 12 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	N/A	5 14 secs	N/A	12 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 10 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	N/A	1 9 secs	N/A	4 10 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	N/A	1 43 secs	N/A	1 42 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	N/A	1 39 secs	N/A	1 35 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	N/A	1 42 secs	N/A	2 45 secs
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	N/A	1 40 secs	N/A	2 43 secs
A5/ Birch Coppice							
31/1	A5 Eastbound Ahead Lane 1	1814	Queue Aver Delay	1 17 secs	2 16 secs	3 19 secs	9 20 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 14 secs	2 21 secs	1 16 secs	3 18 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	11 1m 19s	15 1m 56s	5 56 secs	6 59 secs
32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	10 1m 33s	12 2m 17s	4 54 secs	4 54 secs

37/1	A5 Westbound Left Turn Lane 1	1751	Queue Aver Delay	3 23 secs	3 23 secs	1 17 secs	1 16 secs
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	10 45 secs	11 49 secs	20 1m 16s	22 1m 28s
37/3 + 38/2 + 53/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	11 52 secs	11 1m 11s	21 1m 20s	20 1m 29s
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	4 27 secs	6 27 secs	5 22 secs	5 22 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	4 25 secs	3 26 secs	5 21 secs	6 22 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	2 28 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 3 secs	3 5 secs	3 7 secs	5 8 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 1 sec	1 1 sec	2 2 secs	2 2 secs
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	2 1 min	1 1m 2s	1 1m 18s	2 1m 22s
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	7 9 secs	8 10 secs	6 10 secs	6 11 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	4 7 secs	5 7 secs	5 9 secs	6 10 secs
51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	2 2m 54s	2 2m 50s	1 55 secs	2 1m 11s
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	1 7m 26s	1 7m 12s	1 4m 12s	1 3m 47s
A5/ Dordon Roundabout							
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	4 18 secs	6 22 secs	7 20 secs	14 25 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 34 secs	2 42 secs	1 38 secs	2 40 secs
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	9 23 secs	10 27 secs	4 15 secs	5 16 secs
97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	0 12 secs	1 13 secs	0 13 secs	1 13 secs
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 22 secs	0 22 secs	0 21 secs	0 21 secs

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

Appendix J: Agreed 2033 Local Plan Case TRANSYT Results

Table 5.4b: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2033 Local Plan (v7 models)

Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	AM Peak		PM Peak	
				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 20 secs	6 36 secs	1 9 secs	2 19 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	6 15 secs	6 14 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	1 7 secs	0 7 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	7 26 secs	13 41 secs	5 30 secs	14 1 min
B5080 Pennine Way South/ A5 Westbound On/ Off 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 + 6/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1 8 secs	1 8 secs	38 1m 38s	39 1m 38s
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 4 secs	0 5 secs	0 7 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 49s	24 2m 53s
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	13 49 secs	13 50 secs
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 15 secs	6 29 secs	6 29 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	1 13 secs	1 13 secs	4 1m 7s	4 1m 8s
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	6 23 secs	7 27 secs	12 43 secs	14 50 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	3 18 secs	4 18 secs	11 39 secs	12 46 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	12 17 secs	12 18 secs	20 24 secs	23 26 secs
7/3	M42 Northbound Circulating Lane 3	1840	Queue Aver Delay	13 19 secs	15 24 secs	18 51 secs	19 50 secs

7/4	M42 Northbound Circulating Lane 4	1840	Queue Aver Delay	3 9 secs	2 8 secs	1 10 secs	1 10 secs
8/1 + 9/1 + 11/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	8 25 secs	12 33 secs	6 42 secs	6 43 secs
8/2 + 9/2 + 11/2 + 69/1 + 70/1	A5 Eastbound Lane 2	1900	Queue Aver Delay	32 1m 38s	46 2m 11s	34 2m 38s	54 3m 49s
8/3	A5 Eastbound Lane 3	1900	Queue Aver Delay	4 17 secs	5 21 secs	8 39 secs	9 44 secs
8/4 + 9/3 + 11/3 + 69/2 + 70/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	34 1m 36s	35 1m 52s	23 1m 55s	36 3m 24s
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	4 21 secs	5 22 secs	4 19 secs	5 19 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	1 18 secs	2 20 secs	2 17 secs	3 17 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	7 22 secs	7 24 secs	9 22 secs	8 22 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	7 24 secs	8 29 secs	11 26 secs	12 27 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	4 44 secs	4 45 secs	5 42 secs	5 41 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	6 1m 7s	6 1m 10s	20 2m 55s	20 2m 58s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	1 2 secs	2 4 secs	2 2 secs	2 3 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	16 14 secs	16 13 secs	17 16 secs	16 15 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	10 11 secs	11 11 secs	16 17 secs	17 18 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	1 3 secs	1 4 secs	4 5 secs	5 5 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	2 21 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 26 secs	2 27 secs	2 23 secs	7 1m 6s
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	2 27 secs	2 26 secs	4 55 secs	5 1 min
A16/1	M42 Northbound Onslip Toucan Crossing	2213	Queue Aver Delay	N/A	2 3 secs	N/A	3 2 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	15 7 secs	20 7 secs	13 10 secs	13 11 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	16 6 secs	17 7 secs	13 11 secs	14 11 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	21 10 secs	21 11 secs	9 12 secs	8 11 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 4 secs	1 3 secs	1 9 secs	1 11 secs
23/1 + 24/1 + A25/1 +39/1	A5 Westbound Lane 1	1930	Queue Aver Delay	15 37 secs	9 38 secs	12 1m 29s	22 1m 4s
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	7 30 secs	5 30 secs	6 34 secs	8 38 secs

