Land North East of M42 Junction 10

784-B033920

Appendices to Proof of Evidence of Dr N.R. Bunn BSc(Hons), MSc, Ph.D, MCIHT, CMILT

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

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

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Appendix NRB 27: Stagecoach/TT Email Stagecoach/TT Emails 6 February 2024 & 8 May 2024

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Appendix NRB 30: WCC & SCC Bus Meeting 22 May 2024

Appendix NRB 1: SCC/TT Emails 22 January & 1 November 2023

Wakenshaw, Gareth

From: Spencer, Will (E,I&S) <will.spencer@staffordshire.gov.uk>
Sent: 01 November 2023 07:45
To: Bunn, Nick; Wakenshaw, Gareth; Evans, Mark (E,I&S)
Cc: dwh@hodgettsestates.co.uk
Subject: RE: PAP/2021/0663 - Land NE of M42 J10 - Meeting Agenda Wednesday 4th October

Thanks Nick, that's fine.

Kind regards,

Will

Staffordshire County Council

Will Spencer | Senior Transport Strategy Officer
Connectivity and Sustainability
Economy, Infrastructure and Skills
Third Floor, Staffordshire Place 1
Tipping Street, Stafford, ST16 2DH
Tel: **07791611198**
E-mail: **will.spencer@staffordshire.gov.uk**
www.staffordshire.gov.uk

From: Bunn, Nick <Nick.Bunn@tetratech.com>
Sent: Thursday, October 26, 2023 2:53 PM
To: Spencer, Will (E,I&S) <will.spencer@staffordshire.gov.uk>; Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>; Evans, Mark (E,I&S) <mark.evans@staffordshire.gov.uk>
Cc: dwh@hodgettsestates.co.uk
Subject: RE: PAP/2021/0663 - Land NE of M42 J10 - Meeting Agenda Wednesday 4th October

Hi Will

Pl find attached a copy of our revised drawing picking up the widening to 2.5m of the proposed foot/cycleway section on the NW side of Pennine Way nr to the junction with Pennymoor Rd.

I hope that this meets your requirements and that you can confirm that the details are not acceptable.

Dr Nick Bunn **BSc(Hons) PhD MSc MCIHT CMILT**
Director
Pronouns: he, him, his

Tetra Tech
4th Floor, Rotterdam House, 116 Quayside, Newcastle Upon Tyne, NE1 3DY
Tel: +44 191 249 9814
Mob: +44 07789 653036

From: Spencer, Will (E,I&S) <will.spencer@staffordshire.gov.uk>
Sent: Wednesday, October 4, 2023 7:47 AM
To: Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>
Cc: Bunn, Nick <Nick.Bunn@tetratech.com>; dwh@hodgettsestates.co.uk
Subject: RE: PAP/2021/0663 - Land NE of M42 J10 - Meeting Agenda Wednesday 4th October

Hi Gareth,

Please see my attached response to Nick's original email. I would reiterate the consideration of widening as mentioned in my response.

Hope this helps. Please confirm receipt of this email.

Kind regards,

Will

Staffordshire County Council

Will Spencer | Senior Transport Strategy Officer
Connectivity and Sustainability
Economy, Infrastructure and Skills
Third Floor, Staffordshire Place 1
Tipping Street, Stafford, ST16 2DH
Tel: **07791611198**
E-mail: **will.spencer@staffordshire.gov.uk**
www.staffordshire.gov.uk

From: Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>
Sent: Tuesday, October 3, 2023 11:01 PM
To: Spencer, Will (E,I&S) <will.spencer@staffordshire.gov.uk>
Cc: Bunn, Nick <Nick.Bunn@tetratech.com>; dwh@hodgettsestates.co.uk
Subject: RE: PAP/2021/0663 - Land NE of M42 J10 - Meeting Agenda Wednesday 4th October

Hi Will,

Many thanks for your email confirming the agreement to the Pennine Way amendments. We hadn't received an agreement email to Nicks email (attached) with the scheme drawing but will take your email today as agreement in principle.

Kind Regards

Gareth Wakenshaw
Associate Transport Planner

Tetra Tech
4th Floor, Rotterdam House, 116 Quayside, Newcastle Upon Tyne, NE1 3DY
Tel: +44 191 249 9817
Mob: +44 734 206 8031

tetratecheurope.com

From: Spencer, Will (E,I&S) will.spencer@staffordshire.gov.uk
Sent: Tuesday, October 3, 2023 4:30 PM
To: Wakenshaw, Gareth Gareth.Wakenshaw@tetratech.com
Subject: RE: PAP/2021/0663 - Land NE of M42 J10 - Meeting Agenda Wednesday 4th October

Hi Gareth,

I believe we've agreed to the Pennine Way amendments already.

Thanks,

Will

Staffordshire County Council

Will Spencer | Senior Transport Strategy Officer
Connectivity and Sustainability
Economy, Infrastructure and Skills
Third Floor, Staffordshire Place 1
Tipping Street, Stafford, ST16 2DH
Tel: **07791611198**
E-mail: **will.spencer@staffordshire.gov.uk**
www.staffordshire.gov.uk

From: Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>
Sent: Tuesday, October 3, 2023 3:55 PM
To: AndrewCollinson@NorthWarks.gov.uk; Tony Burrows <tonyburrows@warwickshire.gov.uk>; alanlaw <alanlaw@warwickshire.gov.uk>; Piechocki, Amrit (E,I&S) <amrit.piechocki@staffordshire.gov.uk>; dwh@hodgettsestates.co.uk; Bunn, Nick <Nick.Bunn@tetratech.com>; Patrick Thomas <Patrick.Thomas@nationalhighways.co.uk>; Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>; Spencer, Will (E,I&S) <will.spencer@staffordshire.gov.uk>; jane@hodgettsestates.co.uk; 'Ed'

Wakenshaw, Gareth

From: Evans, Mark (E,I&S) <mark.evans@staffordshire.gov.uk>
Sent: 22 January 2024 09:31
To: Wakenshaw, Gareth
Cc: Andrew Collinson; Spencer, Will (E,I&S)
Subject: PAP/2021/0663 - Land NE of M42 J10 - Transport Assessment Addendum (TAA) [Filed 22 Jan 2024 09:34]

Morning Gareth,

Apologies for the delay in coming back to you but I can now confirm that Staffordshire County Council are happy with the Transport Assessment Addendum (TAA) which was submitted in early December 2023. This covers action point 12 below.

Regards,

Mark

Staffordshire County Council

Mark Evans | Senior Engineer
Sustainable Development Team - Highways and Built County
Third Floor, Staffordshire Place 1
Tipping Street, Stafford ST16 2DH
Mobile: **07977 064503**
Email: **mark.evans@staffordshire.gov.uk**
www.staffordshire.gov.uk

From: Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>
Sent: Monday, December 18, 2023 8:04 AM
To: AndrewCollinson@NorthWarks.gov.uk; Tony Burrows <tonyburrows@warwickshire.gov.uk>; alanlaw <alanlaw@warwickshire.gov.uk>; Piechocki, Amrit (E,I&S) <amrit.piechocki@staffordshire.gov.uk>; dwh@hodgettsestates.co.uk; Bunn, Nick <Nick.Bunn@tetratech.com>; Patrick Thomas <Patrick.Thomas@nationalhighways.co.uk>; Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>; Spencer, Will (E,I&S) <will.spencer@staffordshire.gov.uk>; jane@hodgettsestates.co.uk; 'Ed' <edward@hodgettsestates.co.uk>; james.warrington@wsp.com; Evans, Mark (E,I&S) <mark.evans@staffordshire.gov.uk>; richard-powell@tamworth.gov.uk; Chadha, Adrian <Adrian.Chadha@nationalhighways.co.uk>
Subject: CM: PAP/2021/0663 - Land NE of M42 J10 - Meeting Summary Thursday 14th December

Hi All,

Thanks for Thursday's meeting last week, please see my meeting notes below, if any changes needed do let me know. Hope you all have a fantastic Christmas and Happy New Year.

1. Circular 01/2022. **TT issued a revised v2 Vision Travel Plan on Friday 8th December. Action: Await NH to sign off.**

Appendix NRB 2: 22 February Meeting Notes (NWBC, NH, SCC, WCC, TT, Hodgetts Estates)

Wakenshaw, Gareth

From: Wakenshaw, Gareth
Sent: 26 February 2024 11:19
To: Patrick Thomas; AndrewCollinson@NorthWarks.gov.uk; Tony Burrows; Alan Law; Piechocki, Amrit (E,I&S); dwh@hodgettsestates.co.uk; Bunn, Nick; Moises Muguerza; Spencer, Will (E,I&S); jane@hodgettsestates.co.uk; 'Ed'; james.warrington@wsp.com; Evans, Mark (E,I&S); richard-powell@tamworth.gov.uk; Chadha, Adrian
Subject: Land NE of M42 J10 - Meeting Notes Thursday 22nd February 2024 [Filed 29 Feb 2024 10:56]

Hi All,

Meeting notes from Thursday last week below.

Meeting Held via Teams at 13:30 on Thursday 22 February 2024
Present:

National Highways	Warwickshire CC	Staffordshire CC
Patrick Thoams (PT) Adrian Chada (AC)	Alan Lamb (AL) Tony Burrow (TB)	Will Spence (WS)
N Warwickshire BC	**Hodgetts Estates**	**TetraTech**
Andrew Collinson (AC)	David Hodgetts (DH)	Nick Bunn (NB) Gareth Wakenshaw (GW)

A. Appeal Application PAP/2021/0663

1. Circular 01/2022. Vision Led Travel Plan – NH confirmed acceptance on 25/1/24. **Item closed.**
2. TT 2023 TRANSYT Validation Report. NH provided interim comments on 22/02/24. PT confirmed that the AM and PM base model validation is agreed, and that the stage calls at A5/Core 42 junction are acceptable in the future year models. PT confirmed that the 2011 signal specifications were the most up to date versions. PT noted discrepancies between the queues and delays in the future year models and those reported in the TAA. GW had briefly reviewed the model and TAA queues and delays and advised that the TAA results were a summation of several contributing streams. GW proposed a Teams meeting with NH and AECOM **Action: NH to arrange a meet between AECOM and TT for w/c 26/02/2024.**
3. Departure from Standards**.** NH and TT had a productive Teams meeting on the two Departures on the A5 west of Jn10 on 9 February. NH's initial view was that, subject to reviewing the DAS report, in principal approval would be forthcoming. NH had advised that the Safety Risk assessment would be helpful. TT are preparing a brief Departure from Standard document broadly following Chapter 5 from the Departure Manual Version 2.1.0. **Action TT Prepare DAS report.**
4. Extent of public highway on A5. NB chased Talvinder at NH on 19/02/2024 for a response. **Action: with NH Operations**.
5. WCHAR. TT to update WCHAR once comments received from PT on mitigation designs. See 6a below. **Action: with NH**
6. GG104 briefing note submitted to NH on 01/11/2023. TT are using Nicholson Sloan to do GG104, for completion early March. NB advised that following the meeting in item 3 above, NB had work on the GG104 to commence. PT reminded that this was at risk and may need revisiting if the scheme design changes. PT had delayed commenting on the GG014 brief pending design comments from colleagues. PT noted that the modelling and design comments are expected shortly, at which point GG104 brief comments would also be provided. **Action: NH to issue design comments – due 1 March 2024 so GG104 brief nearly acceptable.**
    a. PT indicated that the NH asset team and improvement team are reviewing the mitigation drawings and were expected to respond w/c 5th February. PT apologises and is chasing the asset team and safety team PT expects to have final comments for issue to TT on 1st March, including for the GG104 PT has active travel comments. One concern raised was that the ped/cycle crossing on the M42 Sbd

off-slip compromises the segregated left turn slip arrangement. NB noted that the segregated left turn slip was a proposal from the Phil Jones' Associates indicative plan and is included in the 2033 No Development arrangement, however there is no need for the slip lane and TT had removed it in their proposed mitigation scheme. The TAA results show little queueing on the M42 Sbd off slip in the with development assessments. DH informed PT that at the October A5 Stakeholder meeting that none of the three M42 Jn10 'low level intervention' options included the left turn slip arrangement but comprised, widening the south overbridge, an A5 hamburger arrangement, and a M42 Ndb to A5 Ebd link. AL confirmed these options and noted that no drawing had be displayed. DH forwarded details of the meeting and NH contact to PT. A query raised on a footway link and one on modelling, which PT has dismissed. **Action: NH to issue design & GG104 brief comments – due 1 March 2024.**

b. TT confirm a new sub-contractor will be used for the S1RSA. NB confirmed that, following the January meeting, TT had not updated the S1RSA brief pending the design comments. **Action: NH to issue design comments – due 1 March 2024**.

7. Longshoot/ Dodwells. AL confirmed that because NH accept that the development traffic impact is negligible and that no impact assessment is required, WCC do not require an assessment at Longshoot/ Dodwells WS does not see any problem in accepting the impact is negligible given the Vectos Paramics model did not assume a height restriction, but needs to confirm with ME. **Action: WS and ME to confirm SCC position at Longshoots/ Dodwells**.
8. S106/ Stagecoach. NB confirmed that Stagecoach emailed on 6th Feb 2024 that they are still happy to divert the 766/767 into the M42 site. TB requested a copy of the email. **Action: NB to forward the email to the attendees. Post meeting Note – email attached. Item closed.**
9. Transport Assessment Addendum (TAA) (submitted to NWBC 7/12/23). SCC approved TAA (22/01/24). WCC confirm they will take NH lead. Comments from NH awaited after TT meet with AECOM. **Action: NH to issue comments on TAA modelling**.
10. Appeal. Appeal opens 18th June. Exchange of Proof is 21 May 2024. All Noted.
11. Meetings. March Meeting set to 1:30pm on Thursday 21st March. **Post Meet Action: AC circulated meeting invite.**
12. AOB. AC requested draft highway conditions from Hodgetts Estates. **Action: TT and Hodgetts Estates to provide draft highway conditions.**

Modelling Progress Table PAP/2021/0663

Correct as at 11:00 on 26/02/24	**Highway Authority**		
TT Modelling Requirements	**Warwickshire CC**	**National Highways**	**Staffordshire CC**
Traffic Survey Methodology	Agreed – Alan Law email 28/3/23	Agreed – Ben Simm email 14/4/23	Agreed – Amrit email 21/4/23 & Richard email 26/3/23
Traffic Surveys on Tuesday 4th July	Agreed – Moises email 24/4/23	Agreed – Ben Simm email 3/5/23	Agreed – Amrit email 21/4/23
Committed & Local Plan Sites to be included in model	Agreed – Moises email 24/4/23 & Andrew Collinson email 25/4/23	Agreed – Ben Simm email 3/5/23	Agreed – Richard Powell email 4/5/23
Method of data extraction from Vectos for Committed & Local Plan	Agreed – Moises email 25/4/23	Agreed – Ben Simm email 3/5/23	Agreed – Amrit email 26/4/23
Padge Hall Farm (R21/0985) exclusion	Agreed – Moises email 11/4/23	Agreed – Ben Simm email 14/4/23	Agreed – Amrit email 21/4/23
Arkall Farm Traffic Assignment & Flows	Agreed – Moises email 28/6/23	Agreed – Ben Simm email 18/5/23 (agree to use the 5% net reduction flows)	Agreed – Amrit email 10/5/23 (note that NH agree to use the 5% net reduction)

MIRA Technology Park Traffic Assignment & Flows	Update: MIRA traffic flows provided in VECTOS flow bundle, so will use these flows instead of those from my email dated 3/5/23.		
Dordon Roundabout improvement scheme to include in 2033	WCC not involved now, for NH to advise. Alan Law email 10/5/23	Ben Simm email 18/5/23 use current Local Plan scheme – Option A Traffic Signals	N/A
Impact at Dodwells/ Longshoot	WCC at 22/2/24 meeting confirms no further assessment required.	Agreed no further assessment required – BS email 1/12/23.	ME to review previous correspondence and to formally agree no further impact assessment is required.
TT TRANSYT response to AECOM comments	N/A	Agreed – PT email 26/07/23. Agreed criteria to be used in the future year modelling report.	N/A
Updated 2023 TRANSYT Methodology Modelling Note	Agreed – Moises email 25/7/23	TT Issued v2 dated 1/11/23. Agreed – Adrian email 27/11/23	TT Issued v2 dated 1/11/23. Agreed – Mark Evans email 30/11/23
2023 Validated TRANSYT Model	Agreed – WCC taking NH lead (22/02/24 meeting)	Agreed – PT email 22/02/24	TT issued 21/8/23 Response awaited.
Transport Assessment Addendum (Includes 2026 and 2033 Future Year Assessments)	WCC to take NH lead.	TT Issued TAA 7/12/23 Response awaited. PT to arrange a meet between AECOM and TT to discuss model result queries.	Agreed TAA Acceptable – Mark email 22/01/24.

Gareth Wakenshaw, BSc(Hons), MSc, MCIHT | Associate Transport Planner

Direct **+44 191 249 9817** | Mobile **+44 734 206 8031**

Tetra Tech | *Leading with Science®*
2nd Floor, Cathedral Buildings, Dean Street, Newcastle upon Tyne, NE1 1PJ | tetratecheurope.com

From: Bunn, Nick
Sent: Wednesday, February 21, 2024 9:00 AM
To: Patrick Thomas <Patrick.Thomas@nationalhighways.co.uk>; AndrewCollinson@NorthWarks.gov.uk; Tony Burrows <tonyburrows@warwickshire.gov.uk>; Alan Law <alanlaw@warwickshire.gov.uk>; dwh@hodgettsestates.co.uk; Bunn, Nick <Nick.Bunn@tetratech.com>; Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>; Spencer, Will (E,I&S) <will.spencer@staffordshire.gov.uk>; jane@hodgettsestates.co.uk; 'Ed' <edward@hodgettsestates.co.uk>; james.warrington@wsp.com; Evans, Mark

Appendix NRB 3: NH/TT Email 2 May 2024

Wakenshaw, Gareth

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 [Filed 02 May 2024 09:20]
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

National Highways SPA Midlands: Scheme Design Feedback

Task Title	Land NE of M42 J10		
Task Number	PAP/2024/0024	**PIN Description**	Midlands SPC Studies Plan 23-24
Start date	05/04/2024	**End date**	17/04/2024
National Highways Officer	Patrick Thomas/Kate Simmonite	**Consultant Contact**	Ben Higson/Khomal Aruje

NB: The below comments for sections 1 through to 5 should be read in conjunction with Document Ref: Combined Feb 2024 Drawing Pack_MDM Comments.

Drawing No: B033920-TTE-00-ZZ-PL-H-0002_P03	1 Junction Comments: 1.1 Guard rail should be detailed where appropriate, such as on any pedestrian refuges. 1.2 Line type 1004 should continue to the stop line at this location. We assume that the design speed for the approach road to the proposed development is 40 mph or less. 1.3 It appears that on the mainline carriageway, which is a reduced speed limit of 50 mph, the line type should be 1004.1 but this scales to 1004. Can you please therefore ensure that stop lines 1001 are 300mm width and the arrows are 6m length as prescribed by TSRGD. 1.4 This location could include a continuation of line types 1005.1 with 1010 on the offside as lane markings for eastbound traffic through the junction. 1.5 This is where Linetype 1004.1 should start for the off-side lane approaching M42 Junction 10. 1.6 Linetype 1004.1 should not be crossing the junction on the off-side of the eastbound carriageway, this should be line type 1010. Given the number of potential errors picked up with regard to road markings, it is recommended that the road marking layout is thoroughly reviewed against the appropriate design standards. 1.7 The lane width provision should be checked and amended as necessary to ensure that the design vehicle, most likely the 16.5m long Articulated HGV in this case, can be accommodated as per paras. 7.13 to 7.14.1 of CD123. 2 Main Line Carriageway Comments:As per comment 1.3 above. 2.2 The markings in this location should be Linetype 1010, not 1005.1. See also comment 1.6 above. 2.3 This existing pedestrian crossing modifications at this location should be reconsidered as it is bad practice to have them where hatching is present as this can give rise to potential for pedestrians to wait in the hatched area, which is a safety concern. Tactile paving has also not been shown. 2.4 At this location and going westwards, the proposed safety margin provision and footway behind gets close to the existing boundary fence / hedge and requires the removal of a safety barrier. No details are shown as to how the removal of this barrier will be justified, i.e. have the hazards associated with its original need been eliminated. 2.5 It is assumed that the bus shelter provision shown here is to be on an island between a footpath at the front and another to the rear. This is quite a space hungry detail and could be simplified if so. Consideration should also be given as to whether a connection will be required to the proposed footway cycleway at the toe of the embankment behind.

	2.6 The earthworks line over the gravel driveway at this location suggests levels are not compatible. Any affected existing accesses to be retained should be shown and accommodated by the design. 3 <u>Visibility Splay Comments:</u> 3.1 The intervisibility splay shown has been checked and appears to be satisfactory. Any other relevant visibility splays as detailed in CD 123 Section 7 should be shown, such as signal head visibility etc.
Drawing No: B033920-TTE-00-ZZ-PL-H-0003_P03:	4 <u>Shared Cycle Track and Pedestrian Track Comments:</u> 4.1 The provision of a shared cycle track and pedestrian route outside of the proposed earthworks appears to double up on the footpath provision along the north side of the A5 carriageway. Users of this facility may not feel secure given the isolated nature, even if lit. Consideration should be given to widening the proposed footpath alongside the carriageway where security could be considered better given the street lighting and passing traffic, but weighed up against any safety issues in relation to the proximity of the traffic.
Drawing No: B033920-TTE-00-ZZ-PL-H-0004_P03:	5 <u>Shared Cycle Track and Pedestrian Track Comments:</u> 5.1 As per comment 4.1 above. 5.2 As a generally rural facility in nature a shared footway / cycle facility should be adequate. If the nature is likely to change in the future due to development, or traffic expected to noticeably increase, then a slightly wider segregated facility should be given consideration. 5.3 Consideration should be given to providing connections from the shared facility to the A5 at crossing locations, junctions and any key facilities. 5.4 Appropriate signage should be detailed at hazardous locations, such as farm access track crossings.
Drawing No: B033920-TTE-00-ZZ-PL-H-0005_P03:	No further comments, only similar to section 5 above.
Drawing No: B033920-TTE-00-ZZ-PL-H-0021_P03:	<u>Alignment -New Access-CL – Approximately ch20 onwards:</u> Crossfalls appear to be sub-standard - should be checked against CD109 superelevation requirements for the road design speed.
Drawing No: B033920-TTE-00-ZZ-PL-H-0021_P03 to 0026_P01:	<u>Alignment – A5 Eastbound Offside – whole length:</u> Crossfalls appear to be sub-standard - should be checked against CD109 superelevation requirements for the road design speed.
Drawing No: B033920-TTE-00-ZZ-PL-H-0031_P01 to 0034_P01:	Horizontal geometry shown does not have transitions, these are a mandatory CD109 requirement.
<u>NB:</u> The below comments for sections 1 through to 3 should be read in conjunction with Drawing Ref: 784-B033920-TTE-00-ZZ-SK-H-0001-P05_MDM Comments.	
Drawing No: 784-B033920-TTE-00-ZZ-SK-H-0001-P05	1 <u>A5 Western Approach to M42 Junction 10:</u> 1.1 The nose length scales at 43m which accords with the requirements for an urban road with a speed limit of 50 mph or less, as per CD 122 Table 3.21. However, the carriageways feature hard strips which are usually features for on a rural dual carriageway all-purpose road. Road classification should be determined and appropriate standard used to ensure consistency. Nose length for a rural road is 75m, which will reduce

	weaving length available. It should be noted that the existing layout has a very short nose arrangement. The nose ratio should also be checked for minimum requirements. 1.2 The line type for the slip road to Kinsall Green should be Linetype 1010. The existing slip lane appears to be of a non-standard layout and the proposals mimic it to some extent. The slip lane should be checked for hard strip requirements. 1.3 At the crossing on Kinsall Green an advance warning sign (possibly TSRGD 544.1) to forewarn drivers of the potential presence of pedestrians in the road ahead is recommended. 1.4 This existing slip lane appears to be of a non-standard layout and the proposals mimic to some extent. The proposed layout should be detailed to current standards, with a tapering nose. 2 <u>M42 Junction 10 Roundabout:</u> 2.1 The base mapping appears to be out of date here. The proposals appear to match the existing layout according to aerial mapping. 2.2 Consideration should be given to extending the yellow box to cover ore of the merge area subject to performance from a traffic capacity perspective. 2.3 The guidance markings for the merge from the A5 westbound should be smoother with tangential curving geometry. 2.4 Lane width should be checked in this area against minimum requirements and for vehicles to pass a stationary vehicle at this location. 2.5 Width of footway width continuing northwards after crossing should be checked or existing retained from this point. Kerb line should tie in on a curving tangential alignment. The footway / cycleway along the A5 western approach up to this point appears to be 2m throughout. Consideration should be given to improving this width wherever space allows. <u>General:</u> All crossings should be aligned to be perpendicular where possible and have the appropriate depth of tactile paving for a straight approach (1.2m) (including Pennine Way).
Departure from Standards Report	3 <u>General Comments:</u> 3.1 The proposals show a three lane configuration (D3AP) on the western approach to M42 J10 in line with CD 127 Figure 2.1.1N1e for a rural all-purpose road (main line) but with lanes reduced to 3.1m width in places as a departure. 3.2 The proposals also include a reduction in the speed limit between the Pennine Way interchange and M42 J10 to 50 mph, which gives the potential for the 320m approach to the stop line being to CD 127 Figure 2.1.1N1g requirements for an urban all-purpose road as an extension of typical roundabout approach details, which allow for lane reductions on approach below CD127 requirements. 3.3 It should be noted that CS127 table 2.24 des allow for a reduction in set-back of safety barriers from 1200mm to 600mm on 50mph speed limit roads as a relaxation. This could potentially be used be used with either cross section to improve lane widths to a minimum of 3.3m or give a greater clearance to the footpath / cycleway.
Drawing No: B033920-TTE-00-ZZ-DR-H-1001	No further comments, however the comments already raised in relation to Drawing No: 784-B033920-TTE-00-ZZ-SK-H-0001-P05 still apply on this drawing.
Drawing No: B033920-TTE-00-ZZ-DR-H-1002	The alignment of the bridge looks acceptable in principle. However the arrows need to correspond to the destinations of A5W with Green Lane, M42N and A5E on the off-side. Putting a left turn arrow on approach to an off-slip may cause confusion to motorists and lead to safety issues.

NB: The below comments for sections 4 to 5 should be read in conjunction with Drawing Ref: 784-B033920-TTE-00-ZZ-DR-H-1003 Local Plan with Additional Lane_MDM Comments.			
Drawing No: B033920-TTE-00-ZZ-DR-H-1003	4 Proposed Three Lane Option for A5 Eastbound Exit: 4.1 There is a safety implication – there will be three lanes of traffic on the corresponding circulatory approaching this exit for A5 Eastbound traffic, meaning that there is a potential for side swipe collisions, as well as overloading the second lane from the off-side carriageway which takes traffic for M42S and Kingsbury too. 4.2 The roundabout lane markings need to be configured to suit this proposal with said lane marked for A5E traffic. 4.3 In relation to the side swipe collision potential, a swept path analysis will be required that shows articulated vehicles can safely make all possible manoeuvres from all lanes on approach, circulatory and exit carriageways. 4.4 Guidance markings should be shown for all the approaches merging into the circulatory carriageway to ensure lane provision is adequate. It is highly likely that the section of circulatory carriageway immediately before the 3 lane exit to the A5E will need to be marked as 5 lanes to accommodate the two A5 westbound lanes from the M42 southbound off slip. It appears that the existing markings are already flawed in relation to Kingsbury being marked in the wrong lane on the norther bridge over the M42. 5 Trinity Road (South East Arm): 5.1 The newly aligned kerb from the direction of Kingsbury needs to be tied in properly to the existing kerb with curving tangential geometry.		
Produced by:	Matthew Moss		
Approved by:	Stuart Williams	**Date:**	29/04/2024

Appendix NRB 4: WCC/TT Emails 29 and 30 April 2024

Wakenshaw, Gareth

From: Alan Law <alanlaw@warwickshire.gov.uk>
Sent: 30 April 2024 11:03
To: Wakenshaw, Gareth; Moises Muguerza
Cc: dwh@hodgettsestates.co.uk; 'Warrington, James'; Edward Hodgetts; 'Jane Hodgetts'; 'Warrington, James'; 'Hann, Doug'; Bunn, Nick; Adrian Chadha; Andrew Collinson; Tony Burrows; Spencer, Will (E,I&S); Piechocki, Amrit (E,I&S); Evans, Mark (E,I&S); Thomas, Patrick
Subject: Re: Land NE of M42 J10 Highways - WCC Review of TRANSYT Model [Filed 01 May 2024 07:46]

OFFICIAL

Hi Gareth

Thanks for confirming.

