

MIRA Technology Park

Comparative Review of Mitigation Proposals at the A5 / Drayton Lane Junction

1.0 Introduction

1.1 Purpose of this Note

1.1.1 This Technical Note has been prepared by David Tucker Associates (“DTA”) Transport Planning Consultants on behalf of Extra Room Self Storage (“ERSS”) and Drayton Grange Farm in relation to the MIRA Technology Park South Site planning proposals (planning permission ref. 22/00882/OUT).

1.1.2 The purpose of the note is to support consideration of the comparative highway implications of:

- the currently proposed left-in / left-out (“LILO”) arrangement at the A5 / Drayton Lane junction; and
- the alternative signalised mitigation arrangement previously promoted by ERSS.

1.1.3 This note responds specifically to:

- the National Highways (“NH”) Alternative Mitigation Review (“AMR”) dated 11 November 2025 (**Appendix A**);
- previous concerns raised regarding traffic reassignment through Fenny Drayton; and
- the operational and highway implications of diverting HGV traffic away from the existing junction arrangement.

1.1.4 Following receipt of the National Highways Alternative Mitigation Review (“AMR”), the planning permission (22/00882/OUT) was subsequently quashed by consent to allow the implications of the new information contained within the AMR to be properly considered as part of the determination process.

1.1.5 In that context, this Technical Note has been prepared to assist further consideration of the comparative merits and operational implications of the available mitigation approaches. The note also provides additional technical information relevant to the highway assessment of the proposals.

1.2 Background

1.2.1 The current MIRA mitigation package proposes restricting the A5 / Drayton Lane junction to left-in / left-out movements only.

1.2.2 ERSS and Drayton Grange Farm have consistently raised concerns regarding this arrangement due to the operational implications for established businesses which currently rely upon unrestricted access to the A5.

- 1.2.3 In response, DTA prepared an alternative mitigation proposal demonstrating that full signalisation of both the Woodford Lane and Drayton Lane junctions could be achieved without causing unacceptable operational or safety impacts on the A5 corridor.
- 1.2.4 National Highways subsequently reviewed this proposal through its Alternative Mitigation Review (“AMR”) dated 11 November 2025.
- 1.2.5 Importantly, NH now accepts that signalisation of the Drayton Lane junction is technically feasible and operationally deliverable.
- 1.2.6 The principal issue for consideration is therefore no longer whether signalisation can be achieved, but rather which mitigation approach provides the most balanced and proportionate outcome for both the strategic and local highway networks.

1.3 Supporting Technical Documents

- 1.3.1 This note should be read alongside the following supporting documents:
 - Appendix A – National Highways Alternative Mitigation Review (11 November 2025);
 - Appendix B – Independent Review of LinSig Modelling by JCT Consultancy Ltd;
 - Appendix C – DTA HGV Routing Review;

2.0 National Highways Review and Deliverability of Signalisation

2.1 National Highways Conclusions

- 2.1.1 It is recognised that previous consultation responses were prepared in the context of earlier National Highways advice indicating that signalisation at Woodford Lane could not be delivered without the associated banned-turn arrangement at Drayton Lane. However, following subsequent technical review of the alternative mitigation proposals, NH now accepts that dual signalisation is technically feasible and operationally deliverable subject to detailed design considerations.
- 2.1.2 The NH Alternative Mitigation Review reaches the following principal conclusion:

“NH agrees with the DTA assessment that it is technically possible to signalise Drayton Lane without causing undue congestion or safety risks provided additional land is secured to achieve the required geometry...”
- 2.1.3 NH further concludes:

“provided the necessary geometry can be achieved it is theoretically possible to signalise both junctions...”
- 2.1.4 These conclusions significantly change how the alternative mitigation proposal should now be considered.
- 2.1.5 The previous concerns regarding unacceptable operational impacts arising from dual signalisation have now been reviewed and NH has confirmed that the arrangement is operationally feasible.

2.2 Independent Audit

2.2.1 The DTA modelling has additionally been independently reviewed by JCT Consultancy Ltd, specialists in LinSig traffic signal modelling (**Appendix B**).

2.2.2 The JCT review identified:

- no serious issues with the modelling approach;
- no material concerns regarding the operational conclusions; and
- that the updated modelling results remained broadly consistent with the original DTA conclusions.

2.2.3 The JCT review states:

“The overall results were broadly similar to those reported in the DTA LinSig models...”

2.2.4 The review also refined the modelling assumptions associated with queue formation between the junctions and confirmed that westbound queueing concerns were overstated in the original reporting due to known modelling behaviour associated with two-to-one lane merges.

2.2.5 The independent review therefore provides additional confidence that the alternative signalised arrangement is technically robust and operationally achievable.

2.3 Detailed Design Matters

2.3.1 The NH review (**Appendix A**) identifies a number of matters requiring consideration at detailed design stage, including:

- signal staging arrangements;
- right-turn control;
- lane geometry;
- widening requirements;
- separation islands; and
- land requirements.

2.3.2 However, these are standard highway design matters routinely addressed through the detailed design process and do not represent fundamental constraints to delivery.

2.3.3 Importantly, NH expressly concludes that the geometry concerns are “not an insurmountable position”.

2.3.4 ERSS has already confirmed willingness to contribute land within the north-west quadrant of the junction to facilitate an appropriate layout.

2.3.5 The remaining matters are therefore matters of design development rather than barriers to implementation.

3.0 Traffic Reassignment and Comparative Network Effects

3.1 Overview

- 3.1.1 The objective of encouraging traffic to use the strategic highway network in preference to village routes is recognised and supported in principle. The potential for reassignment of traffic through Fenny Drayton is therefore acknowledged as an important consideration.
- 3.1.2 However, careful consideration should also be given to the underlying causes of existing routing behaviour and the extent to which this is influenced by congestion and delay on the A5/A444 route.
- 3.1.3 The currently available evidence demonstrates that the proposed banned-turn arrangement would reduce movements through Drayton Lane. However, the presently available evidence base does not clearly distinguish the extent to which existing reassignment is driven by:
- current operational conditions at the A5/A444 Redgate junction; or
 - the availability of turning movements at Drayton Lane junction itself.
- 3.1.4 This distinction is important when considering the comparative effects of the available mitigation options.

3.2 Driver Route Choice and Conditions on the A5/A444 Route

- 3.2.1 Drivers may divert onto less suitable routes because of congestion and delay. Under existing conditions, congestion and delay at the A5/A444 Redgate junction can create an incentive for some traffic to divert via Drayton Lane and Fenny Drayton.
- 3.2.2 However, the MIRA proposals themselves include substantial mitigation works at the A5/A444 junction specifically intended to improve traffic conditions and reduce congestion and delay on the A444 and A5 corridors.
- 3.2.3 Leicestershire County Council's ("LCC") own review of the submitted modelling identifies that the Redgate mitigation proposals are forecast to improve operational performance at the junction in the future year assessment scenarios.
- 3.2.4 The relative proximity of the alternative strategic route via the A5/A444 corridor is also relevant in this context.
- 3.2.5 Under typical operating conditions, the difference in route distance and travel time between:
- movements via Drayton Lane/Fenny Drayton; and
 - movements via the strategic A5/A444 corridor,
- is comparatively modest.
- 3.2.6 **Figure 1** illustrates that driver route choice is likely to be influenced significantly by congestion, delay and journey time reliability on the wider strategic network rather than by route distance alone.

- 3.2.7 In this context, improvements to the operation of the A5/A444 Redgate junction are likely to influence routing behaviour independently of the Drayton Lane junction arrangement itself.

Figure 1 Illustrative comparison of route options between the A5 and A444 corridors



Illustrative comparison of alternative route options between the A5 and A444 corridors under typical AM peak conditions via: Drayton Lane / Fenny Drayton; and the strategic A5/A444 route. The fairly modest difference in route distance and travel time indicates that drivers are likely to choose routes largely based on congestion, delay and journey time reliability. Source Google Maps/Traffic © Google

3.3 Limitations of the Available Modelling

- 3.3.1 The currently available evidence demonstrates that the proposed banned-turn arrangement would reduce some movements through Drayton Lane.
- 3.3.2 However, the presently available modelling does not clearly show the comparative extent to which:
- existing reassignment is driven by congestion on the A5/A444 route; or
 - reassignment would continue under conditions where the A5/A444 route operates more efficiently.

3.3.3 The presently available modelling also does not distinguish between:

- strategic through-traffic;
- local movement between the A5 and A444 corridors; and
- access-related traffic associated with local land uses and businesses.

3.3.4 This distinction is relevant when considering the nature and significance of reassignment effects within the village environment.

3.3.5 No comparative strategic reassignment modelling has been undertaken for the signalised scenario.

3.3.6 National Highways expressly notes within the AMR (**Appendix A**) that wider strategic modelling would be required to assess reassignment effects in detail and that the issue has not been assessed within the localised LinSig modelling undertaken to date.

3.3.7 Accordingly, whilst reassignment through Fenny Drayton remains a relevant consideration, the comparative difference between the proposed banned-turn arrangement and a fully signalised arrangement cannot presently be clearly quantified.

3.3.8 This uncertainty should be recognised in considering the overall planning balance between the available mitigation approaches.

3.4 Operational Effects of the Proposed Banned-Turn Arrangement

3.4.1 Whilst the reassignment effects associated with the signalised option remain uncertain and unquantified, the traffic impacts associated with the proposed banned-turn arrangement are more direct and identifiable.

3.4.2 Drayton Lane currently accommodates lawful HGV access associated with established local businesses and agricultural operations. This includes access serving 2,000 household and business self-storage customers, together with the arable farming operations at Drayton Grange Farm.

3.4.3 The proposed LILO arrangement would require many HGV movements to reroute via:

- the Redgate junction;
- the A444; and
- Fenny Drayton village.

3.4.4 Detailed vehicle tracking undertaken by DTA (**Appendix C**) demonstrates that this rerouting creates practical vehicle manoeuvring difficulties at multiple locations within the local highway network.

3.4.5 The assessment confirms that articulated vehicles would require use of opposing running lanes at key junctions within the village network, including manoeuvres across opposing traffic lanes on the A444 itself.

3.4.6 This raises identifiable concerns regarding:

- operational suitability;

- vehicle conflict;
- driver expectation;
- obstruction risk; and
- impacts on local traffic conditions within the village environment.

3.4.7 In practical terms, the proposed banned-turn arrangement therefore changes the distribution of operational effects across the wider highway network.

3.5 Potential Mitigation and Management Measures

3.5.1 Even if reassignment effects were identified following implementation of a signalised arrangement, targeted local mitigation measures would remain available.

3.5.2 These could include:

- localised traffic calming;
- gateway features;
- junction priority changes;
- village environmental measures; and
- signal timing optimisation.

3.5.3 A signalised arrangement would also provide ongoing flexibility to monitor and respond to observed operational conditions through changes to signal timings and complementary local mitigation measures if required.

3.5.4 This differs from the proposed banned-turn arrangement, which represents a fixed operational intervention with limited flexibility once implemented.

3.5.5 The reassignment issue should therefore be viewed as capable of management through proportionate mitigation if necessary, rather than as a fundamental constraint to the signalised arrangement itself.

4.0 Comparative Assessment of the Alternative Mitigation Proposal

4.1 Comparative Benefits

4.1.1 LCC's previous consultation responses acknowledge that the assessment of the alternative mitigation approaches ultimately involves a balance between:

- encouraging traffic to utilise the strategic highway network; and
- the operational effects arising from the proposed turn restrictions.

4.1.2 The presently available evidence base suggests that this comparative balance is more nuanced than may initially appear, particularly given the uncertainty regarding the extent to which existing reassignment is influenced by current congestion on the A5/A444 route.

4.1.3 The alternative signalised mitigation proposal provides a number of potential advantages over the currently proposed LILO arrangement.

4.1.4 These include:

- retention of lawful and established access arrangements;
- accepted technical feasibility and operational deliverability;
- reduced reassignment of HGV traffic through constrained village routes;
- flexibility of network management through signal timing and phasing; and
- compatibility with additional local mitigation measures if required.

4.2 Balanced and Proportionate Outcome

4.2.1 The alternative mitigation proposal therefore represents a balanced and proportionate highway solution which warrants further consideration.

4.2.2 Whilst the proposed banned-turn arrangement may reduce some traffic movements through Fenny Drayton, the extent to which existing reassignment is driven by wider strategic network conditions remains uncertain on the basis of the presently available evidence.

4.2.3 At the same time, the operational impacts associated with the proposed banned-turn arrangement itself are more direct and identifiable, particularly in relation to reassign access traffic, including HGV routing, through the local highway network.

4.2.4 The presently available evidence base therefore suggests that the overall balance between:

- reducing some village movements through turn restrictions; and
- avoiding the operational impacts associated with reassigned traffic and HGV routing,

is more nuanced than may initially appear.

4.2.5 In this context, it is considered appropriate that the comparative merits of both mitigation approaches continue to be carefully considered as part of the determination of the application.

5.0 Conclusions

5.1 National Highways now accepts that full signalisation of the Drayton Lane and Woodford Lane junctions is technically feasible and operationally deliverable.

5.2 The remaining matters identified by NH relate principally to detailed design, geometry and mitigation considerations rather than any fundamental traffic or safety issue.

5.3 The potential for reassignment of traffic through Fenny Drayton is recognised as an important consideration. However, the presently available evidence does not clearly distinguish between:

- traffic movements arising principally from existing strategic network (A5/A444) congestion; and
- traffic movements arising specifically because of the configuration of the Drayton Lane junction itself.

-
- 5.4 No comparative modelling has been undertaken for the signalised arrangement and the extent of any remaining through traffic under improved conditions on the A5/A444 route therefore remains uncertain.
 - 5.5 At the same time, the traffic impacts associated with the proposed banned-turn arrangement are more direct and identifiable, particularly in relation to HGV traffic using constrained local village roads and junctions.
 - 5.6 Overall, the alternative signalised mitigation proposal represents a technically feasible and operationally deliverable solution which provides an appropriate and balanced approach to both strategic and local highway issues and should therefore continue to be given full consideration as part of the determination of the application.

Appendix A

National Highways Alternative Mitigation Review (11 November 2025)

A5 Drayton Lane Alternative Mitigation Review Report

11 November 2025

Notice

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
A	Review of DTA TN			MR		11/11/25

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Introduction

This report reviews the Technical Note provided by DTA Transport Planning Consultants dated 15 January 2025 exploring an alternative opportunity for signalisation at both the Drayton Lane and Woodford Lane junctions on the A5.

1. Suitability of DTA Assessment

1.1. There are minor points around the modelling and assessment that could be discussed but these will have little material impact on the overall conclusions, however there are a few key factors that do warrant consideration:

- a) Traffic flow data
- b) Modelling of right turns from A5
- c) Geometry and land boundaries

1.2. Traffic Flow Data

1.3. It is not clear where the traffic data used in the DTA assessment has been sourced from. Comparing the turning flows to data from a November 2022 survey (procured by Vectos / Warwickshire and funded by NH) shows some key differences. For example, flows to and from Drayton Lane are higher in the DTA assessments yet flows to and from Woodford Lane are much lower. It is important that a common and robust set of traffic flows for use in analysis is agreed between all parties to underpin further discussions.

