JLL SEE A BRIGHTER WAY

Appendix 14 - Highways Technical Note

Applicant Statement of Case - Appendices
CROWN/2025/0000002 Sevington Inland Border Facility

Sevington Inland Border Facility

Technical Note – Local Traffic Network and Highways

Application Reference No: CROWN/2025/0000002

November 2025

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Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Revision	Status	Date	Prepared by	Checked by	Approved by
P03	S3	Nov 2025	A. Beard Senior Associate Director	M. Scroggs Principal Transport Planner	A. Beard Senior Associate Director

Comments

Comments

Comments

Revision		Status	
P*nn*	Preliminary (shared; non-contractual)	S1	Coordination
C*nn*	Contractual	S2	Information
		S3	Review & Comment
		S4	Review & Authorise
		S5	Review & Acceptance
		A0, A1, A*n*	Authorised & Accepted (*n*=work stage if applicable)

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Consolidated Summary

This Technical Note (TN) has been prepared in response to the Planning Inspectorate document 'Statement of Matters' (the "SoM") dated 21 October 2025, and in support of the current Crown Development Application (Ref: CROWN/2025/0000002) for the permanent provision of Sevington Inland Border Facility and Border Control Post (the 'Proposed Development') in Ashford, Kent (the 'Application Site') at Inquiry.

In his SoM, the Inspector identifies in paragraph 36. v) *"the effect of the development on the local traffic network"*, as one of the main issues to be considered in respect of the application at the present time. The Inspector subsequently raises a series of specific questions relating to 'Local traffic network and/or highways' at items 66 to 74 of his table of Inspector's Matters.

In particular, Item 66 notes that a holding objection has been raised by KCC in its capacity as the Local Highway Authority, relating to impact of the Proposed Development upon M20 Junction 10a, specifically on the A20 arms of the junction, and the requirement for a suitable mitigation scheme at this location.

The points raised by the Inspector in his SoM with respect to transport are considered in detail in the main Statement of Case (SoC), to which this TN is appended and a response / rebuttal of the transport issues provided. Several third-party comments have been received from interested persons / parties in response to the Crown Development Application.

With reference to evidence presented in this TN, the Waterman TA, and other relevant documents submitted in support of the Crown Development Application (Ref: CROWN/2025/0000002), as well as relevant transport policy and guidance, the Applicant has addressed the transport issues raised by the Inspector's SoM, considering the following transport and highway issues:

- **Mitigation of development impact upon M20 J10a** – It has been demonstrated that the impact of development traffic upon M20 J10a can be appropriately mitigated, and that the Proposed Development can be accommodated without adverse impact upon the safety and capacity of the highway network, enabling KCC to withdraw its holding objection.
- **Mitigation of HGV routing impact on local road network** – The Applicant has confirmed that a 'Prohibition of Right-Turn', enforced by signing and bollards, prevents right-turn manoeuvre into the Application Site from the A2070. A signage strategy is proposed by way of appropriately worded condition, in line with KCC and National Highways comments.
- **Mitigation of staff travel impacts** – The Applicant is willing to accept a condition requiring review and submission of an updated or new Travel Plan, in line with KCC and National Highways comments.
- **Public Rights of Way** – The Applicant has confirmed that legal extinguishment of all PRoWs previously running through the Site has been completed. All PRoWs required to be diverted around the Site and / or upgraded as part of the temporary permissions, have been legally completed. The Applicant acknowledges that the resurfacing of the Public Right of Way (Bridleway AE672, located south-west of the staff car park entrance) and provision of surface water drainage in this location, could serve to mitigate this issue. Discussions are continuing with statutory authorities.

This TN also provides clarification on further matters raised by the Inspector and third-party comments.

In conclusion, it is considered that the impact of the Proposed Development can be appropriately mitigated and will not have an adverse impact upon the safety and capacity of the highway network.

In consideration of the guidance set out in the NPPF, it is considered that the Proposed Development should not be prevented or refused on transport grounds as the residual cumulative impacts of the development, following mitigation, are not 'severe'.

1. Introduction

Introduction

1.1 Department for Transport (DfT), His Majesty's Revenue & Customs (HMRC) and Department for Environment, Food and Rural Affairs (DEFRA) (together the 'Applicant') have appointed Waterman Infrastructure and Environment Ltd ('Waterman') to prepare this Technical Note (TN) in response to the Planning Inspectorate document 'Statement of Matters' (the "SoM") dated 21 October 2025, and in support of the current Crown Development Application (Ref: CROWN/2025/0000002) for the permanent provision of Sevington Inland Border Facility and Border Control Post (the 'Proposed Development', 'Sevington IBF') in Ashford, Kent (the 'Application Site') at Inquiry.

1.2 It has been prepared with reference to the Transport Assessment (TA) and supporting technical documents which were prepared by Waterman, on behalf of the Applicant, and were submitted as part of the Crown Development Application in support of the Proposed Development.

1.3 Specifically, the version of the Waterman TA to which this TN refers is Revision P02 dated April 2025 (Ref: 20982110-WAT-XX-XX-RP-N-800001_P02). Supporting technical documents include the Waterman technical note 'M20 Junction 10a Mitigation – Preliminary Option Assessment' dated November 2025 (Ref: 20982117-WAT-XX-XX-RP-N-800004_P03).

1.4 This TN was prepared by Andrew Beard BSc(Hons) MCIHT, Senior Associate Director and an environmental lead at Waterman, specialising in transport planning, with over 25 years' experience in the transport and highways discipline.

Background Information

The Application Site

1.5 The Application Site, for which planning consent is sought, is located immediately south-east of Ashford in Kent, within the administrative area of Ashford Borough Council (ABC). Kent County Council (KCC) is the highway authority for local roads immediately surrounding the Application Site, whilst National Highways is the highway authority responsible for the Strategic Road Network (SRN), comprising the M20 and A2070 routes in the vicinity of the Application Site.

1.6 The Application Site comprises a former greenfield area which was partially developed under a previous planning application (Planning Ref: 14/00910/AS) prior to its temporary permitted use as Sevington IBF. For operational reasons the Application Site is strategically located near M20 Junction 10a, providing direct access to the SRN and enabling goods vehicle traffic to be routed away from urban areas and local communities.

1.7 The Sevington IBF site has been present and in operation since January 2021 as a temporary goods vehicle customs and border control checking facility. The existing operational presence of the Sevington IBF facility, under its current temporary permission, is a material fact. Infrastructure improvements associated with the development of the facility are in-situ, and are expected to remain in place, representing the infrastructure baseline for walking, cycling, and highway networks in the vicinity of the Application Site.

1.8 The Application Site is bounded to the north by the A2070 Link Road, to the east by Highfield Lane and farmland, to the southwest by the Southeastern Main Line and High Speed 1 railway lines, and to the west by St Mary's Church, which is a Grade I Listed Building, and the Milbourn Equine Centre with the A2070 Bad Munstereifel Road beyond. The Application Site is bounded by Church Road to the south, along which are residential properties, some of which are Grade II listed.

1.9 The M20 motorway, which forms part of the SRN, runs generally east-west north of the Application Site between London and Folkestone. M20 Junction 10a, completed in October 2019, is located approximately 400m to the east of the Application Site. A dual carriageway, the A2070 Link Road, is located immediately north of the Application Site and connects the existing section of the A2070 Bad Munstereifel Road to M20 junction 10a. The M20 Junction 10 is located approximately 550m north-west of the Application Site and the recently completed 'The Boulevard / A2070 Bad Munstereifel Road / Waterbrook Avenue' Junction replaces the previous Orbital Park roundabout approximately 1.3km to the southeast.

1.10 The Application Site is accessible by a variety of pedestrian and cycle links connecting the Application Site with the surrounding area. The footways and cycle ways are well maintained and of a good quality, with protection from motorised traffic provided where necessary. An established Public Right of Way (PRoW) network surrounds the Application Site. Public transport accessibly to the Application Site is restricted, however a bespoke Zeelo Bus shuttle service is provided, offering a regular and reliable alternative to the private car for staff travel to and from the Application Site, in line with shift patterns.

1.11 Personal Injury Accident (PIA) data, reviewed for the most recent available three-year period between January 2021 and December 2023 inclusive, raised no specific patterns or concerns with respect to road safety in the vicinity of the Application Site and the assessed road network.

1.12 A detailed accessibility appraisal for the Application Site is presented in Chapter 4 'Baseline Conditions' of the Waterman TA.

Development Proposals

1.13 The Proposed Development is described in the Crown Development Application (Ref: CROWN/2025/0000002) as follows:

'Buildings, Goods Vehicle parking spaces, entry lanes, refrigerated semi-trailers, staff car parking spaces, access, site infrastructure, utilities, hardstanding, landscaping and ancillary facilities and associated works; and ongoing use of the site for an Inland Border Facility and Border Control Post, operating 24 hours per day, seven days per week.'

1.14 The Proposed Development comprises a new planning application for the permanent provision of the Sevington Inland Border Facility and Border Control Point (Sevington IBF), which currently exists as a temporary goods vehicles customs and border control checking and parking facility which is consented to operate for a period of five years from January 2021.

1.15 This Inquiry relates to the submission of a Crown Development Application for the Sevington IBF which would result in the facility becoming permanent beyond the end of December 2025 (when the use under the temporary consent ceases).

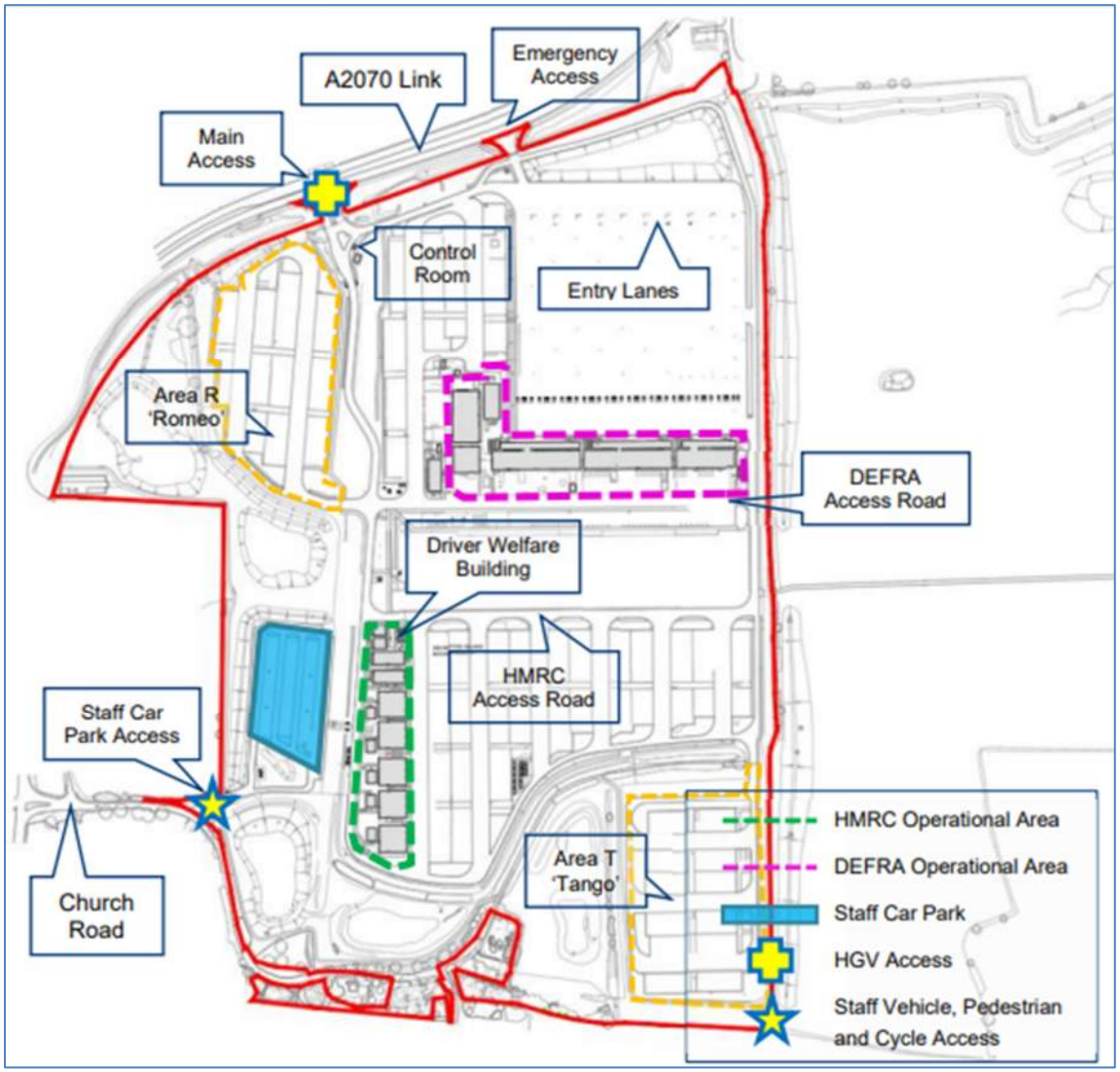
1.16 The current Crown Development Application is seeking full planning permission for the permanent provision of the IBF and BCP, which includes:

- 984 goods vehicle parking spaces;
- Capacity for 240 goods vehicles in 42 entry lanes;
- 357 staff car parking spaces, including 14 accessible bays and three EV charging spaces;
- Vehicular, pedestrian and cycle accesses;
- Buildings and structures comprising a total of 16,348 sqm GIA / 17,277 sqm GEA;
- Space for 24 (19 permanent and five reserved) refrigerated semi-trailers;

- Security fencing and noise attenuation bunds and fences to a maximum height of 5m;
- CCTV columns;
- Lighting columns to a height of 12m;
- Drainage and all associated engineering;
- Hard and soft landscaping; and
- Site-wide ancillary infrastructure.

1.17 Figure 1 below shows a Site Layout Plan for Sevington IBF illustrating the primary points of access, staff car parking, and operational areas for which full planning approval is sought.

Figure 1: Sevington IBF Site Layout



1.18 A detailed overview of the proposed development for the Application Site is presented in Chapter 5 'Development Proposals' of the Waterman TA.

Pre-Application Advice

1.19 A pre-application highways meeting was undertaken with KCC and National Highways officers on 24 September 2024 to establish the principles of the transport assessment, the scope of junctions to be surveyed on their managed networks, and methodology for assessment.

1.20 The Waterman TA has cognisance to and is in broad accordance with the pre-application advice provided by KCC and National Highways at that stage.

Transport Policy Context

1.21 A review of the relevant transport planning policy documents was undertaken as part of the preparation of the Waterman TA in support of the Proposed Development.

1.22 The Crown Development Application has been prepared with cognisance to the transport policy and best practice guidance set out in the Waterman TA and has regard to and supports the delivery of applicable policies within the NPPF, LTP5, and Ashford Local Plan.

1.23 Fundamentally, paragraph 116 of the NPPF states that:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."

1.24 As detailed within this TN, the likely impact of the Proposed Development upon the surrounding highway network can be mitigated and demonstrates compliance with the prevailing transport policies.

2. Response to Planning Inspectorate Statement of Matters

Planning Inspectorate Statement of Matters – Local Traffic Network and/or Highways

2.1 In his SoM dated 21 October 2025, Mr C Parker, BA(Hons) PGCert MA FRGS MRTPI IHBC (the appointed 'Inspector') identifies in paragraph 36. v) *"the effect of the development on the local traffic network"*, as one of the main issues to be considered in respect of the application at the present time. The Inspector subsequently raises a series of specific questions relating to 'Local traffic network and/or highways' at items 66 to 74 of his table of Inspector's Matters.

2.2 In particular, Item 66 notes that a holding objection has been raised by KCC in its capacity as the Local Highway Authority, relating to impact of the Proposed Development upon M20 Junction 10a, specifically on the A20 arms of the junction, and the requirement for a suitable mitigation scheme at this location.

2.3 The points raised by the Inspector in his SoM with respect to transport are considered in detail in the main Statement of Case (SoC), to which this TN is appended and a response / rebuttal of the transport issues provided. Where these responses relate to comments provided by statutory consultees and other interested parties, these are also responded to below.

Summary and Response to Third Party Comments

2.4 Several third-party comments have been received from interested persons / parties in response to the Crown Development Application. These comments, as they relate to transport and highways issues, are set out below, along with the Applicant's considered response and rebuttal, where applicable.

Kent County Council

KCC Comment – Paragraph 6.29 (of submitted Waterman TA)

"The 144 dwellings at Waterbrook Park, in the view of the County Council, form part of the original outline planning permission and are therefore not considered as a second phase of development. It is therefore requested that this should be removed as a committed development."

2.5 KCC comment is noted. Notwithstanding, the impact of removing the estimated vehicle trips associated with this development from the committed baseline assessment is considered likely to be negligible. The submitted assessment reflects a robust scenario, inclusive of these additional background vehicle movements, albeit this element is not considered by KCC to currently comprise committed development.

KCC Comment – Table 8 (of submitted Waterman TA)

"It is the view of the County Council that the vehicle trip rates from the Waterbrook Park development (18/00098/AS) do not add up correctly. The County Council therefore asks that the correct trip rates need to be obtained from the original Transport Assessment and the table is amended."

2.6 This is acknowledged and it is evident from Table 8 of the Waterman TA that there are two incorrect values shown, as the typo of 941 departures in the AM peak should read 91 departures and the resulting total number of AM peak departures should read as 262 departures instead of the 1112 shown. However, a check of the traffic flow diagrams shows that the correct trip values were applied to the assessments, and that the resulting assessment output remains valid.

KCC Comment – Table 12 (of submitted Waterman TA)

"It is the view of the County Council that the vast majority of the Conningbrook Lakes development was completed in 2024 and therefore only a small number of committed development trips should be added to the assessment. It is also suggested that advice should be sought from Ashford Borough Council as to the number of dwellings that have not been completed at the time of the traffic surveys."

2.7 Whilst it is understood that this development has now largely been built out, and existing traffic associated with the developed extent of Conningbrook Lakes already inherent on the highway network, the inclusion of estimated traffic from this committed development in the baseline assessments within the Waterman TA is considered robust.

KCC Comment – Table 17 (of submitted Waterman TA)

"It is the view of the County Council, as the Highway Authority, that this development traffic should be removed from the assessment as this development is not committed at present and has no status in the adopted Ashford Local Plan."

2.8 KCC have subsequently clarified that, contrary to their written comments, the development referenced in Table 17 should be included as it now has a resolution to grant (post KCC's written comments).

KCC Comment – Junction Assessments

2.9 KCC state that: *"To clarify, the County Council will only comment on junctions where the junction is either within the ownership of the County Council or arms are under the ownership of the County Council."*

2.10 KCC have subsequently provided high-level comments on the assessments undertaken for Junction 1 (A2070 Bad Munstereifel Road / Waterbrook Avenue / The Boulevard), Junction 2 (A270 Bad Munstereifel Road / Church Road), Junction 3 (Barrey Road / A2070 Bad Munstereifel Road), Junction 6 (M20 Junction 10), Junction 7 (M20 Junction 10a), Junction 8 (A292 Hythe Road / M20 Westbound On-Slip), Junction 9 (Tesco / A20 Hythe Road roundabout) and Junction 10 (Honeysuckle Avenue / A20 Hythe Road / Spires Court). However, apart from Junction 7 (M20 J10a), KCC state for each of these junctions that the Proposed Development traffic has no impact on arms owned by KCC and therefore do not require mitigation.

2.11 With regard to Junction 7, the M20 Junction 10a, KCC comment:

"The A20 Hythe Road arms are under the control of the County Council. The modelling results demonstrate in a 2024 baseline a severe impact on the A20 Hythe Road arms of this junction (both eastbound and westbound) in both the AM and PM Peaks once the development traffic is added. This is especially the case on eastbound arm in the PM peak where the queue goes up from 7 vehicles to 34 vehicles with the degree of saturation going up from 88% to 104%. The modelling results also demonstrate in a 2026 baseline a severe impact on the A20 Hythe Road arms of this junction (both eastbound and westbound) once the development traffic is added. Again, this is especially the case on the eastbound arm in the AM Peak where the queue goes up from 9 vehicles to 36 vehicles with the degree of saturation going up from 89% to 103% and in the PM peak where the queue goes up from eight vehicles to 42 vehicles with the degree of Saturation' going up from 91% to 108%. There are similar modelling results in terms of the degree of severity for the 2036 horizon year, which again show a severe impact from the proposed development on this junction. The applicant therefore needs to submit a mitigation scheme on the A20 arms of this junction. An accompanying Stage 1 of the Road Safety Audit (RSA) and Designers response also needs to be submitted to support any mitigation scheme. The County Council would welcome further

discussions with the applicant and National Highways regarding a mitigation scheme at this junction."

2.12 As set out in the Waterman TA, assessment shows that M20 Junction J10a will already be experiencing capacity issues on the A20 approaches, and likely to require mitigation of the associated queuing and delay, irrespective of the Proposed Development. It is acknowledged that the Proposed Development is likely to result in increased queuing being experienced compared to the baseline (without development) scenarios in 2026 and 2036.

2.13 It is considered likely that mitigation, in the form of localised improvements on the A20 approaches to the junction, could be effective in alleviating the observed capacity constraints. The nature and scope of physical measures at the junction have been discussed with National Highways and KCC, and a preliminary mitigation scheme identified.

2.14 The preliminary mitigation scheme, comprising widening of the A20 eastbound approach, and signalisation of the A20 westbound approach and corresponding section of the circulatory carriageway, is illustrated by the Waterman TN *'M20 Junction 10a Mitigation – Preliminary Option Assessment' dated November 2025 (Ref: 20982117-WAT-XX-XX-RP-N-800004_P03)'* provided at Appendix A.

2.15 Discussion between the Applicant, National Highways, and KCC to secure the provision of appropriate mitigation to address the existing constraints on the A20 approaches to the junction at M20 Junction 10a is ongoing.

2.16 Through the implementation of the proposed junction improvements, it is considered that the impact of development traffic upon M20 Junction 10a can be appropriately mitigated, and that the Proposed Development can be accommodated without adverse impact upon the safety and capacity of the highway network, enabling KCC to withdraw its holding objection.

KCC Comment – Signage Strategy

"The County Council would also ask that the proposed signage strategy for the site should be reviewed including implementation of signage to date. Signage is helpful for foreign drivers who may not be using Sat-Nav data or if their Sat-Nav data is out of date. It is also noted that local residents have made representations regarding the existing signage being inadequate. There is currently no signage at M20 Junction 10 advising HGV drivers of the route that they should take to the IBF, if they inadvertently exit at M20 Junction 10. There also needs to be better signage at M20 Junction 10A including at the A20 eastbound entry, A20 eastbound exit and then the A2070 exit just before the Inland Border Facility."

2.17 The Waterman TA sets out the routing strategy for HGV traffic accessing the Proposed Development at the main entrance on the A2070 via M20 Junction 10a. No HGV access to the Site is available from any other location. Existing signage on the A20 and A2070 is present to reinforce this message and deter drivers from attempting to access the Site via local routes.

2.18 Significant work has been undertaken over the lifespan of the Site to address issues with HGVs parking in lay-bys. A signage strategy was agreed with National Highways, and new signs have recently been installed, including a sign for St Mary's Church, to reduce confusion and prevent HGVs from travelling toward the church instead of the IBF.

2.19 Notwithstanding occasional rogue incidents, where an individual HGV has been reported as accessing the local road network, there is no evidence to suggest that this is a regular issue within the surrounding area, and the Waterman TA is considered to have appropriately addressed the likely impacts of the Proposed Development in this regard.

2.20 A signage strategy is proposed by way of appropriately worded condition, in line with KCC and National Highways comments.

KCC Comment – Travel Plan

"The Travel Plan 2022 is considered out of date and needs to be updated based on current staff who work at the site. A new staff travel survey should be undertaken. However, the County Council is happy for a travel plan condition to be attached to any planning permission on the site, requiring a new travel plan and staff travel survey to be undertaken and submitted within three months of any planning permission."

2.21 The current Staff Travel Plan is appended to the Waterman TA at Appendix D. Observed staff methods of travel to work, based upon staff travel surveys conducted in May and June 2022, are set out in Table 5 of the Waterman TA, and demonstrated to be broadly in line with 2021 Census 'Mode of travel to work' data.

2.22 On-site car parking for staff is in the staff car park only, accessed via a dedicated vehicle access on Church Road. The staff car park accommodates up to 357 vehicles, including 3 electric vehicle (EV) spaces sharing 2 chargers, and 14 accessible car parking spaces. In addition, a total of 60 secure covered cycle parking spaces is provided on site.

2.23 Staff using the dedicated Zeelo bus shuttle can park at the Ashford Market site on Monument Way. The Zeelo bus shuttle service operates as a 'Park & Ride' for staff from the Ashford Market site and Ashford International Rail Station.

2.24 Pedestrian access to the Application Site is taken via the staff car park access on Church Road, and the existing footway / cycleway network surrounding the Application Site.

2.25 It is acknowledged that the Travel Plan dates from 2022 and, therefore, the Applicant is willing to accept a condition requiring review and submission of an updated or new Travel Plan.

KCC Summary Comment – Holding Objection

"*In summary, and in considering the application as it currently stands, the County Council raises a holding objection on the following grounds:*

- *The County Council as the Highway Authority considers that there is a severe impact from the proposals on M20 Junction 10A, specifically on the A20 Hythe Road arms and a suitable mitigation scheme should be submitted and implemented for these arms in order that the proposals will not have a severe highway impact on the junction."*

2.26 Mitigation of the impact of the Proposed Development upon M20 Junction 10a is addressed by the Applicant's response to 'KCC Comment – Junction Assessments' (paragraphs 2.12 to 2.16) above.

2.27 Through the implementation of the proposed junction improvements, it is considered that the impact of development traffic upon M20 Junction 10a can be appropriately mitigated, and that the Proposed Development can be accommodated without adverse impact upon the safety and capacity of the highway network, enabling KCC to withdraw its holding objection.

Ashford Borough Council (ABC) Planning and Development

ABC Comment 4 – Staff Travel Plan & Missed Active Travel Opportunities

"The Council requests that an updated Staff Travel Plan to include a review of the success of the 2022 version with updated objectives, targets, measures and details of monitoring is secured by an appropriate planning condition. This is required in order to address the cumulative impacts of major development on air quality and to encourage the use of sustainable transport modes and active travel – refer to paragraphs 168-169 of the (ABC Committee) *Report.*

The Council would wish the updated Plan to fully investigate the reasons why only 5% of staff walk and cycle to work as well as to explore whether patronage of the Zeelo bus service would increase by expansion of the service geographically through the provision of a greater number of local pick-up points around Ashford.

The Council considers that allied with an updated Travel Plan staff appropriate facilities should be provided by the applicant including an appropriate number of secure and covered cycle parking spaces and the provision of good facilities for those cycling to work (storage of cycling clothing & kit, changing areas, ability to access shower).

Allied to an updated Travel Plan, the Council expresses its disappointment that funding for upgraded off-site PRoW between the land shown edged in blue and the nearby village of Mersham is not proposed and considers that this must be provided if the government is serious about encouraging active travel. A clear local opportunity exists to demonstrate commitment and leadership in this respect through funding of the necessary local infrastructure. The upgrading of the PRoW from Highfield Lane to Blind Lane already demonstrates what can be done in this respect. The Council considers the applicant should revise the proposed s.106 Undertaking to include funding to KCC, in its role as the local highway authority, to take forward such PRoW upgrades."