Regarding point 2, WCC have reviewed the models and have run the models, however I would prefer to review the submitted outputs prior to confirming our position on impact.

I also note that NH position statement on Friday suggested that work is still continuing with regards to the Transyt and design matters. WCC are not able to set out our position until the final suite of design and modelling information has been shared.

Kind Regards

Alan

Alan Law BSc MCIHT
Service Manager - Transport Modelling and Monitoring
Transport Planning
Transport & Highways
Communities
Warwickshire County Council
Tel: 01926 412044
Email: alanlaw@warwickshire.gov.uk
www.warwickshire.gov.uk

From: Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>
Sent: 29 April 2024 14:18
To: Alan Law <alanlaw@warwickshire.gov.uk>; Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>
Cc: dwh@hodgettsestates.co.uk <dwh@hodgettsestates.co.uk>; 'Warrington, James' <james.warrington@wsp.com>; Edward Hodgetts <edward@hodgettsestates.co.uk>; 'Jane Hodgetts' <jane@hodgettsestates.co.uk>; 'Warrington, James' <james.warrington@wsp.com>; 'Hann, Doug' <doug.hann@wsp.com>; Bunn, Nick <Nick.Bunn@tetratech.com>; Adrian Chadha <Adrian.Chadha@nationalhighways.co.uk>; Andrew Collinson <andrewcollinson@northwarks.gov.uk>; Tony Burrows <tonyburrows@warwickshire.gov.uk>; Spencer, Will (E,I&S) <will.spencer@staffordshire.gov.uk>; Piechocki, Amrit (E,I&S) <amrit.piechocki@staffordshire.gov.uk>; Evans, Mark (E,I&S) <mark.evans@staffordshire.gov.uk>; Thomas, Patrick <Patrick.Thomas@nationalhighways.co.uk>
Subject: Land NE of M42 J10 Highways - WCC Review of TRANSYT Model

OFFICIAL

Hi Alan,

Thanks for the phone call earlier. Just to summarise and for transparency for everyone else;

- Your consultants, SLR, have run the TRANSYT files I sent to Moises on 19th April. I confirmed those model files are the latest versions, based on the current designs.
- You and Moises have reviewed the results and consider the impact on Warwickshire's network to be minor/ negligible and feel that you are close to agreeing the results.
- For completeness you would like the TRANSYT Output files (pdf) to compare against the printouts that SLR have run. I will get onto this for you.
- Moises is away on annual leave for a couple of weeks.

Do let me know if the above is accurate.

Kind Regards

Gareth Wakenshaw, BSc(Hons), MSc, MCIHT | Associate Transport Planner

Direct **+44 191 249 9817** | Mobile **+44 734 206 8031**
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TETRA TECH

From: Wakenshaw, Gareth
Sent: Monday, April 29, 2024 1:46 PM
To: 'Moises Muguerza' <MoisesMuguerza@warwickshire.gov.uk>; Alan Law <alanlaw@warwickshire.gov.uk>
Cc: Bunn, Nick <Nick.Bunn@tetratech.com>
Subject: RE: Land NE of M42 J10 -Highways

Hi Moises,

Thanks for the email. I have just tried Alan and left a voicemail. Alan, if you could call when you get a chance that would be appreciated.

Kind Regards

Gareth Wakenshaw, BSc(Hons), MSc, MCIHT | Associate Transport Planner

Direct **+44 191 249 9817** | Mobile **+44 734 206 8031**
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Appendix NRB 5: TT/WCC Email 7 May 2024

Wakenshaw, Gareth

From: Bunn, Nick
Sent: 07 May 2024 14:17
To: alanlaw@warwickshire.gov.uk; Moises Muguerza; tonyburrows@warwickshire.gov.uk; Andrew Collinson; Evans, Mark (E,I&S)
Cc: dwh@hodgettsestates.co.uk; Edward Hodgetts; 'Warrington, James'; Thomas, Patrick
Subject: FW: 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; Agreed Transyt Results May 2024.pdf

Hi Alan

Pl see below from Patrick which agrees the Transyt modelling, that the impact on the highway network is acceptable, that the proposed highway design are acceptable in principle, and that the design comments (in the attachments) can be addressed at subsequent design stages.

I trust that you are now able to confirm that on the roads for which WCC are the highway authority:
1. the appeal proposals with the proposed mitigation measures have a cumulative residual impact which is not severe in the Reference Case and in the Local Plan Case. For ease of reference, I have attached the agreed Transyt results tables taken from our Transyt notes of 8 March and 10 April.
2. the appeal proposals do not result in an unacceptable impact on road safety in either in the Reference Case and in the Local Plan Case.
3. the appeal proposals are in accord with policies LP23, LP27 and LP29(6) of the North Warwickshire Local Plan 2021 and paragraph 115 of the National Planning Policy Framework 2023.
4. WCC do not intend to undertake their own separate modelling assessment.

I look forward to hearing from you.

Dr Nick Bunn, BSc(Hons) MSc,PhD, MCIHT, CMILT | Director
Pronouns: he, him, his
Direct **+44 191 249 9814**| Mobile **+44 7789 653036**

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TETRA TECH

From: Patrick Thomas <Patrick.Thomas@nationalhighways.co.uk>
Sent: Thursday, May 2, 2024 9:05 AM
To: Bunn, Nick <Nick.Bunn@tetratech.com>; Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>; dwh@hodgettsestates.co.uk
Cc: Baran, Lukasz <Lukasz.Baran@tetratech.com>; Morris, Chris <chris.morris1@aecom.com>;

roger.dickinson@aecom.com; Broad, Mike <MIKE.BROAD@tetratech.com>; 'Warrington, James' <james.warrington@wsp.com>; Alice Langford <Alice.Langford@nationalhighways.co.uk>
Subject: RE: M42 Jn10 A5/ Site access drawings [Filed 02 May 2024 16:20]

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,

Just a quick follow up to the email below.

It appears that the pdf issued by Nick last week did not display correctly. I have attached corrected version of the file.

I would be grateful if you could confirm receipt of the attached.

Regards,

Lukasz Baran, MEng MCIHT | Associate Director – Highways and Infrastructure

Appendix NRB 6: WCC/TT Email 9 May 2024

NRB 6 - 1

Wakenshaw, Gareth

From: Bunn, Nick
Sent: 09 May 2024 16:26
To: Alan Law; Moises Muguerza; Tony Burrows; Andrew Collinson; Evans, Mark (E,I&S)
Cc: dwh@hodgettsestates.co.uk; Edward Hodgetts; 'Warrington, James'; Thomas, Patrick; Wakenshaw, Gareth
Subject: RE: M42 Jn10 A5/ Site access drawings

Hi Alan

Pl see my responses below

Dr Nick Bunn, BSc(Hons) MSc,PhD, MCIHT, CMILT | Director
Pronouns: he, him, his
Direct **+44 191 249 9814**| Mobile **+44 7789 653036**

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TETRA TECH

From: Alan Law <alanlaw@warwickshire.gov.uk>
Sent: Thursday, May 9, 2024 1:44 PM
To: Bunn, Nick <Nick.Bunn@tetratech.com>; Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>; Tony Burrows <tonyburrows@warwickshire.gov.uk>; Andrew Collinson <andrewcollinson@northwarks.gov.uk>; Evans, Mark (E,I&S) <mark.evans@staffordshire.gov.uk>
Cc: dwh@hodgettsestates.co.uk; Edward Hodgetts <edward@hodgettsestates.co.uk>; 'Warrington, James' <james.warrington@wsp.com>; Thomas, Patrick <Patrick.Thomas@nationalhighways.co.uk>; Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>
Subject: Re: M42 Jn10 A5/ Site access drawings

OFFICIAL - Sensitive

Hi Nick

Thanks for your email. Before responding please can you confirm the following:

1. were any revisions necessary to the schemes following discussions with NH which have resulted in updated Transyt modelling? Revisions to the Transyt models in response to NH (AECOM) comments are as detailed in our Transyt modelling notes of 8 March and 10 April

which you already have copies. Between the 10 April note and Patrick's email of 2 May no further updates to the Transyt models or results were made.

2. are you able to summarise what changes were made to the highway layout? There were no changes to the proposed mitigation measures, the site access junction and the cycleway link to Browns Lane. NH requested larger drawings which showed the mitigation measures, where relevant the local plan elements, and the whole of the M42 Jn20 for context. These drawings:

    - B033920-TTE-00-ZZ-SK-H-1001-P01 shows Reference Case With Development Improvements. That is the whole of M42 Jn10 with the proposed mitigation measures from 784-B033920-TTE-00-ZZ-PL-H-0001-P05 and, on the right hand side of the drawing the flaring of the eastbound A5 to the proposed A5/ Site Access junction from 784-B033920-TTE-00-ZZ-PL-H-0002-P03. This drawing does not show the local plan improvements for M42 Jn10
    - B033920-TTE-00-ZZ-SK-H-1002-P01 shows the Local Plan Case With Development Improvements . That is whole of M42 Jn10 with the PJA retained Local Plan improvements for the southern overbridge (shown in red), the proposed mitigation measures from 784-B033920-TTE-00-ZZ-PL-H-0001-P05 (which amends the PJA proposals for this approach) and, on the right hand side the flaring of the eastbound A5 to the A5/ Site access junction from 784-B033920-TTE-00-ZZ-PL-H-0002-P03. The PJA proposal for a segregated left turn slip lane from M42 southbound off slip has been removed from the proposed scheme.
    - B033920-TTE-00-ZZ-SK-H-1003-P01 shows the Local Plan Case With Development and Additional Mitigation. This is the above drawing (B033920-TTE-00-ZZ-SK-H-1002-P01) plus a 3-lane exit from the M42 Jn10 circulatory to the A5 eastbound exit, and the continuation of three eastbound lanes to the A5/Site Access junction.

    Hope that's clear – happy to meet to discuss/ clarify any issues

3. do the Transyt outputs and models supplied by Gareth on the 30/04 represent the latest outputs or are there new models and outputs which can be shared to review? The models shared on 30 April and the outputs are the latest versions
4. please confirm the pdf of results attached to the email reflect the final set of agreed modelling? Confirmed

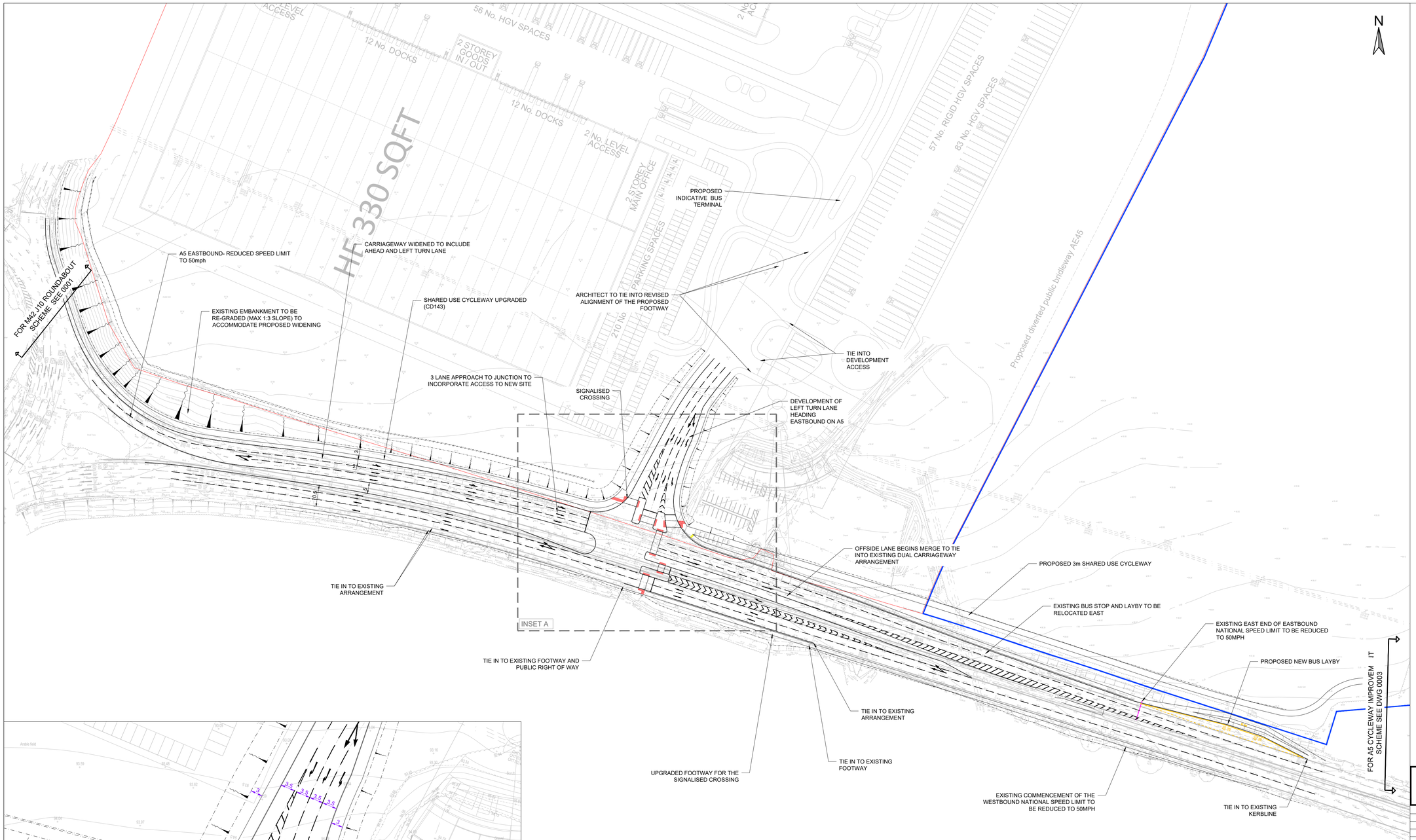
Many Thanks

Alan Law BSc MCIHT
Service Manager - Transport Modelling and Monitoring
Transport Planning
Transport & Highways
Communities
Warwickshire County Council
Tel: 01926 412044
Email: alanlaw@warwickshire.gov.uk
www.warwickshire.gov.uk

From: Bunn, Nick <Nick.Bunn@tetratech.com>
Sent: 07 May 2024 14:19
To: Alan Law <alanlaw@warwickshire.gov.uk>; Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>; Tony Burrows <tonyburrows@warwickshire.gov.uk>; Andrew Collinson <andrewcollinson@northwarks.gov.uk>; Evans,

Appendix NRB 7: Proposed A5 Site Access Junction: TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0002-P03

NRB 7 - 1



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:

- SITE BOUNDARY 1
- SITE BOUNDARY 2
- 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

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 NRB 8: A5 Site Access Junction Long Section and Cross Sections

Notes - Contour Plan

1. Drawing to be read in conjunction with long sections and cross sections drawings.
2. All earthworks have a maximum 1 in 3 gradient (cut & fill) unless shown otherwise.
3. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Contour Plan

- Major contour
- Minor contour
- CH ## — Cross section location/chainage
- Horizontal alignment - straight
- Horizontal alignment - curve
- Chainage

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Tetra Tech Manchester

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

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HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

CONTOUR PLAN
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	Function	Spatial	Form	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0011	P01

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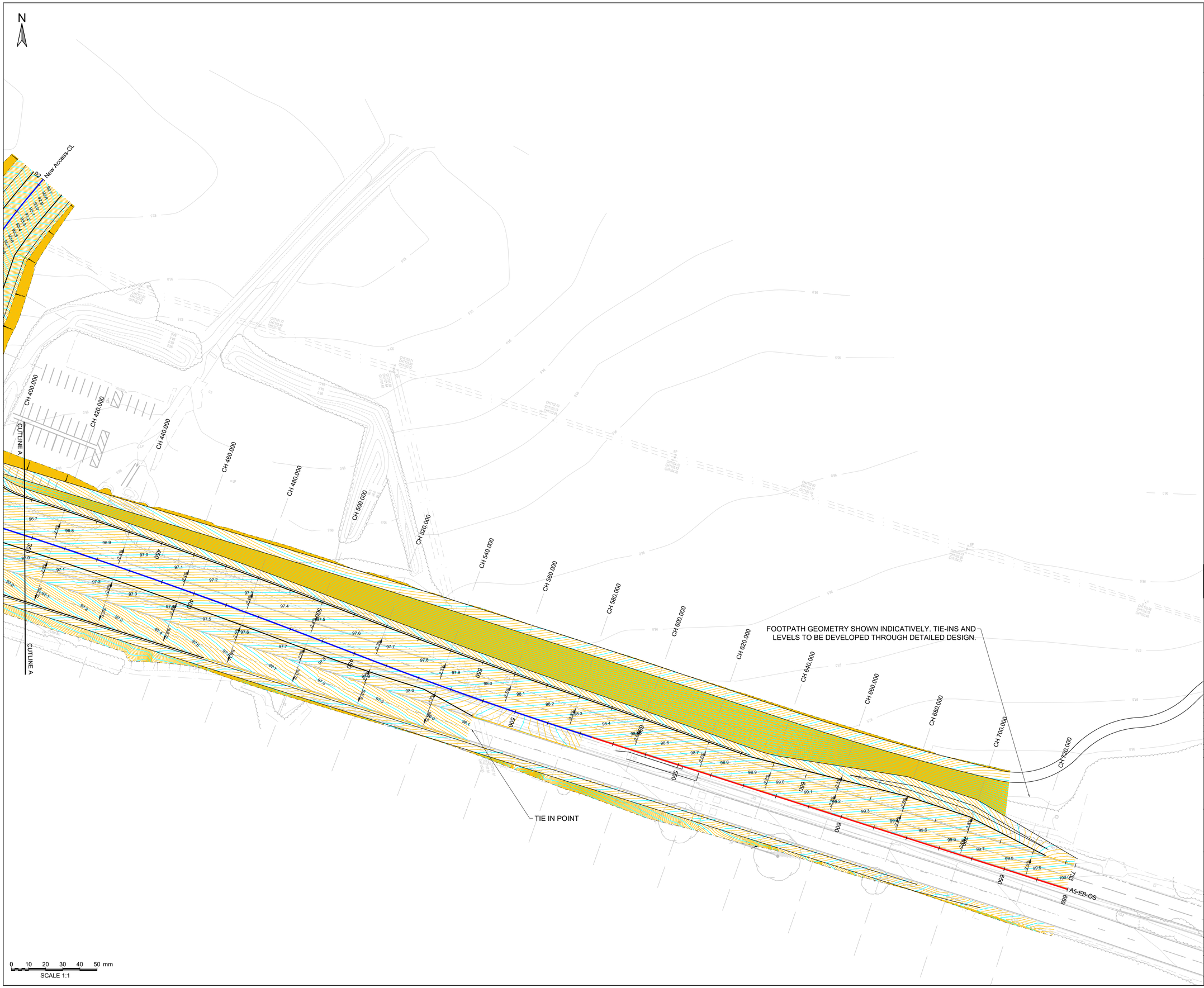

Notes - Contour Plan

1. Drawing to be read in conjunction with long sections and cross sections drawings.
2. All earthworks have a maximum 1 in 3 gradient (cut & fill) unless shown otherwise.
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- Minor contour
- CH ## — Cross section location/chainage
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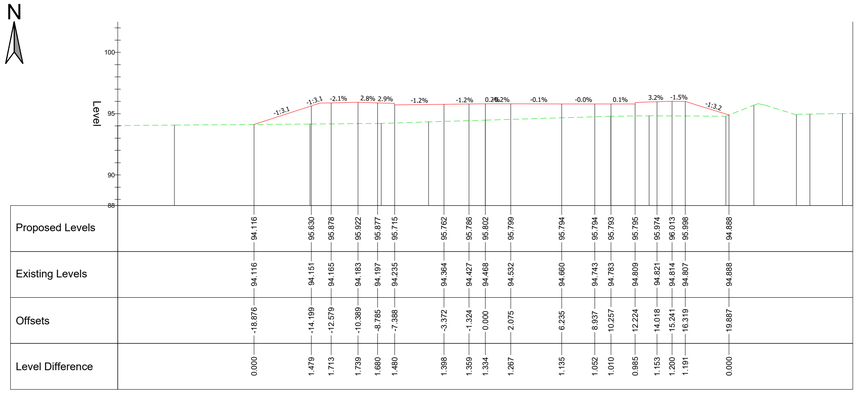
A5 CYCLEWAY IMPROVEMENT

Sheet Title

CONTOUR PLAN
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	Function	Spatial	Form	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0012	P01



Proposed Levels	94.116	95.630	95.878	95.922	95.877	95.715	95.762	95.786	95.802	95.799	95.794	95.794	95.793	95.795	95.974	96.013	95.998	94.888
Existing Levels	94.116	94.151	94.165	94.183	94.197	94.235	94.364	94.427	94.468	94.532	94.660	94.743	94.783	94.809	94.821	94.814	94.807	94.888
Offsets	-18.876	-14.199	-12.579	-10.389	-8.785	-7.388	-3.372	-1.324	0.000	2.075	6.235	8.937	10.257	12.224	14.018	15.241	16.319	19.887
Level Difference	0.000	1.479	1.713	1.739	1.680	1.480	1.398	1.359	1.334	1.267	1.135	1.052	1.010	0.985	1.153	1.200	1.191	0.000

Alignment -New Access-CL - CH 20.000 (1)

Proposed Levels	93.388	93.879	94.471	95.265	95.308	95.329	95.300	95.128	95.200	95.125	94.985	95.187	95.164	94.756	94.156	94.114
Existing Levels	93.388	93.396	93.407	93.422	93.435	93.441	93.463	93.514	93.603	93.707	93.914	93.997	94.026	94.060	94.111	94.114
Offsets	-15.932	-14.437	-12.634	-10.174	-8.172	-7.155	-6.147	-3.928	0.000	3.633	10.763	13.715	14.766	15.999	17.811	17.938
Level Difference	0.000	0.483	1.064	1.843	1.874	1.888	1.837	1.614	1.598	1.418	1.071	1.190	1.138	0.695	0.045	0.000

Alignment -New Access-CL - CH 40.000 (2)

Proposed Levels	92.747	93.591	94.361	94.401	94.436	94.400	94.241	94.330	94.249	94.088	94.313	94.298	93.946	93.563	93.267
Existing Levels	92.747	92.756	92.765	92.772	92.803	92.833	92.864	92.936	92.996	93.140	93.197	93.214	93.232	93.252	93.267
Offsets	-14.336	-11.803	-9.492	-7.936	-6.442	-4.976	-3.492	0.000	2.936	8.987	11.997	13.069	14.178	15.389	16.322
Level Difference	0.000	0.835	1.597	1.628	1.633	1.567	1.377	1.394	1.253	0.948	1.116	1.084	0.714	0.311	0.000

Alignment -New Access-CL - CH 60.000 (3)

Proposed Levels	92.242	92.297	93.357	93.432	93.250	93.330	93.302	93.144	93.339	93.314	92.642
Existing Levels	92.242	92.243	92.279	92.322	92.372	92.415	92.430	92.521	92.580	92.601	92.642
Offsets	-12.842	-12.679	-9.498	-6.448	-2.987	0.000	1.061	7.001	9.951	11.001	13.019
Level Difference	0.000	0.054	1.078	1.110	0.878	0.915	0.871	0.622	0.760	0.713	0.000

Alignment -New Access-CL - CH 80.000 (4)

SCALE 1:250

Proposed Levels	93.860	93.850	94.117	95.419	97.675	97.622
Existing Levels	93.860	93.878	94.101	95.217	97.318	97.622
Offsets	-20.976	-20.038	-17.014	-12.978	-5.574	-0.202
Level Difference	0.000	-0.028	0.015	0.202	0.357	0.000

Alignment - A5-EB-NS - CH 0.000

Proposed Levels	93.522	93.536	93.506	98.034	98.059	97.986	97.939
Existing Levels	93.521	93.522	93.506	97.627	97.931	97.996	97.904
Offsets	-22.694	-22.578	-19.579	-6.000	-4.950	-1.975	-0.023
Level Difference	0.002	0.014	0.000	0.407	0.128	-0.011	0.036

Alignment - A5-EB-NS - CH 20.000

Proposed Levels	92.940	92.942	92.941	92.968	94.638	95.462	97.933	97.958	97.885	97.839	97.839
Existing Levels	92.936	92.936	92.938	92.941	93.866	94.708	97.148	97.490	97.795	97.714	97.714
Offsets	-24.124	-24.011	-22.761	-20.892	-15.886	-13.415	-6.000	-4.950	-1.975	0.000	0.050
Level Difference	0.004	0.006	0.003	0.027	0.771	0.754	0.785	0.468	0.090	0.125	0.125

Alignment - A5-EB-NS - CH 40.000

Proposed Levels	92.349	92.324	92.340	93.931	94.435	94.812	95.696	96.057	97.560	97.585	97.512	97.466	97.467
Existing Levels	92.323	92.317	92.301	93.199	93.705	94.084	94.970	95.331	96.797	97.137	97.529	97.339	97.339
Offsets	-24.875	-23.981	-21.694	-16.908	-15.392	-14.255	-11.597	-10.513	-6.000	-4.950	-1.975	0.000	0.050
Level Difference	0.025	0.007	0.039	0.732	0.730	0.728	0.726	0.725	0.763	0.449	-0.017	0.128	0.128

Alignment - A5-EB-NS - CH 60.000

Notes - Cross Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Cross Sections

- - - Existing level

— Proposed level

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Project Name

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A5 CYCLEWAY IMPROVEMENT

Sheet Title

CROSS SECTIONS
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	1:250	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920 -	TTE -	00 -	ZZ -	PL -	H -	0021	P01

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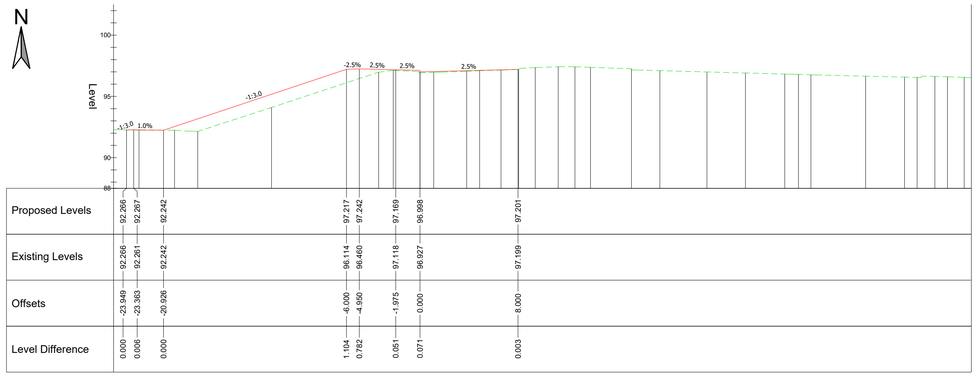

NRB 8 - 4

Proposed Levels	92.266	92.267	92.242	97.217	97.242	97.169	96.998	97.201
Existing Levels	92.266	92.261	92.242	96.114	96.460	97.118	96.927	97.199
Offsets	-23.949	-23.363	-20.926	-6.000	-4.950	-1.975	0.000	8.000
Level Difference	0.000	0.006	0.000	1.104	0.782	0.051	0.071	0.003