1.4. Comparing model results with the two flowsets shows little difference in the overall conclusions with the key factor being whether two lanes are needed on the Drayton Lane approach or not. See more on this point below.

1.5. Modelling of Right Turns from A5

1.6. The concept alternative mitigation for Woodford Lane includes a fully signalled right turn as an opposed right turn (where drivers would turn in gaps in oncoming traffic) is not suitable given the mainline speeds (as confirmed by speed surveys). This is a requirement of CD 123:

- *7.18 On roads with a design speed of 85 kph or higher, right turning lane(s) shall be separately signalled and segregated from the adjacent ahead-only lane(s) by a traffic island.*
- *CD 123 Geometric design of at-grade priority and signal-controlled junctions Version 2.1.0*

- 1.7. Traffic signs manual Chapter 6 para 8.4.1 also advises that *“Separately signalled right turns should be considered in circumstances where opposed right turns may be unsafe, for example on roads where the 85th percentile speed is above 45 mph on the relevant approaches.”*
- 1.8. All traffic modelling NH have used (NH Linsig and WCC Paramics model) in assessing the MIRA proposals has been based on a separately signalled right turn for Woodford Lane.
- 1.9. The DTA modelling however treats both right turns off the A5 as opposed right turns not separately signalled. Such a layout is not supported on safety grounds (unacceptable safety risk), is highly unlikely to be granted the necessary departures from standard and such a proposal would likely be raised in a Road Safety Audit. The addition of a separate stage for the right turn movements to make them fully signalled reduces the overall capacity of the junctions, increases delays and significantly increases queue lengths which undermines the conclusions reached in the DTA assessments.
- 1.10. It is noted that CD123 para 7.18 also requires a separation island between the ahead and right turn lane which was not included in the concepts and will need to be added at detailed stage unless a departure from standards to not include one is granted. Such an island can be included in the Woodford Lane concept within the available highway boundary land.
- 1.11. While this key point undermines the DTA conclusions further modelling in Linsig has been undertaken by NH which is discussed later in this report.
- 1.12. Geometry and Land Boundaries
- 1.13. The DTA TN includes confirmation that Extra Room Self Storage (their client) “is willing to contribute land in the northwest quadrant of the Drayton Lane junction to support an appropriate layout”. This is key to achieving a suitable lane arrangement and geometry on Drayton Lane as the current cross section is too narrow to signalise as it would need to allow for approaching and departing traffic to flow past each other freely, not accounting for any requirement for additional lanes.
- 1.14. However two questions remain; firstly, if there is a limit to how much land Extra Room Self Storage are prepared to contribute and the costs of realigning / widening Drayton Lane, and the A5, to achieve a suitable geometric layout.

- 1.15. Based on the tracking information provided, the current layout presented by DTA does not appear to achieve suitable and safe geometry if regular use by articulated vehicles is expected. This is not an insurmountable position as it could be overcome by additional widening and potentially alignment changes to Drayton Lane to create a suitable, trackable layout.
- 1.16. There may also be a need for additional land along the A5 to facilitate the necessary cross section on the A5.

2. Traffic reassignment through Fenny Drayton

- 2.1. One of the main reasons for opposing full signalisation of both Woodford Lane and Drayton Lane is the risk of encouraging traffic reassignment (rat-running) through Fenny Drayton. It is notable that 80-90% of peak time traffic on the 2022 survey that turned right out of either side road then turned right into the other road, much of this traffic is assumed to be accessing the A444 the other side of Fenny Drayton. If these movements are made easier through signalisation it is likely to attract more users to this movement leading to adverse impacts on the village. Increased demand for these movements may also lead to overloading of the traffic signal junctions – none of the Linsig modelling has assessed this due to the localised nature; a wider model such as the WCC Paramics model would be needed to assess this in more detail.
- 2.2. While it is hoped that the MIRA proposals to improve the A5 / A444 Redgate junction might encourage some users to go via this junction and not through Fenny Drayton, signalising both junctions would keep Drayton Lane as a highly attractive option. As such a proposal to signalise both junctions with all movements should also include additional highway measures to discourage through traffic from using Drayton Lane. This may for example include changes to junction priorities or inclusion of traffic calming features in or around Fenny Drayton.
- 2.3. While this is not an insurmountable issue it again raises the question of viability.

3. Feasibility of Signalising Drayton Lane

3.1. Taking the information provided by DTA into account National Highways has updated our previous Linsig models of Woodford Lane to also include Drayton Lane and test a joint signalisation scheme. This has used both our survey flows and the flows from the DTA Linsig models as separate flow groups for comparison. These lead to the following conclusions:

- In all cases the A5 needs two lanes eastbound at Drayton Lane to accommodate the traffic volumes
- In all cases the A5 westbound only needs a single ahead lane and a separate right turn lane at Drayton Lane
- The number of lanes required on Drayton Lane itself depends on the flows used – the NH / WCC survey flows would work to an acceptable level with a single approach lane however the higher flows from DTA would require a two-lane approach to keep green times short enough
- Given the short stacking, and 2-to-1 merges on the A5 it is important that the cycle time is kept short

3.2. Therefore, provided the necessary geometry can be achieved it is theoretically possible to signalise both junctions notwithstanding the above points about managing traffic reassignment, land requirements and costs. It is noted that signalising both junctions will result in some additional delay to A5 through traffic, and National Highways has not undertaken comparative modelling to calculate a value for this.

4. Conclusions

- 4.1. NH agrees with the DTA assessment that it is technical possible to signalise Drayton Lane without causing undue congestion or safety risks provided additional land is secured to achieve the required geometry, albeit there is a difference in views on the layout required. However, it should be noted that other factors must also be considered such as the cost of the additional work, its viability, and management / mitigation of wider impacts from vehicle route choices.
- 4.2. It may be reasonable therefore for Extra Room Self Storage to propose upgrading Drayton Lane as part of any proposed site expansion – notwithstanding other potential planning issues that may be objectionable against the proposals.
- 4.3. National Highways does not consider however that it would be reasonable to expect MIRA, as part of their proposals, to have to upgrade Drayton Lane to a fully signalised junction as they have already demonstrated that their impacts can be accommodated with the previously identified scheme without severe adverse traffic impacts or unacceptable safety impacts and because the additional works to upgrade Drayton Lane to a full signalised junction, and provide mitigation for rat-running through Fenny Drayton, would add substantial additional costs to their mitigation.

Appendix B

Independent Review of LinSig Modelling by JCT Consultancy Ltd



Technical Note 25023

Drayton Lane, Fenny Drayton

Date: 25th June 2025

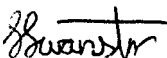
Issue 1.0

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Technical Note 25023
Issue: 1.0

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0.0 About this technical note

This technical note is intended for use by personnel experienced in traffic engineering and familiar with the area being analysed / designed. It is designed to help these technical personnel in the decision making process and its contents may be subsumed into a more comprehensive report without permission. This technical note should always be read in conjunction with models, drawing and or supplementary text and documents as outlined throughout the note. This is not intended to be a comprehensive report for the consumption of a wider and potentially none technical audience. A technical note rather than a more descriptive report has been produced at the client's request. JCT are happy to provide supplementary information to others and provide information on the tasks undertaken in alternative format on instruction.

1.0 Brief

- 1.0.1 JCT were commissioned by Extra Room Self Storage (ERSS) to produce LinSig MOTs for models representing two proposed traffic-signal options at two junctions on the A5 corridor, by Fenny Drayton. The junctions connect the A5 with Drayton Ln and Woodford Ln.
- 1.0.2 A planning application proposal converted the junction with Woodford Ln into a traffic-signals scheme and restricted the junction with Drayton Ln into a left-in, left-out junction only. This scheme impacted access to the site belonging to ERSS, via Drayton Ln. Therefore, David Tucker Associates (DTA), evaluated two proposed options on behalf of ERSS, which converted Drayton Lane into a traffic-signal scheme and retained all movements.
- 1.0.3 Option 1 provides two westbound ahead lanes between both junctions, with an exit merge to the west of Drayton Ln. Option 2 merges the westbound ahead traffic to the west of the Woodford Ln junction, thus the ahead traffic is restricted to a single lane upstream of the Drayton Ln junction.
- 1.0.4 Milestone Transport Planning (MTP) produced an e-mail response to the DTA schemes on 21st January 2025, which highlighted some concerns. DTA produced a Report on 27th May, addressing MTP's comments.
- 1.0.5 DTA provided JCT with the LinSig models and their Report, which included layouts of both schemes and the e-mail from MTP.
- 1.0.6 JCT's role was to review the modelling and produce MOT's highlighting any major and/or minor issues. JCT would update any issues with the models found and show the impact of these on the modelling results within this Technical Note.

2.0 Review

2.1 Options

2.1.1 The Option 1 scheme is shown in **Figure 1**.

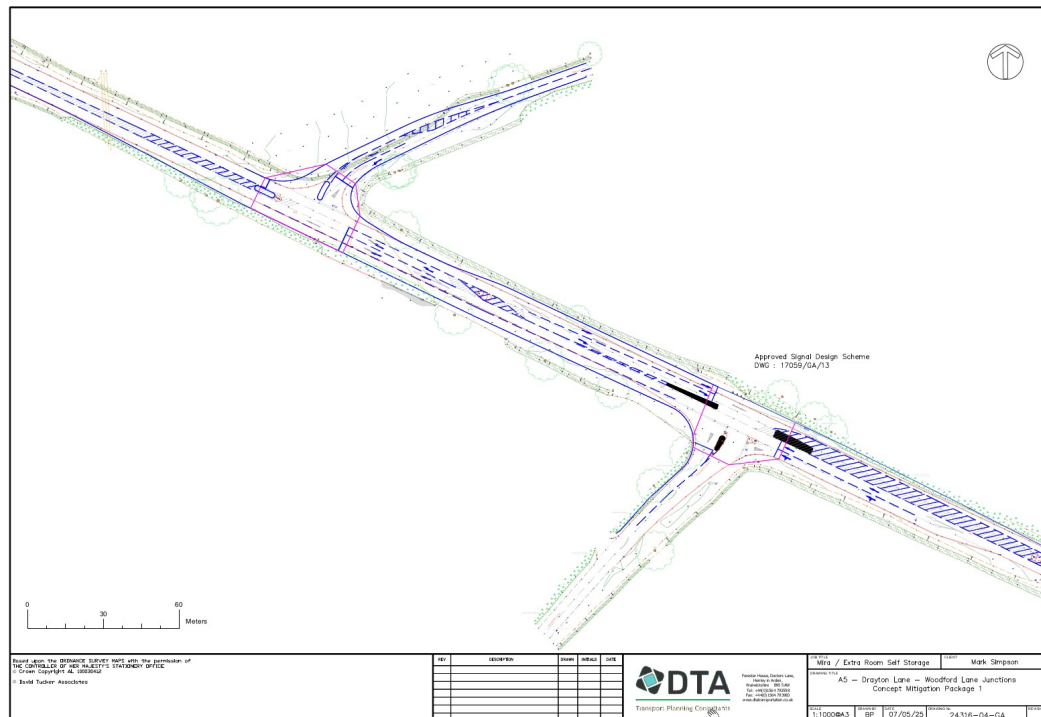


Figure 1: Option 1 Scheme

2.1.2 The Option 2 scheme is shown in **Figure 2**.

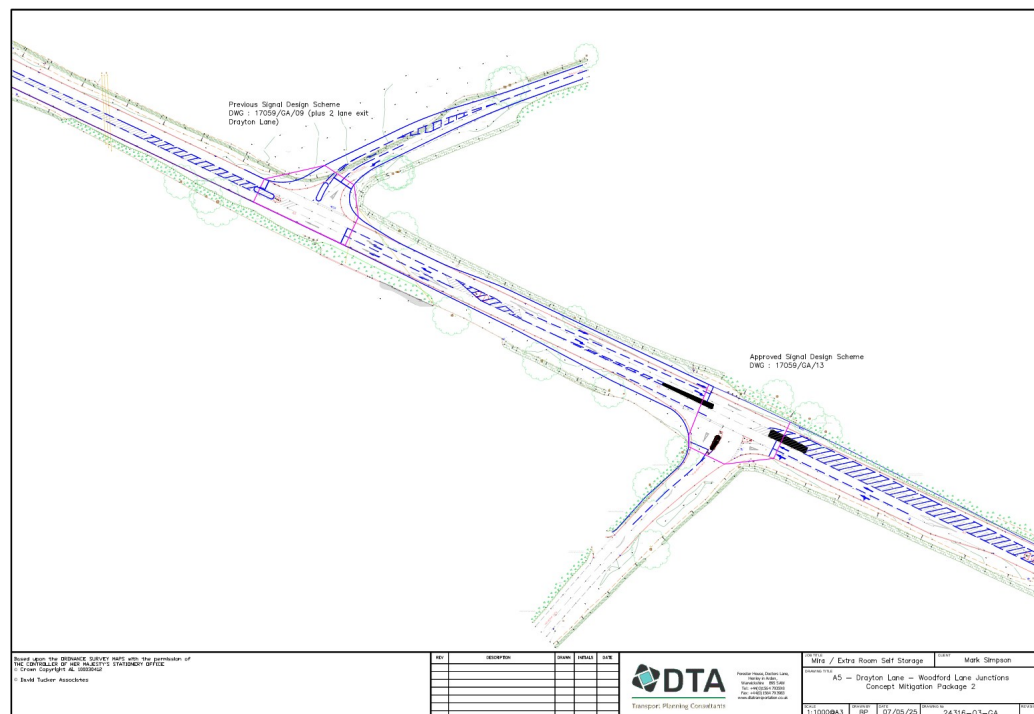


Figure 2: Option 2 Scheme

2.2 Audits

2.2.1 The LinSig MOTs are included in **Appendix A**.

2.2.2 The MOTs identified no serious issues with the models. There were some parameters identified as technical errors (highlighted in red within the MOT), although these would not have had a significant impact on the modelling results.

2.2.3 JCT updated the models, with the key changes being documented as Notes within the LinSig files themselves. However, some of the changes are discussed below.

2.3 Selected Modelling Adjustments

2.3.1 JCT produced quickGreen files of each junction layout, to estimate appropriate intergreen periods. These were shown to closely reflect the values used in the LinSig models, although in some cases there was a one second difference. JCT updated the models to reflect the quickGreen values. The quickGreen outputs are included in **Appendix B**.

2.3.2 LinSig needs to know the cruise times between the junctions to effectively optimise the timings to provide good co-ordination, provide green waves for the largest platoons and minimize delays and queues between the junctions. These could be entered directly or estimated by entering cruise speeds and appropriate lane lengths. The provided models used both methods for different lane connectors. For consistency, JCT updated the model to ensure all lane lengths were correct, and speeds entered on all connectors of 60 kph (the speeds used in the provided models).

2.3.3 In both files, the westbound traffic flow in the nearside lane on the entry to the network, was restricted to 210 pcus. It was assumed the purpose of this was to model the impact of reduced usage of this lane due to the exit merge downstream.

In the Option 2 modelling, this could be a reasonable assumption, as the exit merge is located beyond the Woodford Ln junction, and drivers going ahead may find it less desirable to use the nearside lane and then have to merge towards the offside lane downstream.