2.28 The status of the staff Travel Plan for the Application Site is addressed by the Applicant's response to 'KCC Comment – Travel Plan' (paragraphs 2.21 to 2.25) above.

2.29 As detailed within the Waterman TA, the Application Site currently provides cycle storage for 60 standard bicycles, contained within secure bicycle stores, with two stores located behind HMRC Inspection shed 1, and four stores located behind the HMRC hub and Defra BCP, a level of cycle parking provision which is expected to meet the forecast demand. Staff lockers, showers and changing facilities are also provided on-site within staff welfare areas.

2.30 Currently, the existing PRoW route between Blind Lane and Mersham (Footpath AE363) which is unsurfaced and runs across open agricultural land, is circa 700m walking distance using the existing PRoW alignment. The alternative route, following the available surfaced road network via Kingsford Street, is circa 1,000m, so the PRoW represents an approximate time saving of about 4 minutes on a total walking journey of circa 43 minutes between the Application Site and Mersham. It is considered unlikely that a material footfall of staff between the Application Site and Mersham will occur.

ABC Comment 5 – Highways

"The Council requests that mitigation necessary to the J10A gyratory junctions with the A20 (both east & west bound) to resolve current and anticipated queuing issues is secured with proactive liaison taking place between the applicant, National Highways and Kent County Council – refer to paragraph 162 of the (ABC Committee) *Report.*

The Council consider that the applicant must liaise with KCC, in its role as local highway authority, to mitigate any other known or anticipated impacts on the local highway network.

The Council consider that the entrance to the staff car park on Church Road is one where tailgating is experienced that impacts on highway safety and requests that the entry arrangements are reviewed. The Council consider that the carriageway should be raised at the crossing point in order to make it safer for users and to slow vehicle speeds."

2.31 As set out in the Waterman TA and noted previously within this TN, M20 Junction 10a is the only junction assessed that is considered likely to experience a material impact from the Proposed Development (relative to the 'Do Nothing' baseline without the development). Mitigation of the impact of the Proposed Development upon M20 Junction 10a is addressed by the Applicant's response to 'KCC Comment – Junction Assessments' (paragraphs 2.12 to 2.16) above.

2.32 Whilst ABC comments with respect to the staff car park access on Church Road are noted, as set out in the Waterman TA, there have been no recorded personal injury accidents at this location, which comprises gated and controlled access. Sufficient visibility splays at the Staff Car Park access on Church Road are available, commensurate with the observed 85%ile vehicle speeds.

ABC Comment 11 – Signage and Sat-Nav

"The Council welcomes recent signage improvements designed to reduce instances of the rural road highway network being incorrectly used to access the site and welcomes on-going collaboration between National Highways and Kent County Council to explore all sensible signage improvements on the strategic and local highway network including liaison with sat-nav as necessary to ensure guidance given to drivers in respect of the access from the J10A link road is correct – refer to paragraphs 163-165 of the (ABC Committee) *Report."*

2.33 The proposed routing and signage strategy for HGVs accessing the Application Site is addressed by the Applicant's response to 'KCC Comment – Signage Strategy' (paragraphs 2.17 to 2.20) above.

National Highways (NH)

NH Comment

"While National Highways worked at pace to facilitate the original construction and operation of the IBF, several matters remain to be formally and finally addressed. Those relating to (a) include

1) Site Accesses. The final design needs to be agreed and implemented

2) Network Signage. The final signage strategy and design of roadside signage connected to the operation of the IBF need to be agreed and implemented.

3) Operational Management Plan. The OMP needs to be updated to reflect experience to date and any matters arising from (1) to (3)

It will also be noted that the access and other SRN related works will need to be the subject of separate agreement(s) under the 1980 Highways Act.

With regards (b), we note that the site 1) was constructed such that the main and emergency access were created through land forming part of the otherwise now completed A2070 (then Highways England) Major Project. Kent County Council acted on behalf of the SDO Government Departments to construct the accesses. Landscaping and related matters relating to this land remain outstanding. We will engage with the applicant's agents on this matter."

Detail on conditions sought:

1. Condition: Works to the Strategic Road Network: A2070 - Within three months of the date of this consent a scheme of works relating to that area of the A2070 temporarily handed over from National Highways to

Kent County Council to facilitate the construction and operation of the Sevington Inland Border Facility shall be submitted to and then approved in writing by the determining authority (who shall consult National Highways). Thereafter the scheme of works shall be implemented in accordance with the approved details.

- Reason: To ensure that the A2070 Trunk Road continues to be an effective part of the national system of routes for through traffic in accordance with section 10 of the Highways Act 1980 and to satisfy the reasonable requirements of road safety and paragraph 115 of the National Planning Policy Framework (2024).

- Informative: This development involves work to the public highway (strategic road network) that can only be undertaken within the scope of a legal Agreement between the applicant and National Highways (as the strategic highway company appointed by the Secretary of State for Transport). Planning permission in itself does not permit these works. In this particular case the scheme of work will need to cover all details relating to the works carried out to date or needing to be carried out in the future within the approximate area shown in drawings HE514442-VIN-ZZZ-XX-FM-ZM-0002 Page 5 of 8 dated February 2018 and HE514442-VIN-ZZZ-XX-FM-ZM-0002 Page 10 of 13 dated February 2018 as shown in Appendix B. It is the applicant responsibility to ensure that any works to the public highway (including adjacent highway land), are covered by any necessary Agreements under the Highways Act 1980 (at no cost to National Highways).

2. Condition: Strategic Road Network Signage - Within three months of the date of this consent a Signage Strategy covering the strategic road network shall be submitted to and then approved in writing by the determining authority (who shall consult National Highways). Thereafter the approved Signage Strategy shall be fully implemented.

- Reason: To ensure that the strategic and local road networks in the vicinity of the site continue to be an effective part of the national system of routes for through traffic in accordance with section 10 of the Highways Act 1980 and to satisfy the reasonable requirements of road safety and paragraph 115 of the National Planning Policy Framework (2024)

- Informative: The Signage Strategy will include a review of the existing signage supporting the existing Sevington Inland Border Facility as well as proposals for further signage in order to meet the reasonable needs of those required to visit the site and the general travelling public.

3. Condition: Operational Management Plan - Within three months of the date of this consent an Operational Management Plan covering all consented activities that can occur at the site shall be submitted to and then approved in writing by the determining authority (who shall consult National Highways). Thereafter the development shall be operated in full compliance with the approved Operational Management Plan.

- Reason: To ensure that the strategic road network in the vicinity of the site continue to be an effective part of the national system of routes for through traffic in accordance with section 10 of the Highways Act 1980 and to satisfy the reasonable requirements of road safety and paragraph 115 of the National Planning Policy Framework (2024)

- Informative: National Highways would expect that via the OMP or TP an on-going commitment is made regarding the existing bus shuttle between Ashford International Railway Station, Ashford Park & Ride and Sevington IBF to ensure it will "continue to operate at current levels" and that "the service timetable is aligned with shift patterns and offers a good alternative to driving for Staff working at the Site."

2.34 It is anticipated that National Highways comments can be addressed through suitably worded planning conditions, and in turn discharged through ongoing collaboration between the Applicant, National Highways, and KCC.

2.35 The Applicant is proactively engaging with National Highways and is progressing towards agreement of a Statement of Common Ground, to be submitted in advance of the inquiry.

Mersham Parish Council (MPC)

MPC Comment

"Mersham Parish Council is concerned about "the traffic control systems as there are lots of issues with tail backs on the A20 around J10a."

2.36 Mitigation of the impact of the Proposed Development upon M20 Junction 10a is addressed by the Applicant's response to 'KCC Comment – Junction Assessments' (paragraphs 2.12 to 2.16) above.

Sevington with Finberry Parish Council (SFPC)

SFPC Comment 8.2

"The functioning of Junction 10A must be scrutinised. The junction is partially traffic light controlled & numerous complaints have been received of significant congestion on non-controlled entry points due to significant consecutive HGV's using the junction."

2.37 Mitigation of the impact of the Proposed Development upon M20 Junction 10a is addressed by the Applicant's response to 'KCC Comment – Junction Assessments' (paragraphs 2.12 to 2.16) above.

SFPC Comment 8.3

"Reports of increased road traffic accidents due to HGV's crossing lanes without notice needs investigation and resolution, possibly through more informative signage at motorway exits and on leaving the IBF."

2.38 As set out in the Waterman TA, Personal Injury Accident (PIA) data has been reviewed for the most recent three-year period between January 2021 and December 2023 inclusive. A review of the historic accident data in the vicinity of the Application Site and the assessed road network raises no specific patterns or concerns with respect to road safety.

SFPC Comment 8.5

"There are continued wrong turns resulting in HGV's becoming stuck and causing damage to vehicles and property, along country lanes. This specifically relates to Church Road and Cheeseman's Green Lane within Sevington area. Width restrictions and signage has done little to resolve and a more cohesive strategy, such as further improvements to signage and obscuring the staff entrance, which presents aesthetically as an entrance to the site from the A2070."

2.39 The proposed routing and signage strategy for HGVs accessing the Application Site is addressed by the Applicant's response to 'KCC Comment – Signage Strategy' (paragraphs 2.17 to 2.20) above.

Smeeth Parish Council (SPC)

SPC Comment

"Raise concerns about "traffic issues with J10a making Hythe Road very difficult to negotiate"

2.40 Mitigation of the impact of the Proposed Development upon M20 Junction 10a is addressed by the Applicant's response to 'KCC Comment – Junction Assessments' (paragraphs 2.12 to 2.16) above.

The Village Alliance (TVA)

TVA Comment

"We are still experiencing errant HGV's travelling into Mersham village and into Kingsford Street. This presents a very dangerous situation along a narrow lane, with no pavement and numerous dog walkers, children in prams, joggers and cyclists using the road. The signage is still not working. We were promised a permanent sign at the entrance to Kingsford Street, but this has not materialised the signage on the A20 is obviously not working."

2.41 The proposed routing and signage strategy for HGVs accessing the Application Site is addressed by the Applicant's response to 'KCC Comment – Signage Strategy' (paragraphs 2.17 to 2.20) above.

Campaign to Protect Rural England (CPRE)

CPRE Comment

"The purpose and operation of the site has significant transport impacts. The transport assessment in this application is inadequate. It assumes that all issues are resolved by the site's proximity to junction 10a and by a staff travel plan (which contains avoidable errors including reference to an Ashford Park and Ride). There is no discussion of customer transport issues other than an inadequate reference to signage that assumes 'drivers will learn'. Although outside the planning remit it may be that the impacts will only be resolvable if the operations protocol identifies and treats drivers as customers (this would be logical as they are entirely responsible for their vehicle and its load)"

Specifically mentioned areas for improvement:

"a) Signage: This is a major border control site which is used by cross channel logistics operators inbound from Dover Port and Eurotunnel or outbound. As a multi-agency site drivers will either use it voluntarily if needed or by instruction (Follow Me vehicles are a frequent sight). Only a small proportion of the 6000 / day logistics vehicles using the Short Straights crossing use the IBF: this is as set out on the BTOM (Border Target Operating Model). As there are approximately 20k drivers regularly using the crossing some may never use it or only very occasionally. The signage is therefore incredibly important and needs to be properly researched so that one-time drivers fully understand it and it makes sense with a wide variety of sat nav's. This needs more and continuing effort to help the drivers and the residents of Mersham and Sevington who frequently help 'lost drivers'.

b) Drivers Hours: the transport assessment makes no reference to the issue of drivers hours. Drivers arriving at the IBF are customers of the government departments and agencies operating there. As there is a prohibition on parking up on the site, drivers who arrive close to a driving hours limit requiring them to stop will be parking up in the area; not all will be using the Ashford truck park adjacent at Waterbrook. Drivers are well experienced in managing drivers hours regulations, but if required to attend the IBF the issue of parking up nearby for drivers hours reasons will arise and needs to be factored into the transport assessment. Local experience of the issue by neighbouring residential and business areas should be researched and understood so that if needed appropriate arrangements can be included in this planning application by amendment or condition."

2.42 The status of the staff Travel Plan for the Application Site is addressed by the Applicant's response to 'KCC Comment – Travel Plan' (paragraphs 2.21 to 2.25) above.

2.43 For clarity, the Waterman TA reference to an 'Ashford Park & Ride' relates specifically to the dedicated Zeelo bus shuttle between Ashford International Railway Station, Ashford 'Park & Ride' (located at Ashford Market on Monument Way), and the Application Site. The route provides direct

connections from the station and the 'Park & Ride' site for commuting staff, free of charge. Vehicles have a capacity of 25 seats and passengers wishing to use the service must pre-book using the Zeelo website.

2.44 The proposed routing and signage strategy for HGVs accessing the Application Site is addressed by the Applicant's response to 'KCC Comment – Signage Strategy' (paragraphs 2.17 to 2.20) above. It is expected that ongoing collaboration between the Applicant, National Highways, and KCC will identify, monitor, and address any further routing issues arising, including issues associated with the management of driver's hours regulations.

Residents

Residents Comments

15 objections to highways safety issues. Most responses refer to "inadequate signage" as a cause of the problems.

2.45 As set out in the Waterman TA, Personal Injury Accident (PIA) data has been reviewed for the most recent three-year period between January 2021 and December 2023 inclusive. A review of the historic accident data in the vicinity of the Application Site and the assessed road network raises no specific patterns or concerns with respect to road safety.

2.46 The proposed routing and signage strategy for HGVs accessing the Application Site is addressed by the Applicant's response to 'KCC Comment – Signage Strategy' (paragraphs 2.17 to 2.20) above.

3. Summary and Conclusion

Summary

3.1 With reference to evidence presented in this TN, the Waterman TA, and other relevant documents submitted in support of the Crown Development Application (Ref: CROWN/2025/0000002), as well as relevant transport policy and guidance, the Applicant has addressed the transport issues raised by the Inspector's SoM, considering the following transport and highway issues:

- **Mitigation of development impact upon M20 J10a** – It has been demonstrated that the impact of development traffic upon M20 J10a can be appropriately mitigated, and that the Proposed Development can be accommodated without adverse impact upon the safety and capacity of the highway network, enabling KCC to withdraw its holding objection.
- **Mitigation of HGV routing impact on local road network** – The Applicant has confirmed that a 'Prohibition of Right-Turn', enforced by signing and bollards, prevents right-turn manoeuvre into the Application Site from the A2070. A signage strategy is proposed by way of appropriately worded condition, in line with KCC and National Highways comments.
- **Mitigation of staff travel impacts** – The Applicant is willing to accept a condition requiring review and submission of an updated or new Travel Plan, in line with KCC and National Highways comments.
- **Public Rights of Way** – The Applicant has confirmed that legal extinguishment of all PRoWs previously running through the Site has been completed. All PRoWs required to be diverted around the Site and / or upgraded as part of the temporary permissions, have been legally completed. The Applicant acknowledges that the resurfacing of the Public Right of Way (Bridleway AE672, located south-west of the staff car park entrance) and provision of surface water drainage in this location, could serve to mitigate this issue. Discussions are continuing with statutory authorities.

3.2 This TN has also provided clarification on further matters raised by the Inspector and third-party comments.

Conclusion

3.3 In conclusion, it is considered that the impact of the Proposed Development can be appropriately mitigated and will not have an adverse impact upon the safety and capacity of the highway network.

3.4 In consideration of the guidance set out in the NPPF, it is considered that the Proposed Development should not be prevented or refused on transport grounds as the residual cumulative impacts of the development, following mitigation, are not 'severe'.

Appendices

A. M20 Junction 10a Mitigation – Preliminary Option Assessment

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Sevington Inland Border Facility

M20 Junction 10a Mitigation – Preliminary Option Assessment

Date:	November 2025
Client Name:	Department for Transport (DfT), His Majesty's Revenue & Customs (HMRC) and Department for Environment, Food and Rural Affairs (DEFRA)
Document Reference:	20982117-WAT-XX-XX-RP-N-800004_P03

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Prepared by	Checked by	Approved by
P03.S3	M Scroggs Principal Transport Planner	A Beard Senior Associate Director	A Beard Senior Associate Director

1. Introduction

1.1. Department for Transport (DfT), His Majesty's Revenue & Customs (HMRC) and Department for Environment, Food and Rural Affairs (DEFRA) (together the 'Applicant') have appointed Waterman Infrastructure and Environment Ltd ('Waterman') to prepare this Technical Note (TN) in response to Statutory Consultee Comments relating to the current Crown Development Application (Ref: CROWN/2025/0000002) for the permanent provision of the existing Sevington Inland Border Facility and Border Control Post (the 'Proposed Development', 'Sevington IBF') in Ashford, Kent (the 'Application Site').

1.2. The Proposed Development comprises:

"Buildings, Goods Vehicle parking spaces, entry lanes, refrigerated semi-trailers, staff car parking spaces, access, site infrastructure, utilities, hardstanding, landscaping and ancillary facilities and associated works; and ongoing use of the site for an Inland Border Facility and Border Control Post, operating 24 hours per day, seven days per week."

1.3. A supporting Transport Assessment (TA) was prepared by Waterman (Ref: 20982110-WAT-XX-XX-RP-N-800001_P02), dated April 2025, and submitted as part of the planning application.

1.4. Kent County Council (KCC) subsequently responded with comments on the application in an emailed letter, dated 12th September 2025, which was provided by JLL, the planning consultant representing the Applicant. The comments relating to Highways and Transportation covered elements such as the committed developments considered within the assessment, the results of the modelling of the junctions assessed, the signage strategy and the travel plan. As part of their response, a holding objection with regard to Highways and Transportation has been raised by KCC on the following grounds:

'The County Council as the Highway Authority considers that there is a severe impact from the proposals on M20 Junction 10A, specifically on the A20 Hythe Road arms and a suitable mitigation scheme should be submitted and implemented for these arms in order that the proposals will not have a severe highway impact on the junction.'

1.5. Further to this, within the specific comments, KCC state: "*The A20 Hythe Road arms are under the control of the County Council. The modelling results demonstrate in a 2024 baseline a severe impact on the A20 Hythe Road arms of this junction (both eastbound and westbound) in both the AM and PM Peaks once the development traffic is added. This is especially the case on eastbound arm in the PM peak where the queue goes up from 7 vehicles to 34 vehicles with the degree of saturation going up from 88% to 104%. The modelling results also demonstrate in a 2026 baseline a severe impact on the A20 Hythe Road arms of this junction (both eastbound and westbound) once the development traffic is added. Again, this is especially the case on the eastbound arm in the AM Peak where the queue goes up from 9 vehicles to 36 vehicles with the degree of saturation going up from 89% to 103% and in the PM peak where the queue goes up from eight vehicles to 42 vehicles with the degree of Saturation' going up from 91% to 108%. There are similar modelling results in terms of the degree of severity for the 2036 horizon year, which again show a severe impact from the proposed development on this junction. The applicant therefore needs to submit a mitigation scheme on the A20 arms of this junction. An accompanying Stage 1 of the Road Safety Audit (RSA) and Designers response also needs to be submitted to support any mitigation scheme. The County Council would welcome further discussions with the applicant and National Highways regarding a mitigation scheme at this junction."*

1.6. A meeting was subsequently held with KCC and National Highways on 28th October 2025 to discuss their comments and, more specifically, M20 Junction 10a given the holding objection and comment referred to above. This focussed on the need to improve the operation of the A20 eastbound and A20 westbound approaches to the junction, which are currently give-way controlled and frequently experience lengthy queues and long delays during peak hours. It is noted that for all items unrelated to M20 Junction 10a, KCC confirmed that they consider the approach used by Waterman to be robust and do not require revisions to the assessments undertaken.

1.7. At the meeting, Waterman discussed a preliminary design developed for a potential scheme to improve the operation of the A20 eastbound and A20 westbound approaches. The results obtained from the initial modelling of this were also discussed and both KCC and National Highways considered the mitigation layout proposal and its forecast operation to be reasonable in principle. KCC subsequently requested that a Technical Note (TN) be drafted by Waterman to provide further details of the proposed layout and the modelling of this undertaken for them to review prior to a decision to be made on whether the scheme meets their criteria to lift the holding object on Transport grounds. National Highways supported this request.

1.8. This TN therefore specifically addresses the KCC concerns over the operation of M20 Junction 10a by reconfirming the operation of the existing layout and providing further details of the mitigation layout and its operation. It is structured as follows:

- Section 2 – Operation of Existing Layout;
- Section 3 – Preliminary Option Layout Design;
- Section 4 – Modelling of Preliminary Option Layout; and
- Section 5 – Conclusions

2. Operation of Existing Layout

2.1. The April 2025 TA included a LinSig modelling assessment of M20 Junction 10a using the observed 2024 Base including Sevington IBF traffic flows.

2.2. The performance of signalised junctions modelled within LinSig is typically indicated using standard outputs and the following outputs are shown for each modelled scenario:

- Degree of Saturation (DoS) - The DoS is defined as the ratio of flow-to-capacity for each junction approach lane and a Degree of Saturation of 90% is considered the practical capacity of the lane, with a value of 100% the actual capacity.

- Mean Maximum Queue (MMQ) – The MMQ is the average maximum queue (in PCUs) on each approach lane across the modelled peak hour.
- Average Vehicle Delay (Delay) – The Delay is the average vehicle delay (in seconds per PCU) on each approach lane across the modelled peak hour.
- Practical Reserve Capacity (PRC) - PRC is a measure of how much additional traffic can pass through a junction whilst maintaining a maximum DoS of 90% on all lanes. A positive PRC value indicates that the junction has spare capacity while a negative PRC value indicates that the junction is operating above capacity.

2.3. The LinSig modelling assessment results for the 2024 observed situation, as shown in the TA, are shown in Table 1 below with the results for the A20 eastbound and A20 westbound approaches highlighted.

Table 1: 2024 Base with Sevington (Observed Scenario) LinSig Results for M10 Junction 10a

LinSig Lane ID	Junction Approach Lane	2024 AM Peak		2024 PM Peak	
		DoS %	MMQ (PCUs)	DoS %	MMQ (PCUs)
2024 Base with Sevington IBF					
1/1+1/2	M20 EB Off-Slip Ahead Left	57.1 : 57.1%	3.1	56.2 : 56.2%	3.2
1/3	M20 EB Off-Slip Ahead	20.4%	1	37.4%	2
2/1	W Circ Ahead Left	76.8%	10.2	80.3%	8.6
2/2	W Circ Ahead	50.3%	4	57.8%	4.8
1/1	**A20 EB Ahead**	**99.2%**	**17.6**	**104.3%**	**34.4**
1/2+1/1	**A20 WB Jnc at M20 J10a Left Ahead**	**99.1 : 99.1%**	**17.9**	**86.1 : 86.1%**	**6.2**
1/1	E Circ Right	32.7%	2.9	42.1%	2.4
1/2	E Circ Right	33.0%	3.1	53.1%	3.8
1/3	E Circ Right	36.8%	3.1	50.9%	3.1
2/2+2/1	M20 WB Off-Slip Ahead	62.3 : 62.4%	5.7	42.9 : 43.0%	3.2
2/3	M20 WB Off-Slip Ahead	34.2%	2.5	9.2%	0.5
1/2+1/1	A2070 EB Ahead Left	54.5 : 54.5%	1.7	54.8 : 54.8%	1.7
1/3	A2070 EB Ahead	77.4%	4.6	64.6%	2.6
	PRC % =	-10.3%		-15.9%	
	Cycle Time =	46s		38s	

2.4. The results demonstrated that M20 Junction 10a is currently at capacity due to the A20 eastbound and westbound approaches operating with DoS values over 90% with associated moderate to long queues and delays, with a maximum DoS of 104.3% and associated MMQ of 34.4 PCUs on the A20 eastbound approach in the PM peak. This is consistent with the typically observed operation on site during weekday peak hours.

2.5. The TA also included results for the 2026 and 2036 future assessment years. For the purposes of this TN, the results for the 2036 Base without Sevington IBF, 2036 Base with Sevington IBF and 2036 Base with Sevington 4 IBF traffic flow scenarios have been repeated below in Table 2 with the results for the A20 eastbound and A20 westbound approaches highlighted.