Alignment - A5-EB-NS - CH 80.000

Proposed Levels	92.476	92.516	92.515	92.514	94.572	96.868	96.893	96.820	96.649	96.837	96.848
Existing Levels	92.476	92.483	92.494	92.513	93.767	95.928	96.268	96.684	96.518	96.836	96.836
Offsets	-22.247	-21.629	-20.625	-19.064	-12.890	-6.000	-4.950	-1.975	0.000	7.392	7.402
Level Difference	0.000	0.033	0.021	0.001	0.805	0.940	0.625	0.136	0.131	0.002	0.012

Alignment - A5-EB-NS - CH 100.000

Proposed Levels	92.846	92.987	92.933	93.837	94.521	95.044	96.460	96.485	96.411	96.240	96.420	96.545
Existing Levels	92.855	92.861	92.933	93.613	94.095	94.478	95.557	95.767	96.253	96.210	96.422	96.427
Offsets	-26.551	-26.107	-23.030	-18.415	-15.143	-12.546	-6.000	-4.950	-1.975	0.000	7.259	7.391
Level Difference	-0.008	0.126	0.000	0.224	0.425	0.566	0.903	0.718	0.159	0.030	-0.002	0.117

Alignment - A5-EB-NS - CH 120.000

Proposed Levels	92.908	93.132	93.095	95.995	96.020	95.947	95.776	95.972	96.097	95.832
Existing Levels	92.908	92.940	93.095	95.280	95.414	95.788	95.854	95.984	96.072	95.832
Offsets	-28.135	-27.458	-24.457	-6.000	-4.950	-1.975	0.000	8.421	15.409	19.336
Level Difference	0.000	0.193	0.000	0.715	0.606	0.159	-0.078	-0.012	0.026	0.000

Alignment - A5-EB-NS - CH 140.000

0 2.5 5 7.5 10 12.5 m
SCALE 1:250

Proposed Levels	93.212	93.228	93.234	94.108	94.392	95.525	95.550	95.477	95.305	95.566	95.824	95.546
Existing Levels	92.986	93.023	93.234	93.902	94.116	94.962	95.074	95.389	95.480	95.531	95.807	95.546
Offsets	-25.000	-24.100	-21.908	-15.992	-13.979	-6.000	-4.950	-1.975	0.000	10.463	14.773	18.455
Level Difference	0.226	0.205	0.000	0.206	0.277	0.563	0.476	0.087	-0.175	0.035	0.017	0.000

Alignment - A5-EB-NS - CH 160.000

Proposed Levels	93.062	93.274	93.258	93.239	93.576	93.806	94.623	95.315	95.340	95.267	95.096	95.357	95.761	95.483	95.328	95.215	95.318	95.299
Existing Levels	93.062	93.077	93.102	93.239	93.441	93.580	94.074	94.477	94.578	94.864	95.053	95.259	95.688	95.483	95.324	95.215	95.317	95.299
Offsets	-21.973	-21.152	-19.820	-18.263	-16.236	-14.885	-10.059	-6.000	-4.950	-1.975	0.000	10.489	15.123	18.784	22.824	25.778	28.093	29.779
Level Difference	0.000	0.197	0.157	0.000	0.135	0.226	0.549	0.838	0.762	0.404	0.043	0.098	0.073	0.000	0.004	0.000	0.001	0.000

Alignment - A5-EB-NS - CH 180.000

Proposed Levels	93.171	93.168	93.506	93.496	93.485	93.883	95.305	95.330	95.257	95.086	95.348	95.723	95.828	95.562	95.516	95.302	95.473	95.300
Existing Levels	93.167	93.168	93.193	93.262	93.485	93.694	94.428	94.548	94.888	95.114	95.226	95.460	95.634	95.562	95.510	95.302	95.402	95.300
Offsets	-18.371	-18.350	-17.184	-15.758	-14.266	-12.422	-6.000	-4.950	-1.975	0.000	10.487	14.099	15.577	19.213	20.425	26.204	28.154	29.762
Level Difference	0.004	0.000	0.313	0.234	0.000	0.189	0.877	0.782	0.369	-0.028	0.122	0.263	0.194	0.000	0.006	0.000	0.070	0.000

Alignment - A5-EB-NS - CH 200.000

Proposed Levels	93.374	93.373	93.649	93.620	95.432	95.457	95.384	95.212	95.474	95.733	95.934	95.684	95.634	95.444	95.601	95.576	95.495
Existing Levels	93.371	93.373	93.439	93.620	94.249	94.357	94.770	95.053	95.269	95.265	95.663	95.684	95.629	95.444	95.552	95.525	95.495
Offsets	-16.231	-16.197	-15.173	-12.353	-6.000	-4.950	-1.975	0.000	10.486	12.659	15.758	19.389	20.831	26.380	27.769	28.816	29.733
Level Difference	0.003	0.000	0.211	0.000	1.182	1.100	0.613	0.160	0.206	0.468	0.271	0.000	0.006	0.000	0.049	0.052	0.000

Alignment - A5-EB-NS - CH 220.000

Notes - Cross Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Cross Sections

🟩 Existing level
🟥 Proposed level

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M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

CROSS SECTIONS
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	1:250	S3

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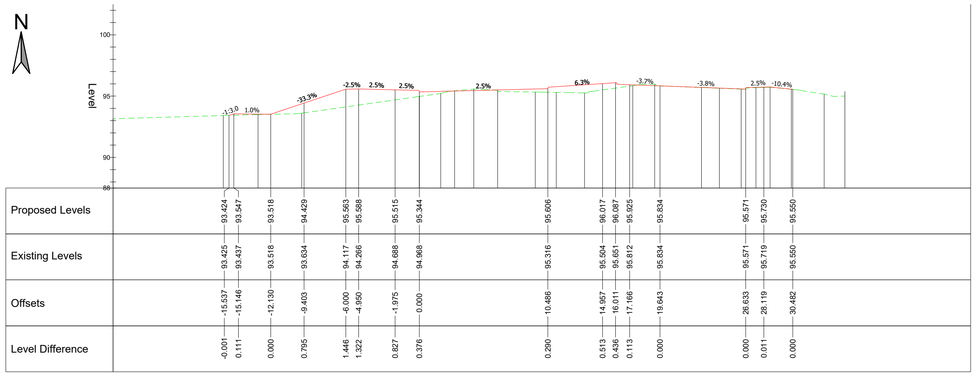
B033920 -	TTE -	00 -	ZZ -	PL -	H -	0022	P01

TTE_MT_v1



Proposed Levels	93.424	93.547	93.518	94.429	95.563	95.588	95.515	95.344	95.606	96.017	96.087	95.925	95.834	95.571	95.730	95.550
Existing Levels	93.425	93.437	93.518	93.634	94.117	94.266	94.688	94.968	95.316	95.504	95.651	95.812	95.834	95.571	95.719	95.550
Offsets	-15.537	-15.146	-12.130	-9.403	-6.000	-4.950	-1.975	0.000	10.486	14.957	16.011	17.166	19.643	26.633	28.119	30.482
Level Difference	-0.001	0.111	0.000	0.795	1.446	1.322	0.827	0.376	0.290	0.513	0.436	0.113	0.000	0.000	0.011	0.000

Alignment - A5-EB-NS - CH 240.000

Proposed Levels	93.538	93.653	93.623	95.695	95.720	95.647	95.475	95.738	96.172	96.232	95.980	95.786	95.731	95.895	95.859
Existing Levels	93.538	93.546	93.623	94.011	94.138	94.514	94.818	95.363	95.552	95.723	95.981	95.785	95.731	95.883	95.859
Offsets	-15.562	-15.216	-12.216	-6.000	-4.950	-1.975	0.000	10.486	15.422	16.452	19.982	25.434	26.973	28.654	30.046
Level Difference	0.000	0.107	0.000	1.684	1.582	1.133	0.657	0.375	0.620	0.510	0.000	0.001	0.000	0.013	0.000

Alignment - A5-EB-NS - CH 260.000

Proposed Levels	93.679	93.782	93.752	95.826	95.851	95.778	95.607	95.869	96.110	96.385	96.142	96.041	95.880	96.029	96.079
Existing Levels	93.679	93.686	93.752	93.918	94.004	94.366	94.804	95.484	95.442	95.745	96.142	96.043	95.880	96.013	96.079
Offsets	-15.531	-15.223	-12.223	-6.000	-4.950	-1.975	0.000	10.487	12.439	16.775	20.407	23.067	27.399	28.492	30.333
Level Difference	0.000	0.096	0.000	1.909	1.847	1.412	0.803	0.386	0.668	0.641	0.000	-0.002	0.000	0.017	0.000

Alignment - A5-EB-NS - CH 280.000

Proposed Levels	93.883	93.988	93.959	95.958	95.983	95.910	95.739	96.001	96.423	96.504	96.262	96.179	96.078	96.176	96.202	96.137
Existing Levels	93.883	93.890	93.959	94.095	94.119	94.436	94.808	95.630	95.755	95.948	96.262	96.179	96.076	96.152	96.192	96.137
Offsets	-15.315	-14.999	-11.998	-6.000	-4.950	-1.975	0.000	10.489	15.845	17.285	20.919	23.638	27.010	28.037	29.078	30.493
Level Difference	0.000	0.098	0.000	1.863	1.864	1.474	0.930	0.371	0.667	0.556	0.000	0.000	0.001	0.023	0.010	0.000

Alignment - A5-EB-NS - CH 300.000

0 2.5 5 7.5 10 12.5 m
SCALE 1:250

Proposed Levels	94.095	94.207	94.178	96.090	96.115	96.041	95.870	96.132	96.448	96.577	96.425	96.318	96.268	96.416	96.407	96.395
Existing Levels	94.098	94.108	94.178	94.302	94.337	94.515	94.872	95.735	95.768	96.202	96.514	96.297	96.268	96.346	96.384	96.395
Offsets	-15.071	-14.735	-11.734	-6.000	-4.950	-1.975	0.000	10.491	15.083	18.079	20.828	25.678	28.505	29.511	31.259	31.840
Level Difference	-0.004	0.099	0.000	1.788	1.778	1.527	0.999	0.397	0.680	0.374	-0.089	0.020	0.000	0.071	0.024	0.000

Alignment - A5-EB-NS - CH 320.000

Proposed Levels	94.179	94.314	94.286	96.221	96.246	96.173	96.002	96.264	96.537	96.670	96.545	96.529	96.444	96.613	96.507	96.504
Existing Levels	94.179	94.192	94.285	94.478	94.509	94.596	95.133	95.876	95.940	96.594	96.545	96.515	96.444	96.519	96.504	96.504
Offsets	-15.215	-14.809	-11.806	-6.000	-4.950	-1.975	0.000	10.494	15.770	20.393	21.932	23.045	28.923	30.796	31.809	31.834
Level Difference	0.000	0.123	0.001	1.743	1.737	1.577	0.869	0.388	0.597	0.075	0.000	0.014	0.000	0.093	0.003	0.000

Alignment - A5-EB-NS - CH 340.000

Proposed Levels	95.778	95.793	95.821	95.849	95.876	95.902	95.928	95.953	95.978	95.996	96.009	96.022	96.030	96.035	96.037	96.036	95.930	95.954	96.000	96.036	96.066	96.107	96.133	96.396	96.686	96.525	96.693	96.719
Existing Levels	94.001	94.020	94.059	94.096	94.129	94.164	94.203	94.242	94.283	94.333	94.374	94.423	94.461	94.500	94.541	94.585	94.625	94.666	94.714	94.753	94.830	94.937	95.075	96.001	96.686	96.525	96.693	96.719
Offsets	-25.000	-24.497	-23.478	-22.460	-21.441	-20.422	-19.403	-18.384	-17.291	-15.994	-14.933	-13.654	-12.653	-11.634	-10.563	-9.431	-8.363	-7.285	-5.369	-3.823	-2.642	-1.021	0.000	10.498	22.102	29.092	30.918	31.703
Level Difference	1.778	1.773	1.762	1.753	1.747	1.739	1.725	1.711	1.694	1.662	1.635	1.599	1.569	1.534	1.496	1.452	1.305	1.288	1.285	1.284	1.236	1.169	1.059	0.394	0.000	0.000	0.000	0.000

Alignment - A5-EB-NS - CH 360.000

Proposed Levels	95.622	95.632	95.672	95.720	95.754	95.798	95.840	95.871	96.002	96.034	96.186	96.220	96.242	96.264	96.288	96.311	96.260	96.282	96.545	96.763	96.739	96.957	96.661	96.820	96.844	96.816
Existing Levels	94.512	94.525	94.581	94.646	94.695	94.760	94.822	94.872	95.030	95.060	95.090	95.131	95.158	95.200	95.249	95.285	95.496	95.700	96.137	96.227	96.599	96.957	96.698	96.768	96.794	96.816
Offsets	-25.000	-24.723	-23.577	-22.238	-21.224	-19.875	-18.602	-17.587	-12.412	-11.313	-10.182	-8.668	-7.640	-6.581	-5.519	-4.513	-1.005	0.000	10.500	13.990	18.005	21.512	29.031	30.510	31.532	32.381
Level Difference	1.110	1.107	1.092	1.074	1.059	1.037	1.017	0.999	0.972	0.974	1.096	1.089	1.084	1.064	1.039	1.026	0.764	0.582	0.408	0.536	0.141	0.000	-0.036	0.052	0.050	0.000

Alignment - A5-EB-NS - CH 380.000

Notes - Cross Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Cross Sections

- - - -	Existing level
———	Proposed level

PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App		
P01	PRELIMINARY FIRST ISSUE	02.02.2024	RN	DM	LB

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Issuing Office

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

Client

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

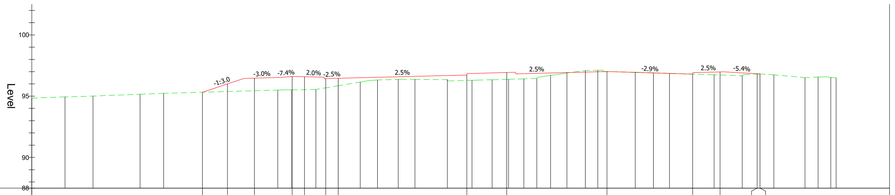
CROSS SECTIONS
SHEET 3

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	1:250	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920 -	TTE -	00 -	ZZ -	PL -	H -	0023	P01

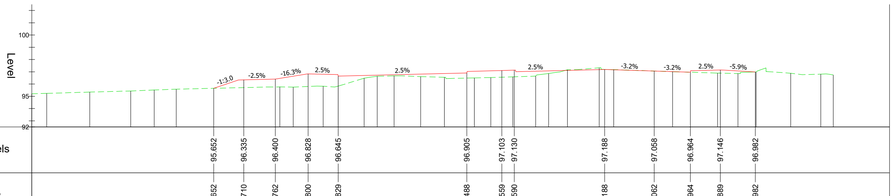
TTE_MT_v1

N



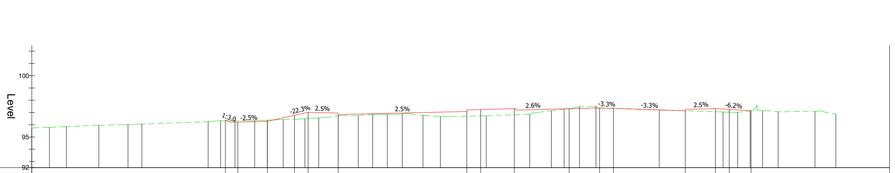
Proposed Levels	96.322	96.001	96.470	96.605	96.587	96.436	96.462	96.724	96.932	97.007	96.803	96.980	96.835	96.823
Existing Levels	96.322	95.982	95.446	95.519	95.538	95.680	95.854	96.288	96.375	97.007	96.803	96.728	96.812	96.823
Offsets	-11.075	-9.039	-6.829	-3.755	-2.749	-1.016	0.000	10.500	13.761	21.941	28.851	31.174	34.200	34.424
Level Difference	0.000	0.619	1.023	1.086	1.050	0.756	0.618	0.435	0.557	0.000	0.000	0.253	0.023	0.000

Alignment - A5-EB-NS - CH 400.000



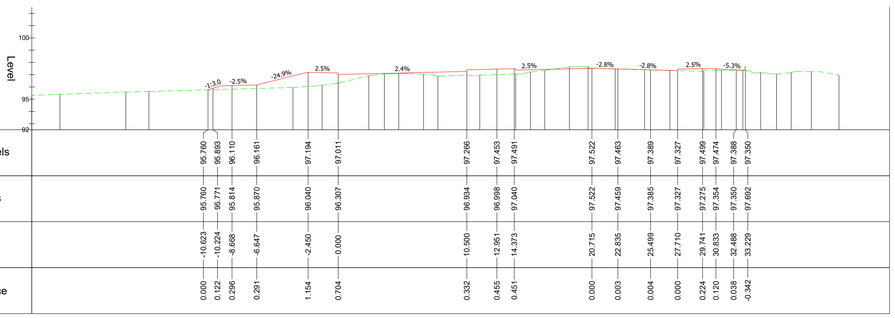
Proposed Levels	95.652	96.335	96.400	96.828	96.645	96.905	97.103	97.130	97.188	97.058	96.964	97.146	96.982
Existing Levels	95.652	95.710	95.762	95.800	95.829	96.488	96.559	96.590	97.188	97.062	96.964	96.889	96.982
Offsets	-10.151	-7.697	-5.134	-2.450	0.000	10.500	13.355	14.373	21.751	25.791	28.741	31.192	34.048
Level Difference	0.000	0.625	0.637	1.028	0.816	0.417	0.544	0.540	0.000	-0.003	0.000	0.258	0.000

Alignment - A5-EB-NS - CH 420.000



Proposed Levels	96.347	96.219	96.280	96.775	97.011	96.828	97.085	97.239	97.315	97.305	97.370	97.333	97.138	97.320	97.252	97.143
Existing Levels	96.336	96.332	96.371	96.452	96.512	96.724	96.685	96.725	96.811	97.322	97.370	97.332	97.138	97.061	97.027	97.143
Offsets	-9.210	-8.191	-5.779	-3.559	-2.450	0.000	10.500	11.638	14.373	18.853	21.342	22.474	28.335	30.786	31.919	33.694
Level Difference	0.011	-0.113	-0.091	0.324	0.499	0.104	0.390	0.514	0.504	-0.017	0.000	0.001	0.000	0.259	0.225	0.000

Alignment - A5-EB-NS - CH 440.000

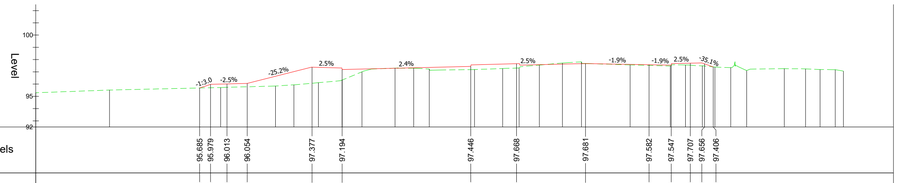


Proposed Levels	95.760	96.893	96.110	96.161	97.194	97.011	97.285	97.453	97.491	97.522	97.463	97.389	97.327	97.499	97.474	97.389	97.350
Existing Levels	95.760	95.771	95.814	95.870	96.040	96.307	96.934	96.998	97.040	97.522	97.459	97.385	97.327	97.275	97.354	97.360	97.892
Offsets	-10.623	-10.224	-8.688	-6.647	-2.450	0.000	10.500	12.951	14.373	20.715	22.535	25.499	27.710	29.741	30.833	32.488	33.229
Level Difference	0.000	0.122	0.256	0.291	1.154	0.704	0.332	0.455	0.451	0.000	0.003	0.004	0.000	0.224	0.120	0.038	-0.342

Alignment - A5-EB-NS - CH 460.000

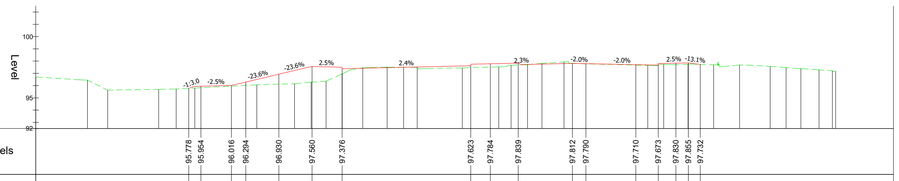
0 2.5 5 7.5 10 12.5 m

SCALE 1:250



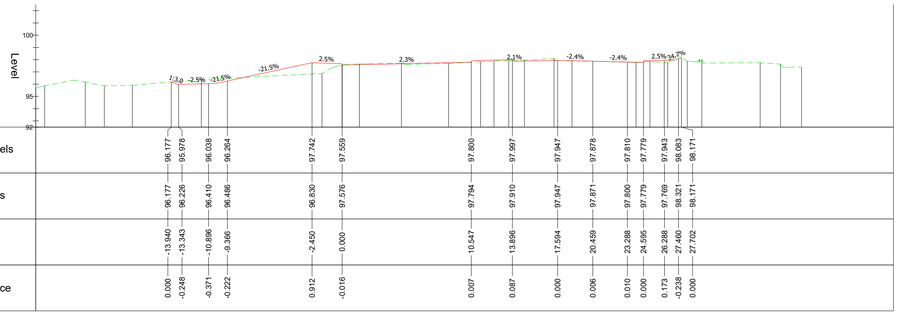
Proposed Levels	95.685	95.979	96.013	96.054	97.377	97.194	97.446	97.668	97.681	97.582	97.547	97.707	97.656	97.406
Existing Levels	95.685	95.705	95.738	95.762	96.071	96.331	97.184	97.313	97.681	97.524	97.547	97.542	97.483	97.406
Offsets	-11.626	-10.743	-9.398	-7.739	-2.450	0.000	10.500	14.239	19.867	25.054	26.865	28.415	29.578	30.289
Level Difference	0.000	0.274	0.275	0.272	1.305	0.862	0.262	0.355	0.000	0.058	0.000	0.165	0.173	0.000

Alignment - A5-EB-NS - CH 480.000



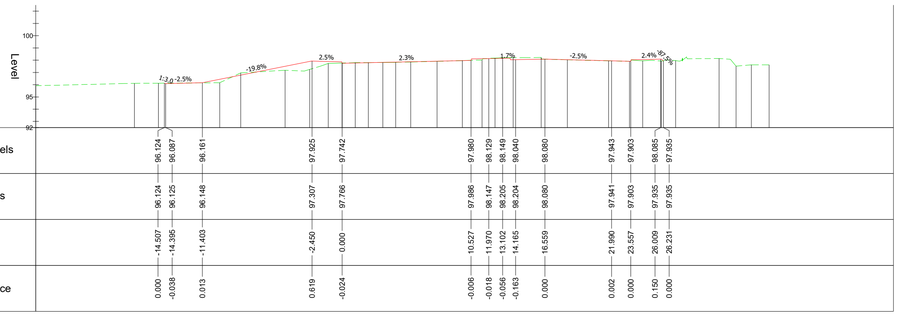
Proposed Levels	95.778	95.954	96.016	96.294	96.930	97.560	97.376	97.623	97.784	97.839	97.812	97.790	97.710	97.673	97.830	97.865	97.732
Existing Levels	95.778	95.830	95.958	96.019	96.117	96.283	96.956	97.464	97.511	97.682	97.812	97.783	97.679	97.673	97.711	97.746	97.732
Offsets	-12.521	-11.526	-9.037	-7.839	-5.161	-2.450	0.000	10.500	12.098	14.371	18.799	19.884	23.969	25.801	27.238	28.255	29.237
Level Difference	0.000	0.124	0.057	0.275	0.813	1.276	0.420	0.159	0.273	0.157	0.000	0.007	0.031	0.000	0.119	0.109	0.000

Alignment - A5-EB-NS - CH 500.000



Proposed Levels	96.177	95.978	96.038	96.264	97.742	97.559	97.800	97.987	97.947	97.878	97.810	97.779	97.943	98.063	98.171
Existing Levels	96.177	96.226	96.419	96.488	96.838	97.576	97.794	97.910	97.947	97.871	97.800	97.779	97.760	98.321	98.171
Offsets	-13.940	-13.343	-10.896	-9.366	-2.450	0.000	10.547	13.896	17.894	20.459	23.288	24.595	26.288	27.460	27.702
Level Difference	0.000	-0.248	-0.371	-0.222	0.912	-0.016	0.007	0.087	0.000	0.006	0.010	0.000	0.173	-0.238	0.000

Alignment - A5-EB-NS - CH 520.000



Proposed Levels	96.124	96.087	96.161	97.925	97.742	97.980	98.129	98.149	98.080	97.943	97.903	98.085	97.935
Existing Levels	96.124	96.125	96.148	97.307	97.766	97.986	98.147	98.205	98.204	98.080	97.941	97.903	97.935	97.935
Offsets	-14.507	-14.395	-11.403	-2.450	0.000	10.527	11.970	13.102	14.165	16.559	21.990	23.557	26.009	26.231
Level Difference	0.000	-0.038	0.013	0.619	-0.024	-0.006	-0.018	-0.056	-0.163	0.000	0.002	0.000	0.150	0.000

Alignment - A5-EB-NS - CH 540.000

Notes - Cross Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Cross Sections

Existing level

Proposed level

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Document Control

Issuing Office

Tetra Tech Manchester

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

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

CROSS SECTIONS
SHEET 4

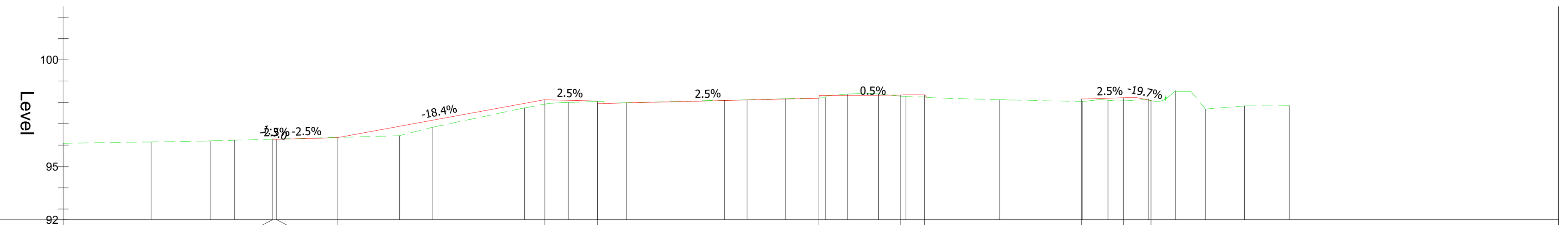
TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	RN	Feb'24	DM	Feb'24	LB	Feb'24	1:250	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0024	P01