23/3 + 24/2 + A25/2 + 39/2	A5 Westbound Lane 3	1851	Queue Aver Delay	9 25 secs	6 26 secs	15 1m 47s	17 59 secs
23/4 + 24/3	A5 Westbound Lane 4	1851	Queue Aver Delay	12 31 secs	9 34 secs	7 1m 17s	9 1m 56s
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	12 22 secs	13 23 secs	15 22 secs	14 21 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	6 19 secs	7 19 secs	6 15 secs	5 15 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	1 11 secs	1 11 secs	1 12 secs	1 12 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	2 12 secs	2 11 secs	5 35 secs	5 37 secs
28/1	Trinity Road Lane 1	1669	Queue Aver Delay	4 44 secs	4 43 secs	3 29 secs	3 29 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	2 39 secs	2 39 secs	2 26 secs	2 27 secs
28/3 + 29/1	Trinity Road Lane 3	1669	Queue Aver Delay	9 1m 1s	8 58 secs	14 1m 35s	14 1m 43s
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	11 8 secs	12 8 secs	6 9 secs	7 10 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	15 10 secs	15 10 secs	9 14 secs	9 15 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	11 7 secs	11 7 secs	2 6 secs	3 7 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	13 8 secs	13 8 secs	7 27 secs	7 27 secs
A5/ Proposed Site Access							
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	13 16 secs	N/A	17 14 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	N/A	11 15 secs	N/A	13 13 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	N/A	4 8 secs	N/A	5 6 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	N/A	2 13 secs	N/A	4 20 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	N/A	2 13 secs	N/A	4 20 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	N/A	1 42 secs	N/A	0 42 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 41 secs	N/A	2 1m 14s
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	N/A	1 42 secs	N/A	2 1m 11s
A5/ Birch Coppice							
31/1	A5 Eastbound Ahead Lane 1	1814	Queue Aver Delay	1 9 secs	2 11 secs	2 13 secs	2 14 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	2 11 secs	7 10 secs	2 11 secs	3 12 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	13 1m 43s	12 1m 39s	6 1m 4s	6 59 secs
32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	14 2m 14s	15 2m 24s	4 55 secs	4 54 secs

37/1	A5 Westbound Left Turn Lane 1	1751	Queue Aver Delay	2 13 secs	2 13 secs	2 15 secs	2 15 secs
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	10 41 secs	11 44 secs	13 31 secs	14 34 secs
37/3 + 38/2 + 53/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	12 50 secs	13 54 secs	12 32 secs	13 35 secs
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	7 44 secs	6 44 secs	6 37 secs	7 40 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	4 38 secs	5 39 secs	8 37 secs	7 40 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	3 41 secs	3 42 secs	7 47 secs	8 48 secs
A5/ Core 42							
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	2 3 secs	3 4 secs	3 4 secs	2 4 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 1 sec	1 1 sec	2 3 secs	2 3 secs
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	2 1m 5s	2 1m 3s	2 1m 30s	2 1m 27s
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	16 27 secs	17 29 secs	8 14 secs	7 15 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	14 25 secs	14 27 secs	6 12 secs	6 13 secs
51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	3 3 mins	3 3m 4s	3 1m 7s	2 1m 7s
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	1 8m 42s	1 7m 36s	3 4m 55s	3 4m 32s
A5/ Dordon Roundabout							
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	12 20 secs	11 20 secs	22 22 secs	23 22 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	12 19 secs	10 19 secs	24 21 secs	23 21 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	7 1m 4s	7 1m 18s	6 1m 31s	6 1m 33s
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	6 20 secs	6 21 secs	3 8 secs	3 8 secs
97/2 + 98/2	A5 Westbound Ahead Lane 2	N/A	Queue Aver Delay	5 18 secs	5 18 secs	3 7 secs	3 7 secs
111/1	A5 Westbound Right Turn Lane 3	N/A	Queue Aver Delay	2 49 secs	2 49 secs	5 1m 3s	4 1m 6s
100/1	Gypsy Lane	N/A	Queue Aver Delay	2 28 secs	2 28 secs	2 37 secs	2 37 secs

KEY	
#	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

Appendix K: Agreed 2033 Local Plan Additional Mitigation TRANSYT Results

Table 5.5a v2: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2033 Local Plan + Additional Mitigation (v7 models) – AM Peak