Table 2: 2036 Scenario LinSig Results for Existing M20 Junction 10a Layout

LinSig Lane ID	Junction Approach Lane	2036 AM Peak			2036 PM Peak		
		DoS %	MMQ (PCUs)	Delay (s/PCU)	DoS %	MMQ (PCUs)	Delay (s/PCU)
2036 Base without Sevington IBF							
1/1+1/2	M20 EB Off-Slip Ahead Left	70.3 : 0.0%	4.0	35.7	76.2 : 76.2%	4.5	32.3
1/3	M20 EB Off-Slip Ahead	13.5%	0.6	22.2	29.6%	1.3	18.8
2/1	W Circ Ahead Left	86.9%	12	16.1	83.5%	9.7	15.8
2/2	W Circ Ahead	50.5%	4.4	8.4	59.2%	4.8	10.6
1/1	**A20 EB Ahead**	**130.0%**	**107.1**	**454.4**	**123.7%**	**81.4**	378.4
1/2+1/1	**A20 WB Jnc at M20 J10a Left Ahead**	**106.0 : 106.0%**	**48.7**	**138.9**	**94.6 : 94.3%**	**10.9**	36.7
1/1	E Circ Right	53.3%	3.6	19.8	44.2%	2.4	15.5
1/2	E Circ Right	49.9%	3.6	15.2	51.8%	3.3	12.9
1/3	E Circ Right	50.8%	3.3	16.3	49.9%	2.8	14.0
2/2+2/1	M20 WB Off-Slip Ahead	57.0 : 57.0%	6.1	10.1	55.4 : 55.4%	4.6	9.9
2/3	M20 WB Off-Slip Ahead	26.8%	2.1	9.1	11.8%	0.7	8.4
1/2+1/1	A2070 EB Ahead Left	70.2 : 70.2%	3.5	7.0	62.6 : 62.6%	2.5	5.0
1/3	A2070 EB Ahead	80.9%	6.3	13.7	75.9%	4.3	10.0
	PRC % =		-44.5%			-37.4%	
	Cycle Time =		46s			38s	
2036 Base with Sevington IBF							
1/1+1/2	M20 EB Off-Slip Ahead Left	70.3 : 0.0%	4.0	35.7	76.2 : 35.7%	3.6	18.4
1/3	M20 EB Off-Slip Ahead	52.5%	2.6	28.3	33.7%	1.5	19.4
2/1	W Circ Ahead Left	90.4%	13.7	20.1	85.6%	10	18.8
2/2	W Circ Ahead	55.7%	5.6	9.6	69.5%	7.5	14.0
1/1	**A20 EB Ahead**	**151.0%**	**146.3**	**656.0**	**144.1%**	**119.3**	**590.8**
1/2+1/1	**A20 WB Jnc at M20 J10a Left Ahead**	**122.8 : 122.8%**	**96.5**	**361.4**	**131.4 : 131.4%**	**98.2**	**459.5**
1/1	E Circ Right	58.4%	4	22.1	80.6%	5.5	35.3
1/2	E Circ Right	62.9%	5	17.7	65.3%	4	23.9
1/3	E Circ Right	54.2%	3.5	17.8	60.1%	3.4	22.0
2/2+2/1	M20 WB Off-Slip Ahead	58.4 : 58.4%	6.1	9.5	51.3 : 51.3%	4.2	7.5
2/3	M20 WB Off-Slip Ahead	25.7%	2	8.4	10.1%	0.6	6.4
1/2+1/1	A2070 EB Ahead Left	78.4 : 78.4%	5.4	9.0	69.4 : 69.4%	2.8	5.5
1/3	A2070 EB Ahead	86.5%	8.2	17.8	84.1%	5.9	13.4
	PRC % =		-67.8%			-60.2%	
	Cycle Time =		46s			38s	

LinSig Lane ID	Junction Approach Lane	2036 AM Peak			2036 PM Peak		
		DoS %	MMQ (PCUs)	Delay (s/PCU)	DoS %	MMQ (PCUs)	Delay (s/PCU)
2036 Base with Sevington 4 IBF							
1/1+1/2	M20 EB Off-Slip Ahead Left	70.3 : 0.0%	4.0	35.7	76.2 : 76.2%	4.5	30.1
1/3	M20 EB Off-Slip Ahead	59.0%	3.1	30.3	69.8%	3.9	28.1
2/1	W Circ Ahead Left	90.8%	14	20.7	88.6%	10.3	21.4
2/2	W Circ Ahead	56.8%	5.5	9.6	70.9%	7.8	14.0
1/1	**A20 EB Ahead**	**155.5%**	**152.9**	**692.3**	**153.3%**	**132.3**	**668.9**
1/2+1/1	**A20 WB Jnc at M20 J10a Left Ahead**	**126.5 : 126.5%**	**106.1**	**405.0**	**122.9 : 83.6%**	**62.6**	**276.2**
1/1	E Circ Right	54.0%	3.7	19.8	53.1%	3.5	23.0
1/2	E Circ Right	59.2%	4.9	15.0	69.7%	5.2	25.2
1/3	E Circ Right	50.1%	3.1	15.7	52.8%	3.5	20.7
2/2+2/1	M20 WB Off-Slip Ahead	58.7 : 58.8%	6.3	10.3	54.5 : 54.5%	4.6	9.1
2/3	M20 WB Off-Slip Ahead	26.8%	2.1	9.1	11.2%	0.7	7.7
1/2+1/1	A2070 EB Ahead Left	79.4 : 79.4%	4.6	9.2	72.1 : 72.1%	3.1	6.1
1/3	A2070 EB Ahead	87.6%	8.6	18.8	86.1%	6.8	15.2
	PRC % =		-72.8%			-70.3%	
	Cycle Time =		46s			38s	

2.6. The results indicated that the junction is likely to operate significantly over capacity in the 2036 Base without Sevington IBF scenario traffic flows due to the A20 eastbound and A20 westbound approaches operating with DoS values above 100% and with associated lengthy queues and delays, with a maximum DoS of 130.7% and associated MMQ of 107.1 PCUs and average delay of 454.4s/PCU on the A20 eastbound approach in the AM peak.

2.7. It was also indicated that the 2036 Base flows inclusive of the Sevington IBF and 'worst-case' sensitivity test Sevington 4 IBF traffic flows would be expected to exacerbate the congestion on the two A20 approaches, most notably on the A20 westbound approach in both peak hours.

2.8. Given the estimated impact of the Sevington IBF traffic on the A20 westbound and A20 eastbound approaches of M20 Junction 10a, which would already operate above capacity in the 2036 Base (without Sevington IBF) scenario, a preliminary mitigation scheme that improves the operation of these two A20 approaches has been designed, and this is discussed in the following section.

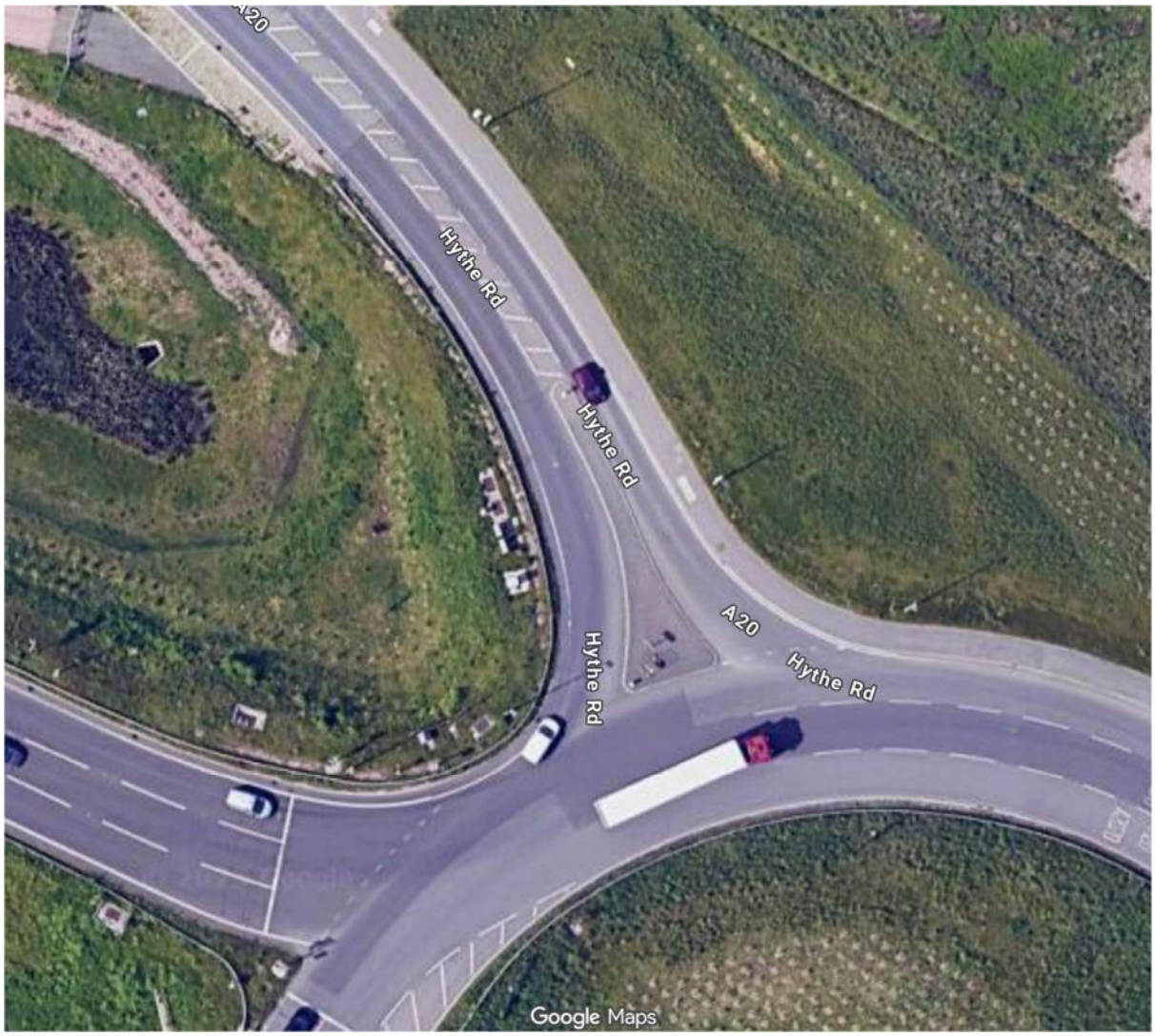
3. Preliminary Mitigation Layout Design

3.1. Various measures to improve the operation of both the A20 eastbound and A20 westbound approaches were considered taking into account the existing constraints at the junction and minimising any impact on the other approaches and the circulatory carriageway.

A20 Eastbound Approach

3.2. This approach currently comprises one lane which flares out to a wide one-lane approach at the give-way line where it adjoins the circulatory carriageway, as shown in the below satellite photo extract from Google Maps within Figure 1.

Figure 1 : Existing Layout on A20 eastbound approach



3.3. Traffic signal control on the A20 eastbound approach and the corresponding roundabout circulatory carriageway has been considered. However, given the proximity of the A20 eastbound approach to the M20 eastbound off-slip approach and the narrow width of the traffic island at the intersection of the A20 with the roundabout, there is insufficient available space on the circulatory carriageway to store vehicles queueing at the stopline without the queue blocking the exit to the A20 and extending back to the M20 off-slip approach and corresponding circulatory carriageway stopline.

3.4. It is therefore considered that retaining the existing give-way control and providing additional lane capacity on the A20 eastbound approach is the preferred option for improving its operation. This was discussed with KCC and National Highways at the 28th October 2025 meeting and agreed in principle.

3.5. An initial preliminary option layout of this potential scheme was designed and submitted to KCC and NH on 5th November 2025 for comment. KCC noted the following regarding the changes to the A20 eastbound approach:

'The vehicle tracking is too tight for vehicles travelling along the A20 eastbound in the outside lane.

The approach lanes should be widened slightly to give more clearance. I would suggest the footway is re-located slightly further back into the verge so that the central island is not reduced in width any

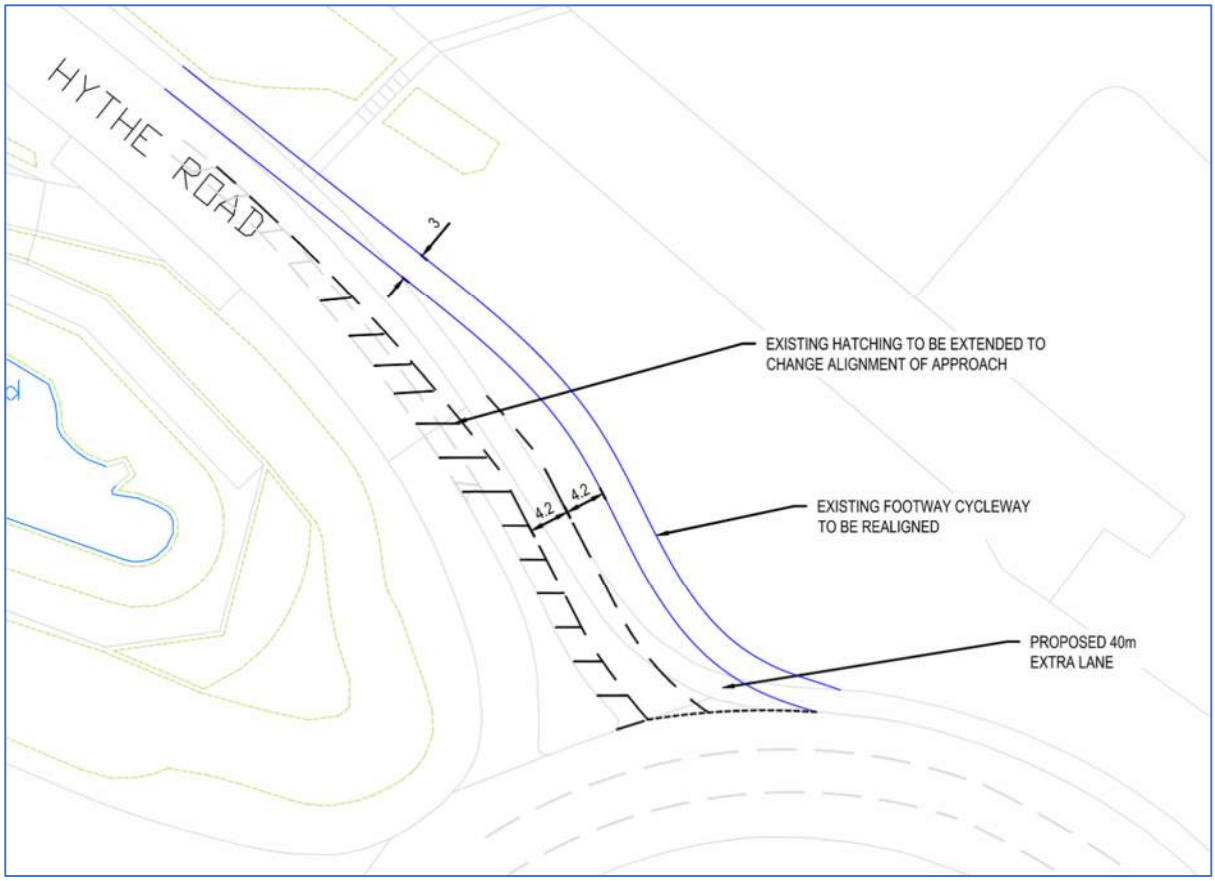
more. I would also suggest lane widths of at least 4.2 metres so that two HGV's can safely pass another if required.'

3.6. Based on these comments, a revised preliminary option layout of this potential scheme has been designed and an extract of the drawing shown below in Figure 2.

3.7. The full drawing is shown at **Appendix A**. This includes the following key elements:

- A 40-metre long flare (second lane) that is 4.2 wide in its middle section, which is envisaged to serve traffic headed to the A20 eastern arm, has been added to the nearside of the approach and modelled in this format. This provides sufficient width for Heavy Goods Vehicles (HGVs) to travel in the lane and not conflict with traffic in the neighbouring lane, as shown by the swept path analysis undertaken of the 16.5m long articulated HGV attached at **Appendix A**.
- The second approach lane has been made 4.2m wide in its middle section. This provides sufficient width for HGVs to travel in the lane and not conflict with traffic in the neighbouring lane, as shown by the swept path analysis undertaken of the 16.5m long articulated HGV attached at **Appendix A**.
- The existing 2.5m wide shared footway/cycleway has been relocated to the east to accommodate the widening of the carriageway for the additional approach lane.

Figure 2 : Preliminary Mitigation Layout on A20 Eastbound Approach



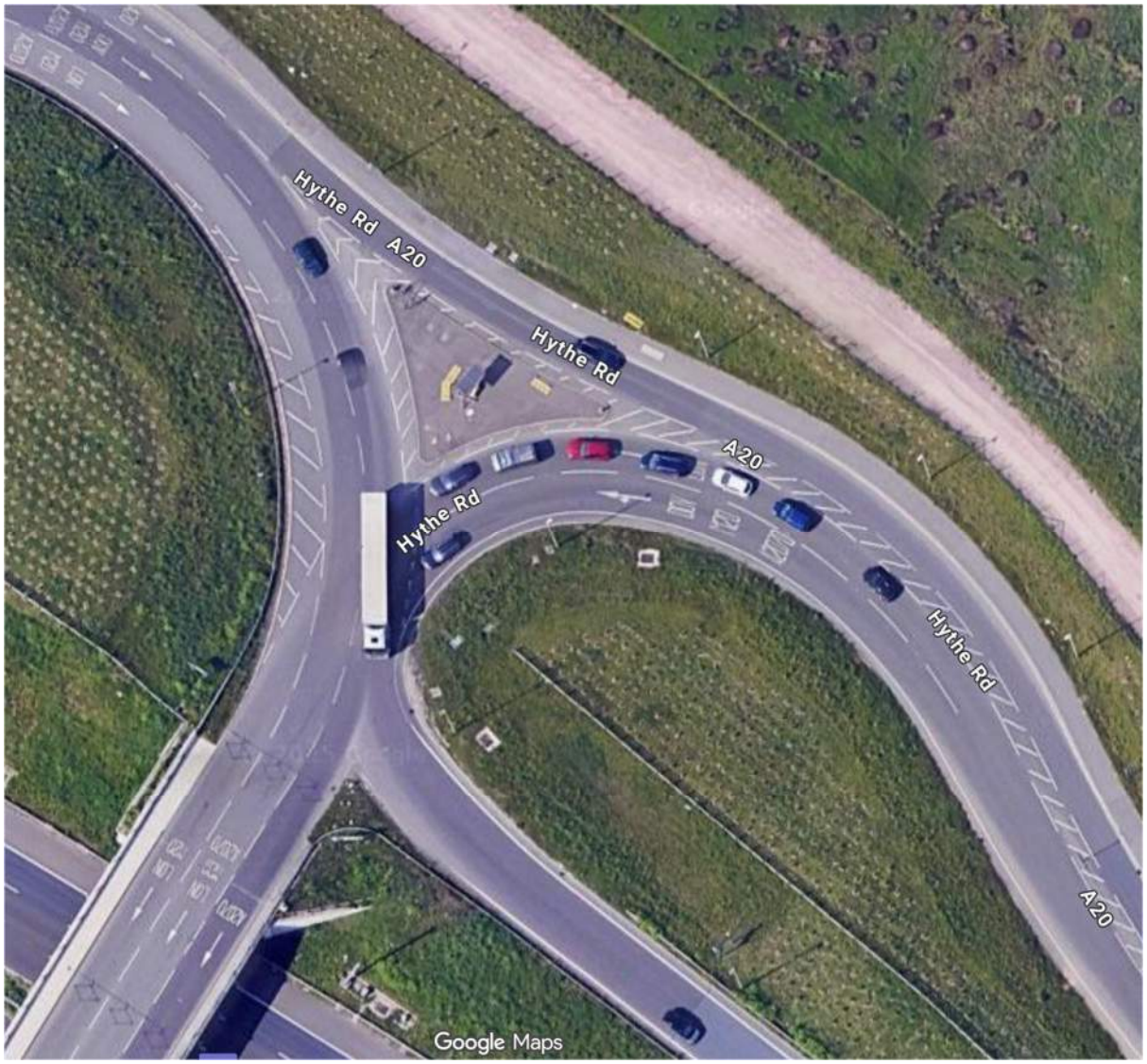
3.8. It is considered that this preliminary design has been revised appropriately to address the comments from KCC.

3.9. The modelling of this revised A20 eastbound approach within the existing M20 Junction 10a LinSig model is discussed in Section 4 of this TN.

A20 Westbound Approach

3.10. This approach currently comprises one lane which flares out to two 60m long lanes behind the give-way line, as shown in the satellite photo extract from Google Maps within Figure 3 below.

Figure 3 : Existing Layout on A20 westbound approach



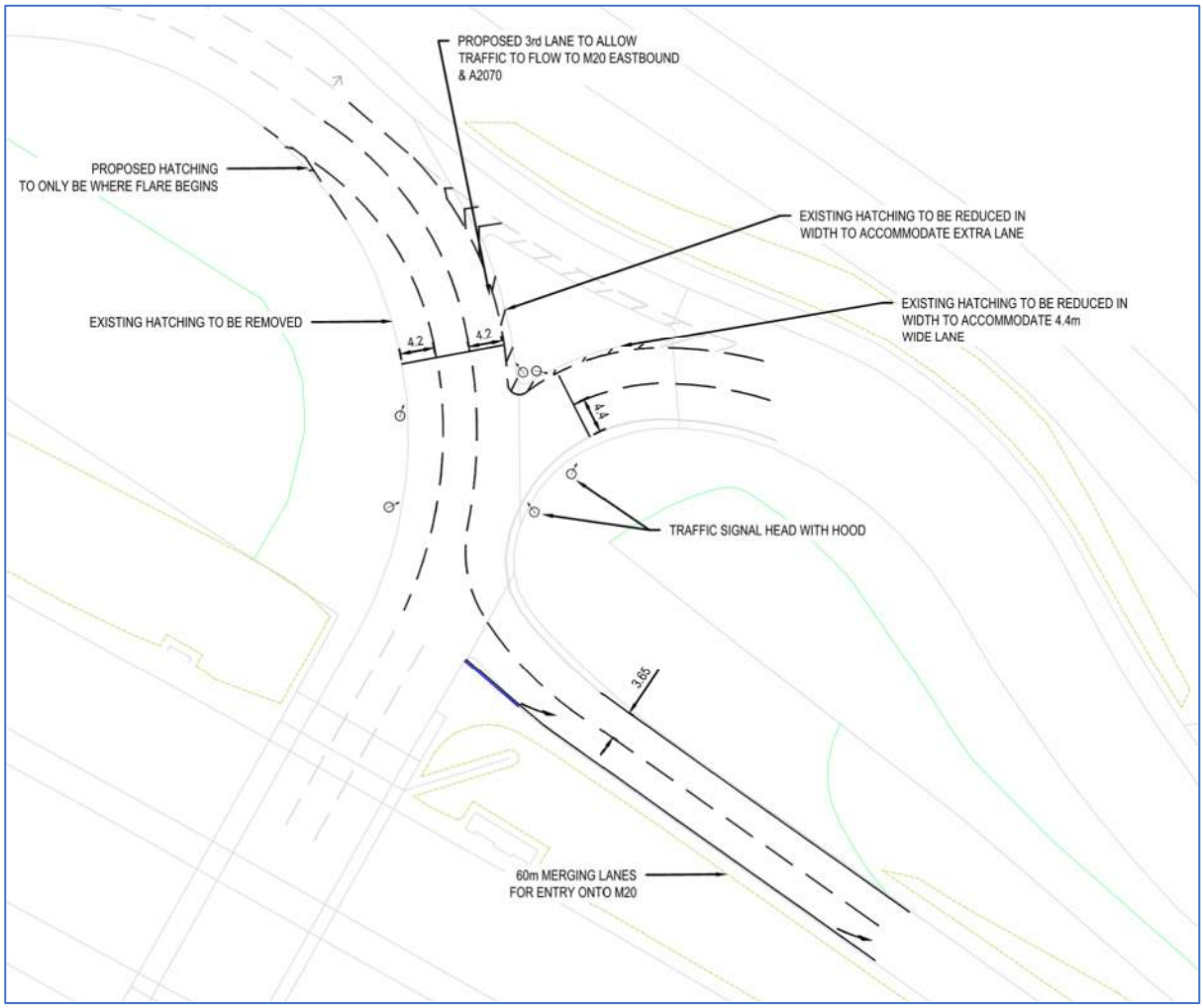
3.11. The provision of traffic signal control on the A20 westbound approach and on the corresponding roundabout circulatory carriageway is considered the preferred option at this intersection given the larger amount of stacking space on the circulatory carriageway to store queueing vehicles behind the stopline, and also as the existing two lane section of the A20 westbound approach is sufficiently long and cannot practically be widened for an extended section.

3.12. A preliminary option layout of this potential scheme has been designed and an extract of the drawing shown below in Figure 4. The full drawing is shown at **Appendix A**. This includes the following key elements:

- Stoplines on both the A20 westbound approach and corresponding circulatory carriageway, with the circulatory approach widened within the existing carriageway to three approach lanes for approximately 15m. The hatching on the carriageway alongside the roundabout centre island has been removed to accommodate the third approach lane.

- The marking of two lanes on the M20 eastbound on-slip exit for approximately 60m prior to a merge, as in the same format as on the M20 westbound on-slip exit for consistency. This element may require some minor realignment of the kerb on the southern side of the on-slip at the immediate exit location from the roundabout. This measure would encourage two lanes of vehicles to pass around the circulatory and exit to the M20 eastbound on-slip, thereby providing an improvement to the current arrangement which only allows for one lane of traffic exiting to the M20 eastbound on-slip.
- A swept path analysis has been undertaken of the vehicle movements using the revised stretches of carriageway at the intersection to assess whether a 16.5m long articulated HGV can manoeuvre without straying into or overhanging neighbouring lanes or conflicting with the kerb. This analysis showed that this type of HGV could make all manoeuvres appropriately and the plans of this are shown within **Appendix A**.

Figure 4: Preliminary Mitigation Layout on A20 Westbound Approach, Circulatory & M20 Eastbound On-Slip



3.13. The modelling of this revised layout within the existing M20 Junction 10a LinSig model is discussed below in Section 4 of this TN.

4. Modelling of Preliminary Mitigation Layout

4.1. The LinSig model of the existing junction layout has been revised to reflect the proposed changes to the layout to improve the operation of the A20 eastbound and A20 westbound approaches.

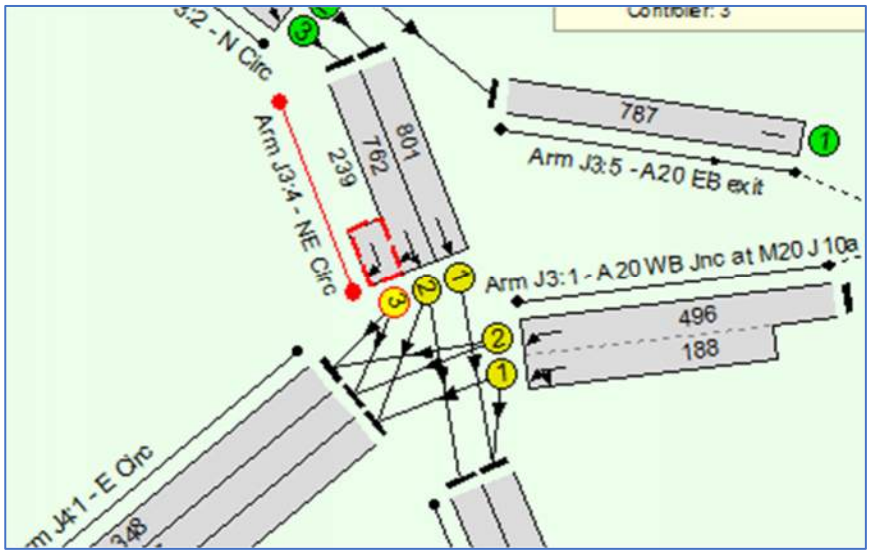
4.2. For the proposed change to the A20 eastbound approach, a 40m long nearside flare lane has been added (J2:1/1). This lane has been designated within the model for traffic headed to the A20 eastern arm given the existing markings on lane one of the circulatory carriageway, which routes traffic to the A20 eastern arm. Based on this, Lane 2 (J2:1/2) of the eastbound approach has been designated for traffic headed to the M20 eastbound on-slip, the A2070 link road and U-turning traffic.

4.3. For the proposed changes to the A20 westbound approach and the corresponding circulatory carriageway, the junction node (J3) has been converted to signal-controlled operation. The lanes on both the A20 eastbound and circulatory approaches have subsequently been changed from give-way lanes to signal-controlled lanes and each assigned a traffic signal phase.

4.4. Lane widths of 4.4m have been applied to both lanes on the A20 westbound approach, which provides sufficient width for HGV manoeuvres entering the circulatory carriageway. Lane widths of 4.2m have been applied to both lanes of the adjoining circulatory carriageway, which again provides sufficient width for HGVs to stay in lane and make the necessary manoeuvres.

4.5. The lane traffic assignment applied within the model is shown below in Figure 5.

Figure 5: Lane Assignment at A20 Westbound Node of M20 J10a



4.6. The lane assignment adopted allows two lanes of traffic (Lanes 1 and 2) on the circulatory carriageway (J3:4/1 and 4/2) to pass through to the M20 eastbound on-slip, therefore sharing the demand of this large movement over two lanes. Traffic in Lane 2 of the circulatory carriageway would also be able to continue around the roundabout to lane J4:1/1, while traffic in Lane 3 would be guided around the circulatory carriageway to lanes J4:1/2 and 1/3. This arrangement was found to be the most optimal lane designation option tested.

4.7. Queue limit values of 10 PCUs and associated DoS and delay weightings were placed on the circulatory carriageway lanes J3:4/1 and 4/2 to restrict queueing on these internal links to the maximum storage of PCUs possible before blocking the upstream node by providing sufficient green signal time when the model is optimised.