TTE_MT_v1

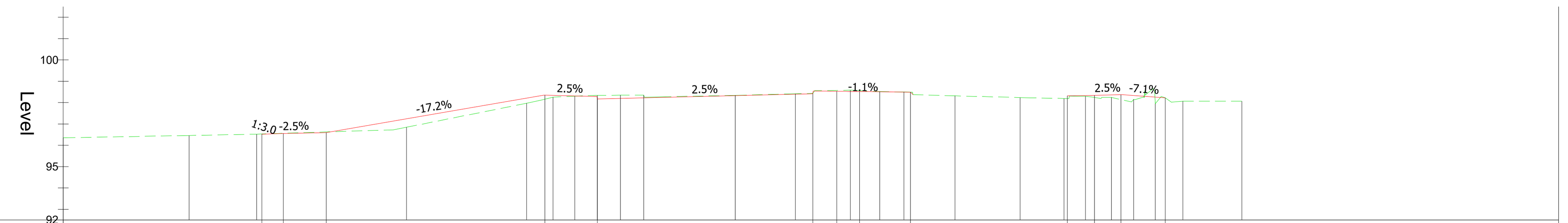
NRB 8 - 7

N



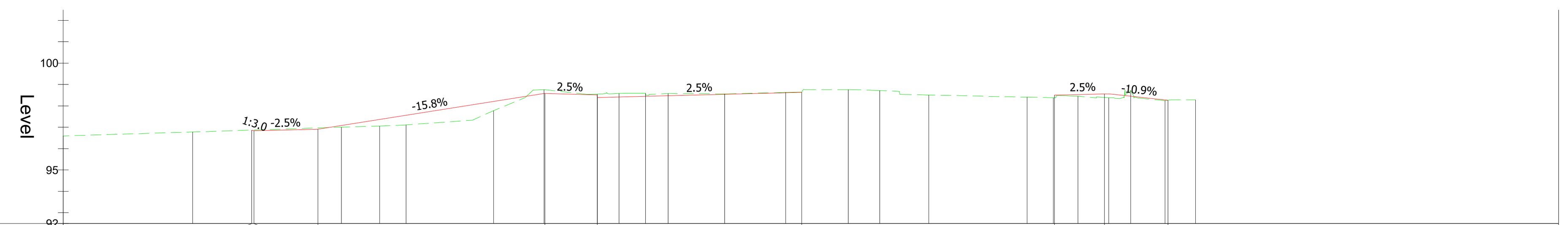
Proposed Levels	96.276	96.273	96.343	98.125	97.942	98.199	98.350	98.358	98.169	98.213	98.088
Existing Levels	96.276	96.281	96.359	97.918	98.046	98.214	98.295	98.251	98.045	98.077	98.088
Offsets	-15.194	-15.013	-12.181	-2.450	0.000	10.373	14.205	15.315	22.663	24.626	25.922
Level Difference	0.000	-0.008	-0.017	0.207	-0.104	-0.015	0.055	0.107	0.125	0.136	0.000

Alignment - A5-EB-NS - CH 560.000



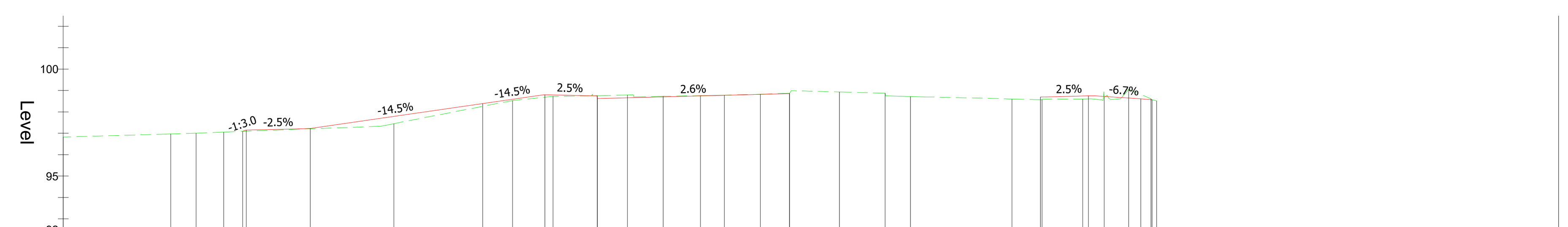
Proposed Levels	96.531	96.548	96.598	98.350	98.167	98.419	98.531	98.517	98.491	98.316	98.342	98.373	98.229
Existing Levels	96.531	96.562	96.626	98.164	98.341	98.434	98.572	98.562	98.491	98.191	98.241	98.143	98.229
Offsets	-15.705	-14.702	-12.690	-2.450	0.000	10.082	11.204	12.280	14.660	22.007	23.278	24.513	26.590
Level Difference	0.000	-0.014	-0.028	0.185	-0.174	-0.015	-0.041	-0.045	0.000	0.125	0.102	0.230	0.000

Alignment - A5-EB-NS - CH 580.000



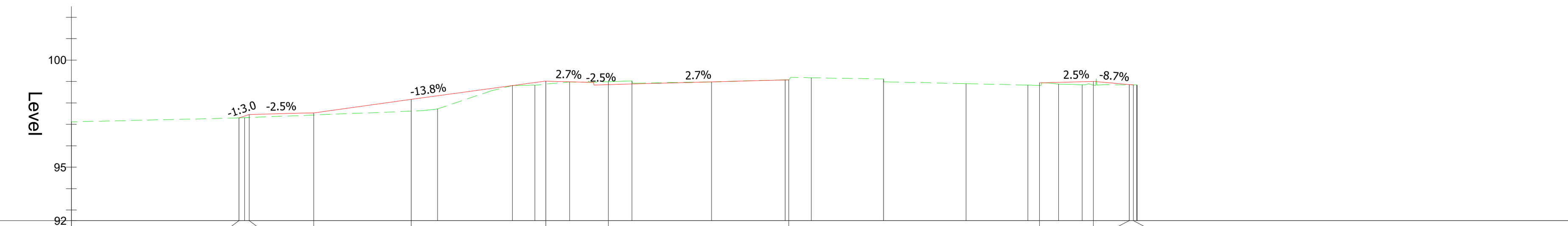
Proposed Levels	96.867	96.834	96.908	98.578	98.395	98.639	98.508	98.560	98.264
Existing Levels	96.867	96.870	96.967	98.756	98.554	98.641	98.382	98.394	98.264
Offsets	-16.176	-16.078	-13.083	-2.450	0.000	9.570	21.398	23.734	26.712
Level Difference	0.000	-0.036	-0.059	-0.178	-0.159	-0.002	0.126	0.166	0.000

Alignment - A5-EB-NS - CH 600.000



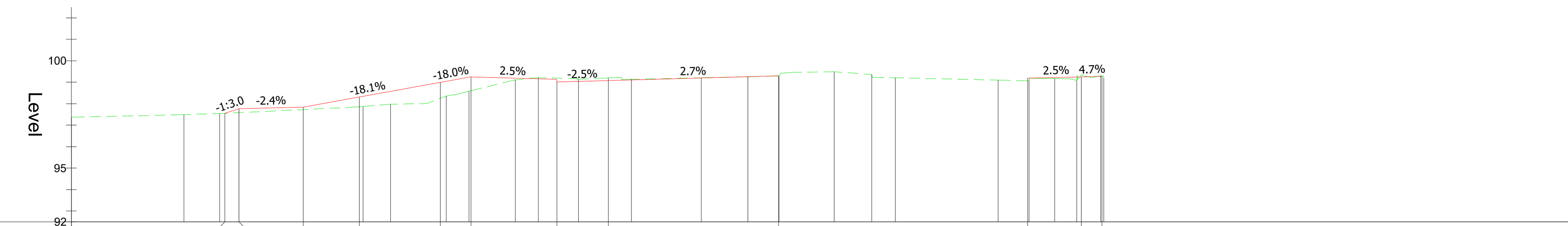
Proposed Levels	97.090	97.147	97.221	98.390	98.806	98.623	98.858	98.696	98.746	98.611	98.572
Existing Levels	97.092	97.098	97.207	98.259	98.685	98.754	98.865	98.571	98.607	98.810	98.572
Offsets	-16.604	-16.433	-13.436	-5.367	-2.450	0.000	8.994	20.745	22.992	25.440	25.971
Level Difference	-0.002	0.049	0.014	0.132	0.121	-0.131	-0.007	0.125	0.138	-0.199	0.000

Alignment - A5-EB-NS - CH 620.000



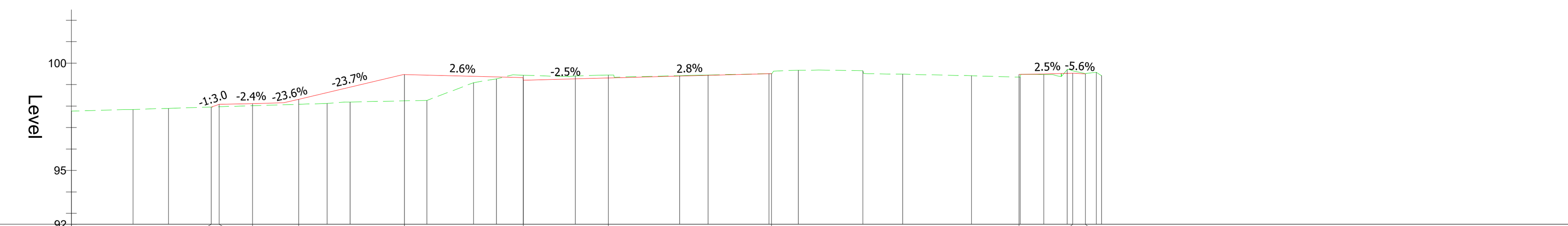
Proposed Levels	97.298	97.459	97.533	98.160	99.017	98.851	99.077	98.941	98.997	98.853	98.839
Existing Levels	97.298	97.317	97.434	97.612	98.875	98.986	99.077	98.816	98.829	98.844	98.843
Offsets	-17.202	-16.719	-13.718	-9.178	-2.911	0.000	8.403	20.076	22.582	24.252	24.444
Level Difference	0.000	0.142	0.099	0.549	0.142	-0.135	0.001	0.125	0.168	0.010	-0.004

Alignment - A5-EB-NS - CH 640.000



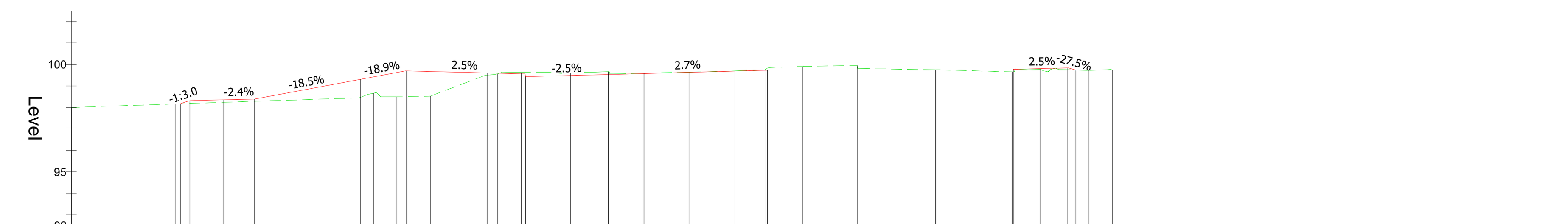
Proposed Levels	97.553	97.770	97.843	98.317	98.996	99.243	99.020	99.079	99.297	99.193	99.250	99.293
Existing Levels	97.553	97.584	97.728	97.860	98.254	98.603	99.194	99.202	99.293	99.069	99.325	99.293
Offsets	-17.850	-17.199	-14.198	-11.588	-7.821	-6.393	-2.387	0.000	7.927	19.520	22.026	22.869
Level Difference	0.000	0.185	0.115	0.457	0.742	0.640	-0.175	-0.122	0.004	0.124	-0.075	0.000

Alignment - A5-EB-NS - CH 660.000



Proposed Levels	97.959	98.080	98.118	98.319	99.475	99.208	99.308	99.517	99.477	99.534	99.504
Existing Levels	97.959	97.970	98.019	98.086	98.245	99.438	99.444	99.514	99.353	99.651	99.504
Offsets	-18.487	-18.121	-16.562	-14.412	-9.495	-3.961	0.000	7.594	19.119	21.624	22.215
Level Difference	0.000	0.110	0.099	0.233	1.230	-0.230	-0.136	0.003	0.124	-0.117	0.000

Alignment - A5-EB-NS - CH 680.000



Proposed Levels	98.176	98.319	98.357	98.392	99.305	99.697	99.603	99.439	99.536	99.737	99.778	99.837	99.742
Existing Levels	98.176	98.190	98.241	98.288	98.480	98.500	99.506	99.625	99.666	99.828	99.654	99.755	99.742
Offsets	-19.913	-19.484	-17.907	-16.476	-11.532	-9.401	-5.619	-3.853	0.000	7.405	18.863	21.369	21.764
Level Difference	0.000	0.128	0.116	0.105	0.825	1.197	0.097	-0.186	-0.130	-0.091	0.124	0.081	0.000

Alignment - A5-EB-NS - CH 700.000

0 2.5 5 7.5 10 12.5 m
SCALE 1:250

Notes - Cross Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Cross Sections

- - - Existing level
— Proposed level

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

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Client
HODGETTS ESTATES

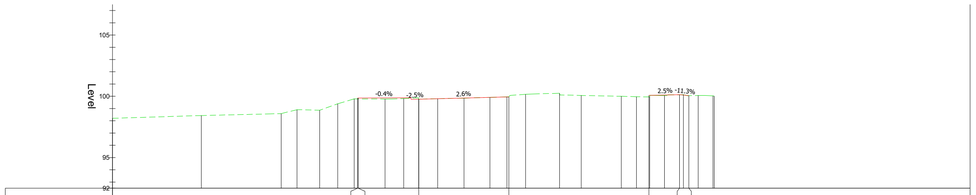
Project Name
M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title
CROSS SECTIONS
SHEET 5

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	1:250	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0025	P01

TTE_MT_v1



NRB 8 - 8

N

Proposed Levels	99.857	99.857	99.764	99.957	100.078	100.137	100.056
Existing Levels	99.788	99.787	99.769	99.957	99.952	100.127	100.056
Offsets	-4.991	-4.941	0.000	7.356	18.779	21.284	22.048
Level Difference	0.069	0.069	-0.006	0.000	0.126	0.010	0.000

Alignment - A5-EB-NS - CH 720.000

SCALE 1:250

Notes - Cross Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Cross Sections

- - - -	Existing level
——	Proposed level

PRELIMINARY ISSUE

P01	PRELIMINARY FIRST ISSUE	02.02.2024	RN	DM	LB
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2nd Floor,11 York Street,
Manchester, United Kingdom
M2 2AW
Tel: +44 (0)161 872 3223
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HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

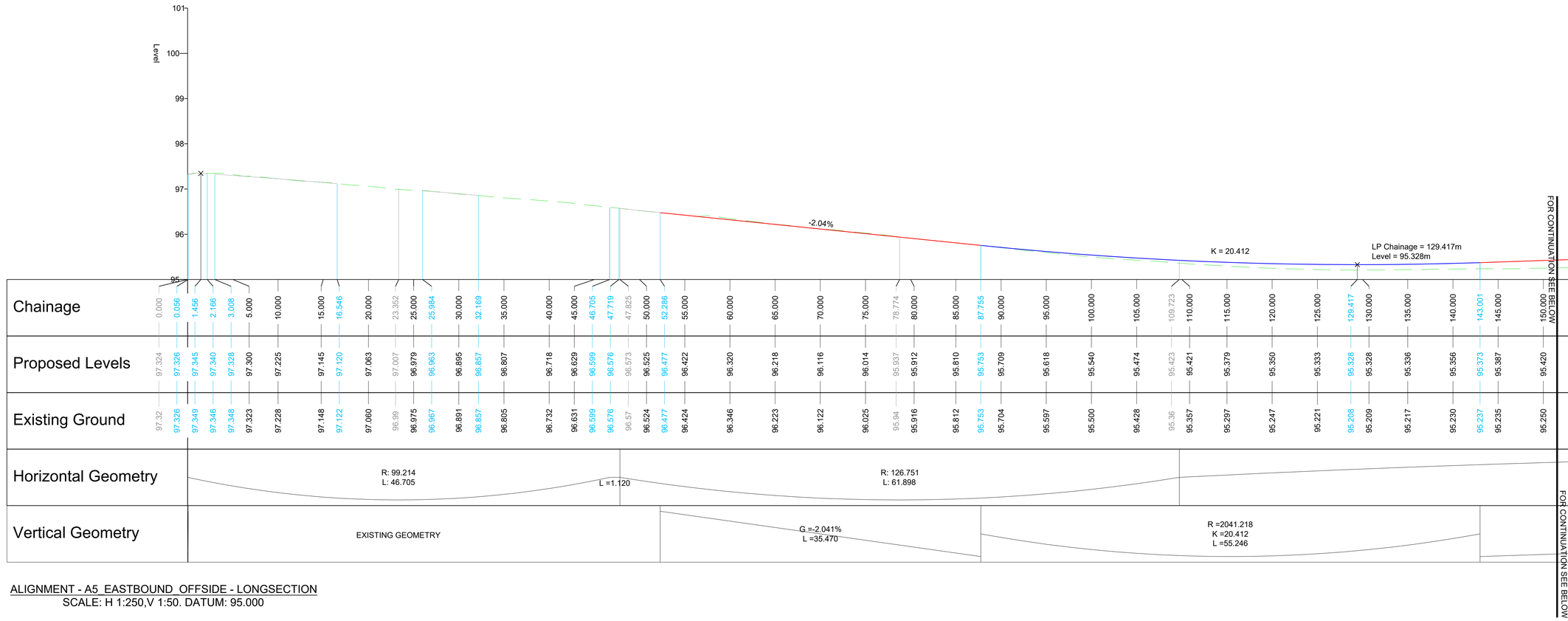
Sheet Title

CROSS SECTIONS
SHEET 6

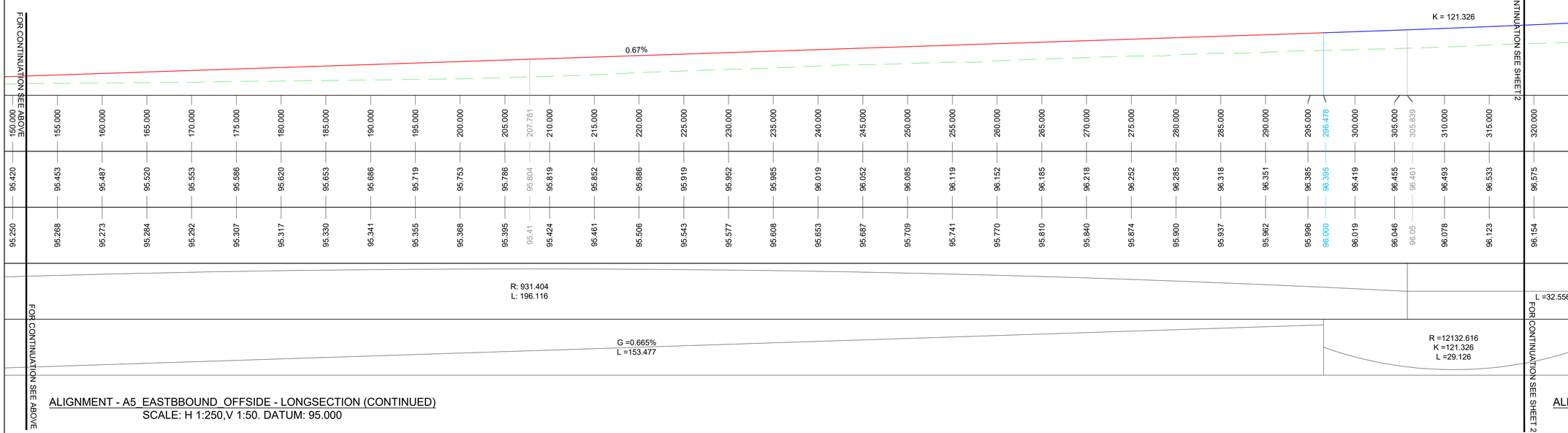
TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	RN	Feb'24	DM	Feb'24	LB	Feb'24	1:250	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920 -	TTE -	00 -	ZZ -	PL -	H -	0026	P01

TTE_MT_v1



ALIGNMENT - A5_EASTBOUND_OFFSIDE - LONGSECTION
SCALE: H 1:250,V 1:50. DATUM: 95.000



ALIGNMENT - A5_EASTBBOUND_OFFSIDE - LONGSECTION (CONTINUED)
SCALE: H 1:250,V 1:50. DATUM: 95.000

Notes - Long Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Long Sections

- Existing level
- Proposed vertical geometry - straight
- Proposed vertical geometry - curve (sag/crest)
- Change in vertical profile
- Change in horizontal profile

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Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

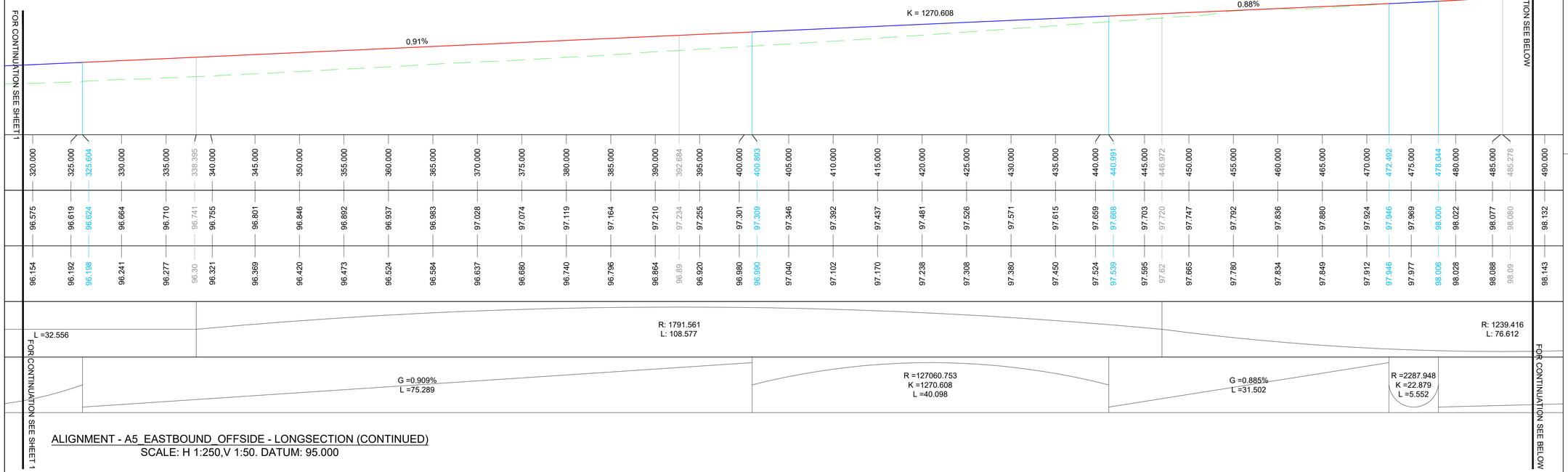
Sheet Title

LONG SECTIONS
SHEET 1

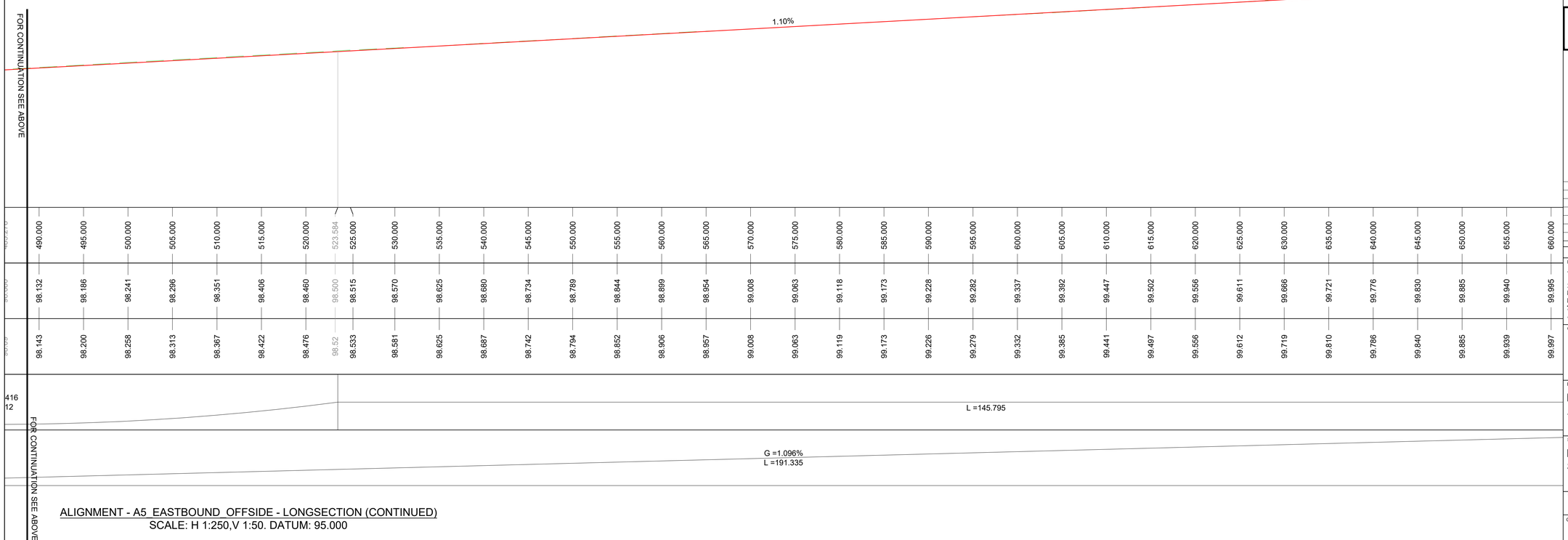
TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	RN	Feb'24	DM	Feb'24	LB	Feb'24	AS SHOWN	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0031	P01

TTE_MT_v1



ALIGNMENT - A5_EASTBOUND_OFFSIDE - LONGSECTION (CONTINUED)
SCALE: H 1:250,V 1:50. DATUM: 95.000



ALIGNMENT - A5_EASTBOUND_OFFSIDE - LONGSECTION (CONTINUED)
SCALE: H 1:250,V 1:50. DATUM: 95.000

Notes - Long Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Long Sections

- Existing level
- Proposed vertical geometry - straight
- Proposed vertical geometry - curve (sag/crest)
- Change in vertical profile
- Change in horizontal profile

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M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

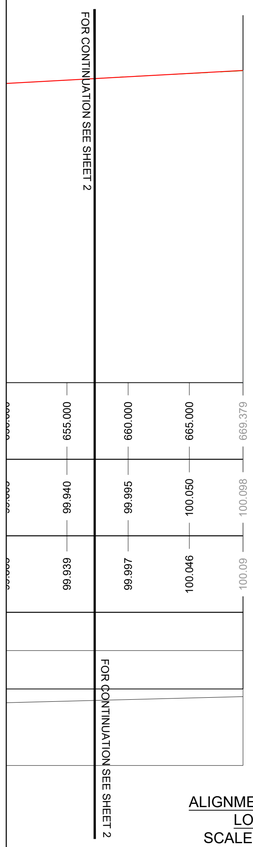
Sheet Title

LONG SECTIONS
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	AS SHOWN	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0032	P01

TTE_MT_v1



ALIGNMENT - A5_EASTBOUND_OFFSIDE -
LONGSECTION (CONTINUED)
SCALE: H 1:250,V 1:50. DATUM: 95.000

Notes - Long Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Long Sections

- Existing level
- Proposed vertical geometry - straight
- Proposed vertical geometry - curve (sag/crest)
- Change in vertical profile
- Change in horizontal profile

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Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