In the Option 1 modelling, drivers may be more willing to use both lanes upstream of the Woodford Ln junction, as the two lanes downstream extend beyond the junction with Drayton Ln. However, JCT left the locked flow as 210 pcus in Option 1, as a more robust assumption.

2.3.4 When modelling Option 2, there is an issue with LinSig reporting westbound queues correctly at the junction with Drayton Ln. The issue is that LinSig does not model individual vehicles directly. Traffic uses two lanes to travel westbound at the first junction, before merging into one lane before the second junction. LinSig merges these flow profiles on top of each other. At the start of green at the first stopline, traffic will leave at a two-lane saturation flow (as the queues discharge). As these lane flow profiles are transferred downstream, merging into a single lane, they effectively arrive at a double lane saturation flow rate for a short time in the cycle. This is higher than the single lane saturation flow used by LinSig on the downstream arm, and thus LinSig reports large queues, even though the traffic is arriving at the second stopline during a green wave.

In reality, individual vehicles at the start of green should have time to merge and continue travelling between the junctions at around cruise speed. Furthermore, the model has already restricted the ahead flow using the nearside lane at the first stopline, thus ensuring a robust degree of saturation calculation on that arm due to the merge. Therefore, one would not expect westbound queues to form at the second stopline.

To address this issue in Option 2, an additional free-flowing arm (with a single lane) was added between the junctions, after the westbound exit merge. A saturation flow was applied to this lane, to ensure that traffic could not arrive at a rate higher than the downstream lane could discharge. This removed the sliver-type queue from the signal-controlled arm at the second stopline and shifted it to the new free-flowing lane.

Note, this approach does not restrict traffic arriving at the second stopline, thus has no impact on the degree of saturation calculation. It simply refines the flow profile arrival rate, to ensure arriving traffic remains within the rate the single lane can cope with and avoid the reporting of inaccurate queues.

2.4 General Comments

- 2.4.1 The model assumes that right-turn traffic off the A5 is opposed and use indicative arrows if required. If road speeds are high on the A5 (85th percentile above 45mph), then fully signal-controlled right-turns might be a requirement, as it can be considered unsafe for drivers to give-way. However, it was assumed that the modelling was consistent with the modelling for the original Woodford Ln scheme.
- 2.4.2 A left-turn filter arrow was used for the left-turn from Drayton Ln. This may be reasonable if opposing vehicle paths are not expected to conflict. There is no island bordering the right-hand side of the right-turn lane from the A5 into Drayton Ln. Could right-turning vehicles cross the right-hand side of this lane as they approach the stopline during a green signal, and potentially come into conflict with traffic turning left from Drayton Ln?

2.5 Updated Models - Results

2.5.1 Tables 1 and 2 show the results summary from the updated LinSig files. Reported degrees of saturation (DoS) and mean maximum queues (MMQ) are shown as the highest value on any lane included within the specified arm.

Table 1: Option 1 Updated LinSig Results

Option 1	AM1		AM2		AM3		PM1		PM2		PM3	
	DoS	MMQ (pcus)	DoS	MMQ (pcus)	DoS	MMQ (pcus)	DoS	MMQ (pcus)	DoS	MMQ (pcus)	DoS	MMQ (pcus)
Junction 1: A5 / Drayton Ln												
A5(W)	86.6%	32.6	93.1%	44.3	89.0%	36.1	88.4%	35.2	90.6%	38.7	72.3%	19.3
Drayton Ln	82.4%	7.3	90.2%	9.5	85.9%	8.7	70.9%	4.5	62.0%	5.0	53.8%	3.2
A5(E)	49.3%	1.0	80.3%	1.6	87.4%	4.1	86.2%	4.6	84.8%	5.3	63.8%	1.5
Junction 2: A5 / Woodford Ln												
A5(W)	85.1%	9.4	90.7%	10.6	88.0%	10.1	86.5%	5.8	79.6%	6.7	69.5%	7.0
A5(E)	71.0%	11.6	88.4%	30.4	71.1%	11.7	81.6%	16.7	86.0%	24.3	85.0%	24.3
Woodford Ln	69.2%	3.7	56.6%	2.8	70.0%	4.4	73.2%	4.4	82.4%	6.3	82.2%	8.9
PRC	3.9%		-3.5%		1.1%		1.8%		-0.7%		5.9%	
Avg. Delay (s/pcu)	27.7		39.0		36.1		32.2		34.0		27.9	
Cycle Time	120		120		120		120		120		120	
File	Linked Junction LinSig Model_REV1e_JCT Update.lsg3x											

Table 2: Option 2 Updated LinSig Results

Option 2	AM1		AM2		AM3		PM1		PM2		PM3	
	DoS	MMQ (pcus)	DoS	MMQ (pcus)	DoS	MMQ (pcus)	DoS	MMQ (pcus)	DoS	MMQ (pcus)	DoS	MMQ (pcus)
Junction 1: A5 / Drayton Ln												
A5(W)	86.6%	32.6	93.1%	44.3	89.0%	36.1	88.4%	35.2	92.6%	36.1	71.5%	18.6
Drayton Ln	82.4%	7.3	90.2%	9.5	85.9%	8.7	70.9%	4.5	57.5%	4.2	59.7%	3.4
A5(E)	65.4%	1.8	80.3%	2.5	87.4%	1.9	86.2%	2.6	89.4%	4.6	74.4%	3.5
Junction 2: A5 / Woodford Ln												
A5(W)	85.1%	9.6	90.7%	10.7	88.0%	10.3	86.5%	6.0	79.8%	5.9	68.8%	7.5
A5(E)	71.0%	11.6	88.4%	30.4	71.1%	11.7	81.6%	16.7	86.9%	21.4	85.0%	24.3
Woodford Ln	69.2%	3.7	56.6%	2.8	70.0%	4.4	73.2%	4.4	83.9%	5.8	82.2%	8.9
PRC	3.9%		-3.5%		1.1%		1.8%		-2.9%		5.9%	
Avg. Delay (s/pcu)	29.6		42.2		34.4		31.5		35.3		31.1	
Cycle Time	120		120		120		120		120		120	
File	Linked Junction LinSig Model_REV2_JCT Update.lsg3x											

2.5.2 The overall results were broadly similar to those reported in the DTA LinSig models, with PRC values being similar for each scenario.

2.5.3 One major difference in the results is the reporting of queues on the A5E at the junction with Drayton Ln. The updated model reports significantly lighter queues. This would be expected, as most westbound traffic will arrive at the second stopline during a green signal.

Appendix A

LinSig MOTs

		File Description		Drayton Ln Mitigation Package 1		LinSig3 MOT												
		Model Filename		Linked Junction LinSig Model_REV1e.lsg3x		Received by DTA												
		JCT Reference		25023A		JCT Auditor Simon Swanston												
Associated Drawing		24316-04-GA		Associated Signal Data		n/a		Associated Traffic Flows		n/a		Other Provided Info		n/a				
JCT AUDIT CHECKLIST	Lane Structure		OK		✓		Flares (Short Lanes)		Note 2		✗		Give-way		Note 3, 14		✗	
	Phases		Notes 4-5, 11		✗		Intergreens		Note 6		✗		Stages / Sequences		Note 7		✓	
	Phase Delays		Note 8		✗		Saturation Flows		Note 9		✗		Cruise Times		Note 10		✗	
	Traffic Flows		Note 1		✗		Advanced Settings / Other		OK		✓		Timings / Results		Note 13		✓	
	✓		No significant errors identified		✗		Comment that may require clarification or minor error		✗		Potential / Likely Error							
Modeller Details		Modeller Name		Modeller Company		Response Date												
JCT Audit Notes (Page 1)														Modeller's Response				
Note Number		Comment																
1		In all scenarios, the A-C flow using the nearside lane route was locked at 210 pcus. This meant that all other A-C traffic could only use the offside lane, forcing a significant volume of traffic into the offside lane. Despite an exit merge beyond the second junction, this seemed like an unnecessary restriction in the model.												The nearside lane was locked to 210 vph (pcu) to reflect likely usage of the flare based on experience elsewhere on the A5 (Longshoot). Accept that longer funnel/merge could improve slightly.				
2		Lane J1:6/3 flare length could be increased from 5 to 7 pcus												Noted. Assumption for Drayton Lane were conservative here				
3		Storage in front of stopline and turns in intergreen, on Lane J1:6/3 could be increased from 2 to 3 pcus.												Noted. Assumption for Drayton Lane were conservative here				
4		Controller 1, Indicative Arrow Phase D was not attached to the lane, though this should not impact mode results												Noted. This was not used				
5		Controller 1 contained a filter arrow phase from J1:2/1. This may be reasonable, if there is no conflict expected with the right-turn into Drayton Ln. This will depend on right-turning traffic staying in their lane upstream of the stopline, as there is no island to the offside of the right-turn lane.												A generous corner taper was provided to ensure that there is no conflict for even a max legal artic. At detailed design a physical island could be specified or left turn filter omitted				
6		JCT produced quickGreen models of both junctions to check the intergreens. These were generally similar to those used in the LinSig model, some being different by 1 second. The quickGreen outputs will be provided alongside the MOT.												Noted				
7		Both junctions run the indicative arrow stage. This is not unreasonable, although during the PM peak at Controller 2, a sequence excluding the indicative arrow could be considered, as the right-turn is low.												Noted				
Disclaimer: This LinSig MOT was conducted based on the information provided to JCT Consultancy Ltd, and used as a tool to identify potential errors and issues requiring clarification. It may be used in the process of determining whether the model is "fit for purpose", although should not be considered the only factor in this decision. It is responsibility of the modeller to ultimately justify modelling inputs and interpreting outputs.																		
																		

JCT Audit Notes (Page 2)

Modeller's Response

Note Number

Comment

8

At Controller 1, a long 10 seconds Phase delay was applied to Phase A, from stage 1 to 3. It was not clear why this was entered. However, as this stage change does not run in the model, it will not impact the results.

Noted

9

The widths and radii used for saturation flow predictions generally looked reasonable, albeit the scale of the drawing was small. JCT recommend that all lanes are considered as nearside lanes, unless the lane offers an overtaking opportunity for traffic going to the same destination as traffic in the adjacent lane. This would change the nearside lane assumptions for some lanes in the model.

Noted

10

Cruise times have either been entered directly, or predicted based on the length of the lane(s) and a speed of 60 kph. It would be more consistent of using one method or the other. If speeds are to be used, the length of J1:3/1 and J2:1/2 would need to be corrected, as these simply use the default lane lengths.

Noted

11

Are the speeds on the A5 likely to be low enough to allow indicative arrows (opposed right-turns) to be used? Fully signalled right-turns would likely need to be considered if the 85th percentile speed is above 45mph.

Noted. This applies to both the agreed scheme on Woodford Lane and the preferred scheme including Drayton Lane.

12

The model may force a significant amount of ahead traffic into Lane J1:6/1, and very little in J1:6/2, depending on the flows and timings. This would be a result of the capacity calculation of the right-turn lane, and more traffic may be assigned to the nearside ahead lane if there is sufficient capacity. This may not be an issue in the model, as in reality one may expect more ahead vehicles to use the offside lane and thus get more balanced usage of the ahead lanes (without any loss or gain of overall junction capacity). However, consideration could be given to locking ahead traffic flows to get more balanced usage, assuming this does not worsen the DoS for the right-turn lane.

Noted

13

These seemed reasonable, albeit JCT produced some better results in some scenarios, simply by optimising for PRC (e.g. PM1 scenario PRC improved from -6.2% to 0.7%). These would need to be re-optimised anyway, once any edits of the model are made.

Noted

14

Lane J1:6/3 should use the lane saturation flow when opposing traffic is stopped, not the Maximum Flow

Agreed although this will not make much difference to the results as the green time for the arrow phase is short

		File Description		Drayton Ln Mitigation Package 2		LinSig3 MOT												
		Model Filename		Linked Junction LinSig Model_REV2.lsg3x		Received by		DTA		Date Sent to JCT		18 June 2025						
		JCT Reference		25023B		JCT Auditor		Simon Swanston		Audit Date		20 June 2025						
Associated Drawing		24316-03-GA		Associated Signal Data		n/a		Associated Traffic Flows		n/a		Other Provided Info		n/a				
JCT AUDIT CHECKLIST	Lane Structure		OK		✓		Flares (Short Lanes)		Note 1		✓		Give-way		Notes 2-3		✗	
	Phases		Notes 4-5		✗		Intergreens		Note 6		✗		Stages / Sequences		Note 7		✓	
	Phase Delays		Note 8		✗		Saturation Flows		Note 9, 14		✗		Cruise Times		Note 10		✗	
	Traffic Flows		Notes 11-12		✗		Advanced Settings / Other		OK		✓		Timings / Results		Note 13		✗	
	✓		No significant errors identified		✗		Comment that may require clarification or minor error		✗		Potential / Likely Error							
Modeller Details		Modeller Name				Modeller Company				Response Date								
JCT Audit Notes (Page 1)												Modeller's Response						
Note Number		Comment																
1		Lane J1:6/2 flare length could be increased from 6 to 7 pcus										Noted						
2		Storage in front of stopline and turns in intergreen, on Lane J1:6/2 could be increased from 2 to 3 pcus.										Noted						
3		Lane J1:6/2 should use the lane saturation flow when opposing traffic is stopped, not the Maximum Flow										Noted. Green time is however short						
4		Controller 1 contained a filter arrow phase from J1:2/1. This may be reasonable, if there is no conflict expected with the right-turn into Drayton Ln. This will depend on right-turning traffic staying in their lane upstream of the stopline, as there is no island to the offside of the right-turn lane.										A generous corner taper was provided to ensure that there is no conflict for even the design vehicle. At detailed design a physical island could be specified or left turn filter omitted						
5		Are the speeds on the A5 likely to be low enough to allow indicative arrows (opposed right-turns) to be used? Fully signalled right-turns would likely need to be considered if the 85th percentile speed is above 45mph.										Noted. This applies to both the agreed scheme on Woodford Lane and the preferred scheme including Drayton Lane.						
6		JCT produced quickGreen models of both junctions to check the intergreens. These were generally similar to those used in the LinSig model, some being different by 1 second. The quickGreen outputs will be provided alongside the MOT.										Noted						
7		Both junctions run the indicative arrow stage. This is not unreasonable, although during the PM peak at Controller 2, a sequence excluding the indicative arrow could be considered, as the right-turn is low.										Noted						
Disclaimer: This LinSig MOT was conducted based on the information provided to JCT Consultancy Ltd, and used as a tool to identify potential errors and issues requiring clarification. It may be used in the process of determining whether the model is "fit for purpose", although should not be considered the only factor in this decision. It is responsibility of the modeller to ultimately justify modelling inputs and interpreting outputs.																		
																		

JCT Audit Notes (Page 2)

Modeller's Response

Note Number

Comment

8

At Controller 1, a long 10 seconds Phase delay was applied to Phase A, from stage 1 to 3. It was not clear why this was entered. However, as this stage change does not run in the model, it will not impact the results.

Noted. Not used

9

The widths and radii used for saturation flow predictions generally looked reasonable, albeit the scale of the drawing was small. JCT recommend that all lanes are considered as nearside lanes, unless the lane offers an overtaking opportunity for traffic going to the same destination as traffic in the adjacent lane. This would change the nearside lane assumptions for some lanes in the model.