				AM Peak		
Traffic Stream(s)	**Lane**	**Saturation Flow pcu/hr**	**Model Output**	**No Dev**	**With Dev + Improv.**	**With Dev + Improv. Modified**
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 20 secs	5 20 secs	4 23 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 7 secs	1 7 secs	1 8 secs
60/1	A5 Eastbound Off Slip Lane 1	N/A	Queue Aver Delay	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
64/1 + 66/1 + 86/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	1 6 secs	1 6 secs	1 7 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	7 26 secs	4 17 secs	5 20 secs
B5080 Pennine Way South/ A5 Westbound On/ Off Slip Road						
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs
89/2	Southbound Overbridge Lane 2	N/A	Queue Aver Delay	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 7 secs
76/2 + 75/1 + 71/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1 8 secs	1 8 secs	1 8 secs
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 4 secs	0 5 secs	0 5 secs
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	1 6 secs	1 7 secs	1 7 secs
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 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	3 17 secs
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 15 secs	2 15 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	1 13 secs	1 13 secs	1 14 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	6 23 secs	9 34 secs	8 34 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	3 18 secs	3 17 secs	3 17 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	3 8 secs	2 8 secs	2 8 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	12 17 secs	14 20 secs	15 25 secs

7/3	M42 Northbound Circulating Lane 3	1840	Queue Aver Delay	13 19 secs	18 34 secs	13 19 secs
7/4	M42 Northbound Circulating Lane 4	1840	Queue Aver Delay	3 9 secs	2 8 secs	3 9 secs
8/1 + 9/1 + 11/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	8 25 secs	22 54 secs	17 45 secs
8/2 + 9/2 + 11/2 + 69/1 + 70/1	A5 Eastbound Lane 2	1900	Queue Aver Delay	32 1m 38s	27 1m 17s	34 1m 55s
8/3	A5 Eastbound Lane 3	1900	Queue Aver Delay	4 17 secs	9 31 secs	7 20 secs
8/4 + 9/3 + 11/3 + 69/2 + 70/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	34 1m 36s	22 1m 3s	13 44 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	4 21 secs	5 23 secs	5 22 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	1 18 secs	6 24 secs	3 20 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	7 22 secs	4 21 secs	8 27 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	7 24 secs	6 26 secs	6 25 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	4 44 secs	3 40 secs	3 41 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	6 1m 7s	8 1m 48s	7 1m 26s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	1 2 secs	14 9 secs	13 10 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	16 14 secs	8 7 secs	12 8 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	10 11 secs	15 12 secs	12 11 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	1 3 secs	1 5 secs	1 2 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	N/A	2 2 secs	2 2 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 25 secs	1 26 secs	1 26 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 26 secs	2 39 secs	2 27 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	2 27 secs	2 27 secs	2 26 secs
A16/1	M42 Northbound Onslip Toucan Crossing	2213	Queue Aver Delay	N/A	3 3 secs	3 3 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	15 7 secs	7 4 secs	13 7 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	16 6 secs	19 8 secs	12 6 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	21 10 secs	19 8 secs	18 8 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 4 secs	11 23 secs	11 7 secs
23/1 + 24/1 + A25/1	A5 Westbound Lane 1	1930	Queue Aver Delay	15 37 secs	19 1m 33s	7 27 secs

23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	7 30 secs	6 47 secs	4 24 secs
23/3 + 24/2	A5 Westbound Lane 3	1851	Queue Aver Delay	9 25 secs	9 36 secs	15 1 min
23/4 + 24/3 + A25/2	A5 Westbound Lane 4	1851	Queue Aver Delay	12 31 secs	9 37 secs	9 34 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	12 22 secs	5 15 secs	8 20 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	6 19 secs	17 50 secs	6 19 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	1 11 secs	1 11 secs	1 12 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	2 12 secs	2 12 secs	2 12 secs
28/1	Trinity Road Lane 1	1669	Queue Aver Delay	4 44 secs	4 44 secs	4 50 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	2 39 secs	2 39 secs	2 47 secs
28/3 + 29/1	Trinity Road Lane 3	1669	Queue Aver Delay	9 1m 1s	9 1m 7s	12 1m 27s
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	11 8 secs	10 8 secs	10 8 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	15 10 secs	16 13 secs	12 9 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	11 7 secs	13 8 secs	13 7 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	13 8 secs	13 9 secs	12 7 secs
A5/ Proposed Site Access						
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	14 16 secs	14 16 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	N/A	12 16 secs	12 16 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	N/A	4 8 secs	5 8 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	N/A	3 15 secs	2 12 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	N/A	3 16 secs	2 12 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	N/A	1 42 secs	1 42 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	N/A	1 36 secs	1 36 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	N/A	1 43 secs	1 41 secs
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	N/A	1 45 secs	1 40 secs
A5/ Birch Coppice						
31/1	A5 Eastbound Ahead Lane 1	1814	Queue Aver Delay	1 9 secs	2 11 secs	2 11 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	2 11 secs	7 12 secs	7 11 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	13 1m 43s	13 1m 52s	13 1m 43s