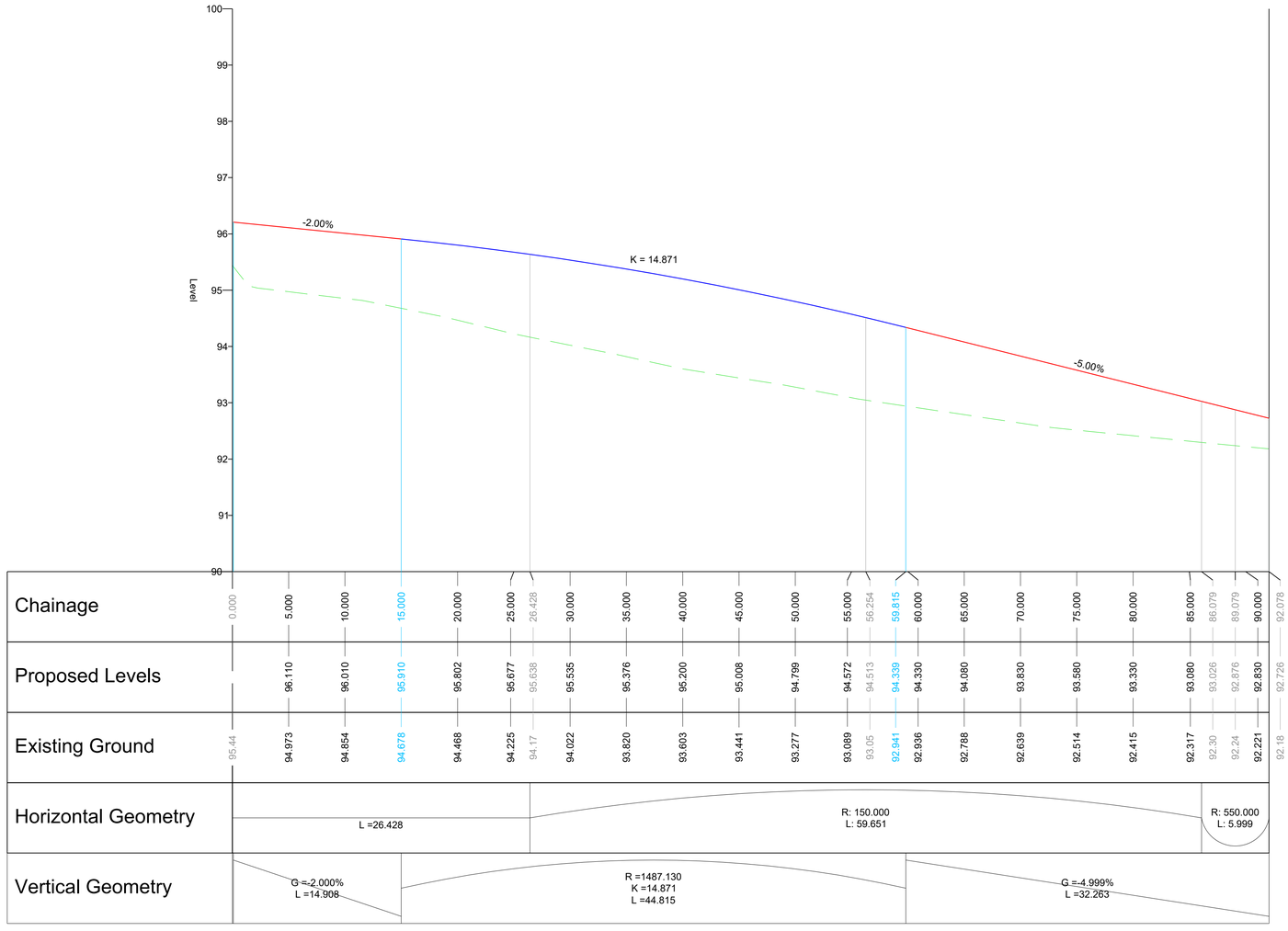
Sheet Title

LONG SECTIONS
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	AS SHOWN	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0033	P01

TTE_MT_v1



ALIGNMENT - NEW ACCESS - CENTERLINE - LONGSECTION
SCALE: H 1:250,V 1:50. DATUM: 90.000

Notes - Long Sections

1. Drawing to be read in conjunction with Contour Plan.
2. The 3D design has been produced using Autodesk Civil 3D 2019

Key - Long Sections

- Existing level
- Proposed vertical geometry - straight
- Proposed vertical geometry - curve (sag/crest)
- Change in vertical profile
- Change in horizontal profile

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Client: HODGETTS ESTATES

Project Name
M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title
PROPOSED ACCESS
LONG SECTION

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	AS SHOWN	S3

Client Project Number	Originator	Function	Spatial	Form	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0034	P01

TTE_MT_v1

Appendix NRB 9: A5 Eastbound Exit SSD: TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0020-P01

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
- FORWARD VISIBILITY ENVELOPE BASED ON 160m STOPPING SIGHT DISTANCE (SSD)
- FORWARD SPLAYS BASED ON 160m SSD
- TYPICAL EXISTING VISBILITY SPLAYS DUE TO DENSE VEGETATION
- HATCHED ENVELOPE WHICH ENCOUNTERS FOR THE OVERLAP WITH THE EXISITING SSD AND THE 160mm FORWARD VISIBILITY

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M2 2AW
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Project Name

LAND NORTH-EAST OF M42 JUNCTION 10

Sheet Title

EXISTING SSD AND VISIBILITY FOR A5 EASTBOUND EXIT

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	LJB	Apr'24	LB	Apr'24	NB	Apr'24	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	- TTE	- 00	- ZZ	- SK	- H	- 0020	P01

Appendix NRB 10: A5 Eastbound Exit SSD with Site Access Junction: TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0021-P01

NRB 10 - 1

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

FORWARD VISIBILITY ENVELOPE BASED ON 160m STOPPING SIGHT DISTANCE (SSD)

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Project Name

LAND NORTH-EAST OF M42 JUNCTION 10

Sheet Title

SSD AND VISIBILITY FOR A5 EASTBOUND EXIT WITH PROPOSED A5 IMPROVEMENTS

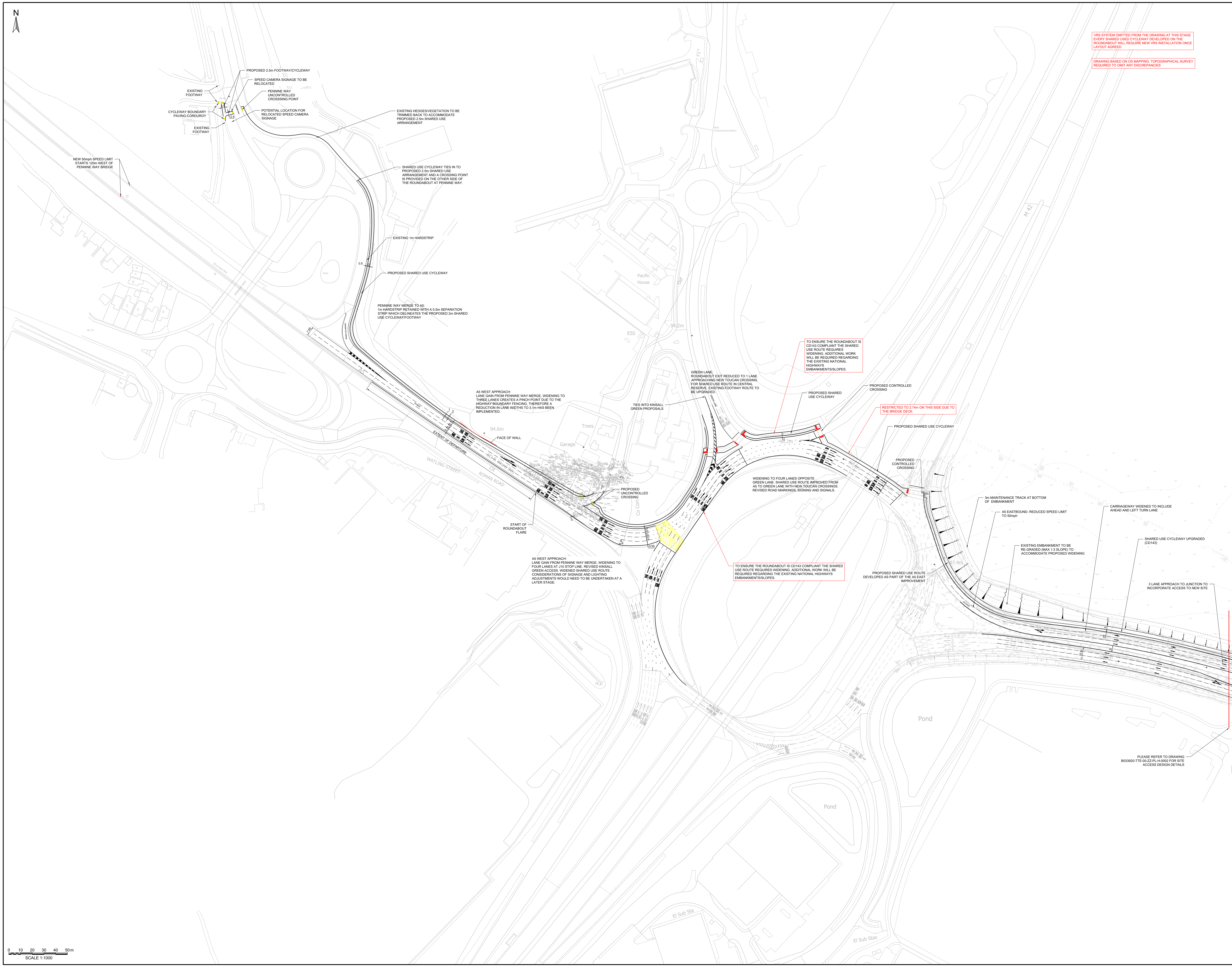
TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	LJB	Apr' 24	LB	Apr' 24	NB	Apr' 24	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	SK	H	0021	P01

TTE_MT_v1

Appendix NRB 11: Reference Case. M42 Jn10 Proposed Improvements: TT Drawing 784-B033920-TTE-00-ZZ-SK-H-1001-P01

NRB 11 - 1



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.
FACE OF WALL
EXTENT OF DEPARTURE
WATLING STREET
ROMAN ROAD
94.6m
Trees
Garage
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
ESS
94.2m
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.
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)
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 ROUTE DEVELOPED AS PART OF THE A5 EAST IMPROVEMENT
3 LANE APPROACH TO JUNCTION TO INCORPORATE ACCESS TO NEW SITE
M 42
Pond
Pond
El Sub Sta
El Sub Sta
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.

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Tetra Tech Manchester
2nd Floor,11 York Street,
Manchester, United Kingdom
M2 2AW
Tel: +44 (0)161 872 3223
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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 NRB 12: 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 NRB 13: A5/ Dordon Roundabout Illustrative Local Plan Improvement Scheme: TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0009-P01

NRB 13 - 1

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

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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

HODGETTS ESTATES

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

Appendix NRB 14: M42 J10 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.

NRB 14 - 1

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.	Revision
02853 - 01	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 NRB 15: Local Plan Case. M42 Jn10 Proposed Improvements with Local Plan Improvements: TT Drawing 784-B033920-TTE-00-ZZ-DR-H-1002-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.

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.

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.

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.

TIES INTO KINSALL GREEN PROPOSALS

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

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

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
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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 NRB 16: Agreed 2033 Local Plan with Additional Mitigation 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

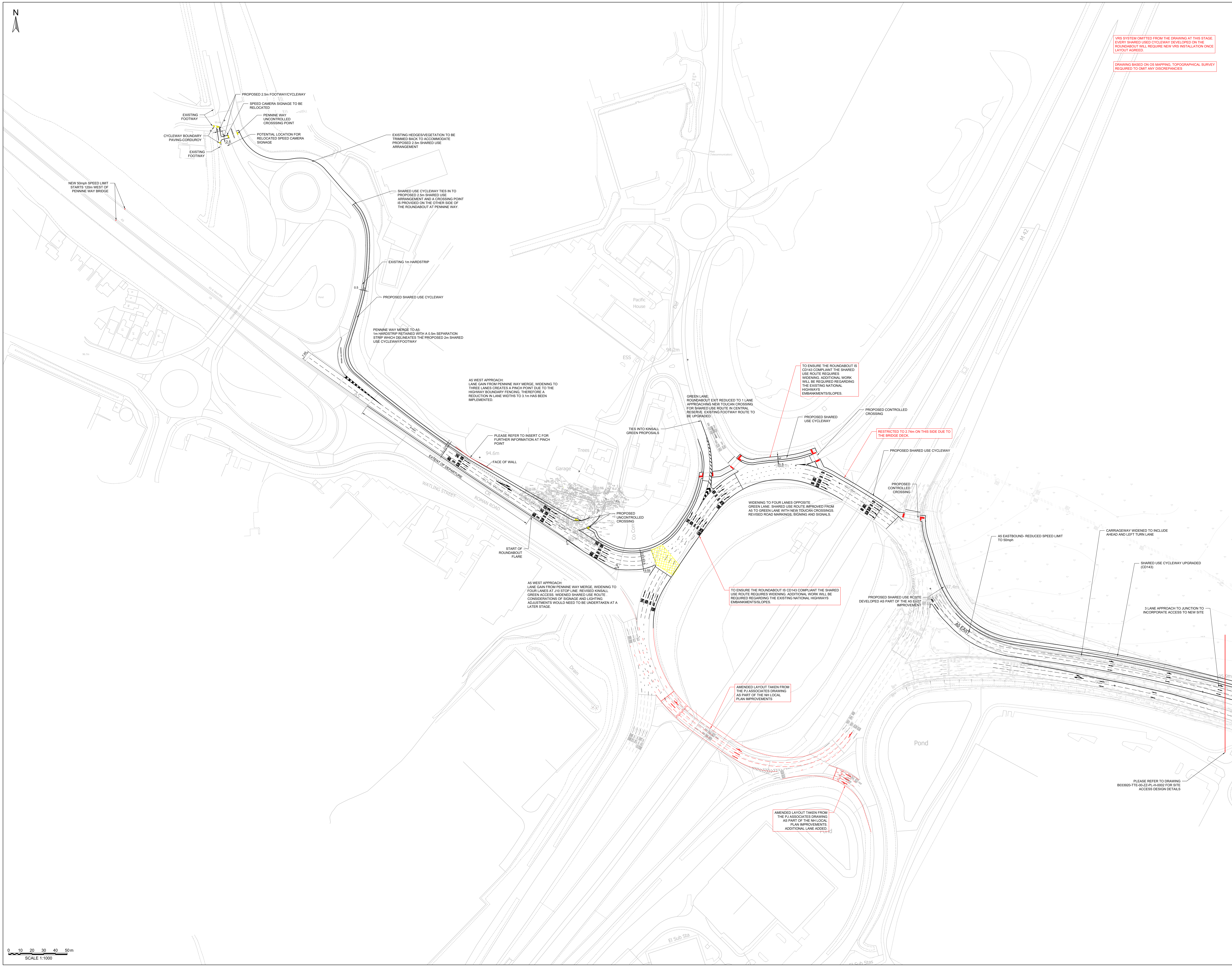
23/3 + 24/2 + A25/2 + 39/2	A5 Westbound Lane 3	1851	Queue Aver Delay	9 25 secs	6 26 secs	15 1m 47s	17 59 secs
23/4 + 24/3	A5 Westbound Lane 4	1851	Queue Aver Delay	12 31 secs	9 34 secs	7 1m 17s	9 1m 56s
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	12 22 secs	13 23 secs	15 22 secs	14 21 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 NRB 17: Local Plan Case. M42 Jn10 Proposed Improvements with Local Plan Improvements plus Additional Mitigation: TT Drawing 784-B033920-TTE-00-ZZ-DR-H-1003-P01

NRB 17 - 1



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
94.6m
94.2m
ESS
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.
M 42
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
97.4m
A5 EAST
3 LANE APPROACH TO JUNCTION TO INCORPORATE ACCESS TO NEW SITE
AMENDED LAYOUT TAKEN FROM THE PJ ASSOCIATES DRAWING AS PART OF THE NH LOCAL PLAN IMPROVEMENTS
Pond
Drain
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-ZZ-PL-H-0002 FOR SITE ACCESS DESIGN DETAILS
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.

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

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 NRB 18: 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 NRB 19: DfT Ministerial Announcement, 9 March 2023

GOV.UK

Written statement to Parliament

Record investment plans for transport network

Over £40 billion will be invested in transformational transport schemes over the next 2 financial years across the country.

From: Department for Transport (/government/organisations/department-for-transport) and The Rt Hon Mark Harper MP (/government/people/mark-harper)

Published 9 March 2023

Delivered on: 9 March 2023

During this Parliament there has been a step change in public investment in infrastructure. The

Autumn Statement protected the public capital budget at record levels, meaning government will invest over £600 billion over the next 5 years. The Chancellor has announced over £40 billion of capital investment in transport across the next 2 financial years, which will drive significant improvements to rail and roads right across our country.

Since agreeing this programme, we have seen headwinds from inflation, triggered by the impact of Putin's illegal war in Ukraine, as well as supply chain disruption as the global economy recovers from the effects of COVID-19.

These headwinds have made it difficult to deliver on our capital programmes, and we recognise that some schemes are going to take longer than expected. Refocusing our efforts will allow us to double down on delivering the rest of our capital programme. This will place our transport investments on a sustainable footing and allow us to support the government's priorities of halving inflation, growing the economy and reducing debt.

In terms of major road investments, Road Investment Strategy (RIS 2) schemes will continue to progress. The A27 Arundel and A5036 Princess Way in Liverpool both face a range of challenges including environmental considerations and ongoing scope and design changes to ensure stakeholders' views are fully considered. As a result, these schemes will be deferred to RIS 3 (covering 2025-2030). Other schemes earmarked for RIS 3 will continue to be developed, in line with the statutory process, but for consideration for inclusion during RIS 4 (beyond 2030). Given many of these schemes were previously expected towards the end of RIS 3, this extra time will help ensure better planned and efficient schemes can be deployed more effectively.

To date we have spent over £800 million on planning the Lower Thames Crossing. It is one of the largest planning applications ever, and it is important we get this right. We remain committed to the Lower Thames Crossing, and the development consent order process will be an important opportunity to consult further to ensure there is an

effective and deliverable plan. In order to allow time for this process, and given wider pressures on RIS, we will look to rephase construction by 2 years.

In rail, HS2 is making good progress, and we have already spent over £20 billion delivering Phase One between London and the West Midlands, supporting 2,500 businesses and creating over 29,000 jobs. The government is prioritising HS2's initial services between Old Oak Common in London and Birmingham Curzon Street to provide delivery of passenger benefits as soon as possible. We remain committed to delivering HS2 services to Euston, and will address affordability pressures to ensure the overall spending profile is manageable. We will therefore take the time to ensure we have an affordable and deliverable station design, delivering Euston alongside high-speed infrastructure to Manchester. We continue to take the High Speed Rail (Crewe – Manchester) Bill through Parliament, and the Crewe-to-Manchester section will also form the foundations for improved rail services in the North through Northern Powerhouse Rail.

The government is committed to delivering HS2 Phase 2a between Birmingham and Crewe. Wehave seen significant inflationary pressure and increased project costs, and so we will rephase construction by 2 years, with an aim to deliver high-speed services to Crewe and the North West as soon as possible after accounting for the delay in construction. Work continues on progressing commitments made in the Integrated Rail Plan to develop HS2 East, the proposed route for HS2 services between the West and East Midlands, and to consider the most effective way to take HS2 trains to Leeds. HS2 continues to represent a very significant investment into our national infrastructure, levelling up communities right across our country, providing a net-zero alternative to car travel and domestic flights, and training a skilled workforce for the UK's future construction industry.

We remain committed to supporting all forms of transport and have invested over £850 million in active travel between 2020/21 and 2022/23. Despite the need to deliver efficiency in all areas of our budget, we will still commit to spend at least a

further £100 million capital into active travel over the remainder of the spending period, as part of a total of around £3 billion investment in active travel over this Parliament, including from City and Region Sustainable Transport settlements and National Highways. We will review these levels as soon as practically possible.

These are the difficult but responsible decisions we are taking, that put the priorities of the British people first, in controlling inflation and reducing government debt. They continue our record investment into our national infrastructure, which will continue to play a vital role in growing our economy and delivering long-term prosperity.

Transport Secretary sets out record investment plans for transport network (https://www.gov.uk/government/news/transport-secretary-sets-out-record-investment-plans-for-transport-network), press notice.

Published 9 March 2023

Explore the topic

Cycling and walking (/transport/cycling-and-walking)

HS2 (/transport/hs2)

Road infrastructure (/transport/road-infrastructure)

Appendix NRB 20: Extract of NWBC Local Infrastructure Plan 2020

North Warwickshire

INFRASTRUCTURE DELIVERY PLAN

North Warwickshire
Borough Council

June 2020

Contents

Table 19: Core A5 Scheme Costs and Delivery Years

ID	Scheme	Cost	Year of Inclusion
1	Holly Lane	£750,000	**2021**
2	Tamworth Rd/Market St	£750,000	**2021**
3	B5000 Canal Bridge widening	£3,000,000	**2021**
4	A5/B5000 Link Road	£7,500,000	**2026**
5	Enhanced A5 Proposals Phase 1	£28,750,000	**2026**
6	Dordon Signals	See 5.	**2026**
7	Holly Lane Widening Approaches	£9,200,000	**2026**
8	Reconfiguration of M42 signal approaches and junction optimisation	To be funded out with the Local Plan	**2026**
9	Grendon Roundabout	See 5.	**2026**
10	Birch Coppice Trinity Way Link	To be funded out with the Local Plan (ideally via M42 J10 enhancements)	**2026**
11	Mancetter Gyratory	£2,300,000	**2031**
12	A5 Holly Lane	See 7.	**2031**
13	B5000/Mercian Way	See 5.	**2031**
14	A5 - Dualling	See 5.	**2031**
15	Bypass Roundabout	See 5.	**2031**

Table 20: Enhanced Scheme Cost Estimates

ID	Scheme	Cost	Year of Inclusion
16	M42 Enhanced Capacity	To be funded out with the Local Plan	**2031**
17	A5 Full Bypass	£57,500,00	**2031**

Appendix NRB 21: Vectos/TT Email14 February 2022

Wakenshaw, Gareth

From: Stuart Allan <stuart.allan@vectos.co.uk>
Sent: 14 February 2022 15:26
To: Bunn, Nick
Cc: dwh@hodgettsestates.co.uk; Wakenshaw, Gareth; Blair, Peter; 'Chris Bancroft'; 'Jane Hodgetts'; Edward Hodgetts
Subject: RE: PARAMICS Modelling for potential new development on land to the northeast of M42 Junction
Attachments: A5 Dualling NWBC Local Plan Statement.pdf; 0 Background.pdf; 1 Growth Corridor Study (Extract) - Schemes.pdf; 2 HIF Schemes.pdf

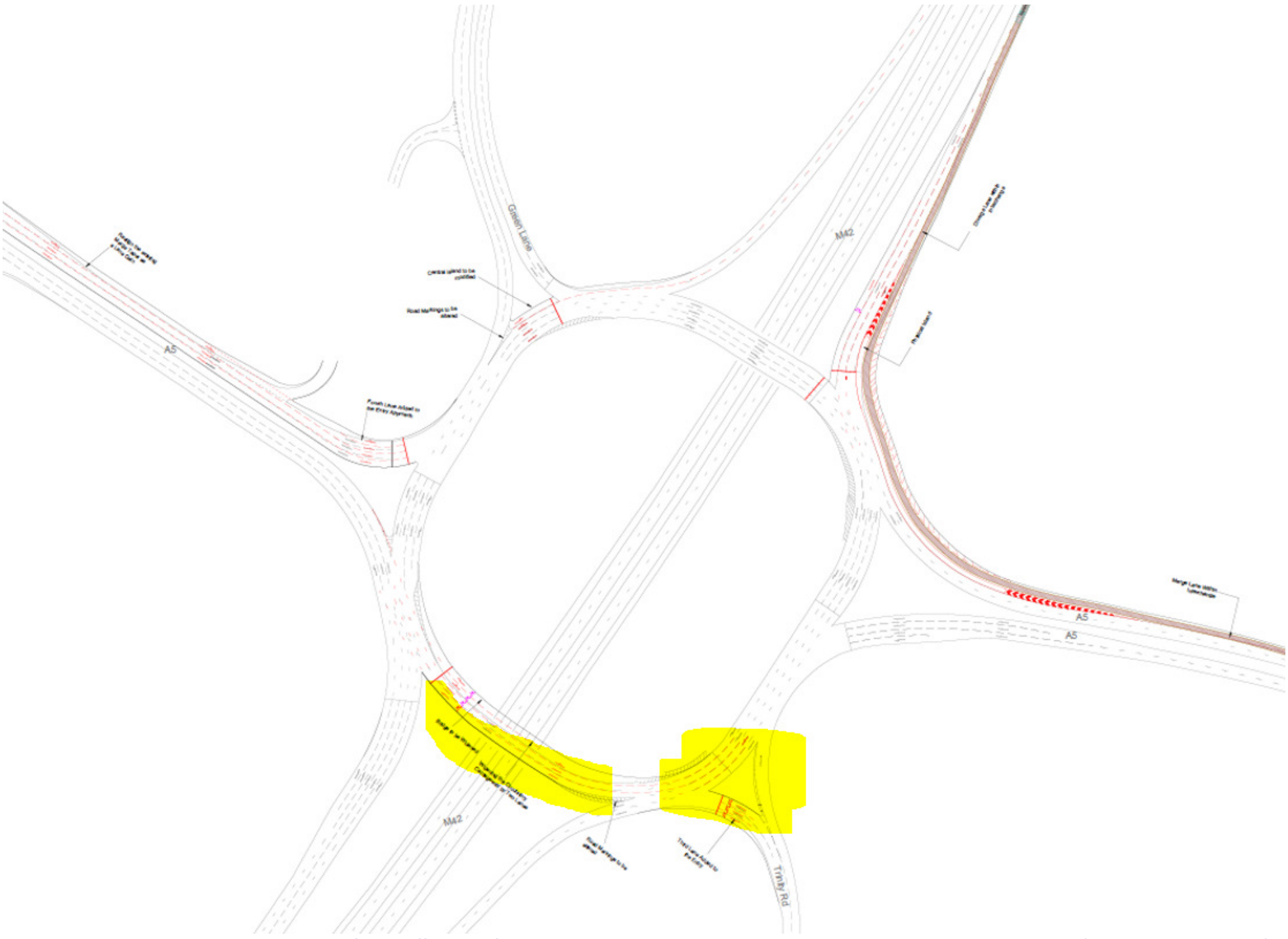
Hi Nick

As discussed, i've had a look at the models and can provide the following brief notes:

1. 2031 Reference Case. The Impact Assessment Results (VM200361.SP001) refers to including *A5 Ph1 & Ph2 improvements i.e. HIF scheme: Dordon to Grendon byass with the associated new roundabouts at each end, A5/Holly Lane improvements (widening & signals), and A5/Spon Ln/Boot Hill improvements (widening).* No specific improvements at Jn10 are indicated. The STA refers at Table row 8 to *Reconfiguration of M42 signal approaches and junction optimisation.* It is not clear whether the improvements to Jn10 have bene include in the Paramics model used to assess the development impacts - can you confirm.

   The 2031 Reference Case includes the A5 Phase 1 and 2 schemes, which were refined and assessed as part of the HE/WCC HIF bid in 2020. It is included in the 2031 Reference Case as it is considered committed (and funded through the HIF), but not included in the earlier years as it isn't likely to be completed then.
   The same scheme is included in the Local Plan scenario for the same reason (NB: schemes here were always identified as necessary in the STA and in the NWBC Plan to facilitate growth)
   I have attached an extract from the HIF reporting that summarises these schemes. Please note these may have evolved over time but this is what was included in the models that were subsequently used for this development assessment.
   M42 Junction 10 improvements are only in the Local Plan scenario. They were identified in the NWBC STA are 'aspirational'. Additional work was carried out in advance of the Plan hearing to determine if the combined growth from NWBC and NBBC could be accommodated and at this time a scheme at M42 J10 was confirmed as required. There has been quite a bit of work carried out over the years exploring schemes here. I am not up to speed with it all but a little bit of background is included in the Local Plan statement note that I have attached.

   The M42 J10 scheme, as included in the Local Plan model used to assess the Hodgetts Estates site, is shown below:



   I have highlighted where I have spotted significant differences from the Keir scheme, ost notably the signals on the Trinity Road approach (and the widening here) and the extra lane on the southern section of the circulatory (4 lanes).

2. Can you let me know what the reconfiguration/ reoptimisation works comprise in terms of physical widening/ lane reallocation of which approaches, and what signal timing alterations were included in this scheme assessed for the STA.

   See above

3. The 2031 Local Plan Case. The Impact Assessment Results refer to the improvements identified for the 2031 Reference Case above *plus M42 J10 enhancements, Grendon Bypass with associated new roundabout on eastern end, and the A5/B5000 Link Road*. The STA at Table 2 for Jn10 refers to *Widening of the A5 eastbound approach and circulatory to four lanes. Widening of the southern circulatory bridge to 4 lanes. Signal optimisation*. Can you confirm the nature of the improvement scheme which was included in the modelling, and whether it was the Kier scheme attached (file name - Appendix 6.1 & 6.2).