Noted

10

Cruise times have either been entered directly, or predicted based on the length of the lane(s) and a speed of 60 kph. It would be more consistent of using one method or the other. If speeds are to be used, the length of J1:3/1 would need to be corrected, as these simply use the default lane lengths.

Noted

11

A small amount of traffic (4 pcus), B-C, had not been assigned in the PM3 scenario.

Noted. The number of vehicle is negligible

12

The nearside ahead flow on J2:5/1 was locked to 210 pcus in all scenarios. It was likely this was due to the immediate exit merge. This could be considered reasonable, and a robust assumption to deal with driver behaviour

The vehicles were locked to reflect expected behaviour given pattern within immediate corridor (Longshoot) and geometry of proposed nearside flare.

13

The model predicts relatively long westbound queues on J1:6/1, despite relatively good co-ordination of the signal timings to achieve progression of the heavy westbound platoon of traffic. This queue is unlikely to occur in reality, and is a result of two upstream lanes of traffic feeding into a single lane. This merges two platoon of traffic together. As these will be travelling at around saturation flow at points in the cycle, when they merge the combined rate is much higher than a single lane saturation flow, thus a queue would be reported in the model (even if it was a free flowing lane with no signals). In reality, merging traffic will do so in gaps, and would be able to continue flowing along the single lane. To try and shift this modelling issue from J1:6, another arm between J2:2 and J1:6 could be added with a single lane. This single lane could be given a saturation flow that does not exceed the downstream saturation flow (used at the flare point, not the stoplines). Although LinSig will report queuing on this new lane (which a large desliver could be used if desired), it will remove this issue from J1:6 (whilst maintaining the correct arrival rate and volume of traffic at the downstream stopline)

Agree with this approach

14

No turning radius for J1:6/2

Noted. This will not make a significant difference to the overall linked junction performance

Appendix B

quickGreen Outputs

quickGreen Report

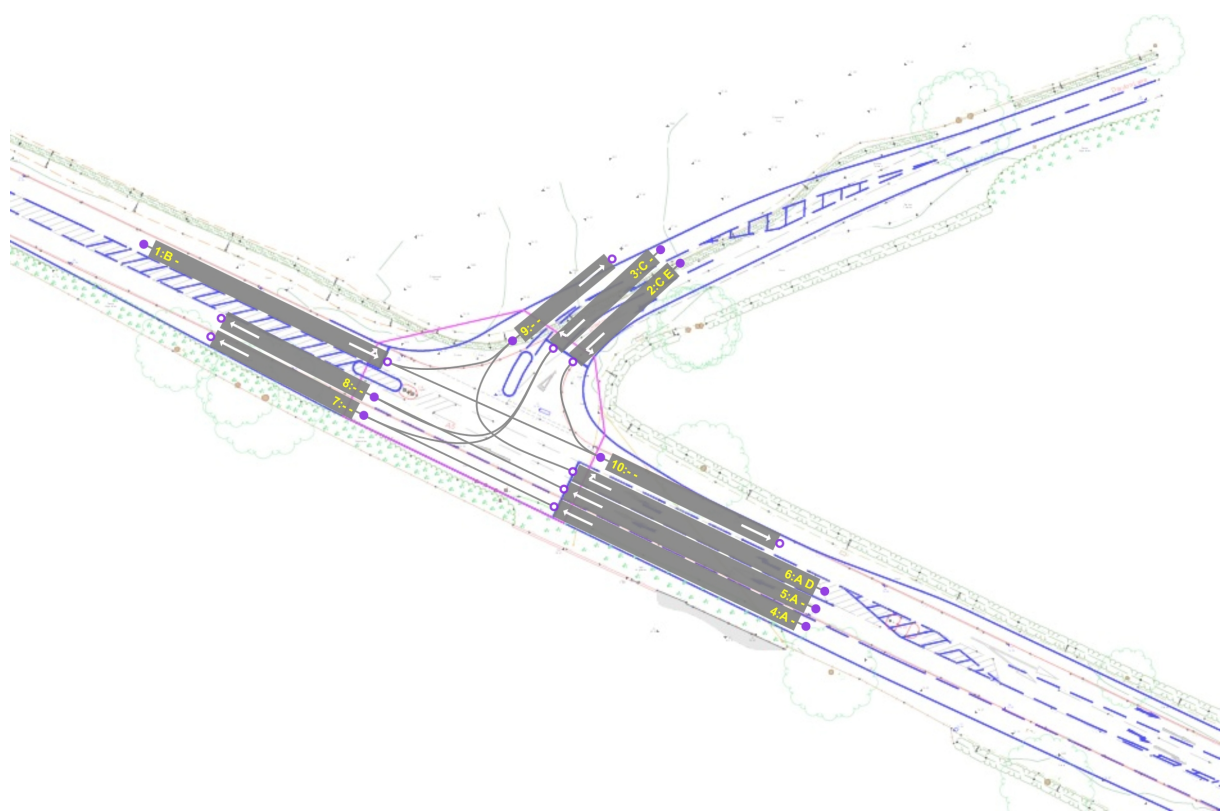
Project: 25023 Drayton Ln
Title: Drayton Ln Option 1

File Name:	Drayton Ln Option 1 IGs.qgn
Location:	Atherstone
Designer:	Simon Swanston
Organisation:	JCT Consultancy
Address:	LinSig House, Deepdale Lane, Nettleham, Lincoln, LN2 2LL

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<http://www.jctconsultancy.co.uk>

Junction Diagram



Notes

This model does not have notes

Lane Details

Lane	Width (m)	Controlling Phase	Controlling Arrow Phase	ASL Length (m)	Number of Turning Movements	Adjusted Turning Movements
1	3.00	B			2	0 of 2
2	3.00	C	E		1	0 of 1
3	3.00	C			2	0 of 2
4	3.00	A			1	0 of 1
5	3.00	A			1	0 of 1
6	3.00	A	D		1	0 of 1

Turning Movement Details

Turning Movement	Turning Movement Adjustment (s)	Always Apply Turning Movement Adjustment?	Is this turn controlled by the upstream lane's arrow phase? (If set)
1 => 9	0	Only if conf. dist > 0	N/A
1 => 10	0	Only if conf. dist > 0	N/A
4 => 7	0	Only if conf. dist > 0	N/A
5 => 8	0	Only if conf. dist > 0	N/A
6 => 9	0	Only if conf. dist > 0	Yes
3 => 7	0	Only if conf. dist > 0	N/A
3 => 8	0	Only if conf. dist > 0	N/A
2 => 10	0	Only if conf. dist > 0	Yes

Pedestrian Crossings

This model does not contain Pedestrian crossings

Traffic Signal Phases

Phase Name	Type	Lanes Controlled
A	3 Aspect Traffic	4, 5, 6
B	3 Aspect Traffic	1
C	3 Aspect Traffic	2, 3
D	Indicative Arrow	6
E	Filter	2

Lane Conflict Distances

Lane Conflict Distances (m)							
		Starting Lane					
		1	2	3	4	5	6
Stopping Lane	1	-	19.63	9.20	-	-	-4.70
	2	-19.63	-	-	-	-	-
	3	-8.95	-	-	5.18	4.44	3.14
	4	-	-	-5.18	-	-	-
	5	-	-	-3.44	-	-	-
	6	10.67	-	-2.58	-	-	-

Traffic/Pedestrian Conflict Distances

No Traffic/Pedestrian conflicts defined

Phase Intergreen Matrix

Phase Intergreens (s)						
		Starting Phase				
		A	B	C	D	E
Terminating Phase	A	-	Opp	5	-	-
	B	Opp	-	7	(-)3*	7
	C	5	5	-	5	-
	D	-	6	5	-	-
	E	-	5	-	-	-

Opp = Phases Oppose, FNC = Force No Conflict, +/- = Intergreen Adjusted or Custom Set, Bold = Is Close to Intergreen Boundary,
 * = Notes Added

Additional Phase Intergreen Detail

Phases	Type	Unadjusted Value	Adjusted Value	Notes
A => B	Phases Oppose	6	-	
B => A	Phases Oppose	5	-	
B => D	Overriden	5	3	Pre Indicative Arrow

Audit Log Records

This model does not have any audit records

quickGreen Report

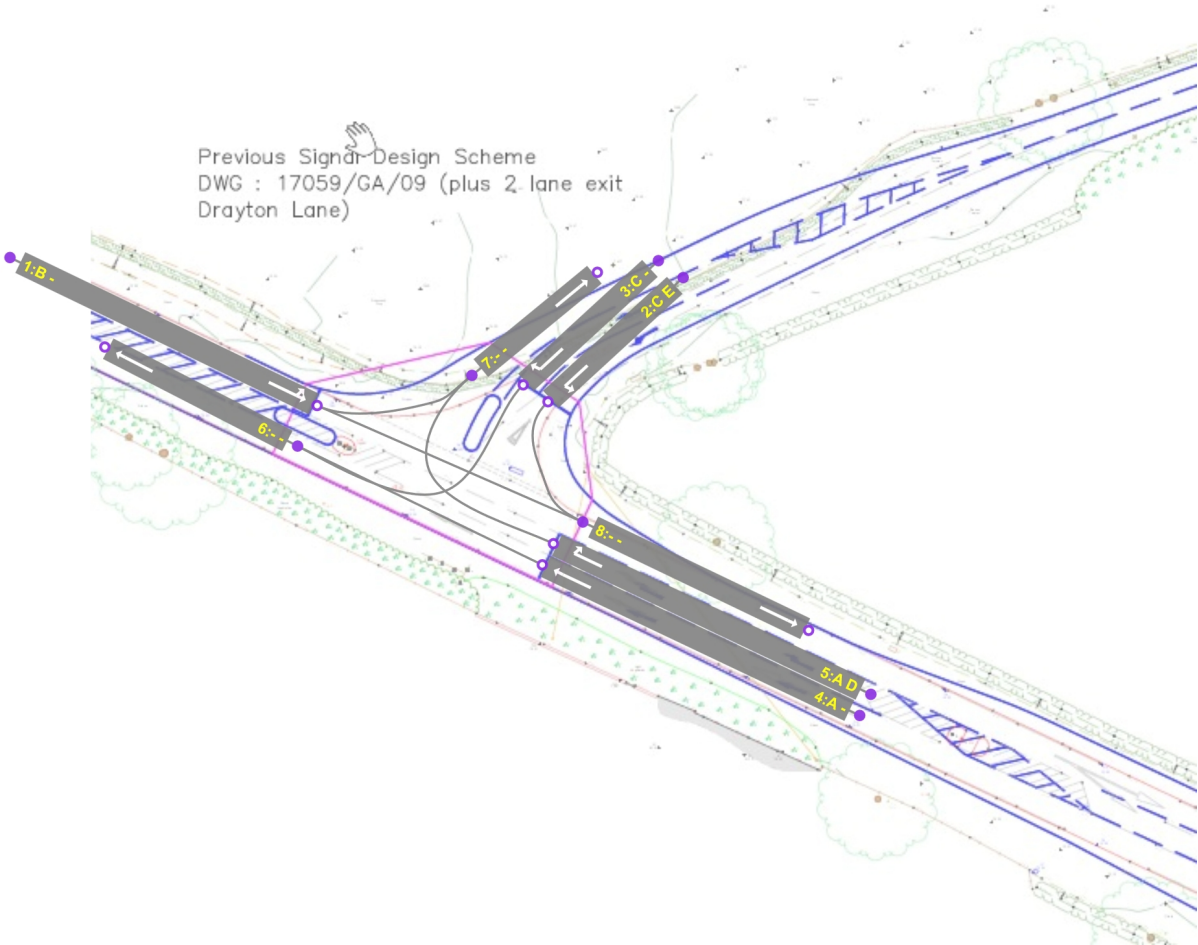
Project: 25023 Drayton Ln
Title: Drayton Ln Option 2

File Name:	Drayton Ln Option 2 IGs.qgn
Location:	Atherstone
Designer:	Simon Swanston
Organisation:	JCT Consultancy
Address:	LinSig House, Deepdale Lane, Nettleham, Lincoln, LN2 2LL

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<http://www.jctconsultancy.co.uk>

Junction Diagram



Notes

This model does not have notes

Lane Details

Lane	Width (m)	Controlling Phase	Controlling Arrow Phase	ASL Length (m)	Number of Turning Movements	Adjusted Turning Movements
1	3.00	B			2	0 of 2
2	3.00	C	E		1	0 of 1
3	3.00	C			1	0 of 1
4	3.00	A			1	0 of 1
5	3.00	A	D		1	0 of 1

Turning Movement Details

Turning Movement	Turning Movement Adjustment (s)	Always Apply Turning Movement Adjustment?	Is this turn controlled by the upstream lane's arrow phase? (If set)
1 => 7	0	Only if conf. dist > 0	N/A
1 => 8	0	Only if conf. dist > 0	N/A
4 => 6	0	Only if conf. dist > 0	N/A
5 => 7	0	Only if conf. dist > 0	Yes
3 => 6	0	Only if conf. dist > 0	N/A
2 => 8	0	Only if conf. dist > 0	Yes

Pedestrian Crossings

This model does not contain Pedestrian crossings

Traffic Signal Phases

Phase Name	Type	Lanes Controlled
A	3 Aspect Traffic	4, 5
B	3 Aspect Traffic	1
C	3 Aspect Traffic	2, 3
D	Indicative Arrow	5
E	Filter	2

Lane Conflict Distances

Lane Conflict Distances (m)						
		Starting Lane				
		1	2	3	4	5
Stopping Lane	1	-	19.10	8.25	-	-5.97
	2	-19.10	-	-	-	-
	3	-8.25	-	-	2.63	1.71
	4	-	-	-2.62	-	-
	5	11.97	-	-1.71	-	-

Traffic/Pedestrian Conflict Distances

No Traffic/Pedestrian conflicts defined

Phase Intergreen Matrix

Phase Intergreens (s)						
		Starting Phase				
		A	B	C	D	E
Terminating Phase	A	-	Opp	5	-	-
	B	Opp	-	7	(-)3*	7
	C	5	5	-	5	-
	D	-	6	5	-	-
	E	-	5	-	-	-

Opp = Phases Oppose, FNC = Force No Conflict, +/- = Intergreen Adjusted or Custom Set, Bold = Is Close to Intergreen Boundary,
 * = Notes Added

Additional Phase Intergreen Detail

Phases	Type	Unadjusted Value	Adjusted Value	Notes
A => B	Phases Oppose	6	-	
B => A	Phases Oppose	5	-	
B => D	Overriden	5	3	Pre Indicative Arrow

Audit Log Records

This model does not have any audit records

Appendix C

DTA HGV Routing Review

Mira / Extra Self Storage

Review of HGV Issues on Drayton Lane

Technical Note



1. The Safety Audit prepared for the works proposed by Mira (**Appendix A**), raises two concerns about the arrangement as designed for the A5 / Drayton Lane junction. The audit is attached in full but in summary it confirms that:

Problem 3.2 Junctions, 3.2.1: Articulated vehicles can't easily turn into Drayton Lane from the A5 if a vehicle is trying to turn out of Drayton Lane onto the A5 at the same time (because the HGV turning left onto the A5 has to use both lanes on Drayton Lane to manoeuvre) – **this could cause rear end shunts on the A5 and an obstruction of the A5**