32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	14 2m 14s	14 2m 20s	15 2m 21s
37/1	A5 Westbound Left Turn Lane 1	1751	Queue Aver Delay	2 13 secs	2 13 secs	2 13 secs
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	10 41 secs	12 45 secs	11 40 secs
37/3 + 38/2 + 53/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	12 50 secs	13 55 secs	13 52 secs
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	7 44 secs	7 45 secs	7 44 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	4 38 secs	5 39 secs	5 38 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	3 41 secs	3 42 secs	3 42 secs
A5/ Core 42						
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	2 3 secs	3 4 secs	3 4 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	1 1 sec	1 1 sec	1 1 sec
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	2 1m 5s	2 1m 5s	2 1m 6s
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	16 27 secs	19 30 secs	17 30 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	14 25 secs	15 28 secs	14 28 secs
51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	3 3 mins	2 2m 46s	3 3m 3s
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	1 8m 42s	1 7m 18s	1 7m 51s
A5/ Dordon Roundabout						
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	12 20 secs	11 20 secs	11 20 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	12 19 secs	10 18 secs	10 18 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	7 1m 4s	7 1m 8s	8 1m 10s
98/1	A5 Westbound Left Turn Slip	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs
97/1 + 98/1	A5 Westbound Ahead Lane 1	N/A	Queue Aver Delay	6 20 secs	6 20 secs	7 20 secs
97/2 + 98/2	A5 Westbound Ahead Lane 2	N/A	Queue Aver Delay	5 18 secs	6 17 secs	7 17 secs
111/1	A5 Westbound Right Turn Lane 3	N/A	Queue Aver Delay	2 49 secs	2 48 secs	2 48 secs
100/1	Gypsy Lane	N/A	Queue Aver Delay	2 28 secs	2 29 secs	2 29 secs

KEY	
#	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

charleyTable 5.5a v2: M42/ Junction 10 + A5/ Birch Coppice + A5/ Core 42, 2033 Local Plan + Additional Mitigation (v7 models) – PM Peak

				AM Peak		
Traffic Stream(s)	**Lane**	**Saturation Flow pcu/hr**	**Model Output**	**No Dev**	**With Dev + Improv.**	**With Dev + Improv. Modified**
B5080 Pennine Way North/ A5 Eastbound On/ Off Slip Road						
54/1 + 55/1	Pennine Way North Lane 1	N/A	Queue Aver Delay	1 9 secs	1 7 secs	1 7 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 6 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
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs
64/1 + 66/1 + 86/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	6 15 secs	5 14 secs	5 15 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	1 7 secs	1 8 secs	1 8 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	5 30 secs	1 5 secs	1 5 secs
B5080 Pennine Way South/ A5 Westbound On/ Off Slip Road						
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs
89/2	Southbound Overbridge Lane 2	N/A	Queue Aver Delay	0 5 secs	1 5 secs	0 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	1 10 secs	2 10 secs	1 10 secs
76/2 + 75/1 + 71/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	38 1m 38s	37 1m 35s	38 1m 39s
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 7 secs	0 8 secs	0 8 secs
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 6 secs	0 6 secs	0 6 secs
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	25 2m 49s	22 2m 39s	25 2m 47s
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 5 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	13 49 secs	14 48 secs	13 48 secs
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	6 29 secs	5 29 secs	5 29 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	4 1m 7s	4 55 secs	4 1m 3s
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	12 43 secs	14 50 secs	15 51 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	11 39 secs	11 43 secs	12 43 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	7 11 secs	5 11 secs	5 10 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	20 24 secs	25 31 secs	20 25 secs

7/3	M42 Northbound Circulating Lane 3	1840	Queue Aver Delay	18 51 secs	22 46 secs	19 49 secs
7/4	M42 Northbound Circulating Lane 4	1840	Queue Aver Delay	1 10 secs	1 9 secs	1 10 secs
8/1 + 9/1 + 11/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	6 42 secs	10 43 secs	17 1m 11s
8/2 + 9/2 + 11/2 + 69/1 + 70/1	A5 Eastbound Lane 2	1900	Queue Aver Delay	34 2m 38s	19 1m 18s	15 57 secs
8/3	A5 Eastbound Lane 3	1900	Queue Aver Delay	8 39 secs	7 31 secs	3 14 secs
8/4 + 9/3 + 11/3 + 69/2 + 70/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	23 1m 55s	8 37 secs	11 32 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	4 19 secs	4 19 secs	4 19 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	2 17 secs	7 19 secs	3 17 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	9 22 secs	4 18 secs	8 21 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	11 26 secs	11 25 secs	11 23 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	5 42 secs	6 43 secs	6 42 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	20 2m 55s	20 3m 7s	20 3m 15s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	2 2 secs	5 6 secs	11 8 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	17 16 secs	7 7 secs	12 8 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	16 17 secs	15 18 secs	8 15 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	4 5 secs	1 4 secs	3 6 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	N/A	2 2 secs	2 2 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	2 21 secs	2 20 secs	1 21 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	2 23 secs	4 36 secs	7 1m 5s
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	4 55 secs	9 1m 46s	5 59 secs
A16/1	M42 Northbound Onslip Toucan Crossing	2213	Queue Aver Delay	N/A	2 2 secs	2 2 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	13 10 secs	3 6 secs	6 7 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	13 11 secs	13 11 secs	9 9 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	9 12 secs	14 14 secs	4 8 srecs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 9 secs	3 14 secs	6 15 secs
23/1 + 24/1 + A25/1	A5 Westbound Lane 1	1930	Queue Aver Delay	12 1m 29s	20 1m 3s	16 44 secs