4.8. The Cycle Time Optimisation tool within LinSig has been used to seek the most optimal cycle time at the junction in the 2036 future year scenarios with its revised layout and operation in place and this calculated a signal time of between 50 and 60 seconds (s) to be optimal for both the AM and PM peak

hours. The existing cycle times at the junction of 46s in the AM peak and 38s in the PM peak were adjusted to 50s in both peak hours as this time was considered to be close to the existing junction cycle times.

4.9. KCC provided an initial comment on 7th November 2025 regarding the modelled cycle time of 50s, stating the following:

'Phase A (roundabout) gets the majority of the time (roughly 60%) and Phase B (A20) gets a minimum. About a quarter of the cycle time is "wasted" on interstage times.

I have tried to increase the cycle time, and upping it to 80 seconds means Phase A gets 58 seconds of green, and Phase B gets 10 seconds. Might be worth having a little more flexibility for Phase B.

Does making any amendments above change the modelling results at all especially on the A20 arms?'

4.10. Further to this, the cycle time in the 2036 future year flow scenarios with the revised layout included was reviewed within LinSig and an 80 second cycle time tested. The model was optimised using the 'Optimisation to PRC' tool within LinSig, which calculates the most optimal operation of the scenario at the junction based on available capacity. It is acknowledged that a longer cycle time can produce a more efficient flow of traffic at the junction, although the modelled results of this test indicated for the worst-case 2036 Base + Sevington 4 IBF scenario that the queueing and delays on the A20 westbound and corresponding circulatory approaches would be notably longer than with the 50s cycle time in place. This aligns to the result of the test using the Cycle Optimisation tool, which suggested a shorter cycle time of around 50 to 60 seconds would be optimal, as referred to above in para 4.8.

4.11. Therefore, cycle times ranging between 50s and 60s have been tested for both the AM and PM peak scenarios to assess the optimal times with this range, with the model run using the Optimisation to PRC tool within LinSig. It was established that 50s is the optimal cycle time for all scenarios, apart from in the 2036 Base + Sevington 4 IBF PM peak scenario where 60s is optimal.

4.12. The LinSig results of the 2036 Base with Sevington IBF and 2036 Base with Sevington 4 IBF scenarios inclusive of the revised layout assessment are summarised in Table 3 below and the full outputs are shown in **Appendix B**.

Table 3: 2036 Mitigation Layout Scenario LinSig Results for M20 Junction 10a

LinSig Lane ID	Junction Approach Lane	2036 AM Peak			2036 PM Peak		
		DoS %	MMQ (PCUs)	Delay (s/PCU)	DoS %	MMQ (PCUs)	Delay (s/PCU)
2036 Base with Sevington IBF							
1/1+1/2	M20 EB Off-Slip Ahead Left	76.4%	4.6	44.0	57.3%	4.2	23.3
1/3	M20 EB Off-Slip Ahead	57.1%	2.9	32.7	54.3%	4.1	22.5
2/1	W Circ Ahead Left	89.2%	15.5	19.0	92.8%	15.1	30.9
2/2	W Circ Ahead	53.7%	6.9	9.5	70.1%	10.3	17.6
1/1	**A20 EB Ahead**	**82.5%**	**4.9**	**11.5**	**95.7%**	**13.0**	**48.6**
1/2+1/1	**A20 WB Jnc at M20 J10a Left Ahead**	**90.5%**	**12.0**	**35.2**	**93.3%**	**12.5**	**47.2**
4/1	**NE Circ Ahead**	**68.9%**	**8.0**	**12.4**	**72.3%**	**5.2**	**9.1**
4/2+4/3	**NE Circ Ahead Right**	**76.7%**	**9.8**	**18.0**	**79.2%**	**8.4**	**13.6**
1/1	E Circ Right	60.2%	5.0	21.7	38.9%	4.9	20.4
1/2	E Circ Right	67.6%	6.2	25.3	39.9%	5.4	20.3
1/3	E Circ Right	63.6%	5.8	14.1	39.6%	5.1	29.2
2/2+2/1	M20 WB Off-Slip Ahead	58.7%	6.4	10.3	71.2%	7.8	18.0

LinSig Lane ID	Junction Approach Lane	2036 AM Peak			2036 PM Peak		
		DoS %	MMQ (PCUs)	Delay (s/PCU)	DoS %	MMQ (PCUs)	Delay (s/PCU)
2/3	M20 WB Off-Slip Ahead	25.8%	2.2	9.0	14.7%	1.1	13.8
1/2+1/1	A2070 EB Ahead Left	79.6%	6.3	10.2	73.1%	4.5	7.3
1/3	A2070 EB Ahead	91.3%	11.6	27.2	88.9%	10.1	20.6
	PRC % =		-1.5%			-6.4%	
	Cycle Time =		50s			50s	
2036 Base with Sevington 4 IBF							
1/1+1/2	M20 EB Off-Slip Ahead Left	76.4%	4.6	44.0	64.2%	5.4	30.5
1/3	M20 EB Off-Slip Ahead	64.1%	3.4	35.4	66.6%	5.8	31.1
2/1	W Circ Ahead Left	90.6%	15.6	20.2	84.1%	13.0	19.3
2/2	W Circ Ahead	54.3%	6.9	9.7	64.0%	11.5	16.0
1/1	**A20 EB Ahead**	**84.1%**	**5.1**	**12.3**	**99.2%**	**18.3**	**72.7**
1/2+1/1	**A20 WB Jnc at M20 J10a Left Ahead**	**88.8%**	**11.0**	**32.3**	**93.9%**	**14.0**	**52.8**
4/1	**NE Circ Ahead**	**71.1%**	**8.1**	**12.1**	**69.4%**	**4.2**	**9.0**
4/2+4/3	**NE Circ Ahead Right**	**77.9%**	**8.7**	**17.1**	**76.2%**	**9.3**	**11.7**
1/1	E Circ Right	53.1%	4.2	15.5	62.4%	6.6	39.3
1/2	E Circ Right	67.0%	6.0	24.4	63.9%	7.3	36.9
1/3	E Circ Right	62.1%	5.9	13.6	62.0%	6.6	49.1
2/2+2/1	M20 WB Off-Slip Ahead	60.0%	6.9	11.1	54.4%	6.1	10.2
2/3	M20 WB Off-Slip Ahead	26.8%	2.3	9.7	9.6%	0.9	8.3
1/2+1/1	A2070 EB Ahead Left	82.0%	6.9	11.4	74.9%	5.9	8.0
1/3	A2070 EB Ahead	92.4%	12.3	29.8	90.7%	12.7	24.4
	PRC % =		-2.6%			-10.2%	
	Cycle Time =		50s			60s	

4.13. The modelling results indicate that the revised junction layout would operate above practical capacity but below actual capacity and with minimal to moderate queues on all approach lanes in both the AM and PM peak hours of the 2036 Base with Sevington IBF and 'worst-case' sensitivity test 2036 Base with Sevington 4 IBF scenarios.

4.14. With regard to the A20 eastbound approach, the results indicate that in the 2036 Base with Sevington 4 IBF scenario this would operate within practical capacity in the AM peak with a DoS of 84.1% and associated MMQ of 5.1 PCUs and delay of 12.3s/PCU, which is considered minimal. In the PM peak, the DoS is indicated to be above practical capacity but below actual capacity with a DoS of 99.2% with an associated MMQ of 18.3 PCUs and delay of 72.7s/PCU, which is considered moderate and would not extend back to other junctions and therefore considered reasonable.

4.15. For the A20 westbound approach, the results indicate that in the 2036 Base with Sevington 4 IBF scenario this would operate within practical capacity in the AM peak with a DoS of 88.8% and associated MMQ of 11 PCUs and delay of 32.3s/PCU, which is considered minimal to moderate. In the PM peak, the DoS is indicated to be 93.9% with an associated MMQ of 14.0 PCUs and delay of 52.8s/PCU, which is considered moderate and would not extend back to other junctions and therefore considered reasonable.

4.16. In terms of the circulatory carriageway approach to the proposed signalised node, the results indicate that the approach lanes would operate within practical capacity in the AM peak hour, with a maximum DoS of 67.0% and associated MMQ of 6.0 PCUs and delay of 24.4s/PCU. In the PM peak, a max DoS of 63.9% is indicated, which is within practical capacity, with an associated max MMQ of 7.3 PCUs and delay of 49.1s/PCU, and this queue being accommodated by the available stacking space.

4.17. A specific comparison between the modelled operation of the A20 eastbound and A20 westbound approaches in the existing layout and the proposed revised layout in the 'worst-case' sensitivity test 2036 Base + Sevington 4 IBF scenario has been shown below in Table 4 for the AM Peak scenarios and Table 5 for the PM peak scenarios. This is to clearly determine the estimated impact of providing the proposed layout changes from the 2036 Base and 2036 Base + Sevington 4 scenarios in the existing layout.

Table 4: 2036 AM Peak Existing Layout vs Proposed Mitigation Layout Operation on A20 Approaches

Junction Approach Lane	2036 Base AM Peak (Existing Layout)			2036 Base + Sevington 4 AM Peak (Existing Layout)			2036 Base + Sevington 4 – with Proposed Mitigation AM Peak		
	DoS %	MMQ (PCUs)	Delay (s/PCU)	DoS %	MMQ (PCUs)	Delay (s/PCU)	DoS %	MMQ (PCUs)	Delay (s/PCU)
A20 eastbound	130.0%	107.1	454.4	155.5%	152.9	692.3	84.1%	5.1	12.3
A20 westbound	106.0%	48.7	138.9	126.5%	106.1	405.0	88.8%	11.0	32.3

4.18. In the 2036 AM peak, the results indicate that the mitigation measures included would significantly improve the operation of both the A20 eastbound and A20 westbound approaches, with the queue lengths substantially shorter than in the 2036 Base + Sevington 4 IBF and 2036 Base scenarios for the existing layout, therefore providing nil-detriment impact for the worst-case Sevington 4 development traffic.

Table 5: 2036 PM Peak Existing Layout vs Proposed Mitigation Layout Operation on A20 Approaches

Junction Approach Lane	2036 Base PM Peak (Existing Layout)			2036 Base + Sevington 4 PM Peak (Existing Layout)			2036 Base + Sevington 4 – with Proposed Mitigation PM Peak		
	DoS %	MMQ (PCUs)	Delay (s/PCU)	DoS %	MMQ (PCUs)	Delay (s/PCU)	DoS %	MMQ (PCUs)	Delay (s/PCU)
A20 eastbound	123.7%	81.4	378.4	153.3%	132.3	668.9	99.2%	18.3	72.7
A20 westbound	94.6%	10.9	36.7	122.9%	62.6	276.2	93.9%	14.0	52.8

4.19. In the 2036 PM peak, the results indicate that the mitigation measures included would significantly improve the operation of the A20 eastbound approach, with the queue length substantially shorter than in the 2036 Base and the 2036 Base + Sevington 4 scenarios in the existing layout. It is also indicated that the A20 westbound approach would experience a significant reduction in queueing from the 2036 Base + Sevington 4 scenario from the existing layout, although a negligible increase in queueing is shown from the 2036 Base scenario with the 2036 Base + Sevington 4 development traffic included.

4.20. It is therefore considered that the mitigation measures proposed to the existing layout would provide substantial improvements to the operation of the A20 eastbound and A20 westbound approaches and to M20 Junction 10a in general. The revised layout would fully mitigate the impact of the modelled 'worst-case' sensitivity test Sevington 4 IBF traffic in the 2036 AM peak and in the 2036 PM peak, fully

mitigate the impact on the A20 eastbound approach and limit the residual impact to a negligible amount on the A20 westbound approach.

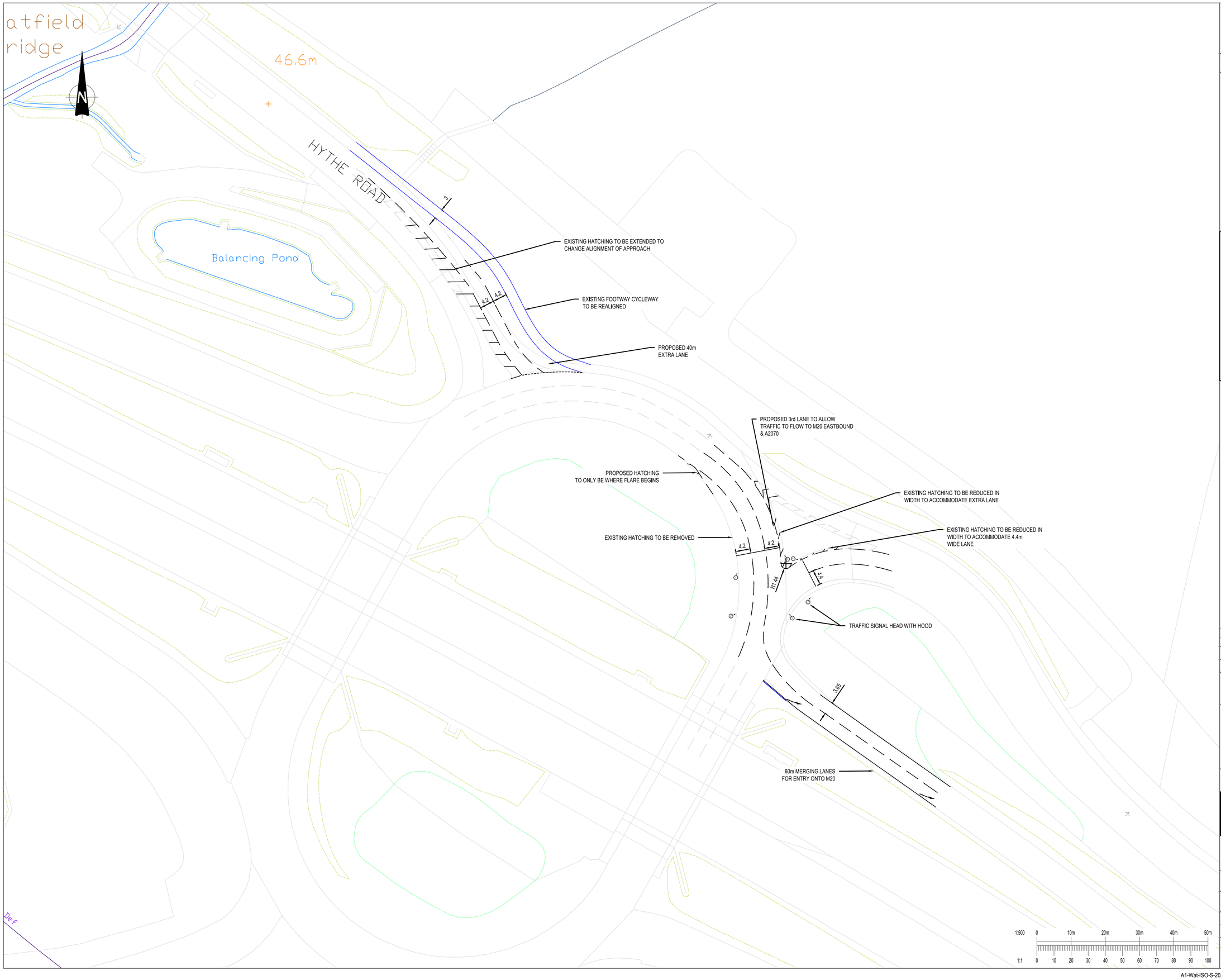
5. Summary & Conclusions

5.1. The proposed widening of the A20 eastbound approach and signalisation of the A20 westbound intersection within the preliminary layout design for M20 Junction 10a is considered to provide a workable solution to providing additional capacity and improved control of traffic at the junction.

5.2. The results of the modelling assessments undertaken clearly indicate that the proposed measures would provide a significant improvement in operation from the 2036 Base + Sevington 4 scenario using the existing layout, while also providing substantial improvements from the 2036 Base (without Sevington IBF) scenario conditions in all but one scenario, with only a negligible residual impact remaining from the Sevington 4 IBF traffic on the A20 westbound approach in the 2036 PM peak. This indicates that the mitigation measures would be highly beneficial for the A20 westbound and A20 eastbound approaches and M20 Junction 10a in general and would satisfactorily mitigate the likely impacts of the Proposed Development.

5.3. It is therefore considered that this proposed scheme is suitable for approval in principle, and subsequent implementation following detailed design and approvals.

APPENDIX A – PROPOSED SCHEME PRELIMINARY DRAWINGS & SWEPT PATH ANALYSIS



GENERAL NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEER'S, ARCHITECT'S OR OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
2. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
3. THE CONTRACTOR MUST ENSURE AND WILL BE HELD RESPONSIBLE FOR THE OVERALL STABILITY OF THE BUILDING/STRUCTURE/EXCAVATION AT ALL STAGES OF THE WORK.
4. ALL WORK BY THE CONTRACTOR MUST BE CARRIED OUT IN SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
5. ALL WORK IS TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENTS OF THE RELEVANT STATUTORY AUTHORITIES AND REGULATIONS.

KEY:

- EXISTING ROAD MARKINGS
- PROPOSED ROAD MARKINGS
- PROPOSED KERBING
- PROPOSED TRAFFIC SIGNAL HEADS

Rev	Date	Description	By	Chk
P02	10.11.25	ISSUED	SR	AB
P01	07.10.25	ISSUED	CW	AB

Amendments

Project
SEVINGTON INLAND BORDER FACILITY

Title
PRELIMINARY M20 JUNCTION 10a PROPOSED MITIGATION SCHEME

Client
HMRC & DEFRA

waterman
Pickfords Wharf Clink Street London SE1 9DG
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Work Stage	STAGE 2 Concept design — RIBA
Suitability	INFORMATION — S2
Designed By	CW
Director	AB
Waterman Ref	WIE20982
Drawn By	CW
Date	OCTOBER 2025
Scales @ A1	1:500

Project	Originator	Functional	Spatial	Form	Discipline	Number	Revision
20982	110-WAT	HGN	XX	DR	H	060103	P02

File Path: G:\Projects\WIE20982\110\01_Deliverables\01_WIP\DR\06\

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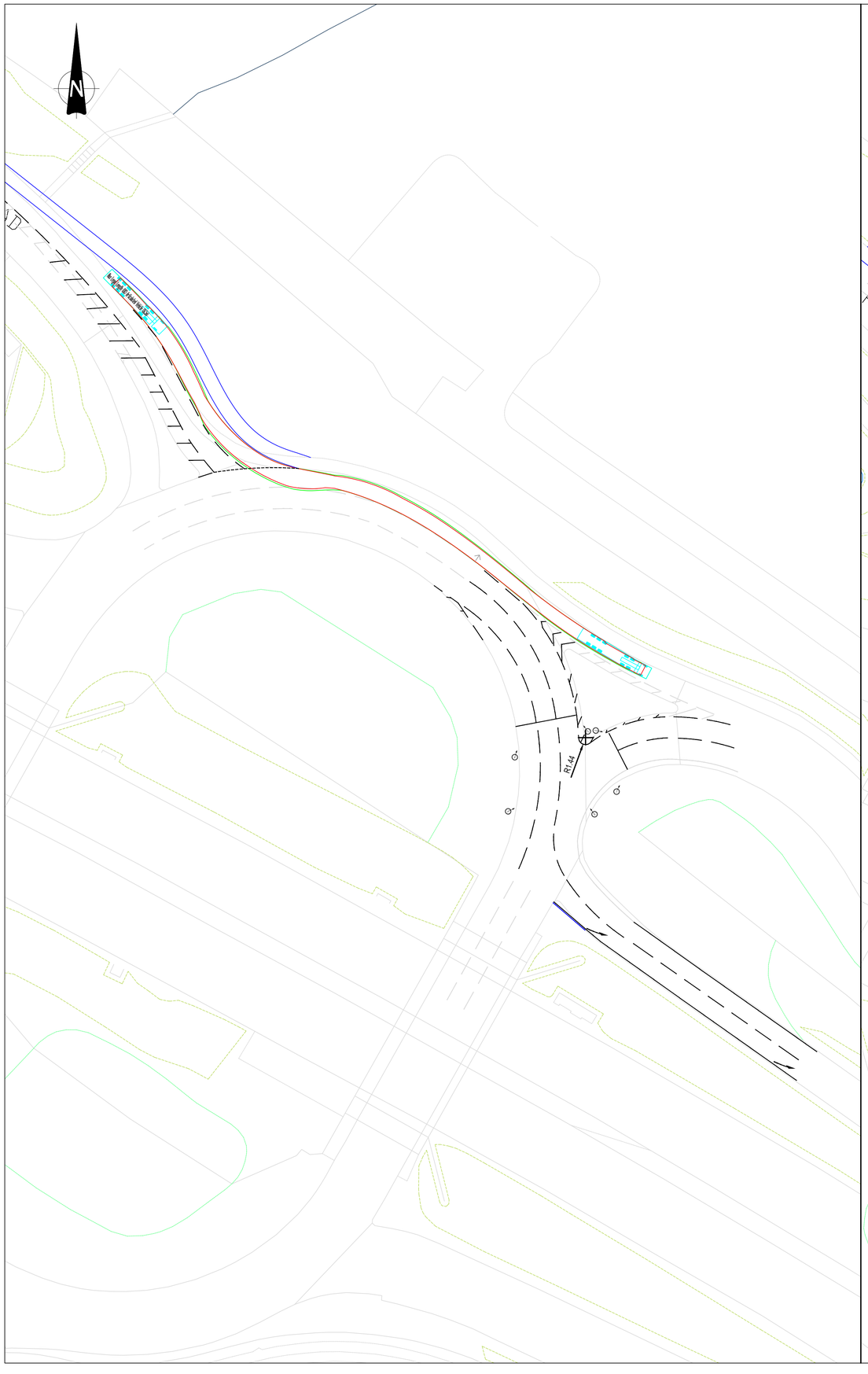

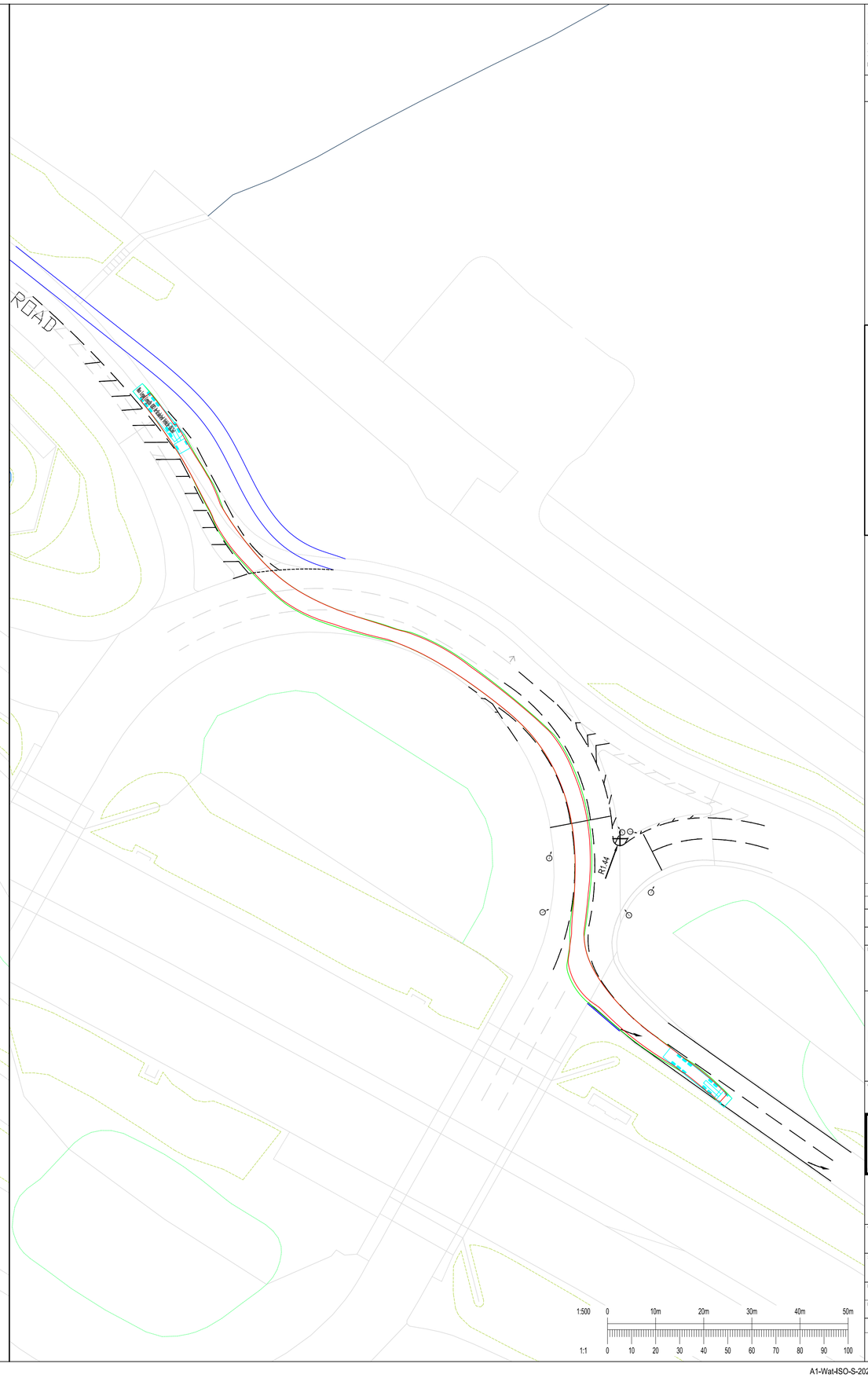

1:500 0 10m 20m 30m 40m 50m

1:1 0 10 20 30 40 50 60 70 80 90 100

Pickfords Wharf, Clink Street, London SE1 9DG t 020 7928 7888 f 03333 444 501

GENERAL NOTES

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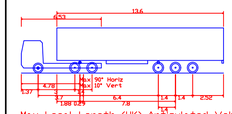

Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
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	Date	Description	By	Chk
P02	10.11.25	ISSUED	SR	AB
P01	07.10.25	ISSUED	CW	AB

Amendments

Project
SEVINGTON INLAND BORDER FACILITY

Title
PRELIMINARY M20 JUNCTION 10a PROPOSED MITIGATION SCHEME SWEPT PATH ANALYSIS

Client
HMRC & DEFRA

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Work Stage	STAGE 2 Concept design		RIBA
Suitability	INFORMATION		S2
Designed By	CW	Director AB	Waterman Ref WIE20982
Drawn By	CW	Date OCTOBER 2025	Scales @ A1 1:500

Project | Originator | Functional | Spatial | Form | Discipline | Number: 20982110-WAT-HGN-XX-DR-H-060102