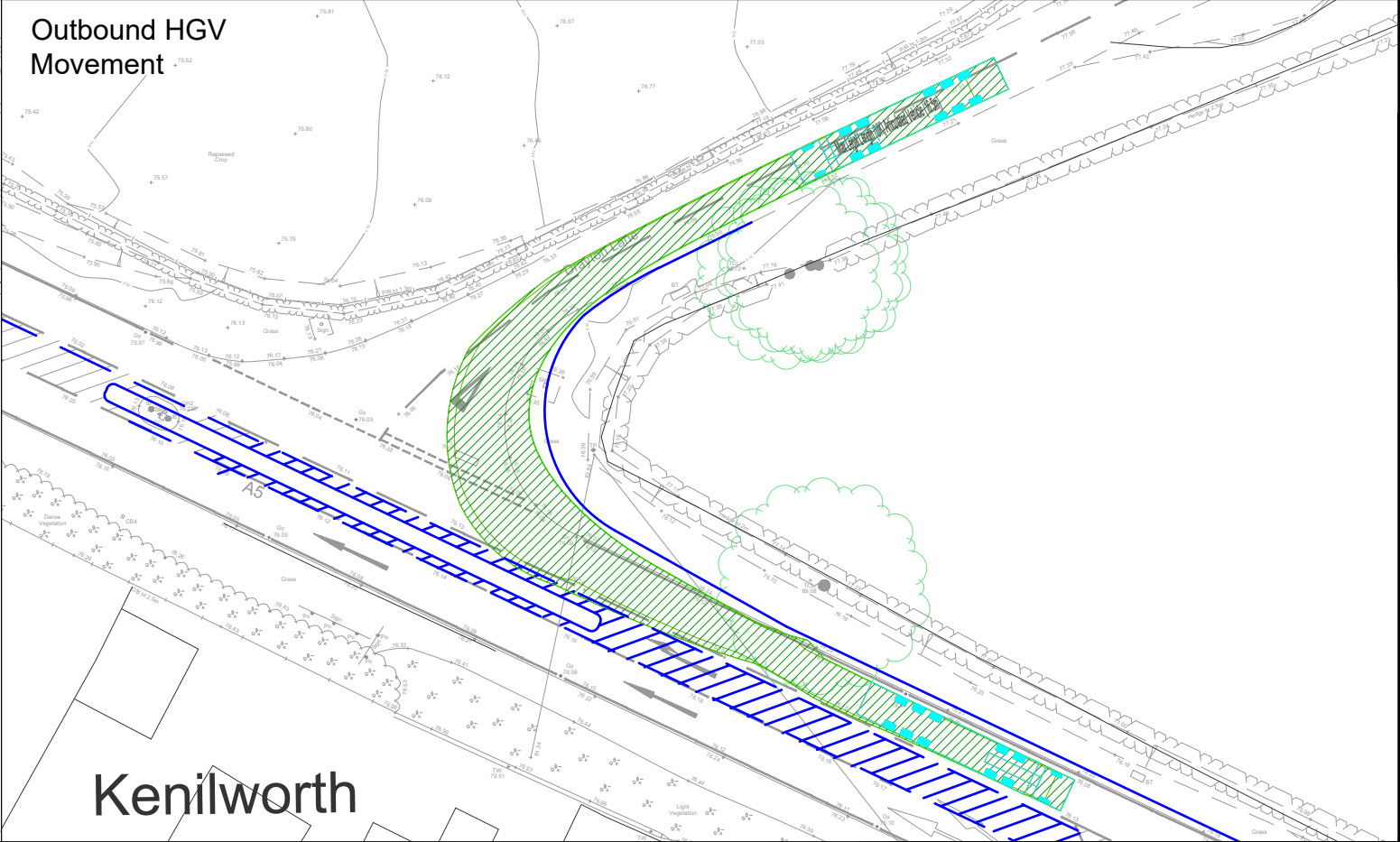
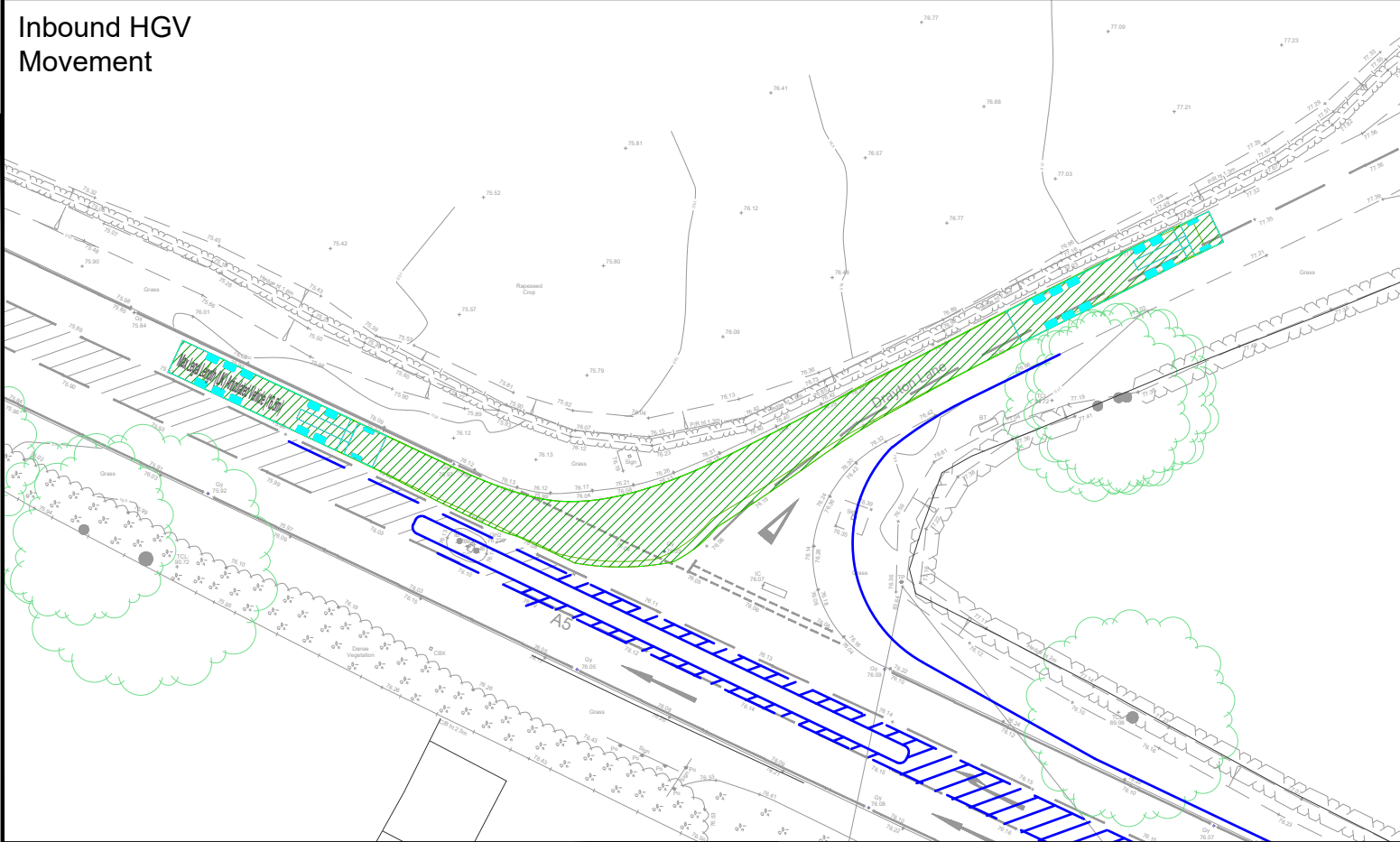
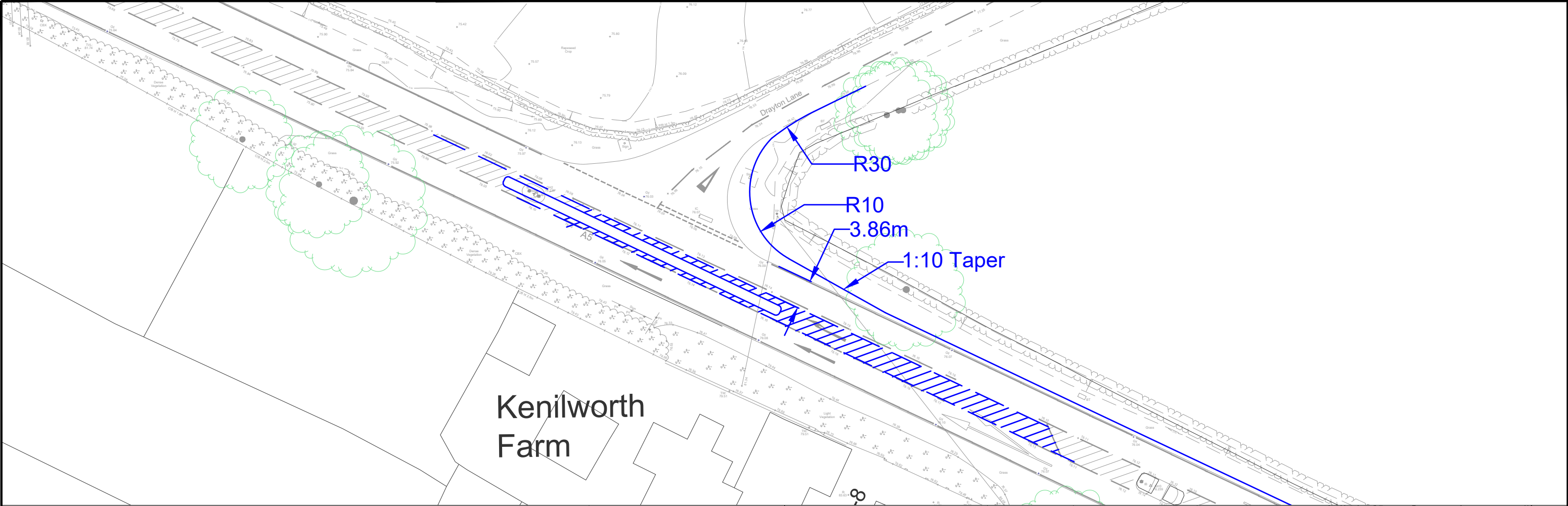
Problem 3.2 Junctions, 3.2.2: Articulated vehicles may miscalculate the turning manoeuvre left out of Drayton Lane (because of the central island on the A5) leading to an obstruction on the A5 either from a vehicle strike on the central island or whilst the vehicle repositions to make the turn – **this could cause potential T-bone type collisions and obstructions on the A5**

2. The particular concern relates to those HGVs turning both left from or onto the A5 being obstructed from doing so by the proposed central reservation.
3. This issue has been assessed in more detail using the topographical survey undertaken on the junction and the tracking is shown on **DTA Drawing 24316-05**. It is clear that both movements will result in over-running of the centre line markings on Drayton Lane and therefore the concerns raised by the RSA are both clearly a significant issue.
4. This issue does not arise with the proposed alternative arrangement as shown on **DTA Drawings 24316-04-TK** and **24316-03- TK**.
5. Although Drayton Lane is subject to a 7.5t weight restriction it is subject to exemptions for access and loading and therefore does carry HGV traffic, principally from the operations at Drayton Grange Farm and Extra Room Self Storage. ATC surveys undertaken at that site in February 2025 (**Appendix B**) confirm movements of HGVS to be around 16-20 movements per day. **Appendix C** shows examples of these vehicles using both the Extra Room Self Storage and the Farm.



6. The RSA response confirms that the weight restriction should remain in place and that HGVs can also gain access via the new (as proposed by Mira) Redgate Roundabout. This will require these vehicles to travel through the village of Fenny Drayton. Tracking at **DTA Drawing 24316-05-2** confirms that tracking of such vehicles through the village is significantly constrained and will require such vehicles to use both running lanes of the roads at all three junctions within the village. This includes the need for HGVs to swing across opposing running lanes on the A444. This is not likely to be safe or acceptable to Leicestershire County Council.
7. On that basis it is the clear that the designer's response to the RSA problems is inadequate and the design of the A5 / Drayton Lane element of the scheme should be reassessed on that basis.

Drawings



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© David Tucker Associates

Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 13.6m
Overall Width 2.55m
Overall Body Height 3.89m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

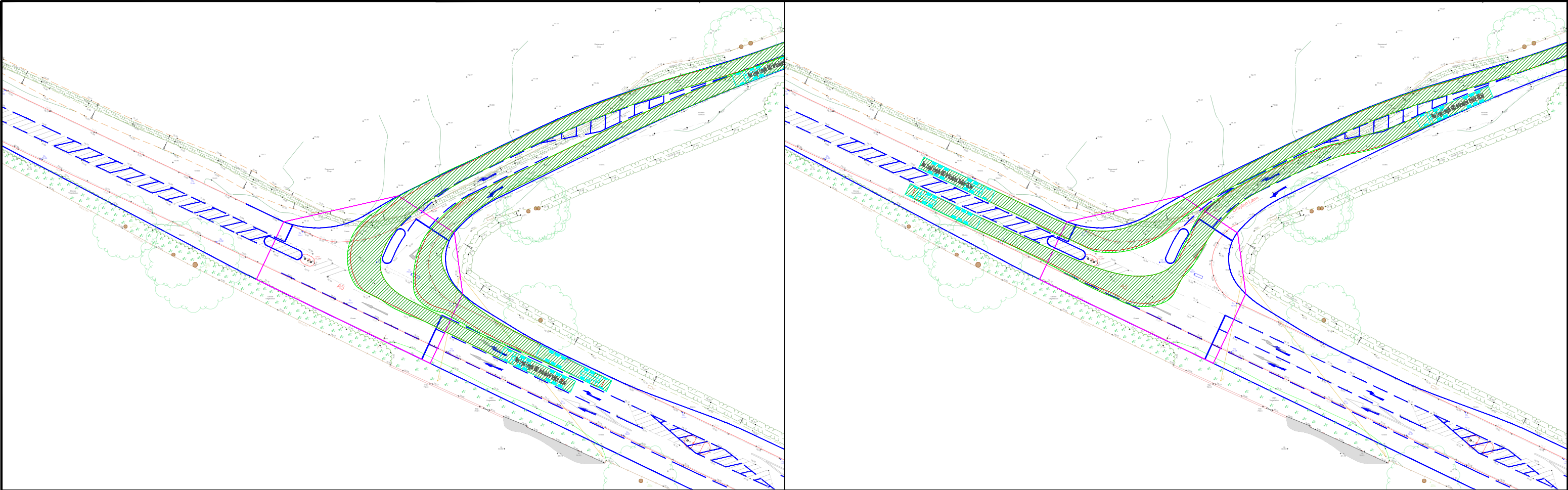
REV	DESCRIPTION	DRAWN	INITIALS	DATE

Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dta-transportation.co.uk

JOB TITLE	CLIENT
Mira / Extra Room Self Storage	Mark Simpson

DRAWING TITLE	
Drayton Lane – A5 Watling Street Safety Scheme	

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/500@A3	BP	02-10-25	24316-05	