23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	6 34 secs	8 40 secs	3 21 secs
23/3 + 24/2	A5 Westbound Lane 3	1851	Queue Aver Delay	15 1m 47s	15 56 secs	17 55 secs
23/4 + 24/3 + A25/2	A5 Westbound Lane 4	1851	Queue Aver Delay	7 1m 17s	11 2m 12s	12 2m 3s
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	15 22 secs	11 20 secs	8 18 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	6 15 secs	8 19 secs	12 22 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	1 12 secs	2 13 secs	2 13 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	5 35 secs	6 36 secs	6 36 secs
28/1	Trinity Road Lane 1	1669	Queue Aver Delay	3 29 secs	3 31 secs	4 32 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	2 26 secs	3 32 secs	2 24 secs
28/3 + 29/1	Trinity Road Lane 3	1669	Queue Aver Delay	14 1m 35s	20 2m 3s	13 1m 58s
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	6 9 secs	5 8 secs	6 9 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	9 14 secs	12 17 secs	12 17 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	2 6 secs	4 9 secs	4 8 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	7 27 secs	9 26 secs	9 26 secs
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	N/A	18 15 secs	20 16 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	N/A	17 16 secs	20 17 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	N/A	5 7 secs	5 7 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	N/A	4 23 secs	4 22 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	N/A	4 22 secs	4 20 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	N/A	1 41 secs	0 42 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	N/A	1 36 secs	1 36 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	N/A	2 1m 21s	2 1m 17s
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	N/A	2 1m 16s	2 1m 12s
A5/ Birch Coppice						
31/1	A5 Eastbound Ahead Lane 1	1814	Queue Aver Delay	2 13 secs	3 15 secs	5 15 secs
31/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	2 11 secs	3 12 secs	3 12 secs
32/1	A5 Eastbound Right Turn Lane 3	1960	Queue Aver Delay	6 1m 4s	6 1m 6s	7 1m 8s

32/2	A5 Eastbound Right Turn Lane 4	1667	Queue Aver Delay	4 55 secs	4 56 secs	4 58 secs
37/1	A5 Westbound Left Turn Lane 1	1751	Queue Aver Delay	2 15 secs	2 15 secs	2 15 secs
37/2 + 38/1 + 53/1	A5 Westbound Ahead Lane 2	2015	Queue Aver Delay	13 31 secs	13 35 secs	14 35 secs
37/3 + 38/2 + 53/2	A5 Westbound Ahead Lane 3	2015	Queue Aver Delay	12 32 secs	12 36 secs	13 36 secs
42/1	Birch Coppice Left Turn Lane 1	1695	Queue Aver Delay	6 37 secs	7 42 secs	7 42 secs
42/2	Birch Coppice Left Turn Lane 2	1983	Queue Aver Delay	8 37 secs	7 41 secs	7 41 secs
43/1	Birch Coppice Right Turn Lane 3	1690	Queue Aver Delay	7 47 secs	7 47 secs	8 47 secs
A5/ Core 42						
46/1	A5 Eastbound Ahead Lane 1	1833	Queue Aver Delay	3 4 secs	3 5 secs	3 5 secs
46/2	A5 Eastbound Ahead Lane 2	2082	Queue Aver Delay	2 3 secs	2 3 secs	2 3 secs
47/1	A5 Eastbound Right Turn Lane 3	1667	Queue Aver Delay	2 1m 30s	2 1m 25s	2 1m 27s
49/1	A5 Westbound Ahead & Left Turn Lane 1	1957	Queue Aver Delay	8 14 secs	7 16 secs	8 16 secs
49/2	A5 Westbound Ahead Lane 2	1909	Queue Aver Delay	6 12 secs	5 14 secs	6 14 secs
51/1	Core 42 Left Turn Lane 1	1695	Queue Aver Delay	3 1m 7s	3 1m 9s	3 1m 6s
52/1	Core 42 Right Turn Lane 2	1690	Queue Aver Delay	3 4m 55s	3 4m 45s	3 4m 48s
A5/ Dordon Roundabout						
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	22 22 secs	26 25 secs	28 27 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	24 21 secs	26 24 secs	27 24 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	6 1m 31s	7 1m 30s	6 1m 29s
98/1	A5 Westbound Left Turn Slip	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs
97/1 + 98/1	A5 Westbound Ahead Lane 1	N/A	Queue Aver Delay	3 8 secs	3 8 secs	3 8 secs
97/2 + 98/2	A5 Westbound Ahead Lane 2	N/A	Queue Aver Delay	3 7 secs	3 7 secs	3 8 secs
111/1	A5 Westbound Right Turn Lane 3	N/A	Queue Aver Delay	5 1m 3s	5 1m 5s	4 1m 6s
100/1	Gypsy Lane	N/A	Queue Aver Delay	2 37 secs	2 37 secs	2 38 secs

KEY	
#	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

Appendix L: A5 Cycleway: TT drawings 784-B033920-TTE-00-ZZ-PL-H-0003-P03, 784-B033920-TTE-00-ZZ-PL-H-0004- P03, and 784-B033920-TTE-00-ZZ-PL-H-0005- P03

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

PROPOSED 2m VERGE

PROPOSED 3m WIDE SHARED USE CYCLEWAY

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

HEDGEROW ALONG A5 TO BE MAINTAINED AND KEPT TO SUITABLE LEVELS

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

PROPOSED 3m WIDE SHARED USE CYCLEWAY

PROPOSED 2m VERGE

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

SHARED USE FACILITY TO CONTINUE INTO THE SITE DEVELOPMENT. PROPOSAL TO BE FINALISED AT A LATER STAGE.