Revision: P02

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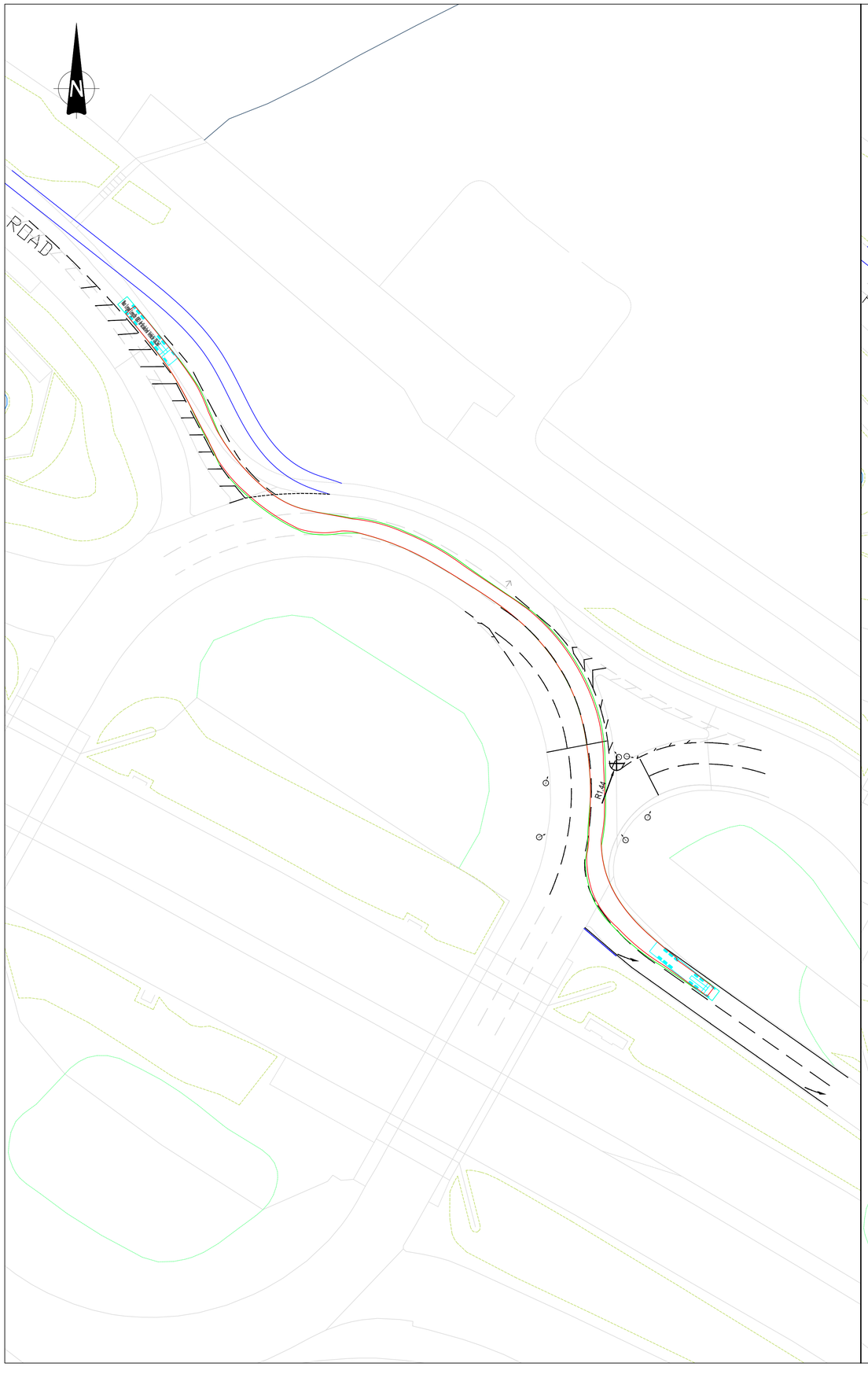

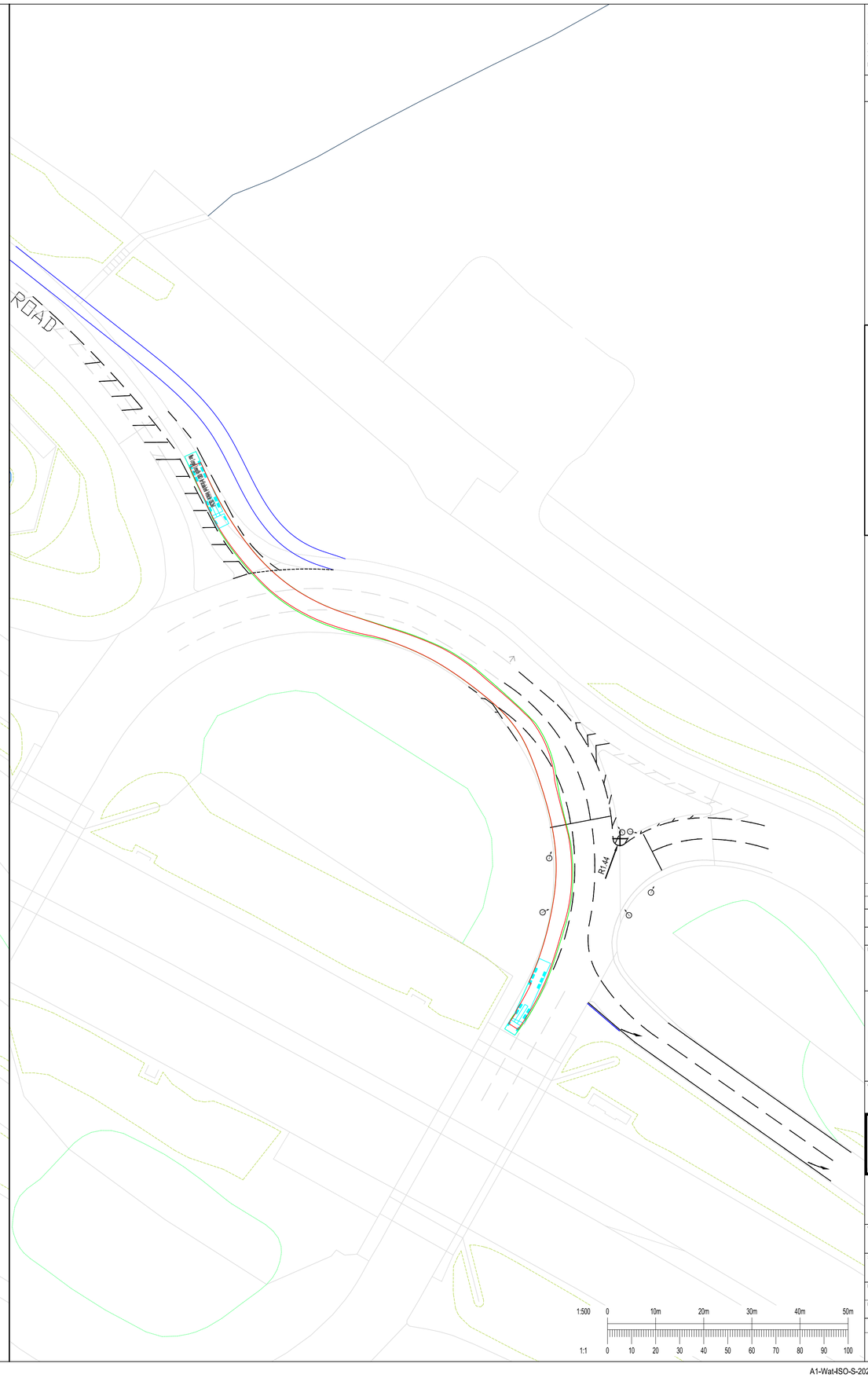

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GENERAL NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEER'S, ARCHITECT'S OR OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
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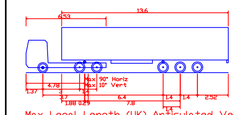
4. ALL WORK BY THE CONTRACTOR MUST BE CARRIED OUT IN SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
5. ALL WORK IS TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENTS OF THE RELEVANT STATUTORY AUTHORITIES AND REGULATIONS.



Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.661m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.10s
Kerb to Kerb Turning Radius	6.530m

Rev	Date	Description	By	Chk
P02	10.11.25	ISSUED	SR	AB
P01	07.10.25	ISSUED	CW	AB

Amendments

Project

SEVINGTON INLAND BORDER FACILITY

Title

PRELIMINARY M20 JUNCTION 10a PROPOSED MITIGATION SCHEME SWEPT PATH ANALYSIS

Client

HMRC & DEFRA

waterman

Pickfords Wharf Clink Street London SE1 9DG
t 020 7928 7888
mail@watermangroup.com www.watermangroup.com

Work Stage			STAGE 2 Concept design — RIBA
Suitability			INFORMATION — S2
Designed By	CW	Director AB	Waterman Ref WIE20982
Drawn By	CW	Date OCTOBER 2025	Scales @ A1 1:500

Project	Originator	Functional	Spatial	Form	Discipline	Number	Revision
20982110	WAT	HGN	XX	DR	H	060103	P02

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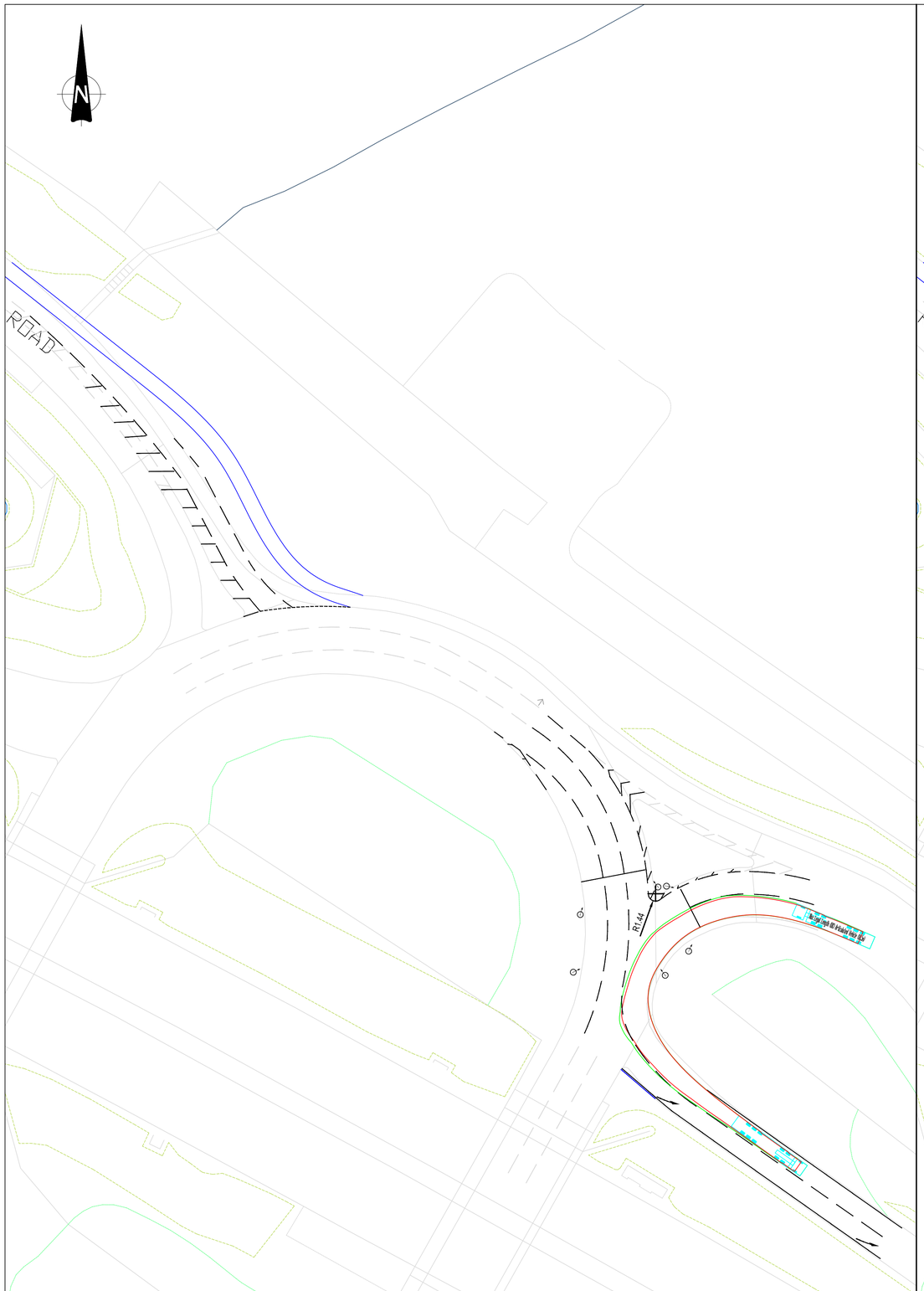

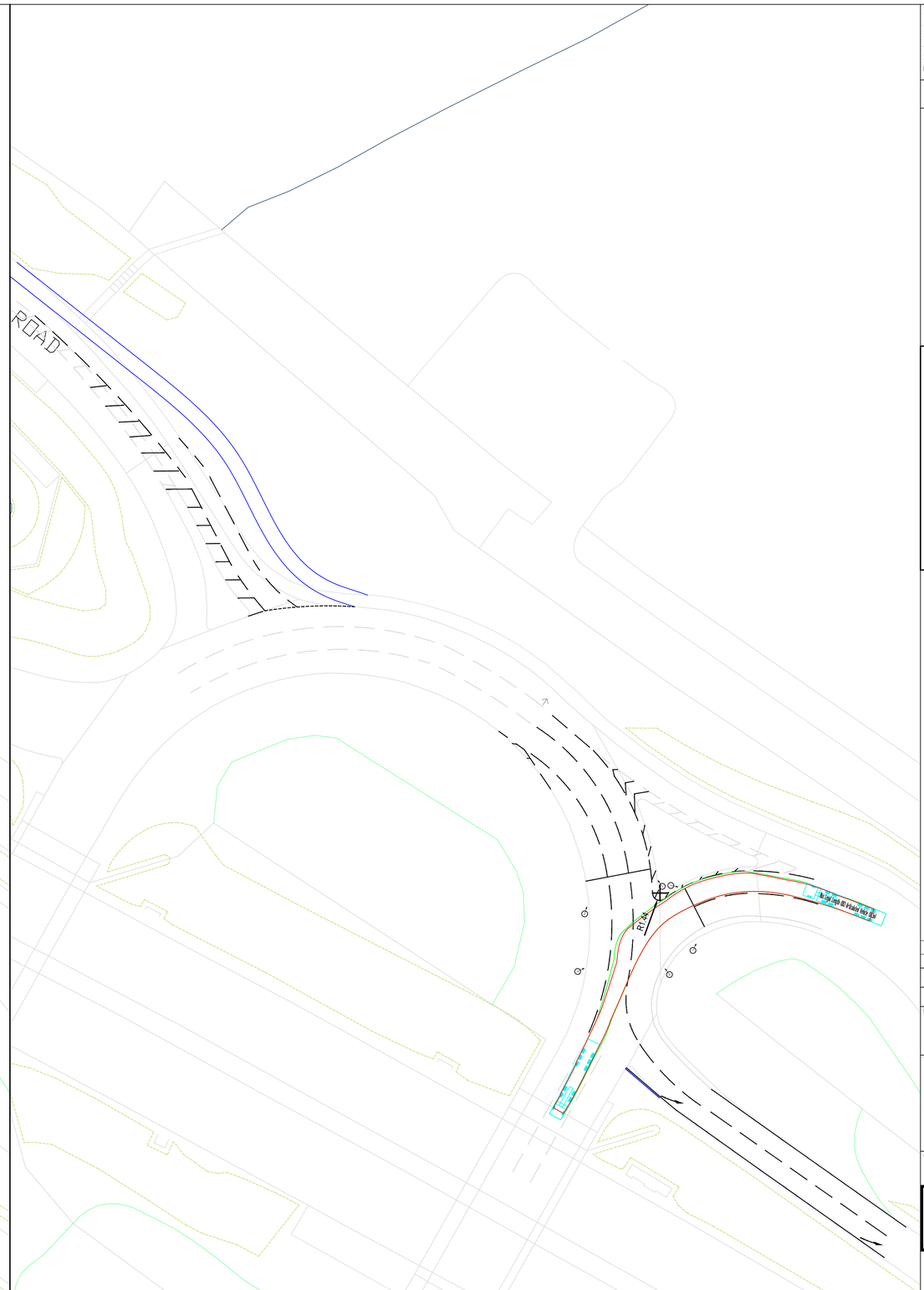

Pickfords Wharf, Clink Street, London SE1 9DG t 020 7928 7888 f 03333 444 501

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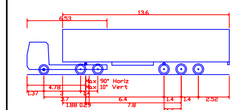

Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.661m
Min Body Ground Clearance	0.411m
Max Track Width	2.590m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

Rev.	Date	Description	By	Chk
P02	10.11.25	ISSUED	SR	AB
P01	07.10.25	ISSUED	CW	AB

Amendments

Project
SEVINGTON INLAND BORDER FACILITY

Title
PRELIMINARY M20 JUNCTION 10a PROPOSED MITIGATION SCHEME SWEPT PATH ANALYSIS

Client
HMRC & DEFRA

Pickfords Wharf Clink Street London SE1 9DG
t 020 7928 7888
mail@watermangroup.com www.watermangroup.com

Work Stage: STAGE 2 Concept design — RIBA
Suitability: INFORMATION — S2

Designed By	Director	Waterman Ref
CW	AB	WIE20982
Drawn By	**Date**	**Scales @ A1**
CW	OCTOBER 2025	1:500

Project | Originator | Functional | Spatial | Form | Discipline | Number: 20982110-WAT-HGN-XX-DR-H-060104

Revision: P02

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File Path: G:\Projects\WIE20982\110\01_Deliverables\01_WIP\DR\060

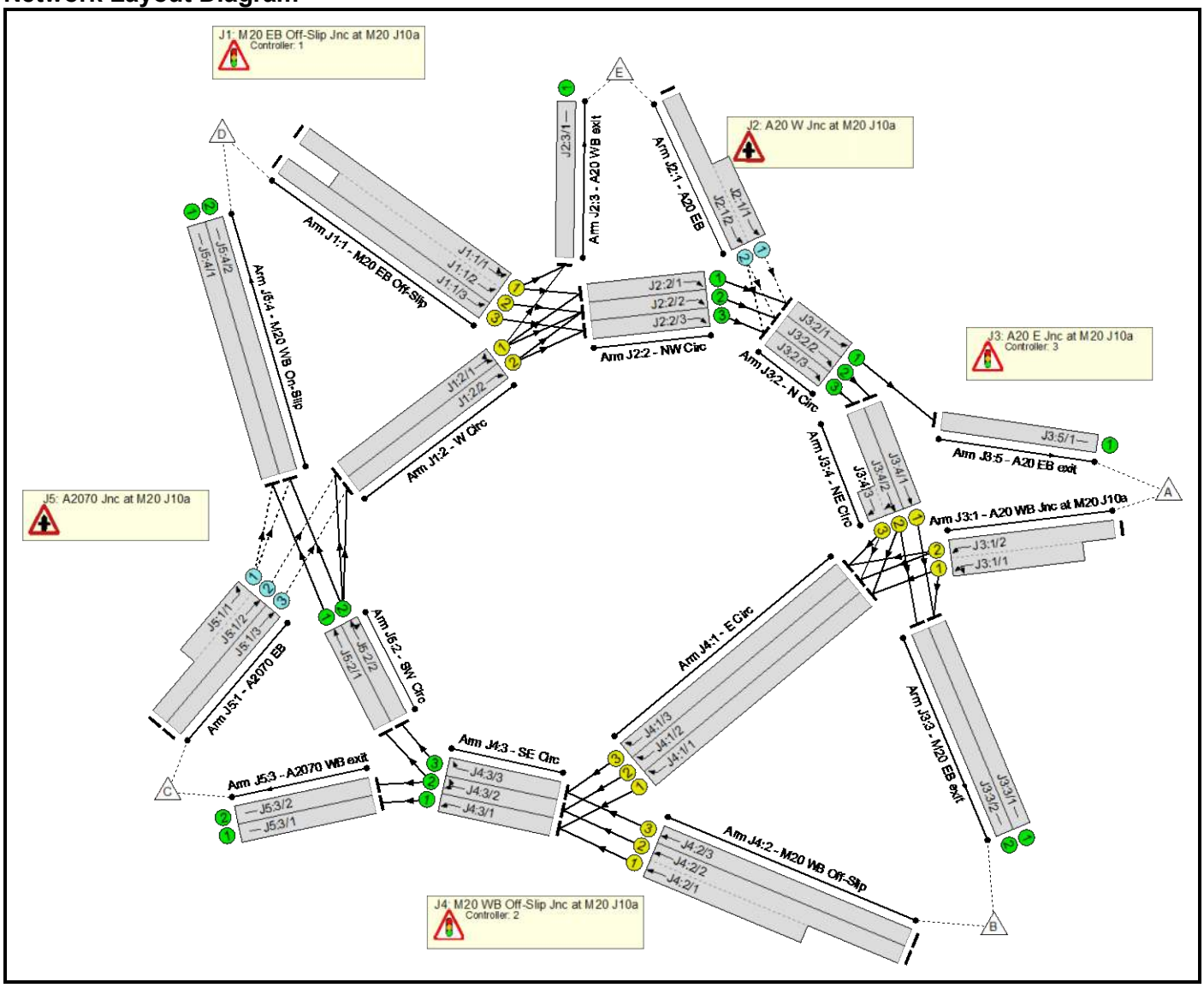
APPENDIX B – LINSIG JUNCTION MODELLING OUTPUTS

Detailed Input Data And Results

User and Project Details

Project:	**WIE20982 Sevington IBF**
Title:	**J7) M20 J10a**
Location:	
Design Layout Ref:	Proposed Mitigation Layout
Date Completed:	November 2025
Model Purpose:	For KCC request for junction improvements
Additional detail:	
File name:	J7) M20 J10a +A20 EB widened +A20 WB Sigs v4 (Nov 2025) Final.lsg3x
Author:	CSMS4
Company:	WIE
Address:	
Linsig Version:	3, 3, 1, 0

Network Layout Diagram



Scenarios

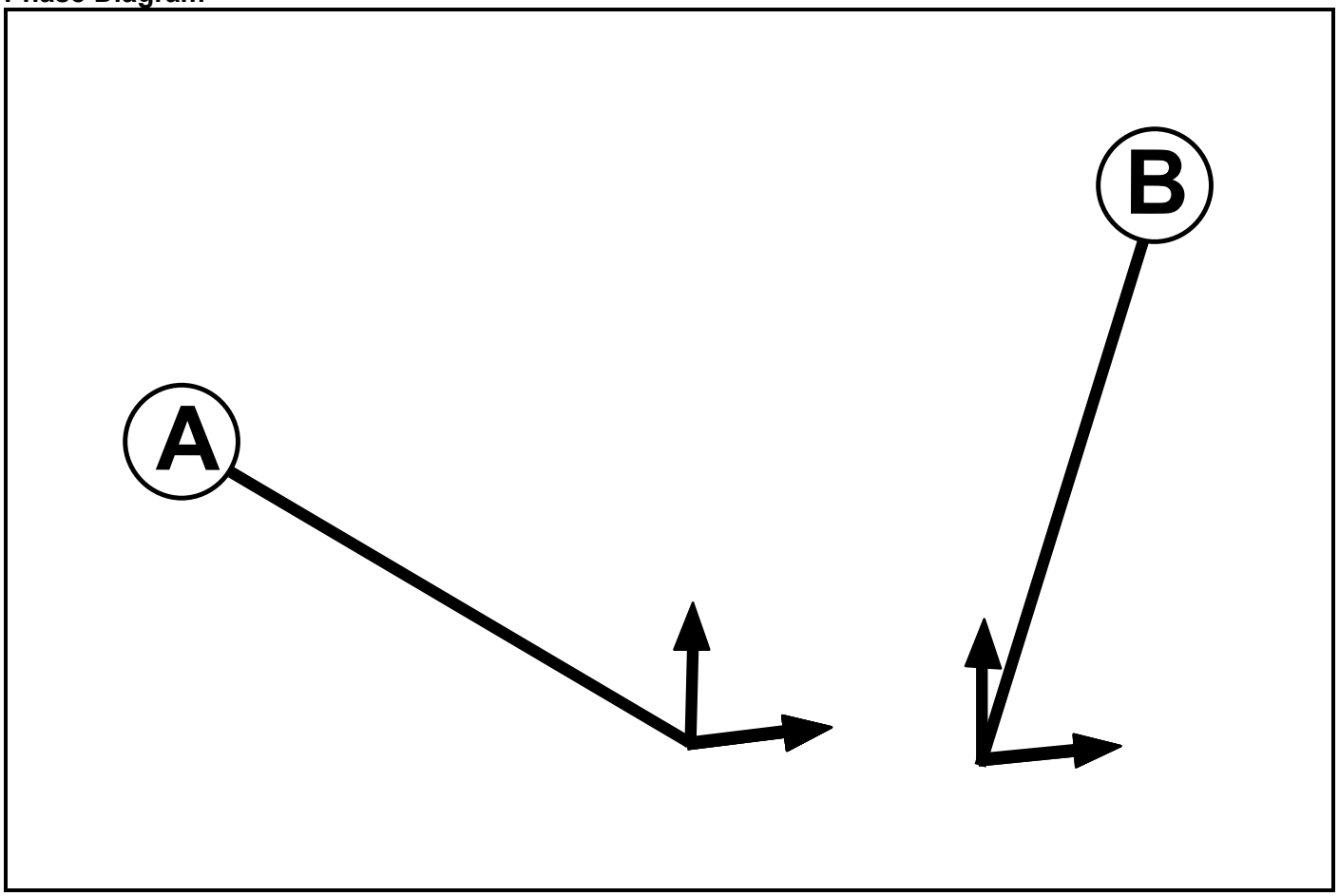
Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2026 Base+Sev AM Peak	2026 Base+Sev AM Peak	Network Control Plan 1	07:45 - 08:45	50	20.0	25.19
2	2026 Base+Sev PM Peak	2026 Base+Sev PM Peak	Network Control Plan 1	16:30 - 17:30	50	28.7	31.41
3	2036 Base+Sev AM Peak	2036 Base+Sev AM Peak	Network Control Plan 1	07:45 - 08:45	50	-1.5	46.67
4	2036 Base+Sev PM Peak	2036 Base+Sev PM Peak	Network Control Plan 1	16:30 - 17:30	50	-6.4	56.84
5	2036 Base+Sev 4 AM Peak	2036 Base+Sev 4 AM Peak	Network Control Plan 1	07:45 - 08:45	50	-2.6	47.61
6	2036 Base+Sev 4 PM Peak	2036 Base+Sev 4 PM Peak	Network Control Plan 1	16:30 - 17:30	60	-10.2	64.47

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	2	2	M20 EB Off-Slip Jnc at M20 J10a A20 W Jnc at M20 J10a A2070 Jnc at M20 J10a	
C2	Gen		Stage Stream 1	2	2	M20 WB Off-Slip Jnc at M20 J10a	
C3	Gen		Stage Stream 1	2	2	A20 E Jnc at M20 J10a	

Controller :C1

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7

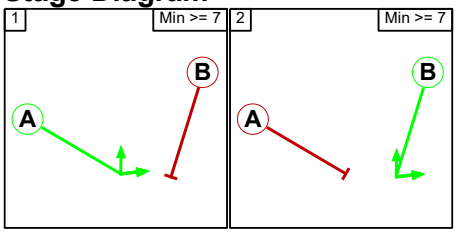
Phase Intergreens Matrix

Terminating Phase	Starting Phase		
		A	B
	A		5
	B	7	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