   See above and attached (see 1 Growth….)

4. The Impact Assessment results include journey time information for the A5 east of Jn10, but none for the A5 west of Jn10 or M42(S). Can queuing delays be provided for all junction approaches to M42 Jn10, A5/ Site Access and A5/ Birch Coppice?

   I'm afraid JT Paths were included in the model so we don't have this information. It could be collected but all models would need rerun to collect.

5. Can you confirm whether the signal junctions at M42 J10, A5 Site Access and A5/ Birch Coppice are set up within the model as fixed time with fixed offsets or whether they are VA/ MOVA controlled.

   Fixed times with fixed offsets. No MOVA in these models.

6. The Impact Assessment Results and the A5 Atherton Paramics Model do not include the junction at A5/ Core 42 (Hall End Farm), however this junction was included in the A5 Corridor Model. Can you advise why it was not included in the modelling work for Bancroft.

   This junction is in all the models as Hall End Farm is included as a committed development. Queue routes weren't added at this junction so queues at the access aren't presented but the delay (and the junctions itself) are in all models. See below (Ref and LP network)

I have attached extracts from various reports that should provide some background on the various models and the schemes. Also a WCC statement re. the A5 infrastructure that was presented at the examination.

Hopefully that helps.

Regards

Stuart Allan
Director
-
0121 289 5610
07469 926 453
stuart.allan@vectos.co.uk
-
7th Floor, 36 Great Charles Street
Birmingham, B3 3JY

vectos microsim. | PART OF SLR

From: Bunn, Nick <Nick.Bunn@tetratech.com>
Sent: 14 February 2022 13:07
To: Stuart Allan <stuart.allan@vectos.co.uk>
Cc: dwh@hodgettsestates.co.uk; Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>; Blair, Peter <Peter.Blair@tetratech.com>; 'Chris Bancroft' <chris@bancroftconsulting.co.uk>; 'Jane Hodgetts' <jane@hodgettsestates.co.uk>; Edward Hodgetts <edward@hodgettsestates.co.uk>
Subject: RE: PARAMICS Modelling for potential new development on land to the northeast of M42 Junction

Hi Stuart

Thanks for the reply.

My queries are in relation to the work you carried out for Hodgetts Estates using the A5 Atherstone paramics model and seeks to identify what improvement schemes were included in the modelling work you did and the nature of those schemes. I am also asking whether further information can be obtained from the modelling work done for Hodgetts Estates. Can you clarify why Alan Lamb would need to respond to these?

Dr Nick Bunn **BSc(Hons) PhD MSc MCIHT CMILT**
Director
Pronouns: he, him, his

Tetra Tech
4th Floor, Rotterdam House, 116 Quayside, Newcastle Upon Tyne, NE1 3DY
Tel: +44 191 249 9814
Mob: +44 07789 653036

tetratecheurope.com

From: Stuart Allan <stuart.allan@vectos.co.uk>
Sent: 14 February 2022 12:50
To: Bunn, Nick <Nick.Bunn@tetratech.com>
Cc: dwh@hodgettsestates.co.uk; Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>; Blair, Peter <Peter.Blair@tetratech.com>; 'Chris Bancroft' <chris@bancroftconsulting.co.uk>; 'Jane Hodgetts' <jane@hodgettsestates.co.uk>; Edward Hodgetts <edward@hodgettsestates.co.uk>
Subject: RE: PARAMICS Modelling for potential new development on land to the northeast of M42 Junction

Hi Nick

In the first instance, can you please direct any questions about the licenced models to WCC.

I suggest sending these queries to Alan Law alanlaw@warwickshire.gov.uk

Regards

Stuart Allan
Director
-
0121 289 5610
07469 926 453
stuart.allan@vectos.co.uk
-
7th Floor, 36 Great Charles Street
Birmingham, B3 3JY

From: Bunn, Nick <Nick.Bunn@tetratech.com>
Sent: 14 February 2022 12:44
To: Stuart Allan <stuart.allan@vectos.co.uk>
Cc: dwh@hodgettsestates.co.uk; Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>; Blair, Peter <Peter.Blair@tetratech.com>; 'Chris Bancroft' <chris@bancroftconsulting.co.uk>; 'Jane Hodgetts' <jane@hodgettsestates.co.uk>; Edward Hodgetts <edward@hodgettsestates.co.uk>
Subject: PARAMICS Modelling for potential new development on land to the northeast of M42 Junction

Hi Stuart

I have been given your contact details by David Hodgetts. We have been asked to pick up the transport work on the application for the site Land NE of M42 Jn10. I have been provided with a copy of the LMVR for the Atherston A5 model, and the Paramics output spread sheets sent to Chris Bancroft (attached). I have also reviewed the STA 2017 produced for the North Warwickshire Local Plan and the A5 Corridor Study 2018 submitted to the EiP.

Following my review I have a some queries and would be grateful for your comments.

1. 2031 Reference Case. The Impact Assessment Results (VM200361.SP001) refers to including *A5 Ph1 & Ph2 improvements i.e. HIF scheme: Dordon to Grendon byass with the associated new roundabouts at each end, A5/Holly Lane improvements (widening & signals), and A5/Spon Ln/Boot Hill improvements (widening).* No specific improvements at Jn10 are indicated. The STA refers at Table row 8 to *Reconfiguration of M42 signal approaches and junction optimisation.* It is not clear whether the improvements to Jn10 have bene include in the Paramics model used to assess the development impacts - can you confirm.
2. Can you let me know what the reconfiguration/ reoptimisation works comprise in terms of physical widening/ lane reallocation of which approaches, and what signal timing alterations were included in this scheme assessed for the STA.
3. The 2031 Local Plan Case. The Impact Assessment Results refer to the improvements identified for the 2031 Reference Case above *plus M42 J10 enhancements, Grendon Bypass with associated new roundabout on eastern end, and the A5/B5000 Link Road*. The STA at Table 2 for Jn10 refers to *Widening of the A5 eastbound*

approach and circulatory to four lanes. Widening of the southern circulatory bridge to 4 lanes. Signal optimisation. Can you confirm the nature of the improvement scheme which was included in the modelling, and whether it was the Kier scheme attached (file name - Appendix 6.1 & 6.2).

4. The Impact Assessment results include journey time information for the A5 east of Jn10, but none for the A5 west of Jn10 or M42(S). Can queuing delays be provided for all junction approaches to M42 Jn10, A5/ Site Access and A5/ Birch Coppice?
5. Can you confirm whether the signal junctions at M42 J10, A5 Site Access and A5/ Birch Coppice are set up within the model as fixed time with fixed offsets or whether they are VA/ MOVA controlled.
6. The Impact Assessment Results and the A5 Atherton Paramics Model do not include the junction at A5/ Core 42 (Hall End Farm), however this junction was included in the A5 Corridor Model. Can you advise why it was not included in the modelling work for Bancroft.
7. It would be helpful to see the model operating at key AM and PM times - can this be arranged?

Happy to meet up over teams to discuss these points.

Look forward to hearing from you

Regards

Dr Nick Bunn **BSc(Hons) PhD MSc MCIHT CMILT**
Director
Pronouns: he, him, his

Tetra Tech
4th Floor, Rotterdam House, 116 Quayside, Newcastle Upon Tyne, NE1 3DY
Tel: +44 191 249 9814
Mob: +44 07789 653036

tetratecheurope.com

Tetra Tech Limited. Registered in England number: 1959704
Registered Office: 3 Sovereign Square, Sovereign Street, Leeds LS1 4ER
VAT No: 431-0326-08.

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Appendix NRB 22: WCC/TT Email13 May 2022

Wakenshaw, Gareth

From: Alan Law <alanlaw@warwickshire.gov.uk>
Sent: 13 May 2022 11:52
To: Wakenshaw, Gareth
Cc: Moises Muguerza
Subject: Re: Land North east of M42 Jn10 - Modelling Strategy Note [Filed 13 May 2022 12:04]
Attachments: Level Intervention 2B+C+D+E+F-Scale 1 to 2000.pdf

OFFICIAL - Sensitive

Hi Gareth

The layout assumed in the Local Plan modelling working was informed by a study undertaken by PJA when WCC were considering petitioning HS2 to deliver the improvement when undertaken works in the area.

I have attached a copy of the pdf layout, I do not have a copy of the CAD. I could request this if really necessary. It should be noted that this is a concept plan, no feasibility assessment has been undertaken and no agreements with regards to acceptance of the proposal have been made with NH. There would also be a need to incorporate cycling facilities into the proposal.

Kind Regards

Alan

Alan Law BSc MCIHT
Lead Commissioner - Transport Planning (Modelling and Monitoring)
Transport Planning
Transport & Highways
Communities
Warwickshire County Council
Tel: 01926 412044
Email: alanlaw@warwickshire.gov.uk
www.warwickshire.gov.uk

From: Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>
Sent: 13 May 2022 09:28
To: Alan Law <alanlaw@warwickshire.gov.uk>
Subject: FW: Land North east of M42 Jn10 - Modelling Strategy Note

Hi Alan,

Hope you are well.

Just wondering if you have had chance to dig out a more detailed plan (CAD or PDF) of the Junction 10 improvement scheme associated with the Local Plan?

Kind Regards

Gareth Wakenshaw
Principal Transport Planner

Tetra Tech
4th Floor, Rotterdam House, 116 Quayside, Newcastle Upon Tyne, NE1 3DY
Tel: +44 191 249 9817
Mob: +44 734 206 8031

tetratecheurope.com

From: Wakenshaw, Gareth
Sent: 05 May 2022 08:36
To: Simm, Ben <Ben.Simm@highwaysengland.co.uk>; Alan Law <alanlaw@warwickshire.gov.uk>; Gafoor Din <gafoordin@warwickshire.gov.uk>
Cc: Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>; Tony Burrows <tonyburrows@warwickshire.gov.uk>
Subject: RE: Land North east of M42 Jn10 - Modelling Strategy Note [Filed 05 May 2022 08:36]

Good Morning All,

Following the agreement on the attached TRANSYT modelling Note, I am wondering if you could provide me with the CAD drawing of the proposed Local Plan highway improvement works to M42 Junction 10 as shown on the attached “Image 1 – Junction 10 Improvement Scheme”? If a CAD is not available, a 1:500 PDF drawing will be fine so that I can extract the relevant geometries to code into the Local Plan TRANSYT model.

Kind Regards

Gareth Wakenshaw
Principal Transport Planner

Tetra Tech
4th Floor, Rotterdam House, 116 Quayside, Newcastle Upon Tyne, NE1 3DY
Tel: +44 191 249 9817
Mob: +44 734 206 8031

tetratecheurope.com

Tetra Tech Limited. Registered in England number: 1959704
Registered Office: 3 Sovereign Square, Sovereign Street, Leeds LS1 4ER
VAT No: 431-0326-08.

From: Simm, Ben <Ben.Simm@highwaysengland.co.uk>
Sent: 11 April 2022 14:41
To: Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>; Alan Law <alanlaw@warwickshire.gov.uk>; Gafoor Din <gafoordin@warwickshire.gov.uk>

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

NRB 22 - 3

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 NRB 23: Effect of Different Levels of Local Plan on the Existing Highway Network in 2033: Transyt Result Tables 1 and 2

Table 1: 2033 AM Peak Scenario 1 Results (No Development at Land North East of M42 Jn10, Existing Highway Network)

				AM Peak				
Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	Baseline	+10% Local Plan	+15% Local Plan	+20% Local Plan	+30% Local Plan
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	32 2m 57s	47 3m 23s	58 3m 50s	59 4m 1s
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 8 secs	0 8 secs	1 8 secs	1 8 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	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	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 6 secs	1 6 secs	1 6 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	0 4 secs	0 5 secs	0 4 secs	0 5 secs	0 5 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	28 2m 7s	35 2m 32s	36 2m 35s	36 2m 40s	38 2m 43s
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	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	0 5 secs	0 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	1 6 secs	0 6 secs	0 6 secs	1 6 secs	0 6 secs
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1 7 secs	1 6 secs	1 7 secs	1 6 secs	1 6 secs
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs	0 4 secs
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs	0 4 secs
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	0 6 secs	1 6 secs	1 6 secs	1 6 secs	1 6 secs
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 4 secs	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 17 secs	4 17 secs	3 17 secs	3 16 secs	3 17 secs
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 15 secs	2 15 secs	3 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	1 13 secs	1 13 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	4 18 secs	4 18 secs	5 19 secs	4 18 secs	4 18 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	4 17 secs	4 17 secs	4 17 secs	4 17 secs	4 17 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	16 19 secs	16 21 secs	16 21 secs	17 2 secs	16 23 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	12 15 secs	12 15 secs	11 15 secs	11 16 secs	12 16 secs
8/1 + 9/1 + 11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	46 3m 15s	72 4m 32s	63 4m 4s	72 4m 30s	81 4m 56s
8/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	3 15 secs	3 16 secs	3 16 secs	2 16 secs	3 16 secs
8/3 + 9/2 + 11/2 + 69/2 + 70/2	A5 Eastbound Lane 3	1900	Queue Aver Delay	53 3m 50s	59 4m 42s	60 4m 49s	62 5m 21s	61 5m 10s
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	3 19 secs	4 19 secs	3 19 secs	4 19 secs	3 19 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	5 21 secs	5 21 secs	7 21 secs	6 21 secs	6 21 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	5 18 secs	5 19 secs	6 19 secs	6 19 secs	6 19 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	1 16 secs	1 16 secs	1 16 secs	1 15 secs	1 16 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	3 41 secs	4 43 secs	4 42 secs	4 43 secs	4 44 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	5 58 secs	5 59 secs	6 1m 8s	6 1m 7s	5 1m 1s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	9 7 secs	11 7 secs	11 7 secs	11 7 secs	10 8 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	5 8 secs	6 8 secs	7 9 secs	7 8 secs	7 9 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	1 3 secs	1 3 secs	1 3 secs	1 3 secs	1 3 secs

18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 25 secs	1 25 secs	1 24 secs	1 25 secs	1 25 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 28 secs	2 27 secs	2 28 secs	2 28 secs	2 28 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	1 25 secs	1 26 secs	1 27 secs	1 26 secs	1 26 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	5 5 secs	5 5 secs	5 5 secs	5 5 secs	5 5 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	8 6 secs	10 6 secs	10 6 secs	10 6 secs	9 7 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	9 8 secs	9 8 secs	11 8 secs	10 7 secs	10 8 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 4 secs	1 4 secs	1 4 secs	1 4 secs	1 4 secs
23/1 + 24/1	A5 Westbound Lane 1	1930	Queue Aver Delay	6 21 secs	7 22 secs	7 22 secs	6 22 secs	6 22 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	2 18 secs	3 18 secs	3 18 secs	2 18 secs	3 18 secs
23/3 + 24/2 + 25/1	A5 Westbound Lane 3	1851	Queue Aver Delay	10 35 secs	11 43 secs	12 44 secs	12 47 secs	12 45 secs
23/4 + 24/3	A5 Westbound Lane 4	1851	Queue Aver Delay	3 18 secs	4 19 secs	3 20 secs	3 20 secs	3 19 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	8 16 secs	6 16 secs	7 16 secs	6 16 secs	6 16 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	3 12 secs	2 12 secs	2 12 secs	2 12 secs	2 12 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 11 secs	2 11 secs	3 11 secs	2 11 secs	2 11 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	2 11 secs	2 11 secs	2 10 secs	2 11 secs	2 11 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	5 32 secs	4 38 secs	5 37 secs	4 33 secs	4 39 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	5 35 secs	5 35 secs	5 36 secs	5 36 secs	5 36 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	10 9 secs	10 10 secs	11 10 secs	9 10 secs	11 10 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	9 9 secs	9 9 secs	9 10 secs	11 9 secs	9 9 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	14 10 secs	14 10 secs	14 10 secs	14 10 secs	14 10 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	8 8 secs	9 8 secs	7 8 secs	8 8 secs	8 8 secs
A5/ Dordon Roundabout								
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	4 18 secs	4 18 secs	5 18 secs	5 19 secs	4 18 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	0 5 secs	0 5 secs	0 5 secs	0 5 secs	0 5 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	2 34 secs	2 37 secs	2 37 secs	2 38 secs	3 37 secs
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	9 23 secs	14 42 secs	24 1m 6s	20 1 min	47 1m 56s
97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	0 12 secs	0 12 secs	0 12 secs	1 13 secs	0 13 secs
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 22 secs	0 25 secs	0 26 secs	0 27 secs	0 27 secs

KEY	
#	New traffic lanes as a result of the proposed development mitigation works
	Impact of Local Plan traffic results in an increase in delay of between 1 minute to 1½ minutes
	Impact of Local Plan traffic results in an increase in delay of over 1½ minutes

Table 2: 2033 PM Peak Scenario 1 Results (No Development at Land North East of M42 Jn10, Existing Highway Network)

				AM Peak				
Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	Baseline	+10% Local Plan	+15% Local Plan	+20% Local Plan	+30% Local Plan
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 6 secs	1 7 secs	1 8 secs	2 18 secs	1 20 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 6 secs	0 6 secs	0 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	0 4 secs
60/2	A5 Eastbound Off Slip Lane 2	N/A	Queue Aver Delay	0 4 secs	0 5 secs	0 5 secs	0 5 secs	0 6 secs
64/1 + 66/1 + 86/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	4 10 secs	5 13 secs	4 13 secs	4 13 secs	5 13 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	1 7 secs	1 7 secs	0 7 secs	0 7 secs	1 7 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	1 9 secs	5 31 secs	8 52 secs	11 1m 8s	15 1m 21s
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	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	0 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	1 9 secs	1 10 secs	1 10 secs	1 9 secs	1 10 secs
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	15 42 secs	16 48 secs	16 48 secs	19 52 secs	17 50 secs
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 7 secs	0 7 secs	0 7 secs	0 7 secs	0 7 secs
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 6 secs	0 6 secs	0 6 secs	0 6 secs	0 6 secs
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	12 1m 26s	15 1m 46s	17 1m 55s	16 1m 54s	16 2m 1s
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 4 secs	0 5 secs	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	12 1m 1s	13 1m 14s	13 1 min	14 1m 10s	15 1m 18s
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 25 secs	2 28 secs	2 27 secs	1 26 secs	2 29 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	8 33 secs	8 35 secs	8 35 secs	7 35 secs	8 36 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	7 28 secs	8 30 secs	8 30 secs	8 31 secs	8 33 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	7 27 secs	7 29 secs	8 30 secs	8 30 secs	8 32 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	20 19 secs	22 20 secs	22 20 secs	22 20 secs	22 20 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	26 36 secs	27 37 secs	27 37 secs	28 38 secs	28 38 secs
8/1 + 9/1 + 11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	16 1m 20s	25 2m 9s	32 2m 45s	38 3m 12s	47 3m 43s
8/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	5 23 secs	5 26 secs	5 28 secs	5 29 secs	5 31 secs
8/3 + 9/2 + 11/2 + 69/2 + 70/2	A5 Eastbound Lane 3	1900	Queue Aver Delay	12 55 secs	20 1m 49s	27 2m 31s	31 3m 1s	40 3m 45s
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	4 18 secs	4 18 secs	4 18 secs	5 18 secs	4 18 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	7 19 secs	8 19 secs	8 19 secs	8 19 secs	8 19 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	7 18 secs	7 18 secs	7 18 secs	7 18 secs	7 18 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	1 14 secs	1 14 secs	2 15 secs	2 14 secs	1 14 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	5 39 secs	5 39 secs	5 40 secs	5 40 secs	5 39 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	17 2m 14s	18 2m 35s	18 2m 39s	19 2m 47s	19 2m 42s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	8 9 secs	9 9 secs	9 9 secs	9 9 secs	9 10 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	8 11 secs	9 12 secs	9 12 secs	9 13 secs	9 13 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	1 3 secs	1 3 secs	1 3 secs	1 3 secs	1 3 secs

18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 19 secs	1 19 secs	1 19 secs	1 19 secs	1 18 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	5 36 secs	5 40 secs	5 39 secs	6 39 secs	5 39 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	3 27 secs	4 27 secs	3 26 secs	3 27 secs	3 27 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	3 7 secs	4 7 secs	4 7 secs	4 7 secs	4 7 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	10 11 secs	11 11 secs	11 11 secs	12 11 secs	11 11 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	8 10 secs	7 11 secs	7 10 secs	8 10 secs	6 10 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	2 6 secs	2 5 secs	2 6 secs	2 6 secs	2 6 secs
23/1 + 24/1	A5 Westbound Lane 1	1930	Queue Aver Delay	6 20 secs	6 21 secs	7 21 secs	7 22 secs	6 21 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	4 18 secs	4 19 secs	4 19 secs	5 20 secs	5 19 secs
23/3 + 24/2 + 25/1	A5 Westbound Lane 3	1851	Queue Aver Delay	12 38 secs	16 48 secs	16 48 secs	17 53 secs	18 50 secs
23/4 + 24/3	A5 Westbound Lane 4	1851	Queue Aver Delay	13 56 secs	11 54 secs	9 38 secs	15 1m 6s	14 59 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	12 20 secs	11 21 secs	11 20 secs	10 20 secs	10 20 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	3 14 secs	3 14 secs	2 14 secs	2 14 secs	3 14 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 13 secs	2 13 secs	3 13 secs	2 13 secs	3 13 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	3 13 secs	3 13 secs	3 13 secs	3 14 secs	3 13 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	18 1m 52s	23 2m 26s	26 2m 39s	28 2m 56s	27 2m 57s
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	6 48 secs	6 50 secs	6 52 secs	6 54 secs	6 53 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	6 8 secs	5 8 secs	6 8 secs	5 8 secs	6 8 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	6 10 secs	6 10 secs	6 10 secs	5 10 secs	6 10 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	3 7 secs	3 8 secs	3 8 secs	3 8 secs	3 8 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	4 13 secs	4 13 secs	4 14 secs	5 15 secs	4 14 secs
A5/ Dordon Roundabout								
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	7 20 secs	10 26 secs	11 30 secs	13 32 secs	15 39 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	0 7 secs	0 7 secs	0 7 secs	0 7 secs	0 7 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	1 38 secs	2 44 secs	2 45 secs	2 48 secs	2 53 secs
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	4 15 secs	6 17 secs	7 18 secs	6 22 secs	6 20 secs
97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	0 13 secs	1 13 secs	1 13 secs	1 13 secs	0 13 secs
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 21 secs	0 22 secs	0 22 secs	0 21 secs	0 23 secs

KEY	
#	New traffic lanes as a result of the proposed development mitigation works
	Impact of Local Plan traffic results in an increase in delay of between 1 minute to 1½ minutes
	Impact of Local Plan traffic results in an increase in delay of over 1½ minutes

Appendix NRB 24: Effect of Different Levels of Local Plan on the Highway Network with the Appeal Proposals & with the Existing A5/ Dordon Roundabout in 2033: Transyt Results Tables 3 and 4

Table 3: 2033 AM Peak Scenario 2 Results (With Development at Land North East of M42 Jn10 with Highway Improvements)

Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	AM Peak		
				Baseline	+20% Local Plan	+30% Local Plan
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 8 secs	2 11 secs	2 11 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 7 secs	1 7 secs	1 7 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 6 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	1 4 secs	0 4 secs	0 4 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	0 2 secs	1 4 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	1 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	0 7 secs	0 7 secs	0 7 secs
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1 7 secs	1 8 secs	1 7 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 6 secs	1 6 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	11 13 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	6 23 secs	6 23 secs	6 25 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	3 17 secs	3 18 secs	4 17 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	3 16 secs	5 18 secs	6 18 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	8 21 secs	8 24 secs	7 23 secs

8/1 + 9/1 + 11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	7 13 secs	6 14 secs	6 15 secs
8/2+ 9/2 + 11/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	10 31 secs	13 44 secs	14 54 secs
8/3	A5 Eastbound Lane 3	1900	Queue Aver Delay	9 28 secs	5 18 secs	4 19 secs
8/4 + 9/3 + 11/3 + 69/2 + 70/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	11 21 secs	19 52 secs	20 1m 13s
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	3 21 secs	4 21 secs	4 21 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	3 19 secs	2 19 secs	2 19 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	5 22 secs	5 22 secs	6 22 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	5 23 secs	6 24 secs	6 23 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	3 41 secs	3 42 secs	3 44 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	5 1m 2s	5 1m 5s	6 1m 7s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	4 3 secs	3 3 secs	3 3 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	12 12 secs	13 12 secs	13 12 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	11 11 secs	10 11 secs	10 11 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	1 3 secs	2 4 secs	1 3 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	1 2 secs	1 2 secs	1 2 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 26 secs	1 26 secs	1 26 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 26 secs	1 27 secs	1 27 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	1 26 secs	2 27 secs	1 27 secs
A16/1	Green Lane Toucan Crossing	2213	Queue Aver Delay	2 2 secs	3 3 secs	3 3 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	8 7 secs	9 7 secs	8 8 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	7 7 secs	7 7 secs	7 7 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	12 9 secs	12 10 secs	14 10 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 3 secs	1 3 secs	1 3 secs
23/1	A5 Westbound Lane 1	1930	Queue Aver Delay	8 20 secs	9 21 secs	9 22 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	6 24 secs	6 27 secs	6 26 secs

23/3 + 24/1 + 25/1	A5 Westbound Lane 3	1851	Queue Aver Delay	10 28 secs	11 38 secs	11 41 secs
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	8 19 secs	9 20 secs	9 20 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	5 14 secs	4 14 secs	4 14 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	5 21 secs	6 23 secs	7 23 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 11 secs	2 11 secs	2 11 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	2 11 secs	2 11 secs	2 11 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	4 33 secs	5 38 secs	5 38 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	5 32 secs	5 34 sec	5 33 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	6 9 secs	7 9 secs	7 9 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	9 12 secs	10 13 secs	10 13 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	12 10 secs	12 10 secs	13 10 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	9 9 secs	10 9 secs	10 9 secs
A5/ Site Access						
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	8 16 secs	11 16 secs	11 18 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	5 14 secs	5 15 secs	7 17 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	2 8 secs	3 8 secs	3 7 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	1 9 secs	1 10 secs	1 10 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	1 9 secs	1 10 secs	1 10 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	1 43 secs	1 43 secs	1 44 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	1 39 secs	1 41 secs	1 37 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	1 42 secs	1 42 secs	1 41 secs
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	1 40 secs	1 37 secs	1 40 secs
A5/ Dordon Roundabout						
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	6 22 secs	8 27 secs	9 28 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	1 5 secs	1 5 secs	1 5 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	2 42 secs	4 53 secs	4 22 secs
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	10 27 secs	40 1m 47s	66 2m 30s

97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	1 13 secs	1 13 secs	0 13 secs
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 22 secs	0 25 secs	0 26 secs

KEY	
#	New traffic lanes as a result of the proposed development mitigation works
	Impact of Local Plan traffic results in an increase in delay of between 1 minute to 1½ minutes
	Impact of Local Plan traffic results in an increase in delay of over 1½ minutes

Table 4: 2033 PM Peak Scenario 2 Results (With Development at Land North East of M42 Jn10 with Highway Improvements)

Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	PM Peak		
				Baseline	+20% Local Plan	+30% Local Plan
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 6 secs	1 6 secs	1 6 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	0 5 secs	0 6 secs	0 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 4 secs	0 4 secs	0 4 secs
64/1 + 66/1 + 86/1	Northbound Overbridge Lane 1	N/A	Queue Aver Delay	4 12 secs	4 13 secs	5 13 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	1 7 secs	1 7 secs	1 7 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	0 1 sec	0 2 secs	1 3 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	0 5 secs	0 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	1 9 secs	1 10 secs	1 10 secs
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	10 38 secs	15 48 secs	17 52 secs
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 7 secs	0 7 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	16 1m 44s	18 2m 1s	19 2m 11s
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	12 58 secs	23 2m 2s	23 2m 4s
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 24 secs	1 35 secs	2 36 secs
1/3	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	7 31 secs	8 40 secs	8 40 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	7 28 secs	8 37 secs	9 40 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	8 31 secs	11 50 secs	14 1 min
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	23 20 secs	22 18 secs	23 18 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	27 36 secs	28 35 secs	28 36 secs