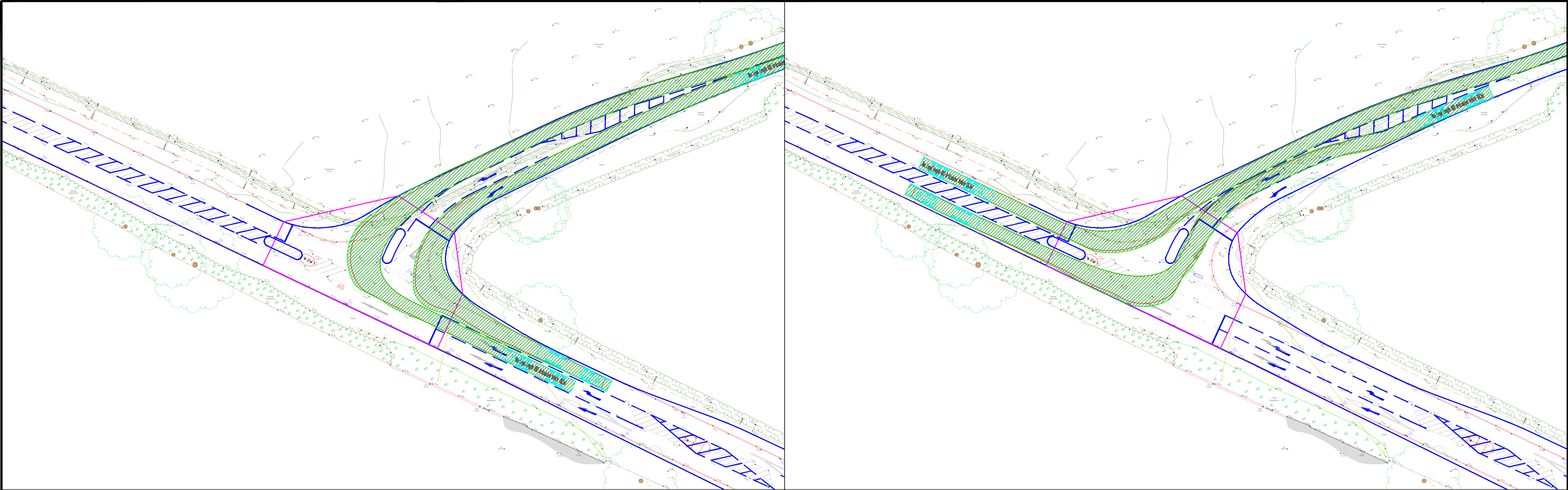
Based upon the ORDNANCE SURVEY MAPS with the permission of
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REV	DESCRIPTION	DRAWN	INITIALS	DATE



Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE Mira / Extra Room Self Storage			CLIENT Mark Simpson	
DRAWING TITLE A5 – Drayton Lane – Woodford Lane Junctions Concept Mitigation Package 1 Vehicle Tracking				
SCALE 1:1000@A3	DRAWN BY BP	DATE 07/05/25	DRAWING No 24316-04-TK	REVISION



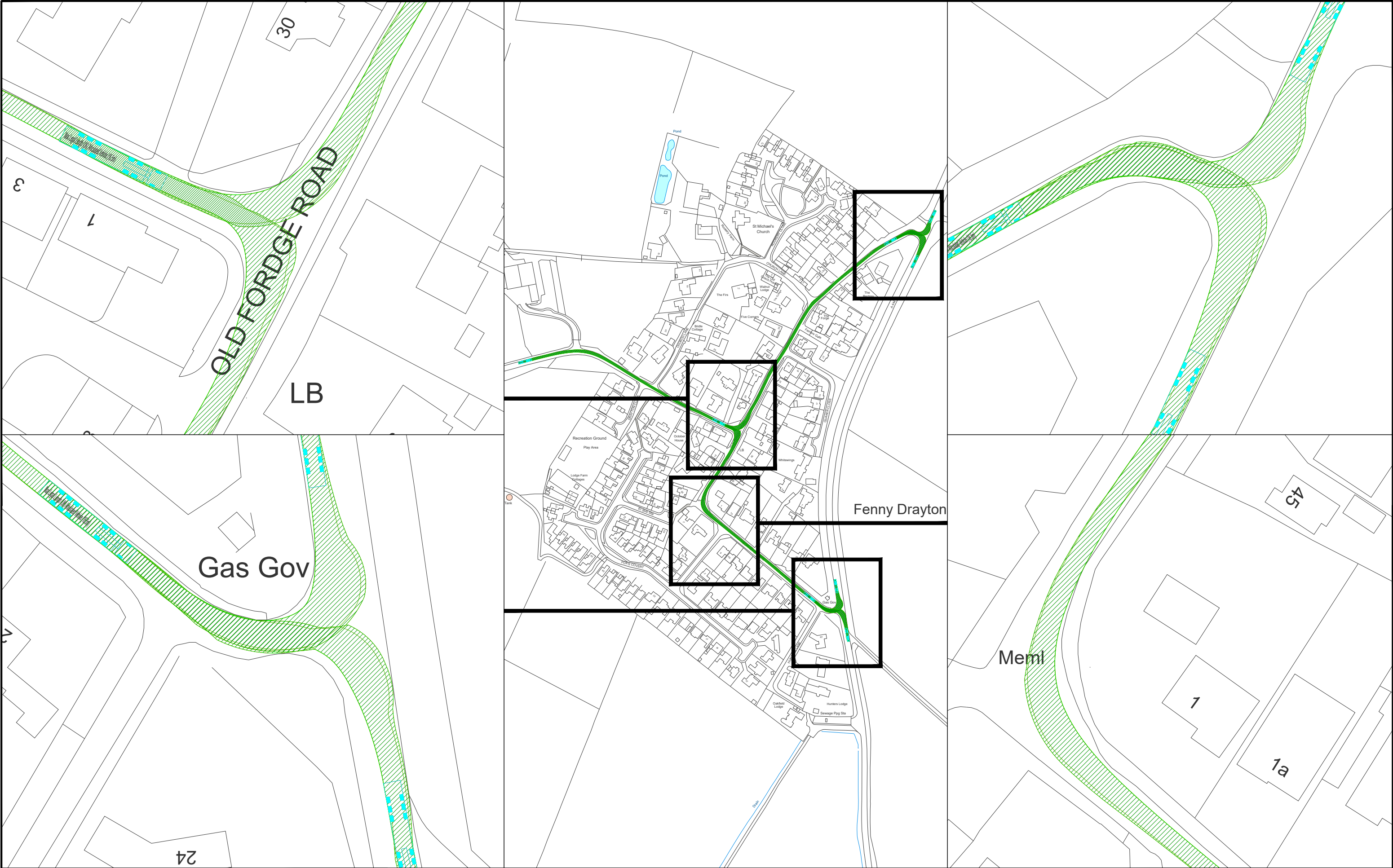
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REV	DESCRIPTION	DRAWN	INITIALS	DATE



Forester House, Doctors Lane,
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Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE Mira / Extra Room Self Storage			CLIENT Mark Simpson	
DRAWING TITLE A5 – Drayton Lane – Woodford Lane Junctions Concept Mitigation Package 2 Vehicle Tracking				
SCALE 1:1000@A3	DRAWN BY BP	DATE 07/05/25	DRAWING No 24316-03-TK	REVISION



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Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.581m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 6.530m

REV	DESCRIPTION	DRAWN	INITIALS	DATE

Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE	CLIENT
Mira / Extra Room Self Storage	Mark Simpson

DRAWING TITLE	
Fenny Drayton – HGV Tracking Plan	

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/500@A3	BP	02-10-25	24316-05-2	

Appendix A

Road Safety Audit Response for Stage 1 Road Safety Audit (GG 119 Appendix F)

F1 Project Details

Table F.1 Project Details

Report Title:	Stage 1 Road Safety Audit Designer's Response
Date:	29 October 2024
Document Reference and Revision:	17059 RSA1 Designer's Response (29.10.24)
Prepared By:	Milestone Transport Planning Ltd
On Behalf of:	ERI MTP Ltd

Table F.2 Authorisation Sheet

Project:	Proposed Mitigation Scheme in association with MIRA South Site - A5 Watling Street / Woodford Lane / Drayton Lane Junctions
Report Title:	Stage 1 Road Safety Audit Response
Prepared by:	
Name:	Paul Koven
Position:	Associate Director
Signed:	
Organisation:	Milestone Transport Planning
Date:	29 October 2024
Approved by:	
Name:	Matt Stevens
Position:	Managing Director
Signed:	
Organisation:	Milestone Transport Planning
Date:	29 October 2024

F2 Introduction

Summary of Scheme

The scheme relates to a proposed planning application - MIRA South Site - which is proposed to provide a strategic employment development park, together with accesses, new link road, landscaping, sustainable drainage, and other associated infrastructure. MIRA South Site is located on the outskirts of Nuneaton, to the south of the wider MIRA Technology Park. It is bounded by the A5 (Watling Street) to the north and the A444 (Weddington Lane) to the south.

The proposed highway arrangements, that are the subject of this Road Safety Audit, are to amend the existing priority junctions on the A5 Watling Road with Drayton lane and Woodford Lane, that comprise:

- Signalisation of the existing A5 Watling Road / Woodford Lane Junction.
- Amendments to the existing Drayton Lane junction to prevent right turns in and out.

The A5 Watling Street, which forms part of the Strategic Road Network (SRN), travels in a North-West to South-East direction. The land to the North-East of the A5 is agricultural land. The land to the South-West of the A5 is primarily agricultural land however also contains a relatively small area of buildings containing 'Kenilworth Farm', 'The Old Stableblock', 'The Vogue' and 'The Floral Heart Florist'. These properties have no access from the A5 and are instead accessed via Woodford Lane.

Woodford Lane is a single carriageway road approximately 6m in width and leads to local amenities such as Dobbies Garden Centre and Severn Trent Water Sewage Treatment Works, amongst others.

Drayton Lane is a single carriageway road of varying widths. Drayton Lane reduces widths in parts and therefore also consists of intermittent vehicle passing places. Drayton Lane leads from the A5 towards Fenny Drayton with the addition of direct farm accesses being provided to adjacent fields / properties.

Stage of the RSA:

Stage 1

Date / reference of the RSA Report:

Date: 25/10/2024

RSA Report Reference: BN-MTP-24-120 Issue No.1

Representatives from the design organisation who prepared the RSA Response Report:

Paul Koven, Milestone Transport Planning, Associate Director

Matt Stevens, Milestone Transport Planning, Managing Director

F3 Key Personnel

Table F.3 Key Personnel

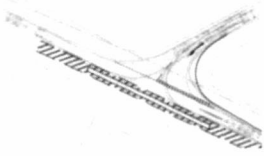
Overseeing Organisation:	National Highways
County Highway Authority:	Warwickshire County Council Leicestershire County Council
RSA Team:	Beth Newiss and Associates Ltd
Design Organisation:	Milestone Transport Planning Ltd

F4 Road Safety Audit Decision Log

Table F.4 Road Safety Audit Decision Log

3.1 General - 3.1.1		
Location - A - A5 Watling Street		
RSA Problem	High Approach speeds may result in increase of sudden braking and loss of control at the signals. Speed survey details that there is an existing compliance issue within this section of the A5 Watling Street, with an 85th %ile speed of 55mph, and recorded speeds of over 70mph recorded. Whilst forward visibility is sufficient there is a concern that drivers may attempt to approach the signals at speed resulting in sudden braking and potential loss of control or overshoot type collisions at the stop line. This concern would be heightened in wet conditions particularly if the carriageway skid resistance or anti-skid surface is insufficient.	
RSA Recommendation	It is recommended that measures are introduced to encourage reduced speeds on the approach to the signals, supplemented with contrasting antiskid surfacing on the approach to the signals.	
Design Organisation Response	Agree - Additional measures such as advanced warning signs and 'SLOW' road markings proposed in addition to contrasting antiskid surfacing on approach to signals to be provided at the Detailed Design Stage.	
Overseeing Organisation Response	National Highways	Designer comments accepted
	Leicestershire CC	AMW - Not applicable to LCC network.
	Warwickshire CC	Accepted
Agreed RSA Action		

F4 Road Safety Audit Decision Log

3.2 Junctions - 3.2.1		
Location - B - Drayton Lane		
RSA Problem	Conflicts may occur between drivers of larger vehicles at the Drayton Lane junction and approaching drivers on the A5 Watling Street resulting in potential obstruction at the junction. The drawings introduce a proposed central island within the A5 Watling Street to restrict the right turn movements into and out of Drayton Lane. On site observations noted that there is currently a 7.5tonne vehicle restriction (except for Loading) on Drayton Lane, it is unclear whether this restriction is to remain. Auto Tracking has been provided detailing the ease as to which an 18.55m Articulated Vehicle can enter and exit Drayton Lane with the proposed island in situ. No details have been provided as to the likelihood of this manoeuvre. This manoeuvre is detailed below:	
	 There is a concern that if larger vehicles are likely to use this junction access on a more regular basis there is a risk of heightened collision at this location. The Auto Tracking clearly shows that larger vehicles cannot freely negotiate the junction whilst another vehicle is approaching southbound along Drayton Lane. This may result in sudden braking and the obstruction of the A5 Watling Street, as a vehicle overhangs the running lane which could cause rear end shunts at this location.	
RSA Recommendation	It is recommended that if the existing restriction is to be removed and larger vehicles required to use this junction more frequently sufficient space within the junction will be required to allow a driver to enter the junction and wait off the A5 Watling Street with their vehicle overhanging the running lane.	
Design Organisation Response	Disagree - the existing weight restriction is to remain with its current '<i>except access</i>' arrangement continuing. As part of the wider scheme, access for large vehicles is also provided via the new Redgate Roundabout / Atherstone Road junction. Drayton Lane currently only provides access to the storage facility for large vehicles and is to remain as per the existing arrangement.	
Overseeing Organisation Response	National Highways	Designer comments accepted
	Leicestershire CC	AMW - DOR response agreed on the basis that the scheme is not expected to increase the numbers of large vehicles using Drayton Lane.
	Warwickshire CC	Accepted
Agreed RSA Action		

F4 Road Safety Audit Decision Log

3.2 Junctions - 3.2.2		
Location - C - Drayton Lane		
RSA Problem	Drivers of larger vehicles may struggle to negotiate the left turn resulting in potential obstruction at the junction.	
	Auto Tracking has been provided detailing the ease as to which an 18.55m Articulated Vehicle can enter and exit Drayton Lane with the proposed island in situ. No details have been provided as to the likelihood of this manoeuvre. It is not that whilst there is a signed 7.5 tonne restriction posted for drivers entering Drayton Lane junction from the A5 Watling Street, no such restriction was found at the Drayton Lane/Old Forge Road entry, therefore it is more likely that an HGV will travel along southbound along Drayton Lane.	
	There is a concern that if the driver of a larger vehicle may struggle to manoeuvre out of the junction and may miscalculate the turning manoeuvre striking the central island, this may cause an obstruction to the A5 Watling Street resulting in potential T-bone type amongst other collisions at the junction.	
	Speed survey details that there is an existing compliance issue within this section of the A5 Watling Street, with an 85th %ile speed of 55mph, and recorded speeds of over 70mph recorded which would further heighten the concern at this location.	
RSA Recommendation	It is recommended that the need for larger vehicles to exit this junction is reviewed and if necessary, implement a restriction and re-route HGVs to Old Forge Road to prevent this manoeuvre occurring at this location.	
Design Organisation Response	Disagree - The existing TRO is to remain in place and therefore access to the storage facility is the only exception allowing large vehicles along this route, as per the existing arrangement. Increasing the junction radii as shown on these proposals provides betterment in comparison to the existing layout, however it is very unlikely that large vehicles will be entering / exiting at the same time.	
Overseeing Organisation Response	National Highways	Designer comments accepted
	Leicestershire CC	AMW - DOR response agreed on the basis that the scheme is not expected to increase the numbers of large vehicles using Drayton Lane.
	Warwickshire CC	Accepted
Agreed RSA Action		