Phase Delays

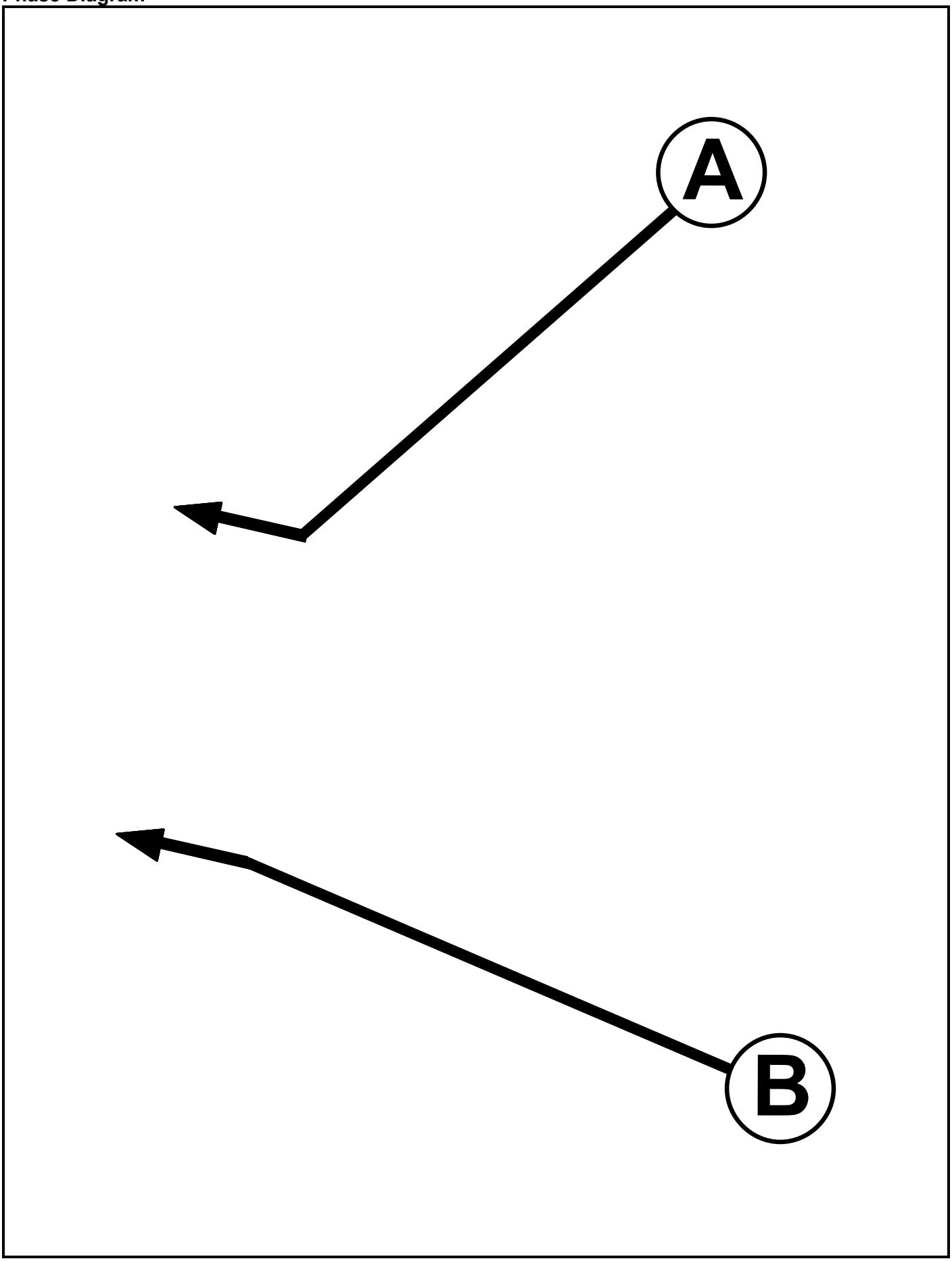
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		5
	2	7	

Controller :C2

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7

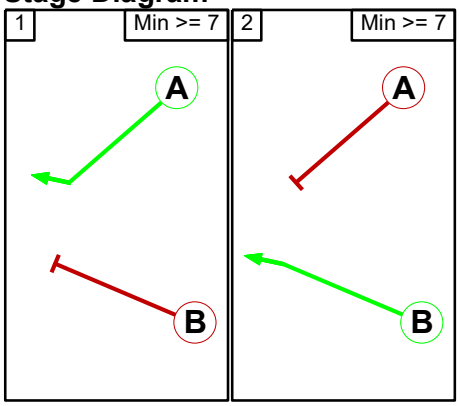
Phase Intergreens Matrix

	Starting Phase		
Terminating Phase		A	B
	A		5
	B	7	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



Phase Delays

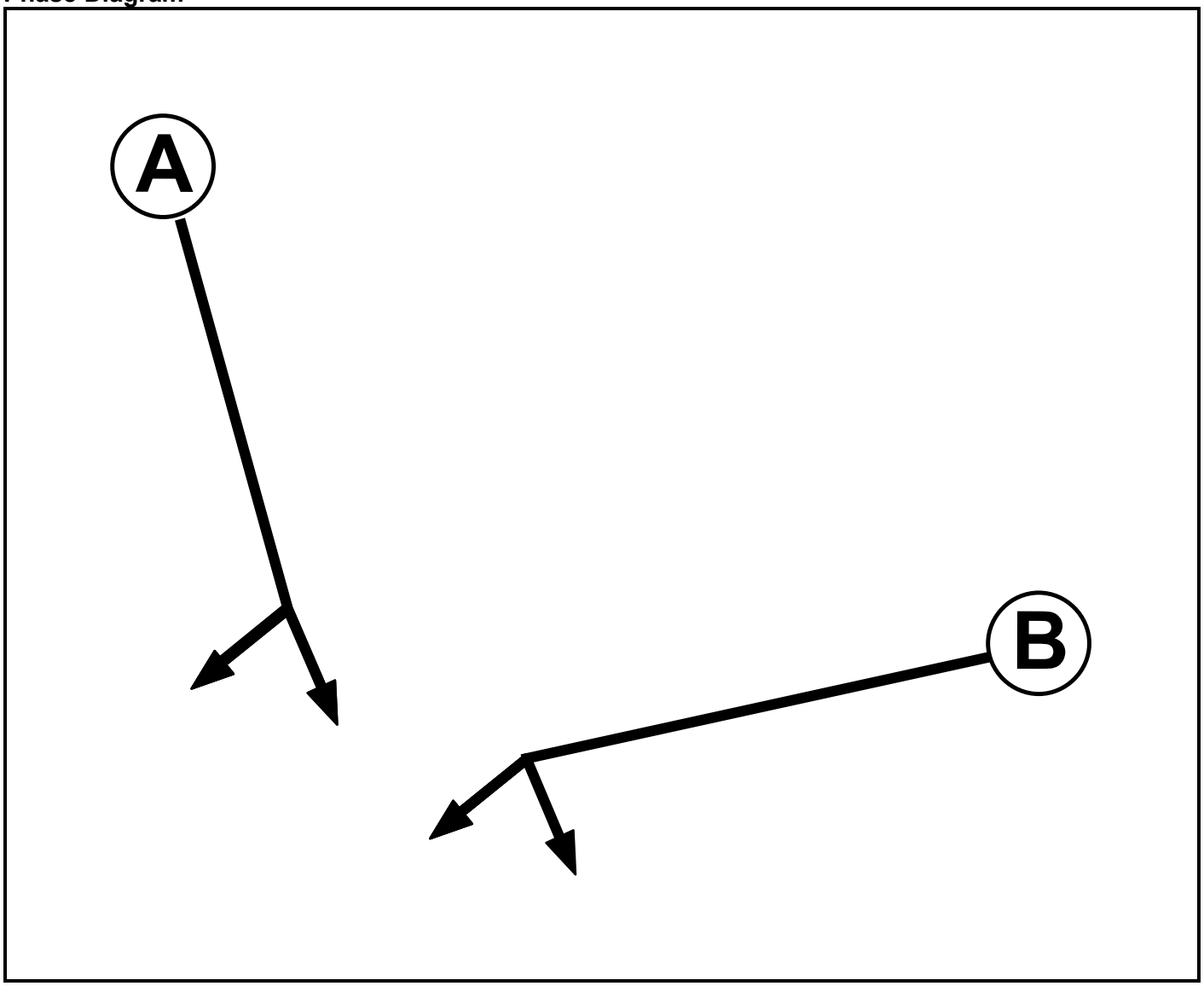
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

	To Stage		
From Stage		1	2
	1		5
	2	7	

Controller :C3

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7

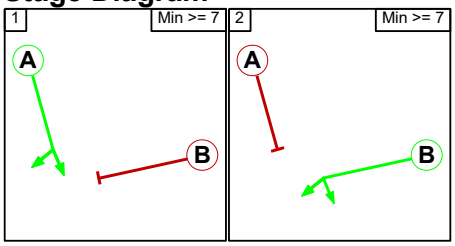
Phase Intergreens Matrix

Terminating Phase	Starting Phase		
		A	B
	A		5
	B	7	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		5
	2	7	

Lane Input Data

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (M20 EB Off-Slip)	U	B	2	3	60.0	Geom	-	4.34	0.00	Y	Arm J2:2 Ahead	20.98
											Arm J2:3 Left	26.16
J1:1/2 (M20 EB Off-Slip)	U	B	2	3	16.2	Geom	-	4.45	0.00	N	Arm J2:2 Ahead	37.36
J1:1/3 (M20 EB Off-Slip)	U	B	2	3	60.0	Geom	-	4.26	0.00	Y	Arm J2:2 Ahead	35.87
J1:2/1 (W Circ)	U	A	2	3	17.4	Geom	-	4.24	0.00	Y	Arm J2:2 Ahead	58.29
											Arm J2:3 Left	31.70
J1:2/2 (W Circ)	U	A	2	3	19.1	Geom	-	4.50	0.00	Y	Arm J2:2 Ahead	31.70

Junction: J2: A20 W Jnc at M20 J10a

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
J2:1/1 (A20 EB)	O		2	3	7.0	Geom	-	3.50	0.00	Y	Arm J3:2 Ahead	Inf
J2:1/2 (A20 EB)	O		2	3	60.0	Geom	-	3.50	0.00	N	Arm J3:2 Ahead	20.35
J2:2/1 (NW Circ)	U		2	3	2.1	Inf	-	-	-	-	-	-
J2:2/2 (NW Circ)	U		2	3	2.6	Inf	-	-	-	-	-	-
J2:2/3 (NW Circ)	U		2	3	3.5	Inf	-	-	-	-	-	-
J2:3/1 (A20 WB exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J3: A20 E Jnc at M20 J10a												
Lane	**Lane Type**	**Phases**	**Start Disp. (s)**	**End Disp. (s)**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
J3:1/1 (A20 WB Jnc at M20 J10a)	U	B	2	3	11.3	Geom	-	4.40	0.00	Y	Arm J3:3 Left	14.34
											Arm J4:1 Ahead	42.27
J3:1/2 (A20 WB Jnc at M20 J10a)	U	B	2	3	60.0	Geom	-	4.40	0.00	N	Arm J4:1 Ahead	39.40
J3:2/1 (N Circ)	U		2	3	5.2	Inf	-	-	-	-	-	-
J3:2/2 (N Circ)	U		2	3	5.2	Inf	-	-	-	-	-	-
J3:2/3 (N Circ)	U		2	3	5.2	Inf	-	-	-	-	-	-
J3:3/1 (M20 EB exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:3/2 (M20 EB exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:4/1 (NE Circ)	U	A	2	3	10.4	Geom	-	4.20	0.00	Y	Arm J3:3 Ahead	52.24
J3:4/2 (NE Circ)	U	A	2	3	10.4	Geom	-	4.20	0.00	N	Arm J3:3 Ahead	49.24
											Arm J4:1 Right	Inf
J3:4/3 (NE Circ)	U	A	2	3	2.6	Geom	-	4.20	0.00	Y	Arm J4:1 Right	46.27
J3:5/1 (A20 EB exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
J4:1/1 (E Circ)	U	A	2	3	13.0	Geom	-	4.02	0.00	Y	Arm J4:3 Right	71.81
J4:1/2 (E Circ)	U	A	2	3	13.0	Geom	-	4.28	0.00	N	Arm J4:3 Right	54.40
J4:1/3 (E Circ)	U	A	2	3	13.0	Geom	-	4.44	0.00	Y	Arm J4:3 Right	37.86
J4:2/1 (M20 WB Off-Slip)	U	B	2	3	13.9	Geom	-	4.02	0.00	Y	Arm J4:3 Ahead	43.32
J4:2/2 (M20 WB Off-Slip)	U	B	2	3	60.0	Geom	-	4.42	0.00	N	Arm J4:3 Ahead	58.70
J4:2/3 (M20 WB Off-Slip)	U	B	2	3	60.0	Geom	-	4.36	0.00	Y	Arm J4:3 Ahead	60.00
J4:3/1 (SE Circ)	U		2	3	8.7	Inf	-	-	-	-	-	-
J4:3/2 (SE Circ)	U		2	3	8.7	Inf	-	-	-	-	-	-
J4:3/3 (SE Circ)	U		2	3	8.7	Inf	-	-	-	-	-	-

Junction: J5: A2070 Jnc at M20 J10a

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
J5:1/1 (A2070 EB)	O		2	3	7.3	Geom	-	4.52	0.00	Y	Arm J5:4 Left	37.75
J5:1/2 (A2070 EB)	O		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:2 Ahead	47.40
J5:1/3 (A2070 EB)	O		2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:2 Ahead	46.37
J5:2/1 (SW Circ)	U		2	3	5.2	Inf	-	-	-	-	-	-
J5:2/2 (SW Circ)	U		2	3	5.2	Inf	-	-	-	-	-	-
J5:3/1 (A2070 WB exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J5:3/2 (A2070 WB exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J5:4/1 (M20 WB On-Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
J5:4/2 (M20 WB On-Slip)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a
There are no Opposed Lanes in this Junction

Junction: J2: A20 W Jnc at M20 J10a											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
J2:1/1 (A20 EB)	J3:2/1 (Ahead)	1000	0	J2:2/1	0.33	All	-	-	-	-	-
				J2:2/2	0.33	All					
				J2:2/3	0.33	All					
J2:1/2 (A20 EB)	J3:2/2 (Ahead)	1000	0	J2:2/1	0.33	All	-	-	-	-	-
				J2:2/2	0.33	All					
				J2:2/3	0.33	All					
	J3:2/3 (Ahead)	1000	0	J2:2/1	0.33	All					
				J2:2/2	0.33	All					
				J2:2/3	0.33	All					

Junction: J3: A20 E Jnc at M20 J10a
There are no Opposed Lanes in this Junction

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a
There are no Opposed Lanes in this Junction

Junction: J5: A2070 Jnc at M20 J10a											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
J5:1/1 (A2070 EB)	J5:4/1 (Left)	1000	0	J5:2/1	0.33	All	-	-	-	-	-
				J5:2/2	0.33	All					
	J5:4/2 (Left)	1000	0	J5:2/1	0.33	All					
				J5:2/2	0.33	All					
J5:1/2 (A2070 EB)	J1:2/1 (Ahead)	1000	0	J5:2/1	0.33	All	-	-	-	-	-
				J5:2/2	0.33	All					
J5:1/3 (A2070 EB)	J1:2/2 (Ahead)	1000	0	J5:2/1	0.33	All	-	-	-	-	-
				J5:2/2	0.33	All					

Lane Connector Input Data

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a				
Org Lane	**Dest Lane**	**Junction**	**Modelled Mean Cruise Time (s)**	**Platoon Dispersion**
J1:1/1	J2:2/1	Leaving	2	35
J1:1/1	J2:3/1	Leaving	2	35
J1:1/2	J2:2/2	Leaving	2	35
J1:1/3	J2:2/3	Leaving	2	35
J1:2/1	J2:2/1	Leaving	2	35
J1:2/1	J2:2/2	Leaving	2	35
J1:2/1	J2:3/1	Leaving	2	35
J1:2/2	J2:2/2	Leaving	2	35
J1:2/2	J2:2/3	Leaving	2	35
J5:1/2	J1:2/1	Entering	2	35
J5:1/3	J1:2/2	Entering	2	35
J5:2/2	J1:2/1	Entering	2	35
J5:2/2	J1:2/2	Entering	2	35

Junction: J2: A20 W Jnc at M20 J10a				
Org Lane	**Dest Lane**	**Junction**	**Modelled Mean Cruise Time (s)**	**Platoon Dispersion**
J1:1/1	J2:2/1	Entering	2	35
J1:1/1	J2:3/1	Entering	2	35
J1:1/2	J2:2/2	Entering	2	35
J1:1/3	J2:2/3	Entering	2	35
J1:2/1	J2:2/1	Entering	2	35
J1:2/1	J2:2/2	Entering	2	35
J1:2/1	J2:3/1	Entering	2	35
J1:2/2	J2:2/2	Entering	2	35
J1:2/2	J2:2/3	Entering	2	35
J2:1/1	J3:2/1	Leaving	1	35
J2:1/2	J3:2/2	Leaving	1	35
J2:1/2	J3:2/3	Leaving	1	35
J2:2/1	J3:2/1	Leaving	1	35
J2:2/2	J3:2/2	Leaving	1	35
J2:2/3	J3:2/3	Leaving	1	35

Junction: J3: A20 E Jnc at M20 J10a				
Org Lane	**Dest Lane**	**Junction**	**Modelled Mean Cruise Time (s)**	**Platoon Dispersion**
J2:1/1	J3:2/1	Entering	1	35
J2:1/2	J3:2/2	Entering	1	35
J2:1/2	J3:2/3	Entering	1	35
J2:2/1	J3:2/1	Entering	1	35
J2:2/2	J3:2/2	Entering	1	35
J2:2/3	J3:2/3	Entering	1	35
J3:1/1	J3:3/1	Internal	2	35
J3:1/1	J4:1/1	Leaving	1	35
J3:1/2	J4:1/2	Leaving	1	35
J3:1/2	J4:1/3	Leaving	1	35
J3:2/1	J3:5/1	Internal	1	35
J3:2/2	J3:4/1	Internal	1	35
J3:2/3	J3:4/2	Internal	1	35
J3:4/1	J3:3/1	Internal	1	35
J3:4/2	J3:3/2	Internal	1	35
J3:4/2	J4:1/1	Leaving	1	35
J3:4/3	J4:1/2	Leaving	1	35
J3:4/3	J4:1/3	Leaving	1	35

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a				
Org Lane	**Dest Lane**	**Junction**	**Modelled Mean Cruise Time (s)**	**Platoon Dispersion**
J3:1/1	J4:1/1	Entering	1	35
J3:1/2	J4:1/2	Entering	1	35
J3:1/2	J4:1/3	Entering	1	35
J4:1/1	J4:3/1	Internal	2	35
J4:1/2	J4:3/2	Internal	2	35
J4:1/3	J4:3/3	Internal	2	35
J4:2/1	J4:3/1	Internal	2	35
J4:2/2	J4:3/2	Internal	2	35
J4:2/3	J4:3/3	Internal	2	35
J4:3/1	J5:3/1	Leaving	1	35
J4:3/2	J5:2/1	Leaving	1	35
J4:3/2	J5:3/2	Leaving	1	35
J4:3/3	J5:2/2	Leaving	1	35
J3:4/2	J4:1/1	Entering	1	35
J3:4/3	J4:1/2	Entering	1	35
J3:4/3	J4:1/3	Entering	1	35

Detailed Input Data And Results

Junction: J5: A2070 Jnc at M20 J10a				
Org Lane	**Dest Lane**	**Junction**	**Modelled Mean Cruise Time (s)**	**Platoon Dispersion**
J5:1/1	J5:4/1	Internal	2	35
J5:1/1	J5:4/2	Internal	2	35
J5:1/2	J1:2/1	Leaving	2	35
J5:1/3	J1:2/2	Leaving	2	35
J4:3/1	J5:3/1	Entering	1	35
J4:3/2	J5:2/1	Entering	1	35
J4:3/2	J5:3/2	Entering	1	35
J4:3/3	J5:2/2	Entering	1	35
J5:2/1	J5:4/1	Internal	2	35
J5:2/2	J1:2/1	Leaving	2	35
J5:2/2	J1:2/2	Leaving	2	35
J5:2/2	J5:4/2	Internal	2	35

Scenario 1: '2026 Base+Sev AM Peak' (FG1: '2026 Base+Sev AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (M20 EB Off-Slip)	4.34	0.00	Y	Arm J2:2 Ahead	20.98	92.2 %	1914	1914
				Arm J2:3 Left	26.16	7.8 %		
J1:1/2 (M20 EB Off-Slip)	4.45	0.00	N	Arm J2:2 Ahead	37.36	0.0 %	2200	2200
J1:1/3 (M20 EB Off-Slip)	4.26	0.00	Y	Arm J2:2 Ahead	35.87	100.0 %	1959	1959
J1:2/1 (W Circ)	4.24	0.00	Y	Arm J2:2 Ahead	58.29	52.3 %	1968	1968
				Arm J2:3 Left	31.70	47.7 %		
J1:2/2 (W Circ)	4.50	0.00	Y	Arm J2:2 Ahead	31.70	100.0 %	1972	1972

Detailed Input Data And Results

Junction: J2: A20 W Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A20 EB)	3.50	0.00	Y	Arm J3:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A20 EB)	3.50	0.00	N	Arm J3:2 Ahead	20.35	100.0 %	1960	1960
J2:2/1 (NW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/2 (NW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:2/3 (NW Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J2:3/1 (A20 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: A20 E Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A20 WB Jnc at M20 J10a)	4.40	0.00	Y	Arm J3:3 Left	14.34	7.7 %	1974	1974
				Arm J4:1 Ahead	42.27	92.3 %		
J3:1/2 (A20 WB Jnc at M20 J10a)	4.40	0.00	N	Arm J4:1 Ahead	39.40	100.0 %	2114	2114
J3:2/1 (N Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:2/2 (N Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:2/3 (N Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J3:3/1 (M20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (M20 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (NE Circ)	4.20	0.00	Y	Arm J3:3 Ahead	52.24	100.0 %	1978	1978
J3:4/2 (NE Circ)	4.20	0.00	N	Arm J3:3 Ahead	49.24	84.5 %	2120	2120
				Arm J4:1 Right	Inf	15.5 %		
J3:4/3 (NE Circ)	4.20	0.00	Y	Arm J4:1 Right	46.27	100.0 %	1971	1971
J3:5/1 (A20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Detailed Input Data And Results

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J4:1/1 (E Circ)	4.02	0.00	Y	Arm J4:3 Right	71.81	100.0 %	1976	1976
J4:1/2 (E Circ)	4.28	0.00	N	Arm J4:3 Right	54.40	100.0 %	2124	2124
J4:1/3 (E Circ)	4.44	0.00	Y	Arm J4:3 Right	37.86	100.0 %	1981	1981
J4:2/1 (M20 WB Off-Slip)	4.02	0.00	Y	Arm J4:3 Ahead	43.32	100.0 %	1950	1950
J4:2/2 (M20 WB Off-Slip)	4.42	0.00	N	Arm J4:3 Ahead	58.70	100.0 %	2142	2142
J4:2/3 (M20 WB Off-Slip)	4.36	0.00	Y	Arm J4:3 Ahead	60.00	100.0 %	2000	2000
J4:3/1 (SE Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:3/2 (SE Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J4:3/3 (SE Circ Lane 3)	Infinite Saturation Flow						Inf	Inf

Junction: J5: A2070 Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J5:1/1 (A2070 EB)	4.52	0.00	Y	Arm J5:4 Left	37.75	100.0 %	1988	1988
J5:1/2 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	47.40	100.0 %	2089	2089
J5:1/3 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	46.37	100.0 %	2087	2087
J5:2/1 (SW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:2/2 (SW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:3/1 (A2070 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:3/2 (A2070 WB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:4/1 (M20 WB On-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:4/2 (M20 WB On-Slip Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2026 Base+Sev PM Peak' (FG2: '2026 Base+Sev PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (M20 EB Off-Slip)	4.34	0.00	Y	Arm J2:2 Ahead	20.98	96.6 %	1913	1913
				Arm J2:3 Left	26.16	3.4 %		
J1:1/2 (M20 EB Off-Slip)	4.45	0.00	N	Arm J2:2 Ahead	37.36	0.0 %	2200	2200
J1:1/3 (M20 EB Off-Slip)	4.26	0.00	Y	Arm J2:2 Ahead	35.87	100.0 %	1959	1959
J1:2/1 (W Circ)	4.24	0.00	Y	Arm J2:2 Ahead	58.29	59.0 %	1971	1971
				Arm J2:3 Left	31.70	41.0 %		
J1:2/2 (W Circ)	4.50	0.00	Y	Arm J2:2 Ahead	31.70	100.0 %	1972	1972

Junction: J2: A20 W Jnc at M20 J10a

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (A20 EB)	3.50	0.00	Y	Arm J3:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A20 EB)	3.50	0.00	N	Arm J3:2 Ahead	20.35	100.0 %	1960	1960
J2:2/1 (NW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/2 (NW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:2/3 (NW Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J2:3/1 (A20 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: A20 E Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A20 WB Jnc at M20 J10a)	4.40	0.00	Y	Arm J3:3 Left	14.34	18.7 %	1960	1960
				Arm J4:1 Ahead	42.27	81.3 %		
J3:1/2 (A20 WB Jnc at M20 J10a)	4.40	0.00	N	Arm J4:1 Ahead	39.40	100.0 %	2114	2114
J3:2/1 (N Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:2/2 (N Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:2/3 (N Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J3:3/1 (M20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (M20 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (NE Circ)	4.20	0.00	Y	Arm J3:3 Ahead	52.24	100.0 %	1978	1978
J3:4/2 (NE Circ)	4.20	0.00	N	Arm J3:3 Ahead	49.24	77.9 %	2125	2125
				Arm J4:1 Right	Inf	22.1 %		
J3:4/3 (NE Circ)	4.20	0.00	Y	Arm J4:1 Right	46.27	100.0 %	1971	1971
J3:5/1 (A20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J4:1/1 (E Circ)	4.02	0.00	Y	Arm J4:3 Right	71.81	100.0 %	1976	1976
J4:1/2 (E Circ)	4.28	0.00	N	Arm J4:3 Right	54.40	100.0 %	2124	2124
J4:1/3 (E Circ)	4.44	0.00	Y	Arm J4:3 Right	37.86	100.0 %	1981	1981
J4:2/1 (M20 WB Off-Slip)	4.02	0.00	Y	Arm J4:3 Ahead	43.32	100.0 %	1950	1950
J4:2/2 (M20 WB Off-Slip)	4.42	0.00	N	Arm J4:3 Ahead	58.70	100.0 %	2142	2142
J4:2/3 (M20 WB Off-Slip)	4.36	0.00	Y	Arm J4:3 Ahead	60.00	100.0 %	2000	2000
J4:3/1 (SE Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:3/2 (SE Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J4:3/3 (SE Circ Lane 3)	Infinite Saturation Flow						Inf	Inf