8/1 + 9/1 + 11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	5 15 secs	6 26 secs	7 23 secs
8/2+ 9/2 + 11/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	10 25 secs	15 57 secs	19 55 secs
8/3	A5 Eastbound Lane 3	1900	Queue Aver Delay	4 15 secs	4 15 secs	4 15 secs
8/4 + 9/3 + 11/3 + 69/2 + 70/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	8 18 secs	9 20 secs	9 30 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	6 18 secs	6 19 secs	6 18 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	2 16 secs	2 16 secs	1 16 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	5 17 secs	5 18 secs	5 18 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	9 20 secs	9 20 secs	10 20 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	5 38 secs	5 39 secs	5 39 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	15 2m 10s	19 2m 42s	19 2m 35s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	2 2 secs	3 2 secs	2 2 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	10 8 secs	12 8 secs	13 9 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	9 14 secs	10 14 secs	10 15 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	3 3 secs	3 4 secs	2 4 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	2 2 secs	2 2 secs	2 2 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 20 secs	2 20 secs	2 21 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	6 57 secs	7 1 min	7 1m 3s
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	4 37 secs	5 39 secs	4 39 secs
A16/1	Green Lane Toucan Crossing	2213	Queue Aver Delay	2 2 secs	2 2 secs	2 2 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	15 9 secs	18 10 secs	18 11 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	10 7 secs	11 8 secs	11 8 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	8 9 secs	8 9 secs	10 9 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 5 secs	1 5 secs	1 5 secs
23/1	A5 Westbound Lane 1	1930	Queue Aver Delay	7 19 secs	7 20 secs	7 20 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	5 19 secs	5 19 secs	5 20 secs

23/3 + 24/1 + 25/1	A5 Westbound Lane 3	1851	Queue Aver Delay	14 56 secs	15 1 min	15 1m 2s
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	14 1m 11s	15 1m 16s	16 1m 19s
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	8 17 secs	8 17 secs	8 17 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	7 15 secs	7 16 secs	7 16 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 13 secs	2 13 secs	2 13 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	3 13 secs	3 13 secs	3 14 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	13 2m 29s	16 2m 54s	18 3m 4s
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	6 49 secs	6 51 secs	6 52 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	3 6 secs	3 6 secs	3 6 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	10 12 secs	10 12 secs	10 12 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	5 7 secs	5 7 secs	5 7 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	5 14 secs	6 14 secs	5 15 secs
A5/ Site Access						
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	11 12 secs	12 12 secs	12 13 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	12 12 secs	13 12 secs	14 13 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	5 7 secs	5 7 secs	5 7 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	3 10 secs	3 10 secs	3 11 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	4 10 secs	3 10 secs	3 10 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	1 42 secs	1 42 secs	0 41 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	1 35 secs	1 35 secs	1 36 srecs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	2 45 secs	2 43 secs	2 46 secs
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	2 43 secs	2 43 secs	2 45 secs
A5/ Dordon Roundabout						
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	14 25 secs	28 56 secs	35 1m 9s
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	1 7 secs	1 8 secs	1 8 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	2 40 secs	2 54 secs	3 1m 6s
97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	5 16 secs	7 21 secs	8 25 secs

97/2	A5 Westbound Lane 2	N/A	Queue Aver Delay	1 13 secs	1 13 secs	1 13 secs
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 21 secs	0 22 secs	0 22 secs

KEY	
#	New traffic lanes as a result of the proposed development mitigation works
	Impact of Local Plan traffic results in an increase in delay of between 1 minute to 1½ minutes
	Impact of Local Plan traffic results in an increase in delay of over 1½ minutes

Appendix NRB 25: Effect of Different Levels of Local Plan on the Highway Network with the Appeal Proposals & the Local Plan Improvement at the A5/ Dordon Roundabout in 2033: Transyt Results Tables 5 and 6

Table 5: 2033 AM Peak Scenario 3 Results (With Development at Land North East of M42 Jn10 with Highway Improvements, plus A5 Dordon to Atherstone Improvement)

				AM Peak			
Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	Baseline	+60% Local Plan	+70% Local Plan	+80% Local Plan
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 8 secs	3 15 secs	4 17 secs	4 19 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	1 7 secs	1 7 secs	1 7 secs	1 7 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	1 6 secs	1 6 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	1 4 secs	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	0 2 secs	4 14 secs	6 21 secs	5 22 secs
B5080 Pennine Way South/ A5 Westbound On/ Off Slip Road							
89/1	Southbound Overbridge Lane 1	N/A	Queue Aver Delay	1 5 secs	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	0 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	0 7 secs	1 7 secs	1 6 secs	1 7 secs
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	1 7 secs	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	0 5 secs
81/2	Centurion Way Lane 2	N/A	Queue Aver Delay	0 4 secs	0 4 secs	0 4 secs	0 4 secs
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	1 6 secs	1 6 secs	1 6 secs	1 7 secs
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 17 secs	4 21 secs	3 21 secs	3 21 secs
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 15 secs	2 17 secs	2 17 secs	2 17 secs
1/3 + 2/2	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	1 13 secs	1 15 secs	1 15 secs	1 15 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	6 23 secs	6 28 secs	5 28 secs	6 29 secs
3/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	3 17 secs	6 31 secs	6 31 secs	7 32 secs
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	3 16 secs	15 14 secs	16 14 secs	16 14 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	8 21 secs	17 26 secs	18 27 secs	18 29 secs

8/1 + 9/1 + 11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	7 13 secs	12 28 secs	12 32 secs	15 34 secs
8/2+ 9/2 + 11/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	10 31 secs	25 1m 19s	31 1m 39s	31 1m 34s
8/3	A5 Eastbound Lane 3	1900	Queue Aver Delay	9 28 secs	4 17 secs	4 18 secs	4 19 secs
8/4 + 9/3 + 11/3 + 69/2 + 70/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	11 21 secs	31 1m 16s	34 1m 33s	34 1m 33s
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	3 21 secs	5 21 secs	4 21 secs	5 21 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	3 19 secs	2 19 secs	2 19 secs	2 19 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	5 22 secs	5 21 secs	5 21 secs	5 21 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	5 23 secs	9 25 secs	9 26 secs	10 26 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	3 41 secs	4 44 secs	4 44 secs	4 45 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	5 1m 2s	5 1m 3s	6 1m 5s	5 1m 4s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	4 3 secs	2 3 secs	2 3 secs	2 3 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	12 12 secs	14 10 secs	13 11 secs	14 11 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	11 11 secs	12 13 secs	12 13 secs	13 13 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	1 3 secs	1 3 secs	1 4 secs	1 4 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	1 2 secs	2 2 secs	2 2 secs	2 2 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 26 secs	1 26 secs	1 26 secs	1 26 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	1 26 secs	1 27 secs	1 27 secs	1 27 secs
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	1 26 secs	1 27 secs	2 27 secs	1 27 secs
A16/1	Green Lane Toucan Crossing	2213	Queue Aver Delay	2 2 secs	3 3 secs	3 3 secs	2 3 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	8 7 secs	10 8 secs	10 8 secs	10 8 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	7 7 secs	8 7 secs	9 7 secs	9 7 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	12 9 secs	14 10 secs	14 10 secs	13 10 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 3 secs	1 3 secs	1 3 secs	1 3 secs
23/1 + 24/1	A5 Westbound Lane 1	1930	Queue Aver Delay	8 20 secs	7 27 secs	7 31 secs	8 28 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	6 24 secs	4 28 secs	4 31 secs	4 32 secs

23/3 + 24/2	A5 Westbound Lane 3	1851	Queue Aver Delay	10 28 secs	15 1m 2s	18 1m 16s	21 1m 30s
23/4 + 24/3	A5 Westbound Lane 4	1851	Queue Aver Delay	8 19 secs	6 25 secs	6 26 secs	6 27 secs
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	5 14 secs	9 15 secs	8 15 secs	8 15 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	5 21 secs	10 23 secs	11 24 secs	11 25 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 11 secs	1 12 secs	1 12 secs	1 12 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	2 11 secs	1 11 secs	1 11 secs	1 11 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	4 33 secs	8 54 secs	8 54 secs	8 57 secs
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	5 32 secs	5 40 secs	5 40 secs	5 40 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	6 9 secs	10 9 secs	10 9 secs	10 9 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	9 12 secs	15 12 secs	15 13 secs	14 13 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	12 10 secs	13 9 secs	13 9 secs	13 9 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	9 9 secs	11 9 secs	11 9 secs	11 9 secs
A5/ Site Access							
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	8 16 secs	14 16 secs	14 16 secs	14 17 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	5 14 secs	12 15 secs	13 15 secs	13 15 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	2 8 secs	4 8 secs	4 8 secs	4 8 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	1 9 secs	1 11 secs	1 11 secs	2 12 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	1 9 secs	1 11 secs	2 11 secs	2 12 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	1 43 secs	1 42 secs	1 42 secs	1 42 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	1 39 secs	1 36 secs	1 36 secs	1 36 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	1 42 secs	1 41 secs	1 42 secs	1 42 secs
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	1 40 secs	1 41 secs	1 41 secs	1 42 secs
A5/ Dordon Roundabout							
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	6 22 secs	11 19 secs	11 19 secs	12 19 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	1 5 secs	11 18 secs	11 18 secs	12 18 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	2 42 secs	6 58 secs	6 1 min	6 59 secs
98/1	A5 Westbound Left Turn Slip	N/A	Queue Aver Delay	N/A	0 5 secs	0 5 secs	0 5 secs

97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	10 27 secs	4 15 secs	4 15 secs	4 15 secs
97/2 + 98/2	A5 Westbound Ahead Lane 2	N/A	Queue Aver Delay	1 13 secs	5 14 secs	5 16 secs	4 14 secs
111/1	A5 Westbound Right Turn Lane 3	N/A	Queue Aver Delay	N/A	2 48 secs	2 48 secs	2 50 secs
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 22 secs	2 29 secs	2 29 secs	2 29 secs

KEY	
#	Dordon Roundabout Upgrade to Traffic Signals
#	New traffic lanes as a result of the proposed development mitigation works
	Impact of Local Plan traffic results in an increase in delay of between 1 minute to 1½ minutes
	Impact of Local Plan traffic results in an increase in delay of over 1½ minutes

Table 6: 2033 PM Peak Scenario 3 Results (With Development at Land North East of M42 Jn10 with Highway Improvements, plus A5 Dordon to Atherstone Improvement)

				PM Peak			
Traffic Stream(s)	Lane	Saturation Flow pcu/hr	Model Output	Baseline	+60% Local Plan	+70% Local Plan	+80% Local Plan
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 6 secs	1 7 secs	1 7 secs	1 7 secs
54/2	Pennine Way North Lane 2	N/A	Queue Aver Delay	0 5 secs	1 6 secs	1 6 secs	0 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	4 12 secs	5 14 secs	5 14 secs	5 14 secs
64/2	Northbound Overbridge Lane 2	N/A	Queue Aver Delay	1 7 secs	1 7 secs	1 7 secs	1 7 secs
68/1 + 59/1 + 58/1	A5 Eastbound On-Slip Merge	N/A	Queue Aver Delay	0 1 sec	1 2 secs	1 5 secs	3 12 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	0 4 secs
89/2	Southbound Overbridge Lane 2	N/A	Queue Aver Delay	0 5 secs	1 5 secs	0 5 secs	0 5 secs
76/1	A5 Westbound Off Slip Lane 1	N/A	Queue Aver Delay	1 9 secs	1 10 secs	1 10 secs	1 10 secs
76/2 + 75/1	A5 Westbound Off Slip Lane 2	N/A	Queue Aver Delay	10 38 secs	23 1 min	23 1m 4s	24 1m 6s
81/1	Centurion Way Lane 1	N/A	Queue Aver Delay	0 7 secs	0 8 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	0 6 secs
86/1	Quarry Hill Lane 1	N/A	Queue Aver Delay	16 1m 44s	21 2m 28s	20 2m 18s	22 2m 30s
86/2	Quarry Hill Lane 2	N/A	Queue Aver Delay	0 5 secs	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	12 58 secs	29 2m 16s	30 2m 22s	33 2m 35s
1/2	M42 Northbound Offslip Lane 2	1740	Queue Aver Delay	2 24 secs	2 37 secs	2 37 secs	2 39 secs
1/3 + 2/2	M42 Northbound Offslip Lane 3	1740	Queue Aver Delay	7 31 secs	9 50 secs	8 50 secs	8 49 secs
3/1	M42 Northbound Offslip Lane 4	1849	Queue Aver Delay	7 28 secs	12 57 secs	13 1m 3s	15 1m 11s
3/2 + 4/2	M42 Northbound Offslip Lane 5	1849	Queue Aver Delay	8 31 secs	19 1m 34s	23 2m 3s	28 2m 31s
7/1	M42 Northbound Circulating Lane 1	2039	Queue Aver Delay	23 20 secs	25 19 secs	25 19 secs	24 19 secs
7/2	M42 Northbound Circulating Lane 2	1840	Queue Aver Delay	27 36 secs	28 38 secs	28 38 secs	29 39 secs

8/1 + 9/1 + 11/1+ 69/1 + 70/1	A5 Eastbound Lane 1	1828	Queue Aver Delay	5 15 secs	5 23 secs	6 31 secs	6 40 secs
8/2+ 9/2 + 11/2	A5 Eastbound Lane 2	1900	Queue Aver Delay	10 25 secs	13 54 secs	17 1m 18s	26 1m 53s
8/3	A5 Eastbound Lane 3	1900	Queue Aver Delay	4 15 secs	6 20 secs	6 22 secs	6 23 secs
8/4 + 9/3 + 11/3 + 69/2 + 70/2	A5 Eastbound Lane 4	1900	Queue Aver Delay	8 18 secs	9 33 secs	10 32 secs	13 46 secs
12/1	A5 Eastbound Circulating Lane 1	1846	Queue Aver Delay	6 18 secs	5 19 secs	5 19 secs	5 19 secs
12/2	A5 Eastbound Circulating Lane 2	1878	Queue Aver Delay	2 16 secs	2 17 secs	2 17 secs	2 17 secs
12/3	A5 Eastbound Circulating Lane 3	1878	Queue Aver Delay	5 17 secs	5 20 secs	6 21 secs	6 21 secs
12/4	A5 Eastbound Circulating Lane 4	1878	Queue Aver Delay	9 20 secs	10 23 secs	10 23 secs	10 23 secs
14/1	Green Lane Lane 1	1602	Queue Aver Delay	5 38 secs	6 42 secs	6 41 secs	5 41 secs
14/2	Green Lane Lane 2	1602	Queue Aver Delay	15 2m 10s	20 2m 57s	20 2m 56s	19 2m 47s
15/1	Green Lane Circulating Lane 1	1950	Queue Aver Delay	2 2 secs	4 2 secs	3 2 secs	3 2 secs
15/2	Green Lane Circulating Lane 2	1745	Queue Aver Delay	10 8 secs	14 12 secs	15 12 secs	17 13 secs
15/3	Green Lane Circulating Lane 3	1745	Queue Aver Delay	9 14 secs	12 15 secs	12 15 secs	12 15 secs
15/4	Green Lane Circulating Lane 4	1745	Queue Aver Delay	3 3 secs	3 5 secs	4 5 secs	3 4 secs
A13/1	Green Lane Toucan Crossing	2272	Queue Aver Delay	2 2 secs	2 2 secs	2 2 secs	2 2 secs
18/1	M42 Southbound Offslip Lane 1	1804	Queue Aver Delay	1 20 secs	1 21 secs	2 21 secs	1 21 secs
18/2	M42 Southbound Offslip Lane 2	1813	Queue Aver Delay	6 57 secs	7 1m 5s	7 1m 4s	8 1m 7s
18/3	M42 Southbound Offslip Lane 3	1813	Queue Aver Delay	4 37 secs	4 39 secs	5 39 secs	4 39 secs
A16/1	Green Lane Toucan Crossing	2213	Queue Aver Delay	2 2 secs	2 2 secs	2 2 secs	2 2 secs
17/1	M42 Southbound Circulating Lane 1	1956	Queue Aver Delay	15 9 secs	13 11 secs	14 11 secs	14 11 secs
17/2	M42 Southbound Circulating Lane 2	1956	Queue Aver Delay	10 7 secs	10 9 secs	11 10 secs	11 10 secs
17/3	M42 Southbound Circulating Lane 3	1800	Queue Aver Delay	8 9 secs	7 10 secs	7 10 secs	7 10 secs
17/4	M42 Southbound Circulating Lane 4	1800	Queue Aver Delay	1 5 secs	1 5 secs	1 5 secs	1 5 secs
23/1	A5 Westbound Lane 1	1930	Queue Aver Delay	7 19 secs	6 24 secs	6 25 secs	6 25 secs
23/2	A5 Westbound Lane 2	1851	Queue Aver Delay	5 19 secs	4 27 secs	4 28 secs	4 29 secs

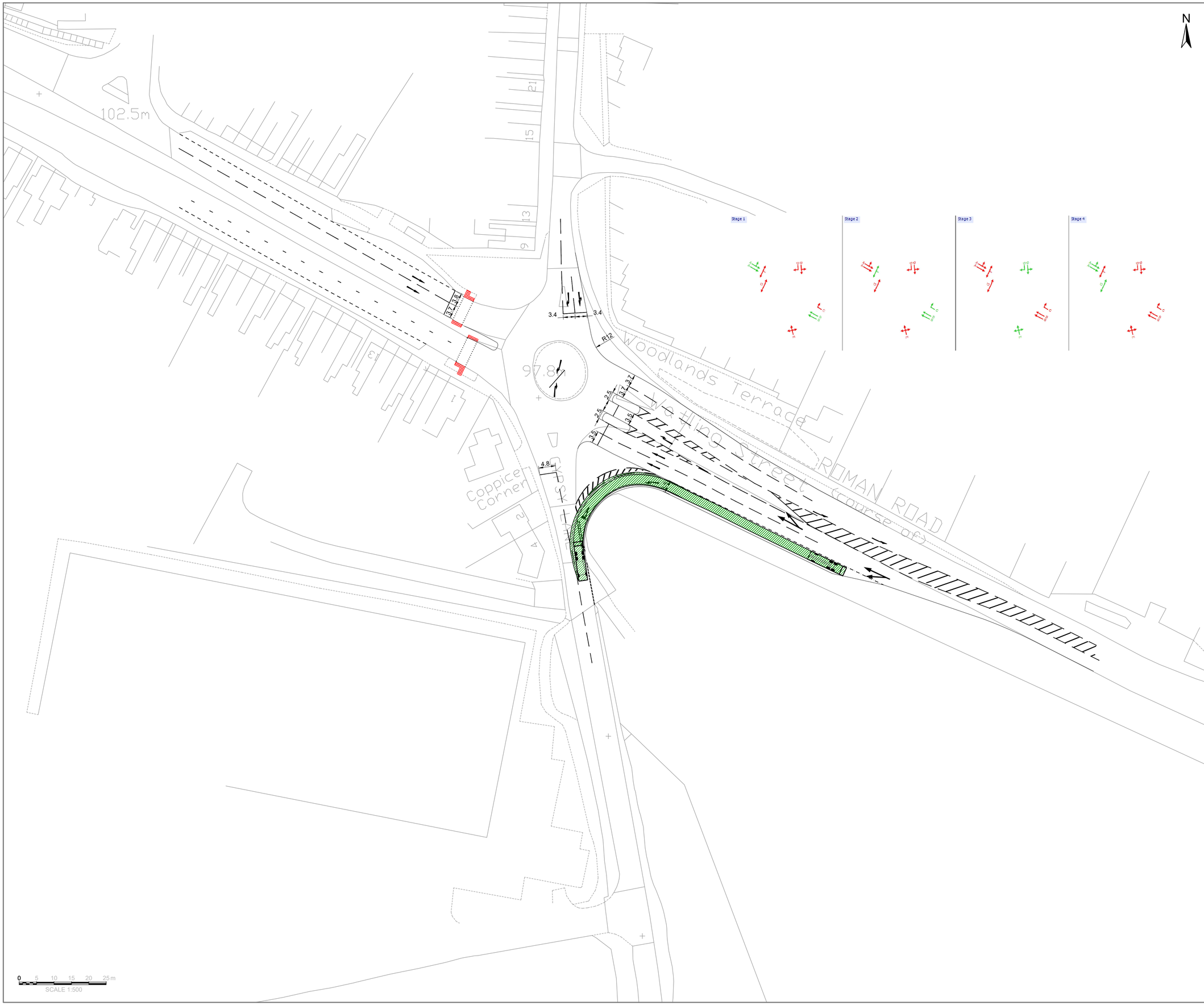
23/3 + 24/1	A5 Westbound Lane 3	1851	Queue Aver Delay	14 56 secs	30 1m 51s	32 2m 1s	32 1m 58s
23/4 + 24/1	A5 Westbound Lane 4	1851	Queue Aver Delay	14 1m 11s	23 2m 10s	22 2m 8s	28 2m 33s
22/1	A5 Westbound Circulating Lane 1	1797	Queue Aver Delay	8 17 secs	7 16 secs	7 16 secs	7 16 secs
22/2	A5 Westbound Circulating Lane 2	1797	Queue Aver Delay	7 15 secs	9 17 secs	9 17 secs	9 17 secs
22/3	A5 Westbound Circulating Lane 3	1902	Queue Aver Delay	2 13 secs	2 13 secs	3 13 secs	2 13 secs
22/4	A5 Westbound Circulating Lane 4	1902	Queue Aver Delay	3 13 secs	4 14 secs	3 14 secs	4 15 secs
28/1 + 29/1	Trinity Road Lane 1	1669	Queue Aver Delay	13 2m 29s	20 2m 25s	21 2m 32s	23 2m 49s
28/2	Trinity Road Lane 2	1669	Queue Aver Delay	6 49 secs	7 47 secs	6 48 secs	6 49 secs
27/1	Trinity Road Circulating Lane 1	1846	Queue Aver Delay	3 6 secs	2 6 secs	2 6 secs	2 6 secs
27/2	Trinity Road Circulating Lane 2	1846	Queue Aver Delay	10 12 secs	11 15 secs	11 15 secs	11 15 secs
27/3	Trinity Road Circulating Lane 3	1878	Queue Aver Delay	5 7 secs	5 10 secs	5 10 secs	5 10 secs
27/4	Trinity Road Circulating Lane 4	1878	Queue Aver Delay	5 14 secs	6 18 secs	6 18 secs	6 19 secs
A5/ Site Access							
A56/1	A5 Eastbound Left & Ahead Lane 1	1677	Queue Aver Delay	11 12 secs	13 13 secs	14 13 secs	13 13 secs
A56/2	A5 Eastbound Ahead Lane 2	1738	Queue Aver Delay	12 12 secs	15 14 secs	14 14 secs	15 14 secs
A56/3	A5 Eastbound Ahead Lane 3	1995	Queue Aver Delay	5 7 secs	5 6 secs	5 8 secs	5 6 secs
A59/1	A5 Westbound Ahead Lane 1	1930	Queue Aver Delay	3 10 secs	6 21 secs	6 22 secs	8 27 secs
A59/2	A5 Westbound Ahead Lane 2	1930	Queue Aver Delay	4 10 secs	6 19 secs	6 20 secs	8 23 secs
A60/1	A5 Westbound Right Turn Lane	1597	Queue Aver Delay	1 42 secs	1 43 secs	1 43 secs	1 44 secs
A54/1	Site Access Left Turn Lane	1624	Queue Aver Delay	1 35 secs	1 36 secs	1 36 secs	1 36 secs
A55/1	Site Access Right Turn Lane 1	1619	Queue Aver Delay	2 45 secs	2 1m 5s	2 1m 10s	3 1m 17s
A55/2	Site Access Right Turn Lane 2	1619	Queue Aver Delay	2 43 secs	2 58 secs	2 58 secs	2 1m 7s
A5/ Dordon Roundabout							
91/1	A5 Eastbound Lane 1	N/A	Queue Aver Delay	14 25 secs	23 21 secs	24 23 secs	26 24 secs
91/2	A5 Eastbound Lane 2	N/A	Queue Aver Delay	1 7 secs	16 16 secs	17 16 secs	17 17 secs
92/1 + 92/2 + 93/1	Long Street	N/A	Queue Aver Delay	2 40 secs	4 1m 18s	5 1m 17s	5 1m 17s
98/1	A5 Westbound Left Turn Slip	N/A	Queue Aver Delay	N/A	0 5secs	0 5 secs	0 5 secs

97/1 + 98/1	A5 Westbound Lane 1	N/A	Queue Aver Delay	5 16 secs	3 7 secs	3 7 secs	3 8 secs
97/2 + 98/2	A5 Westbound Ahead Lane 2	97/2 + 98/2	Queue Aver Delay	1 13 secs	3 7 secs	3 7 secs	3 7 secs
111/1	A5 Westbound Right Turn Lane 3	N/A	Queue Aver Delay	N/A	4 1m 6s	4 1m 5s	4 1m 4s
100/1 + 100/2 + 101/1	Gypsy Lane	N/A	Queue Aver Delay	0 21 secs	2 38 secs	2 37 secs	2 37 secs

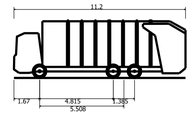
KEY	
#	Dordon Roundabout Upgrade to Traffic Signals
#	New traffic lanes as a result of the proposed development mitigation works
	Impact of Local Plan traffic results in an increase in delay of between 1 minute to 1½ minutes
	Impact of Local Plan traffic results in an increase in delay of over 1½ minutes

Appendix NRB 26: A5/ Dordon Roundabout Amended Illustrative Local Plan Improvement Scheme: TT Drawing 784-B033920-TTE-00-ZZ-SK-H-0009-P02

NRB 26 - 1



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



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

PRELIMINARY ISSUE

Rev	Description	Date	Drn	Chk	App
P02	AMENDED LAYOUT	23.04.2024	LJB	GW	NB
P01	PRELIMINARY FIRST ISSUE	08.09.2023	JG	LB	GW

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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

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TETRA TECH

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	P02

TTE_MT_v1

Appendix NRB 27: Stagecoach/TT Email Stagecoach/TT Emails 6 February 2024 & 8 May 2024

Wakenshaw, Gareth

From: Patrick Stringer <Patrick.Stringer@stagecoachbus.com>
Sent: 06 February 2024 20:38
To: Groves, David
Subject: Re: M42 development site - Stagecoach 766/ 767 service

Hi David

Yes still happy in principle in this regard in line with our letter of support.

Kind regards

Patrick Stringer
Commercial Director, Stagecoach Midlands
Main Road, Far Cotton, Northampton, NN4 8ES
E: patrick.stringer@stagecoachbus.com

Stagecoach Services Limited (Registered in England & Wales No. 1556310)
Registered Office: One Stockport Exchange, 20 Railway Road, Stockport, SK1 3SW

From: Groves, David <David.Groves@tetratech.com>
Sent: 02 February 2024 17:27
To: Patrick Stringer <Patrick.Stringer@stagecoachbus.com>
Subject: M42 development site - Stagecoach 766/ 767 service

Hi Patrick,

I hope all is well.

In September 2022, Stagecoach supported a proposal to divert the 766/ 767 service into a proposed development north of the A5 Watling Street. Please see the letter of support and a site location plan attached.

There is an upcoming Public Inquiry for the scheme and I wanted to confirm that Stagecoach still support the service diversion?