SITE ACCESS CROSSING POINT. SIGNALISED CROSSING TO BE REVIEWED AT DETAILED DESIGN STAGE.

CYCLISTS DISMOUNT

PROPOSED SIGN TO DIAG 966 INDICATE CYCLIST DISMOUNT

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

FOR CONTINUATION SEE VIEWPORT 2

VIEWPORT 1

0 5 10 15 20 25m

SCALE 1:500

FOR CONTINUATION SEE VIEWPORT 1

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

INDICATIVE BRIDLE-WAY ROUTE. WAY MARKER TO BE IMPLEMENTED TO INFORM USERS OF THE START OF THE BRIDLEWAY ROUTE

PROPOSED 3m WIDE SHARED USE CYCLEWAY

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

R25

FOR CONTINUATION SEE VIEWPORT 3

VIEWPORT 2

0 5 10 15 20 25m

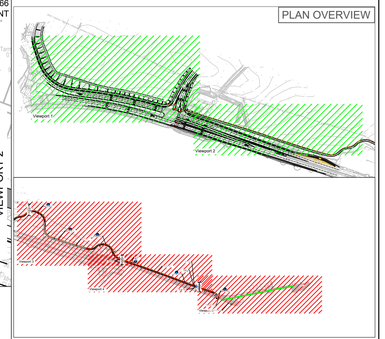
SCALE 1:500

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
3. PROPOSALS FOR THE SHARED USE CYCLEWAY HAVE BEEN DESIGNED IN ACCORDANCE WITH LTN1/20. DUE TO THE LOW VOLUME OF PEDESTRIANS SHARED USE CYCLEWAY HAS BEEN UTILISED COINCIDING WITH POINTS 6.5.2 AND 6.5.6 OF THE LTN 1/20 DESIGN GUIDANCE.

KEY:

- PLANNING APPLICATION BOUNDARY
- ADJOINING LAND UNDER THE CONTROL OF THE APPLICANT
- PROPOSED 3m SHARED USE CYCLEWAY
- PROTECTIVE TIMBER FENCE OR SIMILAR APPROVED
- EXISTING BRIDLEWAY ROUTE (166/AE45/1)
- PROPOSED DIVERSION OF BRIDLEWAY ROUTE

PLAN OVERVIEW



PRELIMINARY ISSUE

Rev	Description	Date	Drn	Chk	App
P03	MINOR AMENDMENTS DUE TO 3D DESIGN	01.02.2024	RN	DM	LB
P02	INITIAL COMMENTS INCORPORATED	11.08.2022	LJB	JG	LB
P01	PRELIMINARY FIRST ISSUE	25.05.2022	LJB	JG	LB