F4 Road Safety Audit Decision Log

3.2 Junctions - 3.2.3		
Location - D - A5 Watling Street and Woodford Lane Junction		
RSA Problem	Potential risk of collisions associated with excessive traffic queues. No details relating to traffic signal analysis have been provided, it is therefore not possible to ascertain whether there will be any safety implications. There is concern that excessive traffic queues on the A5 approaches to the traffic signal-controlled junction may increase the risk of collisions irate motorists.	
RSA Recommendation	It is recommended that appropriate traffic analysis is undertaken to ensure that excessive traffic queues on the A5 approaches to the proposed traffic signal controlled junction are mitigated.	
Design Organisation Response	Agree - Traffic analysis has been undertaken and is included within the document TAA(iii) dated October 2024 that has been submitted to the Local Planning Authorities and the Highway Authorities alongside the Road Safety Audit. For completeness, a copy of TAA(iii) has also been provided to the Auditor. The traffic analysis in TAA(iii) demonstrates that there are no excessive traffic queues on the A5 approaches to the traffic signal controlled junction.	
Overseeing Organisation Response	National Highways	Designers comments accepted
	Leicestershire CC	AMW - Not applicable to LCC Network.
	Warwickshire CC	Accepted
Agreed RSA Action		

F4 Road Safety Audit Decision Log

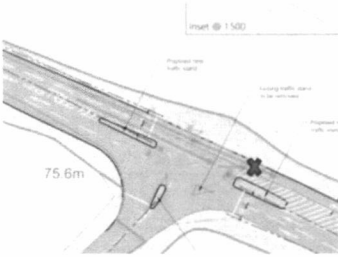
3.5 Signing, Lighting and Carriageway Markings - 3.5.1

Location - E - A5 Watling Street / Drayton Lane

RSA Problem	Central Island may be subject to strike due to reduced conspicuousness. This may result in loss of control type, sudden braking or erratic manoeuvres causing collisions at this location. On site observations noted that the south-eastbound approach to Drayton Lane is 50mph. There is an area of central hatching and 50mph speed roundels within the carriageway. There is also an existing small central island just prior to the Drayton Lane junction which accommodates two (2) illuminated keep left signs and two (2) illuminated keep left bollards. Speed survey details that there is an existing compliance issue within this section of the A5 Watling Street, with an 85th %ile speed of 55mph, and recorded speeds of over 70mph recorded. A proposed new traffic island has been introduced across the Drayton Lane junction to prevent drivers from turning right. No detail, at this stage, have been provided regarding the detailed design or signage proposed within the island. There is a concern that if the conspicuousness of the traffic island is not sufficient there is a heightened risk that the island will be struck resulting by vehicles leading to a loss of control type collision or sudden braking or erratic manoeuvres causing collisions with other road users at this location.	
RSA Recommendation	It is recommended that illuminated signage is introduced at this location with reflective marker posts within the central island.	
Design Organisation Response	Agree - Illuminated bollards and signs are to be provided as part of the Detailed Design Stage.	
Overseeing Organisation Response	National Highways	Designers comments accepted
	Leicestershire CC	AMW - DOR response agreed.
	Warwickshire CC	Accepted
Agreed RSA Action		

3.5 Signing, Lighting and Carriageway Markings - 3.5.2

Location - F - A5 Watling Street - South-eastbound

	Lack of Advanced Warning Signs may result in last minute manoeuvres and side swipe conflict through the junction. The drawings provided do not detail signage at this concept Stage 1 Road Safety Audit. Details of proposed lane discipline has been shown within the general arrangement drawings. As shown below, it is noted that the carriageway markings on the south-east bound approach to the junction results in the nearside lane as ahead only and the off-side lane as a right lane, with the A5 exit lane reduced to one lane via the introduction of central hatch markings. 						
RSA Problem	There is a concern that insufficient advanced warning of the proposed layout of the traffic lanes may result in poor lane discipline with south-east bound motorists travelling ahead using both traffic lanes on the approach to the signal junction. This may result in last-minute manoeuvres to cross into the left lane causing conflict and potential side swipe collisions at this location.						
RSA Recommendation	It is recommended that advanced warning signs are introduced alongside the lane discipline carriageway markings.						
Design Organisation Response	Agree - Advanced lane signs and directional arrow road markings to be provided as part of the Detailed Design Stage.						
Overseeing Organisation Response	<table><tr><td>National Highways</td><td>Designer comments accepted</td></tr><tr><td>Leicestershire CC</td><td>AMW - Not applicable to LCC Network.</td></tr><tr><td>Warwickshire CC</td><td>Accepted</td></tr></table>	National Highways	Designer comments accepted	Leicestershire CC	AMW - Not applicable to LCC Network.	Warwickshire CC	Accepted
National Highways	Designer comments accepted						
Leicestershire CC	AMW - Not applicable to LCC Network.						
Warwickshire CC	Accepted						
Agreed RSA Action							

F4 Road Safety Audit Decision Log

3.5 Signing, Lighting and Carriageway Markings - 3.5.3		
Location - G - A5 Watling Street North-westbound		
RSA Problem	Poor Lane discipline may result in increase of last-minute manoeuvres and subsequent side swipe type collisions on approach to signals. The drawings provided do not detail signage at this concept Stage 1 Road Safety Audit. There is a concern that if the approach signage and lane markings are not provided to drivers, lane discipline may be poor resulting in an increase of last-minute manoeuvres and subsequent side swipe type collision and potentially others at this location.	
RSA Recommendation	It is recommended that Advanced Warning signage and carriageway markings are coherent on the approach.	
Design Organisation Response	Agree - Advanced lane signs and directional arrow road markings to be provided as part of the Detailed Design Stage.	
Overseeing Organisation Response	National Highways	Designer comments accepted
	Leicestershire CC	AMW - Not applicable to LCC Network.
	Warwickshire CC	Accepted
Agreed RSA Action		

F5 Design Organisation & Overseeing Organisation Statements

Table F.5 Design Organisation Statement

On behalf of the design organisation I certify that:

The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the overseeing organisation

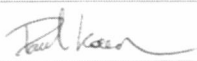
Name:	Paul Koven
Signed:	Associate Director
Position:	
Organisation:	Milestone Transport Planning
Date:	29 October 2024

Table F.6 Overseeing Organisation Statement

On behalf of the overseeing organisation I certify that:

1. The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and
2. The agreed RSA action will be progressed.

Name:	Russell Gray
Signed:	
Position:	Spatial Planner
Organisation:	National Highways
Date:	08/11/24

On behalf of the County Highway Authorities I certify that:

1. The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and
2. The agreed RSA action will be progressed.

Name:	Dana Loxley
Signed:	D Loxley
Position:	Senior Road Safety Engineer
Organisation:	Warwickshire County Council (Highways)
Date:	12/11/2024

Name:	Adrian Whiteman
Signed:	AMW
Position:	Principal Transport Planner, Highway Development Management
Organisation:	Leicestershire County Council (Highways)
Date:	08 November 2024

Appendix B

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Fri 07-Feb-25											
00:00	0	0	-	0	-	0	-	0	-	0	-
01:00	0	0	-	0	-	0	-	0	-	0	-
02:00	0	0	-	0	-	0	-	0	-	0	-
03:00	0	0	-	0	-	0	-	0	-	0	-
04:00	0	0	-	0	-	0	-	0	-	0	-
05:00	0	0	-	0	-	0	-	0	-	0	-
06:00	0	0	-	0	-	0	-	0	-	0	-
07:00	4	0	0.0	4	100.0	0	0.0	0	0.0	0	0.0
08:00	9	0	0.0	5	55.6	3	33.3	1	11.1	0	0.0
09:00	26	0	0.0	22	84.6	2	7.7	2	7.7	0	0.0
10:00	14	0	0.0	14	100.0	0	0.0	0	0.0	0	0.0
11:00	16	0	0.0	13	81.3	3	18.8	0	0.0	0	0.0
12:00	12	0	0.0	10	83.3	1	8.3	1	8.3	0	0.0
13:00	18	0	0.0	13	72.2	3	16.7	2	11.1	0	0.0
14:00	22	0	0.0	22	100.0	0	0.0	0	0.0	0	0.0
15:00	12	0	0.0	9	75.0	2	16.7	1	8.3	0	0.0
16:00	12	0	0.0	12	100.0	0	0.0	0	0.0	0	0.0
17:00	8	0	0.0	7	87.5	0	0.0	1	12.5	0	0.0
18:00	3	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0
19:00	1	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0
20:00	0	0	-	0	-	0	-	0	-	0	-
21:00	0	0	-	0	-	0	-	0	-	0	-
22:00	0	0	-	0	-	0	-	0	-	0	-
23:00	0	0	-	0	-	0	-	0	-	0	-
12H,7-19	156	0	0.0	134	85.9	14	9.0	8	5.1	0	0.0
16H,6-22	157	0	0.0	134	85.4	14	8.9	9	5.7	0	0.0
18H,6-24	157	0	0.0	134	85.4	14	8.9	9	5.7	0	0.0
24H,0-24	157	0	0.0	134	85.4	14	8.9	9	5.7	0	0.0

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Sat 08-Feb-25											
00:00	0	0	-	0	-	0	-	0	-	0	-
01:00	0	0	-	0	-	0	-	0	-	0	-
02:00	0	0	-	0	-	0	-	0	-	0	-
03:00	0	0	-	0	-	0	-	0	-	0	-
04:00	0	0	-	0	-	0	-	0	-	0	-
05:00	0	0	-	0	-	0	-	0	-	0	-
06:00	0	0	-	0	-	0	-	0	-	0	-
07:00	0	0	-	0	-	0	-	0	-	0	-
08:00	3	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0
09:00	14	0	0.0	12	85.7	1	7.1	1	7.1	0	0.0
10:00	19	0	0.0	17	89.5	1	5.3	1	5.3	0	0.0
11:00	18	0	0.0	17	94.4	0	0.0	1	5.6	0	0.0
12:00	14	0	0.0	14	100.0	0	0.0	0	0.0	0	0.0
13:00	16	0	0.0	13	81.3	2	12.5	1	6.3	0	0.0
14:00	10	0	0.0	6	60.0	0	0.0	4	40.0	0	0.0
15:00	2	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0
16:00	0	0	-	0	-	0	-	0	-	0	-
17:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
18:00	0	0	-	0	-	0	-	0	-	0	-
19:00	0	0	-	0	-	0	-	0	-	0	-
20:00	0	0	-	0	-	0	-	0	-	0	-
21:00	0	0	-	0	-	0	-	0	-	0	-
22:00	0	0	-	0	-	0	-	0	-	0	-
23:00	0	0	-	0	-	0	-	0	-	0	-
12H,7-19	97	0	0.0	85	87.6	4	4.1	8	8.3	0	0.0
16H,6-22	97	0	0.0	85	87.6	4	4.1	8	8.3	0	0.0
18H,6-24	97	0	0.0	85	87.6	4	4.1	8	8.3	0	0.0
24H,0-24	97	0	0.0	85	87.6	4	4.1	8	8.3	0	0.0

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Northbound									

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Mon 10-Feb-25											
00:00	0	0	-	0	-	0	-	0	-	0	-
01:00	0	0	-	0	-	0	-	0	-	0	-
02:00	0	0	-	0	-	0	-	0	-	0	-
03:00	0	0	-	0	-	0	-	0	-	0	-
04:00	0	0	-	0	-	0	-	0	-	0	-
05:00	0	0	-	0	-	0	-	0	-	0	-
06:00	0	0	-	0	-	0	-	0	-	0	-
07:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
08:00	9	0	0.0	8	88.9	1	11.1	0	0.0	0	0.0
09:00	17	0	0.0	13	76.5	4	23.5	0	0.0	0	0.0
10:00	16	0	0.0	9	56.3	2	12.5	5	31.3	0	0.0
11:00	14	0	0.0	8	57.1	3	21.4	3	21.4	0	0.0
12:00	4	0	0.0	4	100.0	0	0.0	0	0.0	0	0.0
13:00	4	0	0.0	3	75.0	0	0.0	1	25.0	0	0.0
14:00	17	0	0.0	14	82.4	1	5.9	2	11.8	0	0.0
15:00	13	0	0.0	10	76.9	3	23.1	0	0.0	0	0.0
16:00	8	0	0.0	7	87.5	1	12.5	0	0.0	0	0.0
17:00	2	0	0.0	1	50.0	1	50.0	0	0.0	0	0.0
18:00	2	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0
19:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
20:00	0	0	-	0	-	0	-	0	-	0	-
21:00	0	0	-	0	-	0	-	0	-	0	-
22:00	0	0	-	0	-	0	-	0	-	0	-
23:00	0	0	-	0	-	0	-	0	-	0	-
12H,7-19	107	0	0.0	80	74.8	16	15.0	11	10.3	0	0.0
16H,6-22	108	0	0.0	81	75.0	16	14.8	11	10.2	0	0.0
18H,6-24	108	0	0.0	81	75.0	16	14.8	11	10.2	0	0.0
24H,0-24	108	0	0.0	81	75.0	16	14.8	11	10.2	0	0.0

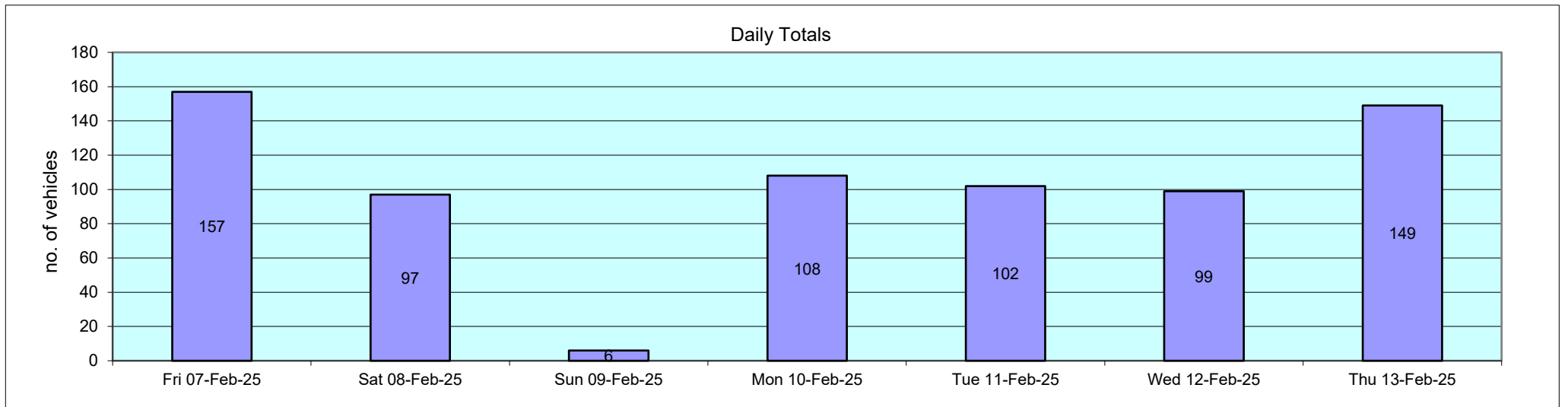
14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Northbound									