Junction: J5: A2070 Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J5:1/1 (A2070 EB)	4.52	0.00	Y	Arm J5:4 Left	37.75	100.0 %	1988	1988
J5:1/2 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	47.40	100.0 %	2089	2089
J5:1/3 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	46.37	100.0 %	2087	2087
J5:2/1 (SW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:2/2 (SW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:3/1 (A2070 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:3/2 (A2070 WB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:4/1 (M20 WB On-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:4/2 (M20 WB On-Slip Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2036 Base+Sev AM Peak' (FG3: '2036 Base+Sev AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (M20 EB Off-Slip)	4.34	0.00	Y	Arm J2:2 Ahead	20.98	91.9 %	1914	1914
				Arm J2:3 Left	26.16	8.1 %		
J1:1/2 (M20 EB Off-Slip)	4.45	0.00	N	Arm J2:2 Ahead	37.36	0.0 %	2200	2200
J1:1/3 (M20 EB Off-Slip)	4.26	0.00	Y	Arm J2:2 Ahead	35.87	100.0 %	1959	1959
J1:2/1 (W Circ)	4.24	0.00	Y	Arm J2:2 Ahead	58.29	55.7 %	1970	1970
				Arm J2:3 Left	31.70	44.3 %		
J1:2/2 (W Circ)	4.50	0.00	Y	Arm J2:2 Ahead	31.70	100.0 %	1972	1972

Detailed Input Data And Results

Junction: J2: A20 W Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A20 EB)	3.50	0.00	Y	Arm J3:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A20 EB)	3.50	0.00	N	Arm J3:2 Ahead	20.35	100.0 %	1960	1960
J2:2/1 (NW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/2 (NW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:2/3 (NW Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J2:3/1 (A20 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: A20 E Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A20 WB Jnc at M20 J10a)	4.40	0.00	Y	Arm J3:3 Left	14.34	6.8 %	1976	1976
				Arm J4:1 Ahead	42.27	93.2 %		
J3:1/2 (A20 WB Jnc at M20 J10a)	4.40	0.00	N	Arm J4:1 Ahead	39.40	100.0 %	2114	2114
J3:2/1 (N Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:2/2 (N Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:2/3 (N Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J3:3/1 (M20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (M20 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (NE Circ)	4.20	0.00	Y	Arm J3:3 Ahead	52.24	100.0 %	1978	1978
J3:4/2 (NE Circ)	4.20	0.00	N	Arm J3:3 Ahead	49.24	83.4 %	2121	2121
				Arm J4:1 Right	Inf	16.6 %		
J3:4/3 (NE Circ)	4.20	0.00	Y	Arm J4:1 Right	46.27	100.0 %	1971	1971
J3:5/1 (A20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Detailed Input Data And Results

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J4:1/1 (E Circ)	4.02	0.00	Y	Arm J4:3 Right	71.81	100.0 %	1976	1976
J4:1/2 (E Circ)	4.28	0.00	N	Arm J4:3 Right	54.40	100.0 %	2124	2124
J4:1/3 (E Circ)	4.44	0.00	Y	Arm J4:3 Right	37.86	100.0 %	1981	1981
J4:2/1 (M20 WB Off-Slip)	4.02	0.00	Y	Arm J4:3 Ahead	43.32	100.0 %	1950	1950
J4:2/2 (M20 WB Off-Slip)	4.42	0.00	N	Arm J4:3 Ahead	58.70	100.0 %	2142	2142
J4:2/3 (M20 WB Off-Slip)	4.36	0.00	Y	Arm J4:3 Ahead	60.00	100.0 %	2000	2000
J4:3/1 (SE Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:3/2 (SE Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J4:3/3 (SE Circ Lane 3)	Infinite Saturation Flow						Inf	Inf

Junction: J5: A2070 Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J5:1/1 (A2070 EB)	4.52	0.00	Y	Arm J5:4 Left	37.75	100.0 %	1988	1988
J5:1/2 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	47.40	100.0 %	2089	2089
J5:1/3 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	46.37	100.0 %	2087	2087
J5:2/1 (SW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:2/2 (SW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:3/1 (A2070 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:3/2 (A2070 WB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:4/1 (M20 WB On-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:4/2 (M20 WB On-Slip Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2036 Base+Sev PM Peak' (FG4: '2036 Base+Sev PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (M20 EB Off-Slip)	4.34	0.00	Y	Arm J2:2 Ahead	20.98	96.4 %	1913	1913
				Arm J2:3 Left	26.16	3.6 %		
J1:1/2 (M20 EB Off-Slip)	4.45	0.00	N	Arm J2:2 Ahead	37.36	0.0 %	2200	2200
J1:1/3 (M20 EB Off-Slip)	4.26	0.00	Y	Arm J2:2 Ahead	35.87	100.0 %	1959	1959
J1:2/1 (W Circ)	4.24	0.00	Y	Arm J2:2 Ahead	58.29	60.6 %	1972	1972
				Arm J2:3 Left	31.70	39.4 %		
J1:2/2 (W Circ)	4.50	0.00	Y	Arm J2:2 Ahead	31.70	100.0 %	1972	1972

Junction: J2: A20 W Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A20 EB)	3.50	0.00	Y	Arm J3:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A20 EB)	3.50	0.00	N	Arm J3:2 Ahead	20.35	100.0 %	1960	1960
J2:2/1 (NW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/2 (NW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:2/3 (NW Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J2:3/1 (A20 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: A20 E Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A20 WB Jnc at M20 J10a)	4.40	0.00	Y	Arm J3:3 Left	14.34	19.9 %	1959	1959
				Arm J4:1 Ahead	42.27	80.1 %		
J3:1/2 (A20 WB Jnc at M20 J10a)	4.40	0.00	N	Arm J4:1 Ahead	39.40	100.0 %	2114	2114
J3:2/1 (N Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:2/2 (N Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:2/3 (N Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J3:3/1 (M20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (M20 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (NE Circ)	4.20	0.00	Y	Arm J3:3 Ahead	52.24	100.0 %	1978	1978
J3:4/2 (NE Circ)	4.20	0.00	N	Arm J3:3 Ahead	49.24	73.5 %	2127	2127
				Arm J4:1 Right	Inf	26.5 %		
J3:4/3 (NE Circ)	4.20	0.00	Y	Arm J4:1 Right	46.27	100.0 %	1971	1971
J3:5/1 (A20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J4:1/1 (E Circ)	4.02	0.00	Y	Arm J4:3 Right	71.81	100.0 %	1976	1976
J4:1/2 (E Circ)	4.28	0.00	N	Arm J4:3 Right	54.40	100.0 %	2124	2124
J4:1/3 (E Circ)	4.44	0.00	Y	Arm J4:3 Right	37.86	100.0 %	1981	1981
J4:2/1 (M20 WB Off-Slip)	4.02	0.00	Y	Arm J4:3 Ahead	43.32	100.0 %	1950	1950
J4:2/2 (M20 WB Off-Slip)	4.42	0.00	N	Arm J4:3 Ahead	58.70	100.0 %	2142	2142
J4:2/3 (M20 WB Off-Slip)	4.36	0.00	Y	Arm J4:3 Ahead	60.00	100.0 %	2000	2000
J4:3/1 (SE Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:3/2 (SE Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J4:3/3 (SE Circ Lane 3)	Infinite Saturation Flow						Inf	Inf

Junction: J5: A2070 Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J5:1/1 (A2070 EB)	4.52	0.00	Y	Arm J5:4 Left	37.75	100.0 %	1988	1988
J5:1/2 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	47.40	100.0 %	2089	2089
J5:1/3 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	46.37	100.0 %	2087	2087
J5:2/1 (SW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:2/2 (SW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:3/1 (A2070 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:3/2 (A2070 WB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:4/1 (M20 WB On-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:4/2 (M20 WB On-Slip Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2036 Base+Sev 4 AM Peak' (FG5: '2036 Base+Sev 4 AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (M20 EB Off-Slip)	4.34	0.00	Y	Arm J2:2 Ahead	20.98	91.9 %	1914	1914
				Arm J2:3 Left	26.16	8.1 %		
J1:1/2 (M20 EB Off-Slip)	4.45	0.00	N	Arm J2:2 Ahead	37.36	0.0 %	2200	2200
J1:1/3 (M20 EB Off-Slip)	4.26	0.00	Y	Arm J2:2 Ahead	35.87	100.0 %	1959	1959
J1:2/1 (W Circ)	4.24	0.00	Y	Arm J2:2 Ahead	58.29	56.4 %	1970	1970
				Arm J2:3 Left	31.70	43.6 %		
J1:2/2 (W Circ)	4.50	0.00	Y	Arm J2:2 Ahead	31.70	100.0 %	1972	1972

Junction: J2: A20 W Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A20 EB)	3.50	0.00	Y	Arm J3:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A20 EB)	3.50	0.00	N	Arm J3:2 Ahead	20.35	100.0 %	1960	1960
J2:2/1 (NW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/2 (NW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:2/3 (NW Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J2:3/1 (A20 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: A20 E Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A20 WB Jnc at M20 J10a)	4.40	0.00	Y	Arm J3:3 Left	14.34	6.5 %	1976	1976
				Arm J4:1 Ahead	42.27	93.5 %		
J3:1/2 (A20 WB Jnc at M20 J10a)	4.40	0.00	N	Arm J4:1 Ahead	39.40	100.0 %	2114	2114
J3:2/1 (N Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:2/2 (N Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:2/3 (N Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J3:3/1 (M20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (M20 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (NE Circ)	4.20	0.00	Y	Arm J3:3 Ahead	52.24	100.0 %	1978	1978
J3:4/2 (NE Circ)	4.20	0.00	N	Arm J3:3 Ahead	49.24	87.3 %	2119	2119
				Arm J4:1 Right	Inf	12.7 %		
J3:4/3 (NE Circ)	4.20	0.00	Y	Arm J4:1 Right	46.27	100.0 %	1971	1971
J3:5/1 (A20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Detailed Input Data And Results

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J4:1/1 (E Circ)	4.02	0.00	Y	Arm J4:3 Right	71.81	100.0 %	1976	1976
J4:1/2 (E Circ)	4.28	0.00	N	Arm J4:3 Right	54.40	100.0 %	2124	2124
J4:1/3 (E Circ)	4.44	0.00	Y	Arm J4:3 Right	37.86	100.0 %	1981	1981
J4:2/1 (M20 WB Off-Slip)	4.02	0.00	Y	Arm J4:3 Ahead	43.32	100.0 %	1950	1950
J4:2/2 (M20 WB Off-Slip)	4.42	0.00	N	Arm J4:3 Ahead	58.70	100.0 %	2142	2142
J4:2/3 (M20 WB Off-Slip)	4.36	0.00	Y	Arm J4:3 Ahead	60.00	100.0 %	2000	2000
J4:3/1 (SE Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:3/2 (SE Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J4:3/3 (SE Circ Lane 3)	Infinite Saturation Flow						Inf	Inf

Junction: J5: A2070 Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J5:1/1 (A2070 EB)	4.52	0.00	Y	Arm J5:4 Left	37.75	100.0 %	1988	1988
J5:1/2 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	47.40	100.0 %	2089	2089
J5:1/3 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	46.37	100.0 %	2087	2087
J5:2/1 (SW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:2/2 (SW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:3/1 (A2070 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:3/2 (A2070 WB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:4/1 (M20 WB On-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:4/2 (M20 WB On-Slip Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2036 Base+Sev 4 PM Peak' (FG6: '2036 Base+Sev 4 PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (M20 EB Off-Slip)	4.34	0.00	Y	Arm J2:2 Ahead	20.98	96.4 %	1913	1913
				Arm J2:3 Left	26.16	3.6 %		
J1:1/2 (M20 EB Off-Slip)	4.45	0.00	N	Arm J2:2 Ahead	37.36	100.0 %	2115	2115
J1:1/3 (M20 EB Off-Slip)	4.26	0.00	Y	Arm J2:2 Ahead	35.87	100.0 %	1959	1959
J1:2/1 (W Circ)	4.24	0.00	Y	Arm J2:2 Ahead	58.29	61.3 %	1972	1972
				Arm J2:3 Left	31.70	38.7 %		
J1:2/2 (W Circ)	4.50	0.00	Y	Arm J2:2 Ahead	31.70	100.0 %	1972	1972

Junction: J2: A20 W Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A20 EB)	3.50	0.00	Y	Arm J3:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A20 EB)	3.50	0.00	N	Arm J3:2 Ahead	20.35	100.0 %	1960	1960
J2:2/1 (NW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/2 (NW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:2/3 (NW Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J2:3/1 (A20 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J3: A20 E Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (A20 WB Jnc at M20 J10a)	4.40	0.00	Y	Arm J3:3 Left	14.34	18.1 %	1961	1961
				Arm J4:1 Ahead	42.27	81.9 %		
J3:1/2 (A20 WB Jnc at M20 J10a)	4.40	0.00	N	Arm J4:1 Ahead	39.40	100.0 %	2114	2114
J3:2/1 (N Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:2/2 (N Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:2/3 (N Circ Lane 3)	Infinite Saturation Flow						Inf	Inf
J3:3/1 (M20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:3/2 (M20 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:4/1 (NE Circ)	4.20	0.00	Y	Arm J3:3 Ahead	52.24	100.0 %	1978	1978
J3:4/2 (NE Circ)	4.20	0.00	N	Arm J3:3 Ahead	49.24	74.0 %	2127	2127
				Arm J4:1 Right	Inf	26.0 %		
J3:4/3 (NE Circ)	4.20	0.00	Y	Arm J4:1 Right	46.27	100.0 %	1971	1971
J3:5/1 (A20 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J4:1/1 (E Circ)	4.02	0.00	Y	Arm J4:3 Right	71.81	100.0 %	1976	1976
J4:1/2 (E Circ)	4.28	0.00	N	Arm J4:3 Right	54.40	100.0 %	2124	2124
J4:1/3 (E Circ)	4.44	0.00	Y	Arm J4:3 Right	37.86	100.0 %	1981	1981
J4:2/1 (M20 WB Off-Slip)	4.02	0.00	Y	Arm J4:3 Ahead	43.32	100.0 %	1950	1950
J4:2/2 (M20 WB Off-Slip)	4.42	0.00	N	Arm J4:3 Ahead	58.70	100.0 %	2142	2142
J4:2/3 (M20 WB Off-Slip)	4.36	0.00	Y	Arm J4:3 Ahead	60.00	100.0 %	2000	2000
J4:3/1 (SE Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J4:3/2 (SE Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J4:3/3 (SE Circ Lane 3)	Infinite Saturation Flow						Inf	Inf

Junction: J5: A2070 Jnc at M20 J10a								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J5:1/1 (A2070 EB)	4.52	0.00	Y	Arm J5:4 Left	37.75	100.0 %	1988	1988
J5:1/2 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	47.40	100.0 %	2089	2089
J5:1/3 (A2070 EB)	4.00	0.00	N	Arm J1:2 Ahead	46.37	100.0 %	2087	2087
J5:2/1 (SW Circ Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:2/2 (SW Circ Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:3/1 (A2070 WB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:3/2 (A2070 WB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J5:4/1 (M20 WB On-Slip Lane 1)	Infinite Saturation Flow						Inf	Inf
J5:4/2 (M20 WB On-Slip Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 Base+Sev AM Peak'	07:45	08:45	01:00	
2: '2026 Base+Sev PM Peak'	16:30	17:30	01:00	
3: '2036 Base+Sev AM Peak'	07:45	08:45	01:00	
4: '2036 Base+Sev PM Peak'	16:30	17:30	01:00	
5: '2036 Base+Sev 4 AM Peak'	07:45	08:45	01:00	
6: '2036 Base+Sev 4 PM Peak'	16:30	17:30	01:00	

Traffic Flows, Desired

FG1: '2026 Base+Sev AM Peak'

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	58	15	181	268	188	710
	B	0	1	908	0	243	1152
	C	201	787	3	150	20	1161
	D	202	0	142	0	17	361
	E	263	221	66	14	0	564
	Tot.	724	1024	1300	432	468	3948

FG2: '2026 Base+Sev PM Peak'

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	10	32	139	200	209	590
	B	0	2	804	0	81	887
	C	205	788	2	148	19	1162
	D	280	1	235	0	10	526
	E	197	287	68	17	0	569
	Tot.	692	1110	1248	365	319	3734

FG3: '2036 Base+Sev AM Peak'

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	62	16	238	287	206	809
	B	0	1	1195	0	267	1463
	C	252	986	4	187	25	1454
	D	215	0	179	0	19	413
	E	319	268	95	17	0	699
	Tot.	848	1271	1711	491	517	4838

FG4: '2036 Base+Sev PM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	11	34	181	211	247	684
	B	0	2	1049	0	104	1155
Origin	C	264	1016	3	190	24	1497
	D	296	1	297	0	11	605
	E	215	314	89	19	0	637
	Tot.	786	1367	1619	420	386	4578

FG5: '2036 Base+Sev 4 AM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	62	16	239	287	206	810
	B	0	1	1202	0	267	1470
Origin	C	252	1010	4	191	25	1482
	D	215	0	201	0	19	435
	E	319	268	95	17	0	699
	Tot.	848	1295	1741	495	517	4896

FG6: '2036 Base+Sev 4 PM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	11	34	181	211	247	684
	B	0	2	1056	0	104	1162
Origin	C	265	1048	3	196	24	1536
	D	296	1	326	0	11	634
	E	215	314	89	19	0	637
	Tot.	787	1399	1655	426	386	4653

Scenario 1: '2026 Base+Sev AM Peak' (FG1: '2026 Base+Sev AM Peak', Plan 1: 'Network Control Plan 1')
Traffic Flows, Actual
Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	58	15	181	268	188	710
	B	0	1	908	0	243	1152
Origin	C	201	787	3	150	20	1161
	D	202	0	142	0	17	361
	E	263	221	66	14	0	564
	Tot.	724	1024	1300	432	468	3948

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 2: '2026 Base+Sev PM Peak' (FG2: '2026 Base+Sev PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	10	32	139	200	209	590
	B	0	2	804	0	81	887
	C	205	788	2	148	19	1162
	D	280	1	235	0	10	526
	E	197	287	68	17	0	569
	Tot.	692	1110	1248	365	319	3734

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 3: '2036 Base+Sev AM Peak' (FG3: '2036 Base+Sev AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	62	16	238	287	206	809
	B	0	1	1195	0	267	1463
Origin	C	252	986	4	187	25	1454
	D	215	0	179	0	19	413
	E	319	268	95	17	0	699
	Tot.	848	1271	1711	491	517	4838

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
Origin	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 4: '2036 Base+Sev PM Peak' (FG4: '2036 Base+Sev PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	11	34	181	211	247	684
	B	0	2	1049	0	104	1155
Origin	C	264	1016	3	190	24	1497
	D	296	1	297	0	11	605
	E	215	314	89	19	0	637
	Tot.	786	1367	1619	420	386	4578

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 5: '2036 Base+Sev 4 AM Peak' (FG5: '2036 Base+Sev 4 AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	62	16	239	287	206	810
	B	0	1	1202	0	267	1470
	C	252	1010	4	191	25	1482
	D	215	0	201	0	19	435
	E	319	268	95	17	0	699
	Tot.	848	1295	1741	495	517	4896

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 6: '2036 Base+Sev 4 PM Peak' (FG6: '2036 Base+Sev 4 PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	11	34	181	211	247	684
	B	0	2	1056	0	104	1162
	C	265	1048	3	196	24	1536
	D	296	1	326	0	11	634
	E	215	314	89	19	0	637
	Tot.	787	1399	1655	426	386	4653

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

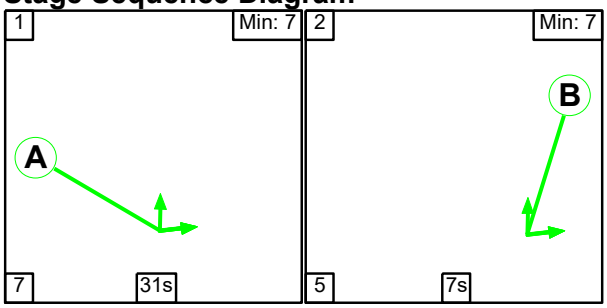
Traffic Lane Flows

Lane	Scenario 1: 2026 Base+Sev AM Peak	Scenario 2: 2026 Base+Sev PM Peak	Scenario 3: 2036 Base+Sev AM Peak	Scenario 4: 2036 Base+Sev PM Peak	Scenario 5: 2036 Base+Sev 4 AM Peak	Scenario 6: 2036 Base+Sev 4 PM Peak
Junction: J1: M20 EB Off-Slip Jnc at M20 J10a						
J1:1/1 (with short)	219(In) 219(Out)	290(In) 290(Out)	234(In) 234(Out)	307(In) 307(Out)	234(In) 234(Out)	308(In) 307(Out)
J1:1/2 (short)	0	0	0	0	0	1
J1:1/3	142	236	179	298	201	326
J1:2/1	945	753	1125	952	1142	968
J1:2/2	556	563	678	719	685	736
Junction: J2: A20 W Jnc at M20 J10a						
J2:1/1 (short)	263	197	319	215	319	215
J2:1/2 (with short)	564(In) 301(Out)	569(In) 372(Out)	699(In) 380(Out)	637(In) 422(Out)	699(In) 380(Out)	637(In) 422(Out)
J2:2/1	461	495	529	571	529	572
J2:2/2	402	583	519	558	575	602
J2:2/3	531	445	651	761	641	778
J2:3/1	468	319	517	386	517	386
Junction: J3: A20 E Jnc at M20 J10a						
J3:1/1 (short)	195	171	235	171	247	188
J3:1/2 (with short)	710(In) 515(Out)	590(In) 419(Out)	809(In) 574(Out)	684(In) 513(Out)	810(In) 563(Out)	684(In) 496(Out)
J3:2/1	724	692	848	786	848	787
J3:2/2	550	614	681	772	703	801
J3:2/3	684	786	869	969	893	1001
J3:3/1	565	646	697	806	719	835
J3:3/2	459	464	574	561	576	564
J3:4/1	550	614	681	772	703	801
J3:4/2 (with short)	684(In) 543(Out)	786(In) 596(Out)	869(In) 688(Out)	969(In) 763(Out)	893(In) 660(Out)	1001(In) 762(Out)
J3:4/3 (short)	141	190	181	206	233	239
J3:5/1	724	692	848	786	848	787
Junction: J4: M20 WB Off-Slip Jnc at M20 J10a						
J4:1/1	264	271	333	339	315	352
J4:1/2	351	318	402	374	427	387
J4:1/3	305	291	353	345	369	348
J4:2/1 (short)	433	383	569	500	573	503
J4:2/2 (with short)	908(In) 475(Out)	804(In) 421(Out)	1195(In) 626(Out)	1049(In) 549(Out)	1202(In) 629(Out)	1056(In) 553(Out)
J4:2/3	244	83	268	106	268	106
J4:3/1	697	654	902	839	888	855

J4:3/2	826	739	1028	923	1056	940
J4:3/3	549	374	621	451	637	454
Junction: J5: A2070 Jnc at M20 J10a						
J5:1/1 (short)	150	148	187	190	191	196
J5:1/2 (with short)	606(In) 456(Out)	601(In) 453(Out)	777(In) 590(Out)	780(In) 590(Out)	798(In) 607(Out)	802(In) 606(Out)
J5:1/3	555	561	677	717	684	734
J5:2/1	223	145	219	143	203	140
J5:2/2	549	374	621	451	637	454
J5:3/1	697	654	902	839	888	855
J5:3/2	603	594	809	780	853	800
J5:4/1	298	219	312	238	298	238
J5:4/2	134	146	179	182	197	188

Scenario 1: '2026 Base+Sev AM Peak' (FG1: '2026 Base+Sev AM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1

Stage Sequence Diagram



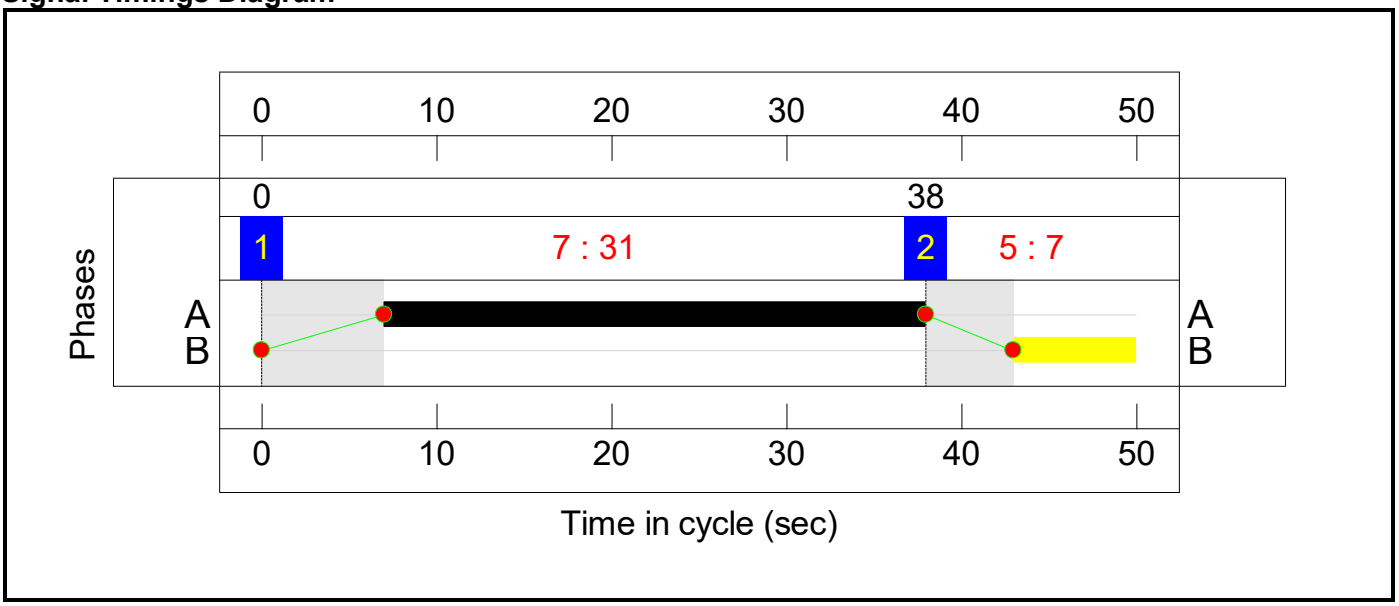
Stage Timings

Stage	1	2
Duration	31	7
Change Point	0	38

Phase Timings

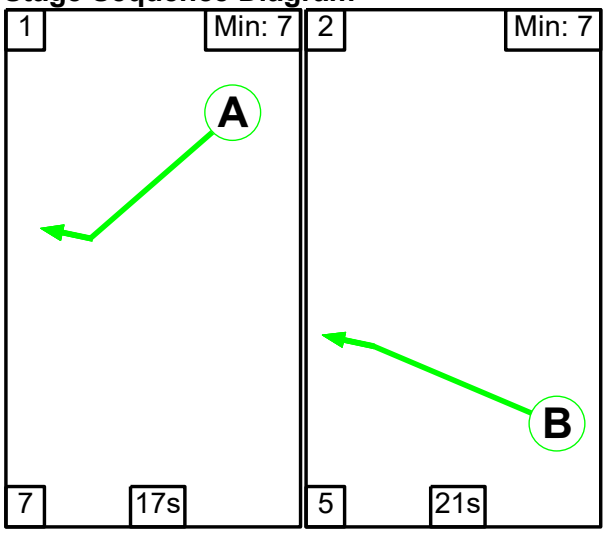
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	W Circ Ahead Left	Traffic	31	7	38
B	M20 EB Off-Slip Ahead Left	Traffic	7	43	0