Document Control

Issuing Office

Tetra Tech Manchester

Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223

www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

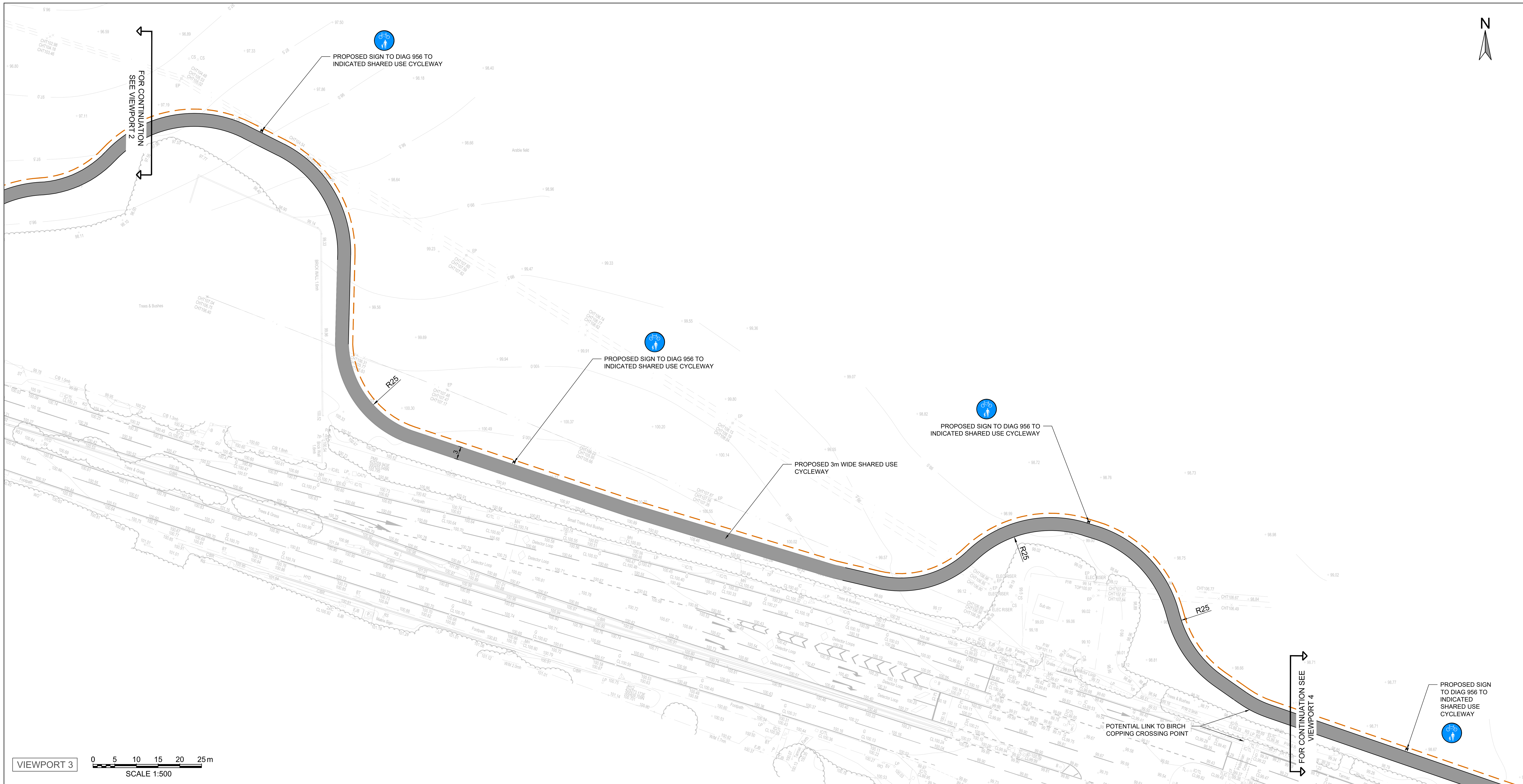
Sheet Title

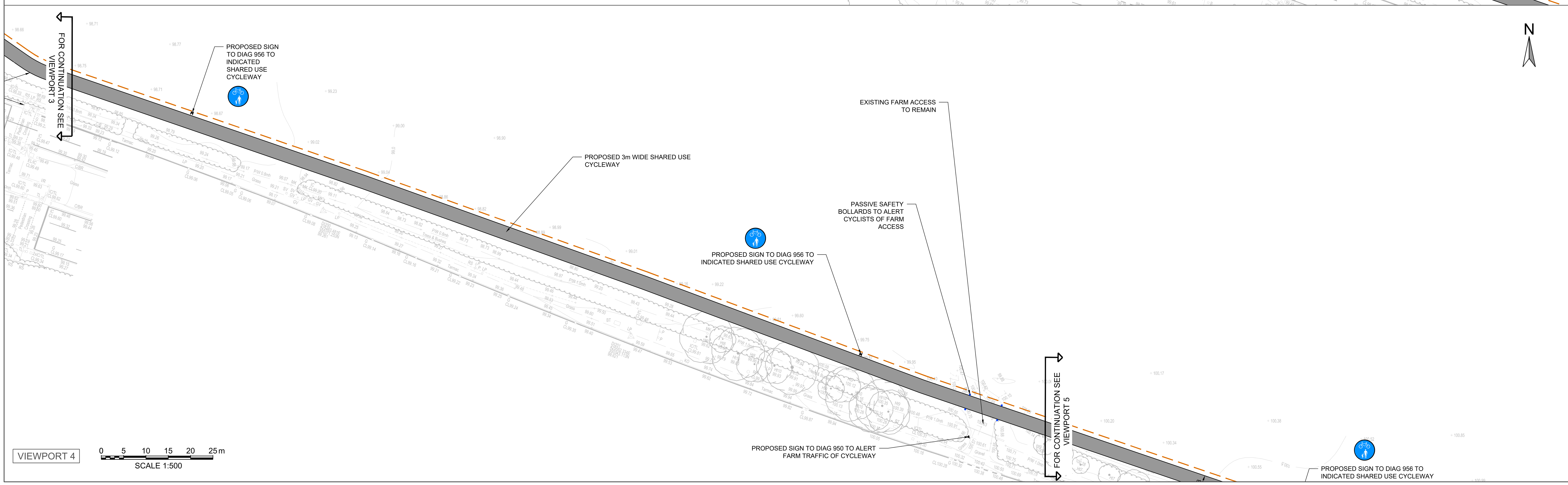
PROPOSED LAYOUT
SHEET 1

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	RN	Feb'24	DM	Feb'24	LB	Feb'24	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0003	P03