Kind regards,

David

David Groves, BA(Hons) MSc| Principal Transport Planner
Pronouns: he, him, his
Direct **+44 191 249 9816**| Mobile **+44 7966298053**

Wakenshaw, Gareth

From: Patrick Stringer <Patrick.Stringer@stagecoachbus.com>
Sent: 08 May 2024 20:29
To: Groves, David
Subject: Re: M42 Junction 10 site - bus accessibility

Hi David

My apologies but I write further to previous correspondence on the plans for bus services to this development; due to a change in travel patterns on this corridor and significant increases in the costs of operation, the service is now being financially supported by Warwickshire County Council and will see significant changes to the route and timetable in July 2024. For this reason, the section 106 contribution required to serve this proposed future development will therefore need to significantly increase, likely to approximately £200k per annum, and going forward will need the input of Warwickshire County Council in determining the specification of the service.

My apologies for any inconvenience.

Best wishes

Patrick Stringer

Commercial Director, Stagecoach Midlands
Main Road, Far Cotton, Northampton, NN4 8ES
E: patrick.stringer@stagecoachbus.com

From: Groves, David <David.Groves@tetratech.com>
Sent: 18 April 2024 09:49
To: Patrick Stringer <Patrick.Stringer@stagecoachbus.com>
Subject: RE: M42 Junction 10 site - bus accessibility

Morning Patrick,

That's great thanks.

David

David Groves, BA(Hons) MSc| Principal Transport Planner
Pronouns: he, him, his
Direct **+44 191 249 9816**| Mobile **+44 7966298053**
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2nd Floor, Cathedral Buildings, Dean Street, Newcastle upon Tyne, NE1 1PJ | tetratecheurope.com

TETRA TECH

From: Patrick Stringer <Patrick.Stringer@stagecoachbus.com>
Sent: Wednesday, April 17, 2024 8:37 PM
To: Groves, David <David.Groves@tetratech.com>
Subject: Re: M42 Junction 10 site - bus accessibility

Hi David

Yes that should be fine.

Kind regards

Patrick Stringer

Commercial Director, Stagecoach Midlands
Main Road, Far Cotton, Northampton, NN4 8ES
E: patrick.stringer@stagecoachbus.com

Stagecoach Services Limited (Registered in England & Wales No. 1556310)
Registered Office: One Stockport Exchange, 20 Railway Road, Stockport, SK1 3SW

From: Groves, David <David.Groves@tetratech.com>
Sent: 10 April 2024 15:12
To: Patrick Stringer <Patrick.Stringer@stagecoachbus.com>
Subject: M42 Junction 10 site - bus accessibility

Hi Patrick,

Further to my last email, I have spoken to my boss about the duration of contribution for the diversion of the 766/767 into the site. Can we suggest that *"A contribution of £30k per annum would commence at first occupation, and continue for either 5 years post occupation of the final phase of development, or for 10 years, whichever comes first."*

Can you confirm the above is acceptable?

Many thanks,

David

David Groves, BA(Hons) MSc| Principal Transport Planner
Pronouns: he, him, his
Direct **+44 191 249 9816**| Mobile **+44 7966298053**
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Appendix NRB 28: WCC/TT Email 9 May 2024

Wakenshaw, Gareth

From: Tony Burrows <tonyburrows@warwickshire.gov.uk>
Sent: 09 May 2024 15:56
To: Groves, David; Bunn, Nick; dwh@hodgettsestates.co.uk; Wakenshaw, Gareth
Cc: Andrew Collinson; Moises Muguerza; Patrick.Thomas@nationalhighways.co.uk
Subject: Re: Planning Application PAP/2021/0663 - Land west side of Dordon Road, Polesworth
Attachments: PAP-2021-0663 Land North East of Dordon v2024.docx

OFFICIAL

Good Afternoon

Please see attached updated Section 106 request for improved bus services.

It is my understanding that Stagecoach should have contacted you removing their contribution request.

Regards

A. Burrows.

Tony Burrows
Development Management Engineer
Planning & Environment
Environment, Planning & Transport
Communities
Warwickshire County Council

Tel: (01926) 412342
Email: tonyburrows@warwickshire.gov.uk
Website: www.warwickshire.gov.uk/environment

From: Tony Burrows <tonyburrows@warwickshire.gov.uk>
Sent: 08 May 2024 15:06
To: Groves, David <David.Groves@tetratech.com>; Bunn, Nick <nick.bunn@tetratech.com>; dwh@hodgettsestates.co.uk <dwh@hodgettsestates.co.uk>; Wakenshaw, Gareth <gareth.wakenshaw@tetratech.com>
Cc: Andrew Collinson <andrewcollinson@northwarks.gov.uk>; Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>; Patrick.Thomas@nationalhighways.co.uk <Patrick.Thomas@nationalhighways.co.uk>
Subject: Re: Planning Application PAP/2021/0663 - Land west side of Dordon Road, Polesworth

Hello everyone

Colleagues are going to provide me with the full reasoning for the requested funds. As soon as I have the official letter I will provide you with a copy.

Regards

A. Burrows.

Tony Burrows
Development Management Engineer
Planning & Environment
Environment, Planning & Transport
Communities
Warwickshire County Council

Tel: (01926) 412342
Email: tonyburrows@warwickshire.gov.uk
Website: www.warwickshire.gov.uk/environment

From: Groves, David <David.Groves@tetratech.com>
Sent: 07 May 2024 19:04
To: Tony Burrows <tonyburrows@warwickshire.gov.uk>; Bunn, Nick <Nick.Bunn@tetratech.com>; dwh@hodgettsestates.co.uk <dwh@hodgettsestates.co.uk>; Wakenshaw, Gareth <Gareth.Wakenshaw@tetratech.com>
Cc: Andrew Collinson <andrewcollinson@northwarks.gov.uk>; Moises Muguerza <MoisesMuguerza@warwickshire.gov.uk>; Patrick.Thomas@nationalhighways.co.uk <Patrick.Thomas@nationalhighways.co.uk>
Subject: RE: Planning Application PAP/2021/0663 - Land west side of Dordon Road, Polesworth

OFFICIAL

Good evening Tony,

Thanks for the confirmation on the trigger and the update on the variance in contributions.

Warwickshire County Council

Request for consideration of S106 contributions.

- Highways (Statutory Consultee – to be submitted separately)
- Flood Risk and Drainage (Statutory Consultee – to be submitted separately)

Planning Application No	PAP/2021/0663
Planning Authority	North Warwickshire Borough Council
Case Officer	Andrew Collinson
Development Location	Land On The North East of J10 M42 Dordon/A5 , Polesworth
Number of dwellings	B2 & B8 (Industrial, storage and distribution use) on 32.36ha
Total contribution requested	£1,080,000

Contributions have only been requested which we believe to be CIL Regulation 122 compliant i.e.

- necessary to make the development acceptable
- directly related to the development
- fairly and reasonably related in scale and kind.

We request the following contributions. These are listed in WCC priority order. If you want to discuss these requests or seek clarification please contact the Infrastructure Team.

WCC Service Area	WCC Passenger Transport Team
Lead Officer Name and contact details	Dan Jeanes Tel – 01926 412242 E-mail – danjeanes@warwickshire.gov.uk
Details of the Request (to be used to inform the wording of the S106) • What is required • Why • Estimated cost and contribution requested • Link to WCC priorities	Section 106 Developer Contribution to Secure Bus Service Provision to serve the new Development: Contribution is requested to maintain (current in 2021) Service 766/7 linking the site with Tamworth, Atherstone and Nuneaton, at suitable shift change times. (Revised Pro-Forma submitted in May 2024 to take into account inflationary pressures since original submission)

Explanation of why required
The National Planning Policy Framework steers development towards promoting its connectivity with sustainable transport in order to facilitate sustainable development and also contribute towards wider sustainability.

The National Planning Policy Framework also promotes the integration of planning and sustainable transport in order to provide attractive alternatives to travelling by car to access employment, education, health facilities, leisure, amenities and health objectives - aimed at providing people with a real choice about how they travel.

Therefore, the County Council is seeking a contribution towards the cost of securing improvements to local bus service to support the forecasted demand in trips by sustainable means.

Contribution Sought:

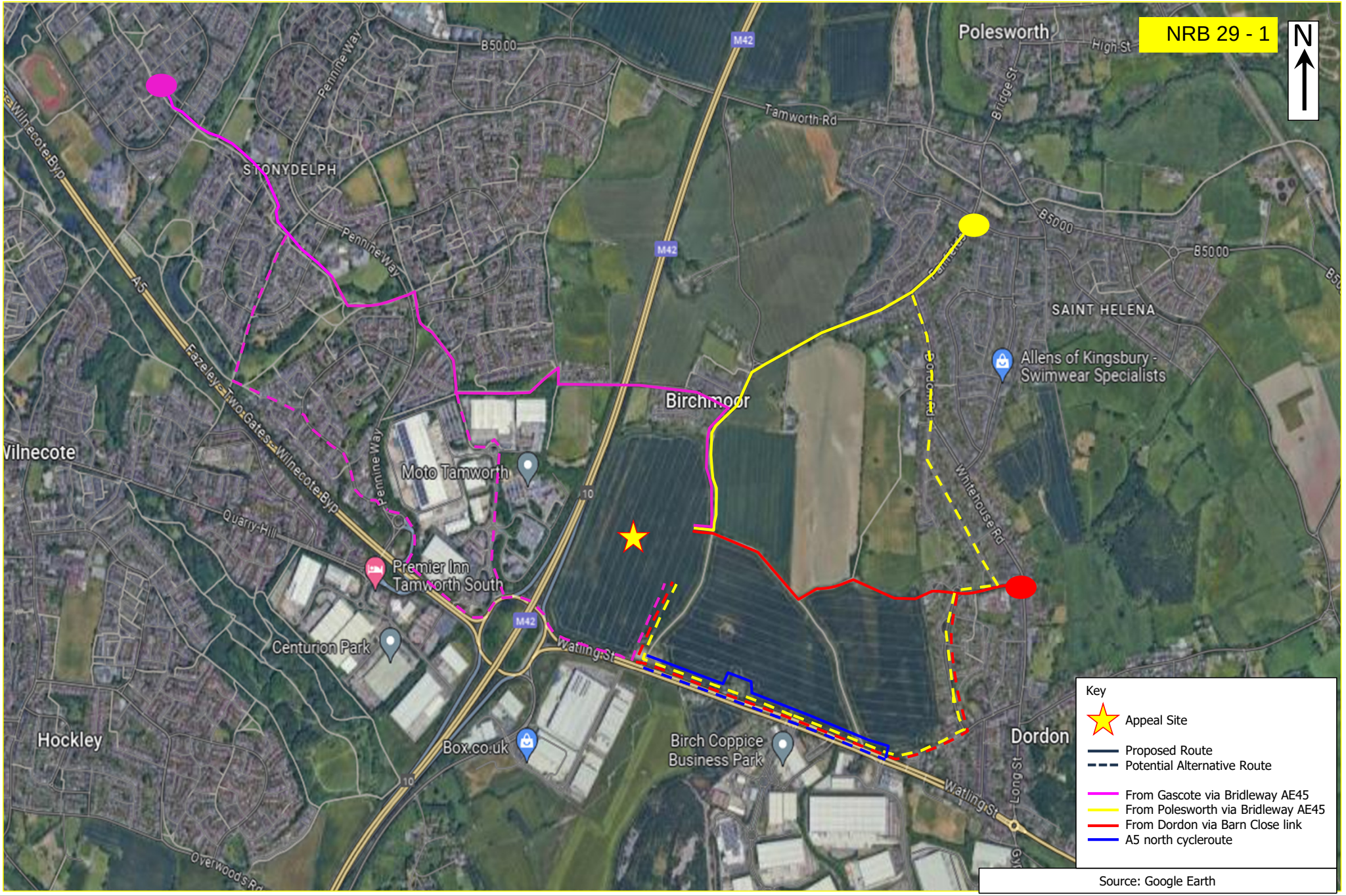
Year 1 - £ 216,000
Year 2 - £ 216,000
Year 3 - £ 216,000
Year 4 - £ 216,000
Year 5 - £ 216,000
Total - £ 1,080,000

Justification of amount requested
The bus subsidy costs are consistent with the delivery of similar scope of service local bus service provision enhancements implemented at significant residential or commercial development sites.

Link to relevant WCC policies
The request for developer contributions to enhance local bus service connectivity with the major employment based new development is entirely consistent with the policies established in the Warwickshire Local Transport Plan 2011-26, in respect to promoting public transport connectivity between new development and employment sites, services and amenities.

Supporting information / evidence	NONE.
Pooling implications	NONE.

Appendix NRB 29: Cycle Routes



M42 Junction 10, Tamworth

Alternative Lit Cycle Routes

Figure 1

TETRA TECH

Land Northeast of M42 Jn10 – Examples of Unlit Rural Cycle Paths

	**Green Lane, Tamworth** The image located on Green Lane, a cycle path on the eastern edge of Tamworth. The view is northbound.
	**NCN 10, Adj. Simonside Way, Killingworth** The image located on NCN 10 Reivers Route, Killingworth, between Killingworth Lane and the Killingworth Way. The view is northbound.
	**NCN 1, Seaton Sluice to Whitley Bay** The image is located on the NCN1 between Seaton Sluice and Whitley Bay. The image is looking northwards towards Seaton Sluice.
	**NCN 10, Parton to Whitehaven** The image is located on the NCN10 Reivers Route in Cumbria. The image is looking south towards Whitehaven.

Land Northeast of M42 Jn10 – Examples of Unlit Urban Cycle Paths

	**Lancaster Canal Towpath** The image is located on the towpath adjacent to the Lancaster Canal. It is part of the Lancaster cycle network. The view is looking northeast.
	**Bristol and Bath Railway Path NCN 4, Bath** The image is located on Bristol and Bath Railway Path running parallel with River Avon in Western Bath. Its located just off Locksbrook Road near an industrial area.
	**Coast to Coast NCN 72, Walker** The image shows NCN 72 which runs coast to coast. This image is located on the route adjacent to St Lawrence Road/The Ropery in Walker, Newcastle.
	**Coventry Canal, Tamworth** The image shows a cycleway/towpath running along the Canal. The view is looking west from a bridge near Tamworth Road / Florendine Street junction.

Appendix NRB 30: WCC & SCC Bus Meeting 22 May 2024

Meeting: M42 Jn10 Employment site bus accessibility meeting on Teams.
Date and Time: Wednesday 22nd May 2024 15.00pm – 16.00pm.
Attendees: Clive Jones (WCC), Nigel Whyte (WCC), Tony Burrows (WCC), John Mitcheson (SCC), David Hodgetts (Hodgetts Estates), Nick Bunn (TT), David Groves (TT)

Stagecoach 766/ 767

- DH explained that Stagecoach have recently informed the team that there are planned changes to the 766/ 767 route with the service effectively seeing the number of trips broadly reduced by half and truncated so that it no longer extends to Tamworth.
- CJ explained that the service would cease running in July 2024 due to the ending of Sc106 contributions from Birch Coppice and alternative provision was being provided – details below.
- DH explained that HE are keen for a bus service that connects the employment site with both Nuneaton and Tamworth.

New Service Provision

- CJ explained that the existing Stagecoach 41 bus service from Nuneaton and Atherstone is to extend to Birch Coppice to replace the 766/ 767 service. The service will run Monday to Friday which would begin operations on 21st July. There will be minor changes to the timetable frequency.
- JM explained that a tender will be issued this week for a new bus service (Route 66) between Tamworth and Birch Coppice to be funded via a government bus grant and would need to be in place by 21st July. SCC currently have funding for 2 years.
- NB asked if a route specification had been issued with the tender and JM/ CJ confirmed that a Route 66 timetable had been sent to tenderers and would send a copy to TT. **– Action JM.**
- JM/ CJ explained that together the 41 and 66 services would provide connections to Birch Coppice from both Nuneaton and Tamworth. When the M42 Jn10 employment site comes on stream and a bus service will extend into the site.
- JM/ CJ explained the new service would run in the early hours of the morning and then on lunchtime and afternoon shift patterns.
- DH explained that late night service provision maybe required but that this would not be known until end occupiers were confirmed. All agreed the timetable could be revisited at a later stage.
- JM/ CJ asked at what date first occupation of the M42 site will be. DH said that first occupation would be 1½ to 2 years.
- Prior to first occupation of the M42 site, the 41/66 services would extend to the development or alternatively the 766/767 would be reinstated and would include the site.
- CJ confirmed that the £216k per annum contribution sought would fully fund the 766/ 767 service including a diversion to the site.

Funding

- DH explained that Sc106 contributions of £216k per annum for 5 years were being sought as requested by WCC. The Sc106 Agreement has the bus contributions being paid to NWBC for distribution.
- SCC agreed to the five-year duration of developer contributions.
- TB will confirm with WCC legals if bilateral agreement between applicant and WCC for Sc106. **– Action TB.**
- JM explained that Mark Evans would confirm whether SCC would be party to the Sc106 Agreement. **– post meeting note, SoCG with SCC not party to Sc106.**

Public Transport Strategy Agreements and Actions

- WCC/ SCC agreed that a £216k per annum contribution is sufficient to secure a bus service between Nuneaton and Tamworth, which serves the site, on the same timetable as the current 766/767.
- SCC happy with five-year developer contributions.
- JM to send new route 66 timetable to TT. **– Action SCC.** – post meeting note, Tender documents sent to TT including timetable information.
- Mark Evans to confirm SCC would be party to Sc106 Agreement. **– post meeting note, SoCG with SCC not party to Sc106.**

All services performed are subject to All services performed are subject to DYNAMIC PURCHASING AGREEMENT FOR THE PROVISION OF TRANSPORTATION IA1569

the Contracting Body	Staffordshire County Council ("the Council")
Invoice Address	
Contact Ref:	John Mitcheson
Service Number	*Service 66 Tamworth – Birch Coppice Mon-Fri To be quoted on all correspondence relating to this Order:*

1. SERVICES REQUIREMENTS

1.1) Services Required:

Days of Operation: Monday to Friday not bank holidays

Period of Contract: 22nd July 2024 to 17 July 2026 or as determined by the County Council

Minimum Passenger Capacity 25 seats, fully PSVAR compliant

Minimum Service Specification (Standard Option)

To operate the timetable below. These times are planned around known worker shifts at Birch Coppice and existing journey times. Minor changes to the timings will be considered as will alternative bids involving existing routes.

Timetable

Route 66 **Monday - Friday**														
Tamworth	03:40	05:20	06:05	07:05	08:05	09:05		14:25	15:50	16:50	17:50	18:50	19:50	20:40
Birch Coppice Dordon	04:02	05:42	06:27	07:27	08:27	09:27		14:52	16:12	17:12	18:12	19:12	20:12	21:02
Birch Coppice Dordon	04:55	05:50	06:40	07:40	08:40		13:55		16:20	17:20	18:20	19:20	20:15	
Tamworth	05:17	06:12	07:02	08:02	09:02		14:17		16:42	17:42	18:42	19:42	20:37	

Route Description:

Operates from Tamworth Corporation Street via Albert Road, Saxon Drive, Bolebridge Street, Glascote Road (B5000), Stoneydelph, Market Street, Fairfields Hill, Dordon Road, Watling Street to Birch Coppice, serving all stops on Danny Mawson Way, turning at the end.

Existing Patronage

The following has been provided for existing route 766 / 767 journeys for the week indicated. These are boarders between Tamworth and Birch Coppice only (excluding at BC towards Nuneaton)

		Boarders at tamworth / Birch Coppice			
Analysis	w/c 22/1/24 Journey (Short = Birch Coppice / Tamworth only)	M-F ave	Sat	Sun	
'66 short	03h38 Tamworth-Birch Coppice	9.6	8	8	dep 0333 Sun
'67 full	04h53 Tamworth-Birch Coppice	1.8	1	x	
'67 full	05h23 Tamworth-Birch Coppice	5	6	6	rte 766 Sun
'66 full	06h05 Tamworth-Birch Coppice	8	6	6	
'66 full	07h02 Tamworth-Birch Coppice	11.6	2	x	
'66 full	09h07 Tamworth-Birch Coppice	3.8	no data	x	
'66 full	10h37 Tamworth-Birch Coppice	4	1	x	
'66 full	12h37 Tamworth-Birch Coppice	5.2	3		dep 1305 Sun
'66 full	14h27 Tamworth-Birch Coppice	8.75	4		dep 1420 Sun
'66 full	16h48 Tamworth-Birch Coppice	7.6	4	10	dep 1603 Sat, 1645 Sun as 767
'66 full	17h58 Tamworth-Birch Coppice	18.6	10	13	dep 1805 Sun; 767 Sat
'66 full	18h58 Tamworth-Birch Coppice	8	11	x	
'66 full	20h38 Tamworth-Birch Coppice	9.8	x	x	
'67 full	04h15 Birch Coppice-Tamworth	2.4	1	6	
'67 full	05h05 Birch Coppice-Tamworth	14.2	8	5	
'67 full	05h40 Birch Coppice-Tamworth	5.2	0	1	
'67 full	06h40 Birch Coppice-Tamworth	5.2	7	5	
'66 full	08h47 Birch Coppice-Tamworth	1.6	2	X	
'66 full	10h19 Birch Coppice-Tamworth	0.4	0	X	
'66 full	12h19 Birch Coppice-Tamworth	2.4	0	0	dep 1240 Sun as 767
'67 full	13h25 Birch Coppice-Tamworth	x	x	2	
'66 full	13h56 Birch Coppice-Tamworth	6.6	7	X	
'67 full	14h40 Birch Coppice-Tamworth	x	x	5	
'66 full	16h15 Birch Coppice-Tamworth	13.2	3	1	dep1625 Sun
'66 full	17h22 Birch Coppice-Tamworth	6	0	X	
'67 full	18h36 Birch Coppice-Tamworth	5.2	5	2	dep 1833 Sun
'67 short	19h22 Birch Coppice-Tamworth	1.25	6	1	dep 1920 Sun

3 ADDITIONAL REQUIREMENTS / NOTES

Operators must assist Staffordshire County council with the provision of performance (on time / late / early) and patronage (passengers split to ENCTS and non-ENCTS and revenue) data on a monthly basis, and additional detailed data as requested from time to time.

Operators must be fully BODS compliant.

Operators must be able to issue and must accept the Staffordshire Knot multi-operator ticket unless specifically agreed to be an exception by Staffordshire County Council.

All services performed are subject to All services performed are subject to DYNAMIC PURCHASING AGREEMENT FOR THE PROVISION OF TRANSPORTATION IA1569

the Contracting Body	Staffordshire County Council ("the Council")
Invoice Address	
Contact Ref:	John Mitcheson
Service Number	*Service 66 Tamworth – Birch Coppice Mon-Fri To be quoted on all correspondence relating to this Order:*

1. SERVICES REQUIREMENTS

1.1) Services Required:

Days of Operation: Saturdays, not bank holidays

Period of Contract: 20th July 2024 to 11th July 2026 or as determined by the County Council

Minimum Passenger Capacity 25 seats, fully PSVAR compliant

Minimum Service Specification (Standard Option)

To operate the timetable below. These times are planned around known worker shifts at Birch Coppice and existing journey times. Minor changes to the timings will be considered as will alternative bids involving existing routes.

Timetable

Route 66												
Saturday												
Tamworth	03:40	05:20	06:05					14:25	15:50	16:50	17:50	18:50
Birch Coppice Dordon	04:02	05:42	06:27					14:52	16:12	17:12	18:12	19:12
Birch Coppice Dordon	04:55	05:50	06:40				13:55		16:20	17:20	18:20	19:20
Tamworth	05:17	06:12	07:02				14:17		16:42	17:42	18:42	19:42

Route Description:

Operates from Tamworth Corporation Street via Albert Road, Saxon Drive, Bolebridge Street, Glascote Road (B5000), Stoneydelph, Market Street, Fairfields Hill, Dordon Road, Watling Street to Birch Coppice, serving all stops on Danny Mawson Way, turning at the end.

Existing Patronage

The following has been provided for existing route 766 / 767 journeys for the week indicated. These are boarders between Tamworth and Birch Coppice only (excluding at BC towards Nuneaton)

		Boarders at tamworth / Birch Coppice			
Analysis	w/c 22/1/24 Journey (Short = Birch Coppice / Tamworth only)	M-F ave	Sat	Sun	
'66 short	03h38 Tamworth-Birch Coppice	9.6	8	8	dep 0333 Sun
'67 full	04h53 Tamworth-Birch Coppice	1.8	1	x	
'67 full	05h23 Tamworth-Birch Coppice	5	6	6	rte 766 Sun
'66 full	06h05 Tamworth-Birch Coppice	8	6	6	
'66 full	07h02 Tamworth-Birch Coppice	11.6	2	x	
'66 full	09h07 Tamworth-Birch Coppice	3.8	no data	x	
'66 full	10h37 Tamworth-Birch Coppice	4	1	x	
'66 full	12h37 Tamworth-Birch Coppice	5.2	3		dep 1305 Sun
'66 full	14h27 Tamworth-Birch Coppice	8.75	4		dep 1420 Sun
'66 full	16h48 Tamworth-Birch Coppice	7.6	4	10	dep 1603 Sat, 1645 Sun as 767
'66 full	17h58 Tamworth-Birch Coppice	18.6	10	13	dep 1805 Sun; 767 Sat
'66 full	18h58 Tamworth-Birch Coppice	8	11	x	
'66 full	20h38 Tamworth-Birch Coppice	9.8	x	x	
'67 full	04h15 Birch Coppice-Tamworth	2.4	1	6	
'67 full	05h05 Birch Coppice-Tamworth	14.2	8	5	
'67 full	05h40 Birch Coppice-Tamworth	5.2	0	1	
'67 full	06h40 Birch Coppice-Tamworth	5.2	7	5	
'66 full	08h47 Birch Coppice-Tamworth	1.6	2	X	
'66 full	10h19 Birch Coppice-Tamworth	0.4	0	X	
'66 full	12h19 Birch Coppice-Tamworth	2.4	0	0	dep 1240 Sun as 767
'67 full	13h25 Birch Coppice-Tamworth	x	x	2	
'66 full	13h56 Birch Coppice-Tamworth	6.6	7	X	
'67 full	14h40 Birch Coppice-Tamworth	x	x	5	
'66 full	16h15 Birch Coppice-Tamworth	13.2	3	1	dep1625 Sun
'66 full	17h22 Birch Coppice-Tamworth	6	0	X	
'67 full	18h36 Birch Coppice-Tamworth	5.2	5	2	dep 1833 Sun
'67 short	19h22 Birch Coppice-Tamworth	1.25	6	1	dep 1920 Sun

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the Contracting Body	Staffordshire County Council ("the Council")
Invoice Address	
Contact Ref:	John Mitcheson
Service Number	*Service 66 Tamworth – Birch Coppice Mon-Fri To be quoted on all correspondence relating to this Order:*

1. SERVICES REQUIREMENTS

1.1) Services Required:

Days of Operation: Sundays and bank holidays incl Good Friday – no service Christmas Day, Boxing Day, New Years Day.

Period of Contract: 21st July 2024 to 12th July 2026 or as determined by the County Council

Minimum Passenger Capacity 25 seats, fully PSVAR compliant

Minimum Service Specification (Standard Option)

To operate the timetable below. These times are planned around known worker shifts at Birch Coppice and existing journey times. Minor changes to the timings will be considered as will alternative bids involving existing routes.

Timetable

Route 66											
Sunday											
Tamworth	03:40	05:20	06:05							16:50	17:50
Birch Coppice Dordon	04:02	05:42	06:27							17:12	18:12
Birch Coppice Dordon	04:55	05:50	06:40						16:20	17:20	18:20
Tamworth	05:17	06:12	07:02						16:42	17:42	18:42

Route Description:

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'66 full	10h19 Birch Coppice-Tamworth	0.4	0	X	
'66 full	12h19 Birch Coppice-Tamworth	2.4	0	0	dep 1240 Sun as 767
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'66 full	13h56 Birch Coppice-Tamworth	6.6	7	X	
'67 full	14h40 Birch Coppice-Tamworth	x	x	5	
'66 full	16h15 Birch Coppice-Tamworth	13.2	3	1	dep1625 Sun
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