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Northbound									

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Northbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Thu 13-Feb-25											
00:00	0	0	-	0	-	0	-	0	-	0	-
01:00	0	0	-	0	-	0	-	0	-	0	-
02:00	0	0	-	0	-	0	-	0	-	0	-
03:00	0	0	-	0	-	0	-	0	-	0	-
04:00	0	0	-	0	-	0	-	0	-	0	-
05:00	0	0	-	0	-	0	-	0	-	0	-
06:00	0	0	-	0	-	0	-	0	-	0	-
07:00	2	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0
08:00	6	0	0.0	4	66.7	2	33.3	0	0.0	0	0.0
09:00	23	0	0.0	20	87.0	1	4.4	2	8.7	0	0.0
10:00	19	0	0.0	16	84.2	2	10.5	1	5.3	0	0.0
11:00	9	0	0.0	8	88.9	0	0.0	1	11.1	0	0.0
12:00	14	0	0.0	12	85.7	2	14.3	0	0.0	0	0.0
13:00	19	0	0.0	16	84.2	1	5.3	2	10.5	0	0.0
14:00	16	0	0.0	15	93.8	0	0.0	1	6.3	0	0.0
15:00	16	0	0.0	16	100.0	0	0.0	0	0.0	0	0.0
16:00	14	0	0.0	14	100.0	0	0.0	0	0.0	0	0.0
17:00	9	0	0.0	7	77.8	1	11.1	1	11.1	0	0.0
18:00	1	0	0.0	0	0.0	0	0.0	1	100.0	0	0.0
19:00	1	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0
20:00	0	0	-	0	-	0	-	0	-	0	-
21:00	0	0	-	0	-	0	-	0	-	0	-
22:00	0	0	-	0	-	0	-	0	-	0	-
23:00	0	0	-	0	-	0	-	0	-	0	-
12H,7-19	148	0	0.0	130	87.8	9	6.1	9	6.1	0	0.0
16H,6-22	149	0	0.0	130	87.3	10	6.7	9	6.0	0	0.0
18H,6-24	149	0	0.0	130	87.3	10	6.7	9	6.0	0	0.0
24H,0-24	149	0	0.0	130	87.3	10	6.7	9	6.0	0	0.0

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Northbound		

TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Daily Totals											
Fri 07-Feb-25	157	0	0.0	134	85.4	14	8.9	9	5.7	0	0.0
Sat 08-Feb-25	97	0	0.0	85	87.6	4	4.1	8	8.3	0	0.0
Sun 09-Feb-25	6	0	0.0	6	100.0	0	0.0	0	0.0	0	0.0
Mon 10-Feb-25	108	0	0.0	81	75.0	16	14.8	11	10.2	0	0.0
Tue 11-Feb-25	102	0	0.0	75	73.5	19	18.6	8	7.8	0	0.0
Wed 12-Feb-25	99	0	0.0	82	82.8	11	11.1	6	6.1	0	0.0
Thu 13-Feb-25	149	0	0.0	130	87.3	10	6.7	9	6.0	0	0.0
Total Vehicles											
[--]	718	0	0.0	593	84.5	74	9.2	51	6.3	0	0.0



14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Southbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Fri 07-Feb-25											
00:00	0	0	-	0	-	0	-	0	-	0	-
01:00	0	0	-	0	-	0	-	0	-	0	-
02:00	0	0	-	0	-	0	-	0	-	0	-
03:00	0	0	-	0	-	0	-	0	-	0	-
04:00	0	0	-	0	-	0	-	0	-	0	-
05:00	0	0	-	0	-	0	-	0	-	0	-
06:00	0	0	-	0	-	0	-	0	-	0	-
07:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
08:00	7	0	0.0	4	57.1	3	42.9	0	0.0	0	0.0
09:00	22	0	0.0	16	72.7	5	22.7	1	4.6	0	0.0
10:00	13	0	0.0	12	92.3	1	7.7	0	0.0	0	0.0
11:00	10	0	0.0	9	90.0	0	0.0	1	10.0	0	0.0
12:00	16	0	0.0	14	87.5	2	12.5	0	0.0	0	0.0
13:00	14	0	0.0	12	85.7	2	14.3	0	0.0	0	0.0
14:00	23	0	0.0	19	82.6	2	8.7	2	8.7	0	0.0
15:00	13	0	0.0	10	76.9	2	15.4	1	7.7	0	0.0
16:00	10	0	0.0	9	90.0	0	0.0	1	10.0	0	0.0
17:00	10	0	0.0	6	60.0	3	30.0	1	10.0	0	0.0
18:00	8	0	0.0	7	87.5	1	12.5	0	0.0	0	0.0
19:00	1	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0
20:00	0	0	-	0	-	0	-	0	-	0	-
21:00	0	0	-	0	-	0	-	0	-	0	-
22:00	0	0	-	0	-	0	-	0	-	0	-
23:00	0	0	-	0	-	0	-	0	-	0	-
12H,7-19	147	0	0.0	119	81.0	21	14.3	7	4.8	0	0.0
16H,6-22	148	0	0.0	119	80.4	22	14.9	7	4.7	0	0.0
18H,6-24	148	0	0.0	119	80.4	22	14.9	7	4.7	0	0.0
24H,0-24	148	0	0.0	119	80.4	22	14.9	7	4.7	0	0.0

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Southbound									

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Southbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Sun 09-Feb-25											
00:00	0	0	-	0	-	0	-	0	-	0	-
01:00	0	0	-	0	-	0	-	0	-	0	-
02:00	0	0	-	0	-	0	-	0	-	0	-
03:00	0	0	-	0	-	0	-	0	-	0	-
04:00	0	0	-	0	-	0	-	0	-	0	-
05:00	0	0	-	0	-	0	-	0	-	0	-
06:00	0	0	-	0	-	0	-	0	-	0	-
07:00	0	0	-	0	-	0	-	0	-	0	-
08:00	0	0	-	0	-	0	-	0	-	0	-
09:00	0	0	-	0	-	0	-	0	-	0	-
10:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
11:00	0	0	-	0	-	0	-	0	-	0	-
12:00	0	0	-	0	-	0	-	0	-	0	-
13:00	0	0	-	0	-	0	-	0	-	0	-
14:00	1	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0
15:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
16:00	0	0	-	0	-	0	-	0	-	0	-
17:00	0	0	-	0	-	0	-	0	-	0	-
18:00	0	0	-	0	-	0	-	0	-	0	-
19:00	0	0	-	0	-	0	-	0	-	0	-
20:00	0	0	-	0	-	0	-	0	-	0	-
21:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
22:00	0	0	-	0	-	0	-	0	-	0	-
23:00	0	0	-	0	-	0	-	0	-	0	-
12H,7-19	3	0	0.0	2	66.7	1	33.3	0	0.0	0	0.0
16H,6-22	4	0	0.0	3	75.0	1	25.0	0	0.0	0	0.0
18H,6-24	4	0	0.0	3	75.0	1	25.0	0	0.0	0	0.0
24H,0-24	4	0	0.0	3	75.0	1	25.0	0	0.0	0	0.0

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Southbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Mon 10-Feb-25											
00:00	0	0	-	0	-	0	-	0	-	0	-
01:00	0	0	-	0	-	0	-	0	-	0	-
02:00	0	0	-	0	-	0	-	0	-	0	-
03:00	0	0	-	0	-	0	-	0	-	0	-
04:00	0	0	-	0	-	0	-	0	-	0	-
05:00	0	0	-	0	-	0	-	0	-	0	-
06:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
07:00	0	0	-	0	-	0	-	0	-	0	-
08:00	7	0	0.0	5	71.4	2	28.6	0	0.0	0	0.0
09:00	10	0	0.0	5	50.0	5	50.0	0	0.0	0	0.0
10:00	11	0	0.0	10	90.9	1	9.1	0	0.0	0	0.0
11:00	14	0	0.0	13	92.9	1	7.1	0	0.0	0	0.0
12:00	7	0	0.0	4	57.1	3	42.9	0	0.0	0	0.0
13:00	8	0	0.0	6	75.0	2	25.0	0	0.0	0	0.0
14:00	19	0	0.0	14	73.7	5	26.3	0	0.0	0	0.0
15:00	14	0	0.0	11	78.6	3	21.4	0	0.0	0	0.0
16:00	8	0	0.0	6	75.0	2	25.0	0	0.0	0	0.0
17:00	6	0	0.0	4	66.7	2	33.3	0	0.0	0	0.0
18:00	2	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0
19:00	2	0	0.0	1	50.0	1	50.0	0	0.0	0	0.0
20:00	0	0	-	0	-	0	-	0	-	0	-
21:00	0	0	-	0	-	0	-	0	-	0	-
22:00	0	0	-	0	-	0	-	0	-	0	-
23:00	0	0	-	0	-	0	-	0	-	0	-
12H,7-19	106	0	0.0	80	75.5	26	24.5	0	0.0	0	0.0
16H,6-22	109	0	0.0	82	75.2	27	24.8	0	0.0	0	0.0
18H,6-24	109	0	0.0	82	75.2	27	24.8	0	0.0	0	0.0
24H,0-24	109	0	0.0	82	75.2	27	24.8	0	0.0	0	0.0

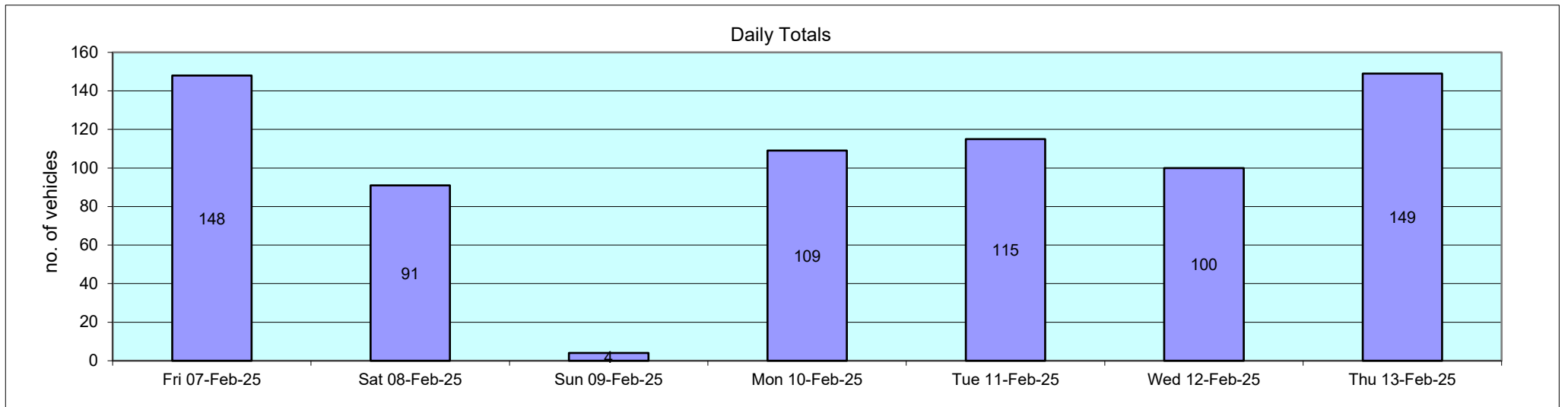
14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Southbound									

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Southbound									

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage							
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Southbound									
TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Thu 13-Feb-25											
00:00	0	0	-	0	-	0	-	0	-	0	-
01:00	0	0	-	0	-	0	-	0	-	0	-
02:00	0	0	-	0	-	0	-	0	-	0	-
03:00	0	0	-	0	-	0	-	0	-	0	-
04:00	0	0	-	0	-	0	-	0	-	0	-
05:00	0	0	-	0	-	0	-	0	-	0	-
06:00	2	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0
07:00	0	0	-	0	-	0	-	0	-	0	-
08:00	6	0	0.0	5	83.3	0	0.0	1	16.7	0	0.0
09:00	21	0	0.0	18	85.7	3	14.3	0	0.0	0	0.0
10:00	11	0	0.0	6	54.6	3	27.3	2	18.2	0	0.0
11:00	15	0	0.0	14	93.3	0	0.0	1	6.7	0	0.0
12:00	10	0	0.0	9	90.0	1	10.0	0	0.0	0	0.0
13:00	18	0	0.0	13	72.2	5	27.8	0	0.0	0	0.0
14:00	18	0	0.0	17	94.4	1	5.6	0	0.0	0	0.0
15:00	15	0	0.0	15	100.0	0	0.0	0	0.0	0	0.0
16:00	22	0	0.0	19	86.4	1	4.6	2	9.1	0	0.0
17:00	9	0	0.0	6	66.7	3	33.3	0	0.0	0	0.0
18:00	1	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0
19:00	1	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0
20:00	0	0	-	0	-	0	-	0	-	0	-
21:00	0	0	-	0	-	0	-	0	-	0	-
22:00	0	0	-	0	-	0	-	0	-	0	-
23:00	0	0	-	0	-	0	-	0	-	0	-
12H,7-19	146	0	0.0	123	84.3	17	11.6	6	4.1	0	0.0
16H,6-22	149	0	0.0	125	83.9	18	12.1	6	4.0	0	0.0
18H,6-24	149	0	0.0	125	83.9	18	12.1	6	4.0	0	0.0
24H,0-24	149	0	0.0	125	83.9	18	12.1	6	4.0	0	0.0

14147	FENNY DRAYTON	Site No: 14147001	Location	Main access to Extra Room Storage
Fri 07-Feb-25 to Thu 13-Feb-25		Channel: Southbound		

TIME PERIOD	TOTAL VEHICLES	MOTOR-CYCLES	MOTOR-CYCLES%	CARS	CARS %	LGV	LGV %	HGV	HGV %	BUS	BUS %
Daily Totals											
Fri 07-Feb-25	148	0	0.0	119	80.4	22	14.9	7	4.7	0	0.0
Sat 08-Feb-25	91	0	0.0	80	87.9	8	8.8	3	3.3	0	0.0
Sun 09-Feb-25	4	0	0.0	3	75.0	1	25.0	0	0.0	0	0.0
Mon 10-Feb-25	109	0	0.0	82	75.2	27	24.8	0	0.0	0	0.0
Tue 11-Feb-25	115	0	0.0	99	86.1	13	11.3	3	2.6	0	0.0
Wed 12-Feb-25	100	0	0.0	81	81.0	15	15.0	3	3.0	1	1.0
Thu 13-Feb-25	149	0	0.0	125	83.9	18	12.1	6	4.0	0	0.0
Total Vehicles											
[--]	716	0	0.0	589	81.4	104	16.0	22	2.5	1	0.1



Appendix C

Example HGVs Accessing Drayton Grange Farm



Example HGVs Accessing Extra Room Self Storage







Forester House
Doctor's Lane
Henley-in-Arden
Warwickshire
B95 5AW

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www.dtatransportation.co.uk