TTE_MT_v1



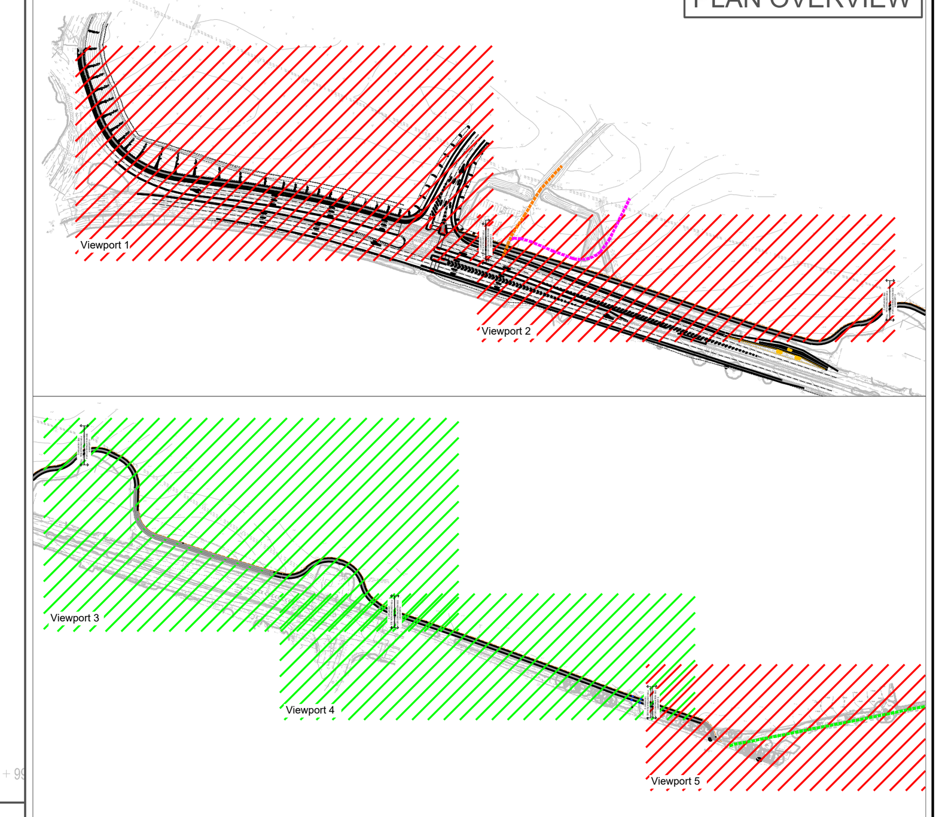


1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
3. PROPOSALS FOR THE SHARED USE CYCLEWAY HAVE BEEN DESIGNED IN ACCORDANCE WITH LTN1/20. DUE TO THE LOW VOLUME OF PEDESTRIANS SHARED USE CYCLEWAY HAS BEEN UTILISED COINCIDING WITH POINTS 6.5.2 AND 6.5.6 OF THE LTN 1/20 DESIGN GUIDANCE.

KEY:

- ADJOINING LAND UNDER THE CONTROL OF THE APPLICANT
- PROPOSED 3m SHARED USE CYCLEWAY
- PROTECTIVE TIMBER FENCE OR SIMILAR APPROVED
- PASSIVE SAFETY BOLLARDS

PLAN OVERVIEW



PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App		
P03	LAYOUT AMENDED	01.02.2024	RN	DM	LB
P02	INITIAL COMMENTS INCORPORATED	11.08.2022	LJB	LB	NB
P01	PRELIMINARY FIRST ISSUE	25.05.2022	LJB	JG	LB

Document Control

Issuing Office

Tetra Tech Manchester
Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223
www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

PROPOSED LAYOUT
SHEET 2

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	RN	Feb'24	DM	Feb'24	LB	Feb'24	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0004	P03

TTE_MT_v1

0 5 10 15 20 25m
SCALE 1:500

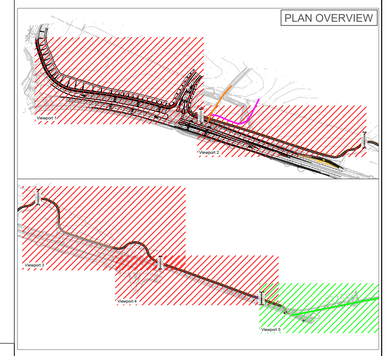
N

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
3. PROPOSALS FOR THE SHARED USE CYCLEWAY HAVE BEEN DESIGNED IN ACCORDANCE WITH LTN1/20. DUE TO THE LOW VOLUME OF PEDESTRIANS SHARED USE CYCLEWAY HAS BEEN UTILISED COINCIDING WITH POINTS 6.5.2 AND 6.5.6 OF THE LTN 1/20 DESIGN GUIDANCE.

KEY:

- ADJOINING LAND UNDER THE CONTROL OF THE APPLICANT
- PROPOSED 3m SHARED USE CYCLEWAY
- PROTECTIVE TIMBER FENCE OR SIMILAR APPROVED
- PUBLIC FOOTPATH

PLAN OVERVIEW



PRELIMINARY ISSUE

Rev	Description	Date	Drn	Chk	App
P03	LAYOUT AMENDED	01.02.2024	RN	DM	LB
P02	INITIAL COMMENTS INCORPORATED	11.08.2022	LJB	LB	NB
P01	PRELIMINARY FIRST ISSUE	25.05.2022	LJB	JG	LB

Document Control

Issuing Office
Tetra Tech Manchester
Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223
www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

PROPOSED LAYOUT
SHEET 3

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	RN	Feb'24	DM	Feb'24	LB	Feb'24	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	SK	H	0005	P03

TTE_MT_v1