Signal Timings Diagram



Controller :C2

Stage Sequence Diagram



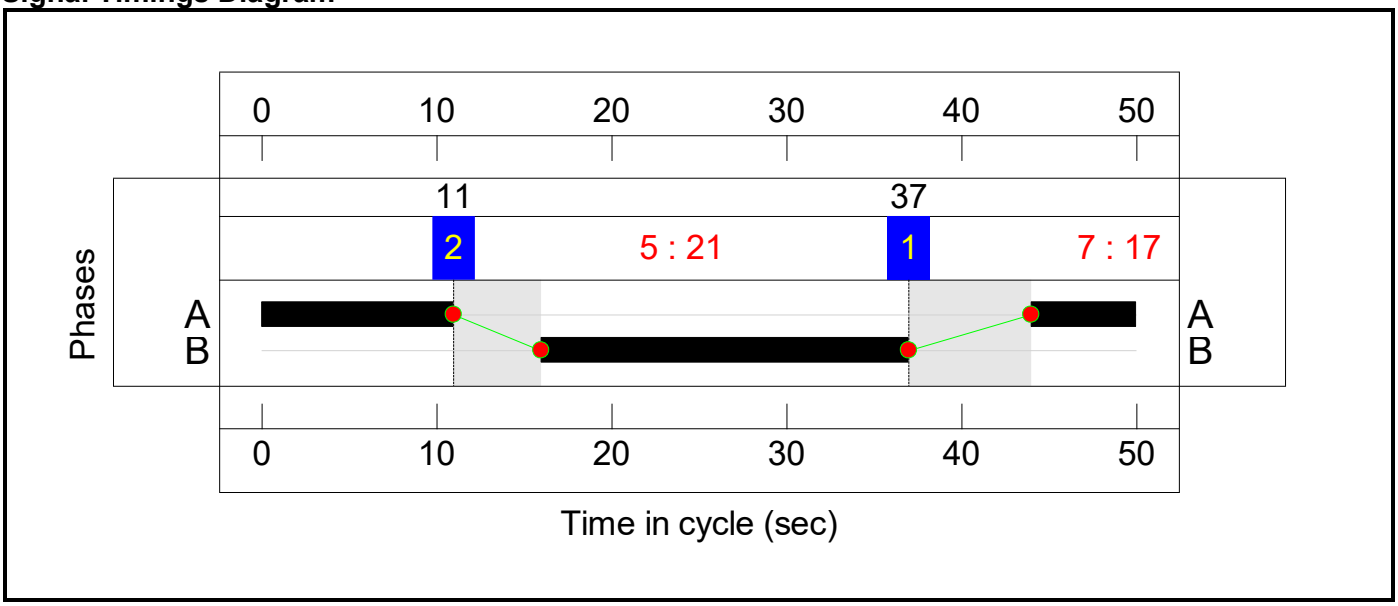
Stage Timings

Stage	1	2
Duration	17	21
Change Point	37	11

Phase Timings

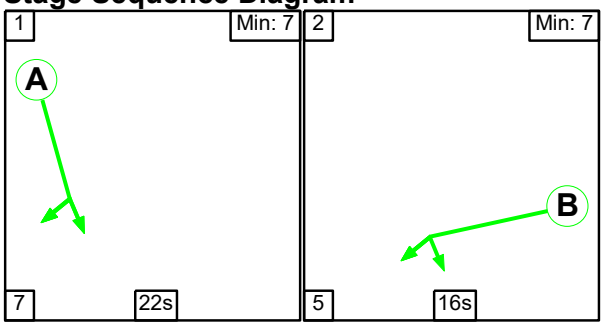
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	E Circ Right	Traffic	17	44	11
B	M20 WB Off-Slip Ahead	Traffic	21	16	37

Signal Timings Diagram



Controller :C3

Stage Sequence Diagram



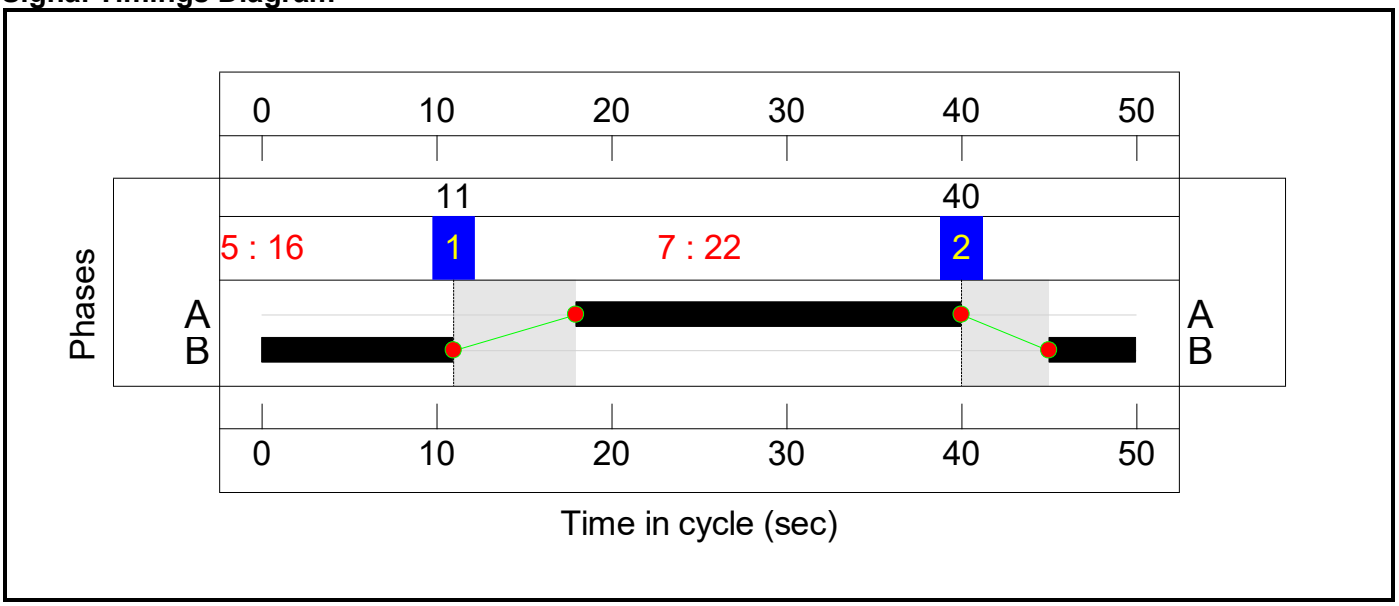
Stage Timings

Stage	1	2
Duration	22	16
Change Point	11	40

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	NE Circ Ahead Right	Traffic	22	18	40
B	A20 WB Jnc at M20 J10a Left Ahead	Traffic	16	45	11

Signal Timings Diagram



Lane Green Times

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J1:1/1	M20 EB Off-Slip Ahead Left	U	B	43	0
J1:1/2	M20 EB Off-Slip Ahead	U	B	43	0
J1:1/3	M20 EB Off-Slip Ahead	U	B	43	0
J1:2/1	W Circ Ahead Left	U	A	7	38
J1:2/2	W Circ Ahead	U	A	7	38

Junction: J2: A20 W Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

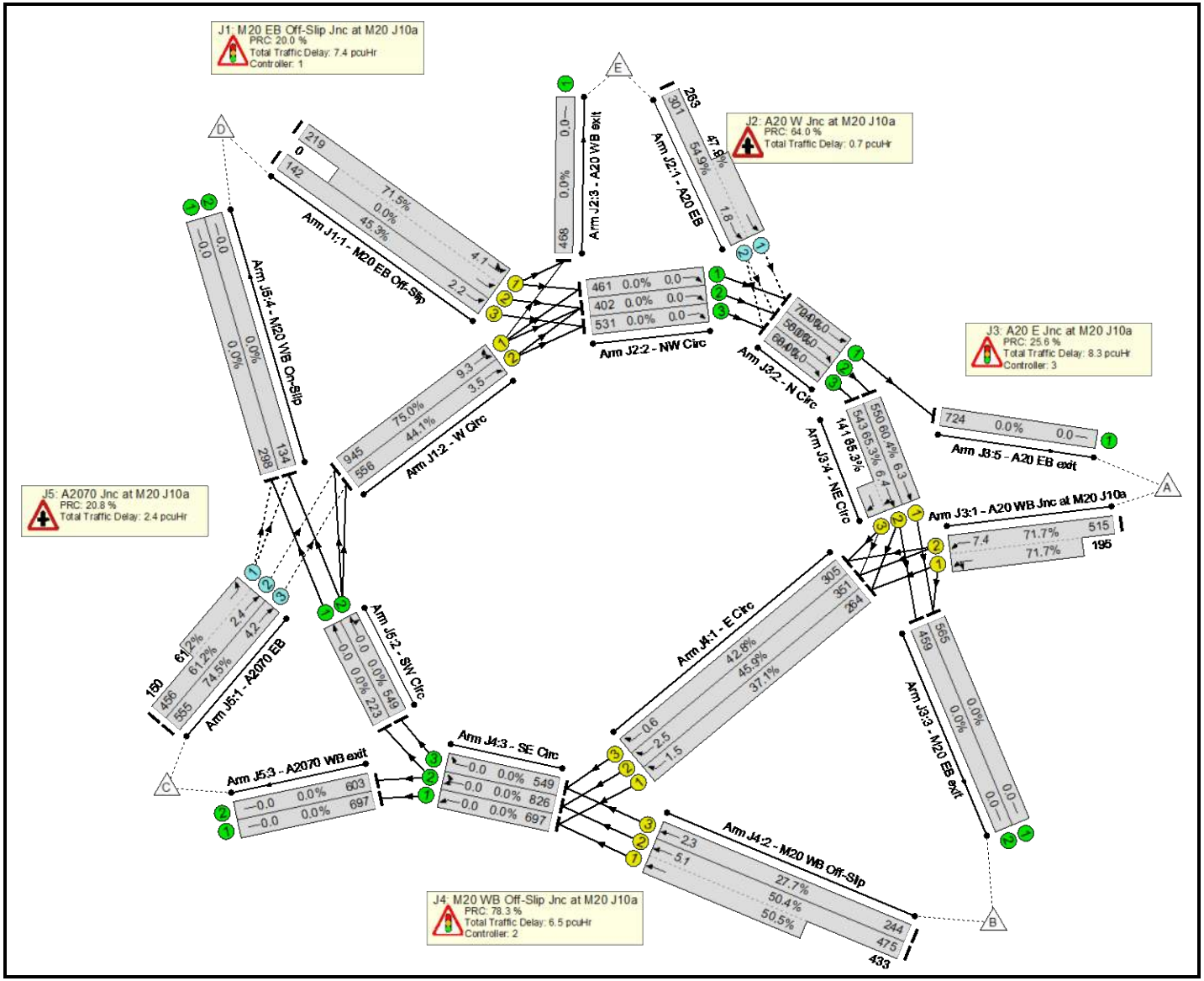
Junction: J3: A20 E Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J3:1/1	A20 WB Jnc at M20 J10a Left Ahead	U	B	45	11
J3:1/2	A20 WB Jnc at M20 J10a Ahead	U	B	45	11
J3:4/1	NE Circ Ahead	U	A	18	40
J3:4/2	NE Circ Ahead Right	U	A	18	40
J3:4/3	NE Circ Right	U	A	18	40

Detailed Input Data And Results

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J4:1/1	E Circ Right	U	A	44	11
J4:1/2	E Circ Right	U	A	44	11
J4:1/3	E Circ Right	U	A	44	11
J4:2/1	M20 WB Off-Slip Ahead	U	B	16	37
J4:2/2	M20 WB Off-Slip Ahead	U	B	16	37
J4:2/3	M20 WB Off-Slip Ahead	U	B	16	37

Junction: J5: A2070 Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: J7) M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.0%**
J1: M20 EB Off-Slip Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.0%**
1/1+1/2	M20 EB Off-Slip Ahead Left	U	N/A	N/A	C1:B		1	7	-	-	219	1914:2200	306+0	71.5 : 0.0%
1/3	M20 EB Off-Slip Ahead	U	N/A	N/A	C1:B		1	7	-	-	142	1959	313	45.3%
2/1	W Circ Ahead Left	U	N/A	N/A	C1:A		1	31	-	-	945	1968	1260	75.0%
2/2	W Circ Ahead	U	N/A	N/A	C1:A		1	31	-	-	556	1972	1262	44.1%
J2: A20 W Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**54.9%**
1/2+1/1	A20 EB Ahead	O	N/A	N/A	-		-	-	-	-	564	1960:1965	549+549	54.9 : 47.9%
2/1	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	461	Inf	Inf	0.0%
2/2	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	402	Inf	Inf	0.0%
2/3	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	531	Inf	Inf	0.0%
3/1	A20 WB exit	U	N/A	N/A	-		-	-	-	-	468	Inf	Inf	0.0%
J3: A20 E Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**71.7%**
1/2+1/1	A20 WB Jnc at M20 J10a Left Ahead	U	N/A	N/A	C3:B		1	16	-	-	710	2114:1974	719+272	71.7 : 71.7%
2/1	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	724	Inf	Inf	0.0%
2/2	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	550	Inf	Inf	0.0%
2/3	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	684	Inf	Inf	0.0%
3/1	M20 EB exit	U	N/A	N/A	-		-	-	-	-	565	Inf	Inf	0.0%

3/2	M20 EB exit	U	N/A	N/A	-		-	-	-	-	459	Inf	Inf	0.0%
4/1	NE Circ Ahead	U	N/A	N/A	C3:A		1	22	-	-	550	1978	910	60.4%
4/2+4/3	NE Circ Ahead Right	U	N/A	N/A	C3:A		1	22	-	-	684	2120:1971	832+216	65.3 : 65.3%
5/1	A20 EB exit	U	N/A	N/A	-		-	-	-	-	724	Inf	Inf	0.0%
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**50.5%**
1/1	E Circ Right	U	N/A	N/A	C2:A		1	17	-	-	264	1976	711	37.1%
1/2	E Circ Right	U	N/A	N/A	C2:A		1	17	-	-	351	2124	765	45.9%
1/3	E Circ Right	U	N/A	N/A	C2:A		1	17	-	-	305	1981	713	42.8%
2/2+2/1	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	21	-	-	908	2142:1950	942+858	50.4 : 50.5%
2/3	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	21	-	-	244	2000	880	27.7%
3/1	SE Circ Ahead	U	N/A	N/A	-		-	-	-	-	697	Inf	Inf	0.0%
3/2	SE Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	826	Inf	Inf	0.0%
3/3	SE Circ Right	U	N/A	N/A	-		-	-	-	-	549	Inf	Inf	0.0%
J5: A2070 Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.5%**
1/2+1/1	A2070 EB Ahead Left	O	N/A	N/A	-		-	-	-	-	606	2089:1988	745+245	61.2 : 61.2%
1/3	A2070 EB Ahead	O	N/A	N/A	-		-	-	-	-	555	2087	745	74.5%
2/1	SW Circ Ahead	U	N/A	N/A	-		-	-	-	-	223	Inf	Inf	0.0%
2/2	SW Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	549	Inf	Inf	0.0%
3/1	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	697	Inf	Inf	0.0%
3/2	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	603	Inf	Inf	0.0%
4/1	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	298	Inf	Inf	0.0%

4/2	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	134	Inf	Inf	0.0%

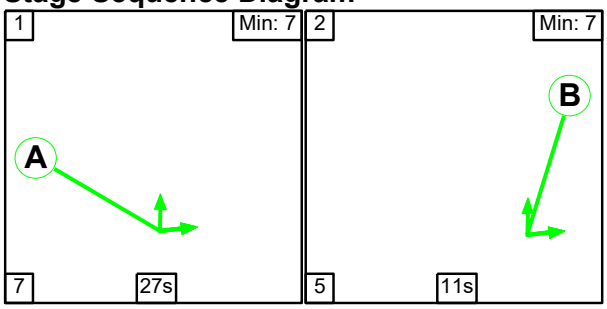
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: J7) M20 J10a	**-**	**-**	**2895**	**0**	**0**	**14.2**	**11.0**	**0.0**	**25.2**	**-**	**-**	**-**	**-**	
J1: M20 EB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**3.8**	**3.5**	**0.0**	**7.4**	**-**	**-**	**-**	**-**	
1/1+1/2	219	219	-	-	-	1.2	1.2	-	2.4	40.0	2.9	1.2	4.1	
1/3	142	142	-	-	-	0.8	0.4	-	1.2	29.5	1.8	0.4	2.2	
2/1	945	945	-	-	-	1.2	1.5	-	2.7	10.3	7.8	1.5	9.3	
2/2	556	556	-	-	-	0.7	0.4	-	1.0	6.8	3.1	0.4	3.5	
J2: A20 W Jnc at M20 J10a	**-**	**-**	**1128**	**0**	**0**	**0.1**	**0.5**	**0.0**	**0.7**	**-**	**-**	**-**	**-**	
1/2+1/1	564	564	1128	0	0	0.1	0.5	-	0.7	4.2	1.3	0.5	1.8	
2/1	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	468	468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J3: A20 E Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**5.3**	**2.9**	**0.0**	**8.3**	**-**	**-**	**-**	**-**	
1/2+1/1	710	710	-	-	-	2.7	1.3	-	4.0	20.1	6.2	1.3	7.4	
2/1	724	724	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	550	550	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	684	684	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	565	565	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/2	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	550	550	-	-	-	0.9	0.8	-	1.7	10.9	5.5	0.8	6.3	
4/2+4/3	684	684	-	-	-	1.7	0.9	-	2.6	13.8	5.5	0.9	6.4	

5/1	724	724	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**4.7**	**1.8**	**0.0**	**6.5**	**-**	**-**	**-**	**-**
1/1	264	264	-	-	-	0.5	0.3	-	0.8	11.5	1.2	0.3	1.5
1/2	351	351	-	-	-	0.9	0.4	-	1.4	13.9	2.1	0.4	2.5
1/3	305	305	-	-	-	0.1	0.4	-	0.5	5.7	0.2	0.4	0.6
2/2+2/1	908	908	-	-	-	2.5	0.5	-	3.0	12.1	4.6	0.5	5.1
2/3	244	244	-	-	-	0.6	0.2	-	0.8	11.8	2.1	0.2	2.3
3/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	826	826	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/3	549	549	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: A2070 Jnc at M20 J10a	**-**	**-**	**1767**	**0**	**0**	**0.2**	**2.2**	**0.0**	**2.4**	**-**	**-**	**-**	**-**
1/2+1/1	606	606	1212	0	0	0.0	0.8	-	0.8	5.0	1.6	0.8	2.4
1/3	555	555	555	0	0	0.1	1.4	-	1.6	10.2	2.8	1.4	4.2
2/1	223	223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	549	549	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	603	603	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	134	134	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	20.0	Total Delay for Signalled Lanes (pcuHr):	7.36	Cycle Time (s): 50
C2	PRC for Signalled Lanes (%):	78.3	Total Delay for Signalled Lanes (pcuHr):	6.52	Cycle Time (s): 50
C3	PRC for Signalled Lanes (%):	25.6	Total Delay for Signalled Lanes (pcuHr):	8.26	Cycle Time (s): 50
	PRC Over All Lanes (%):	20.0	Total Delay Over All Lanes(pcuHr):	25.19	

Scenario 2: '2026 Base+Sev PM Peak' (FG2: '2026 Base+Sev PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1

Stage Sequence Diagram



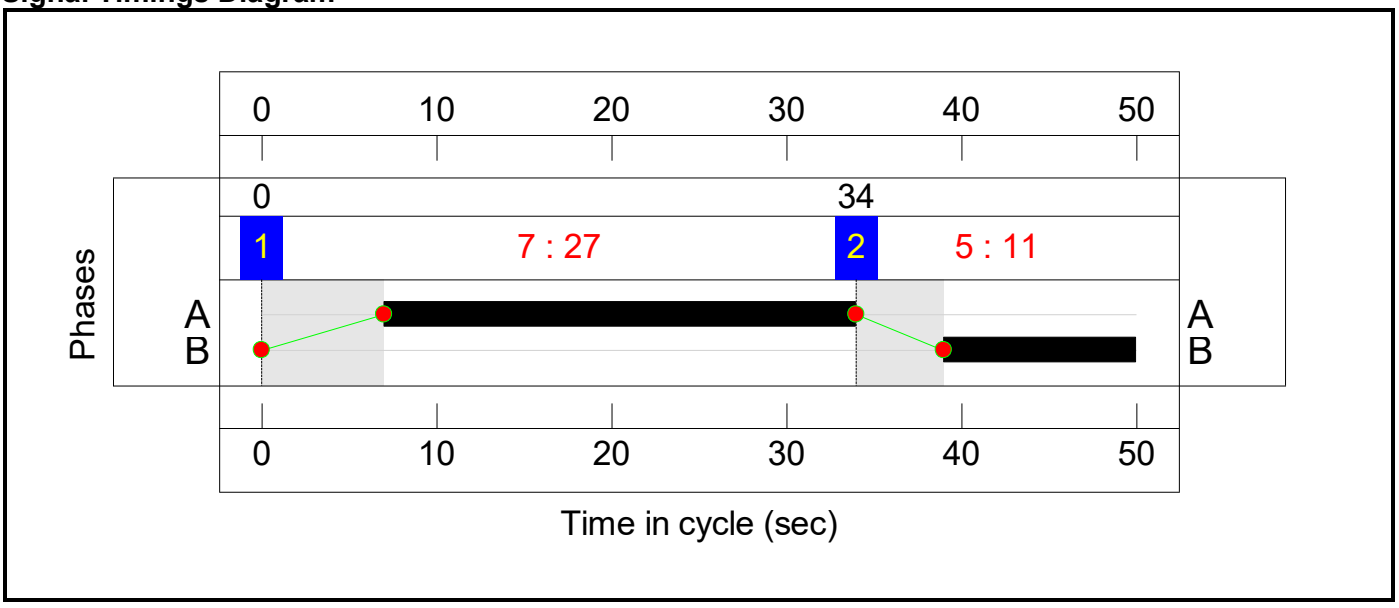
Stage Timings

Stage	1	2
Duration	27	11
Change Point	0	34

Phase Timings

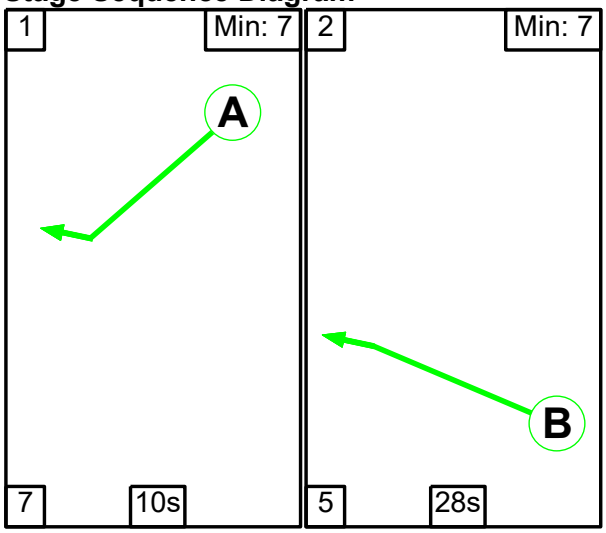
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	W Circ Ahead Left	Traffic	27	7	34
B	M20 EB Off-Slip Ahead Left	Traffic	11	39	0

Signal Timings Diagram



Controller :C2

Stage Sequence Diagram



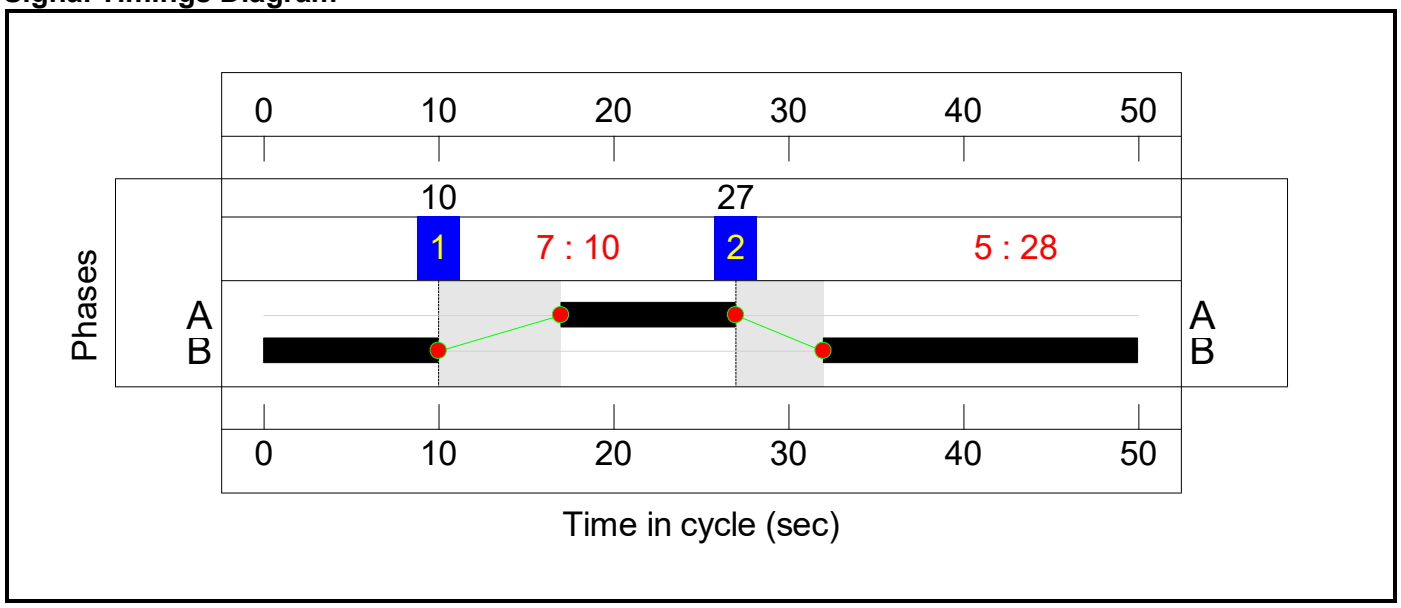
Stage Timings

Stage	1	2
Duration	10	28
Change Point	10	27

Phase Timings

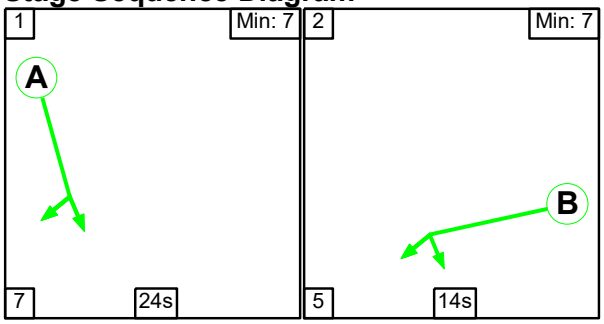
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	E Circ Right	Traffic	10	17	27
B	M20 WB Off-Slip Ahead	Traffic	28	32	10

Signal Timings Diagram



Controller :C3

Stage Sequence Diagram



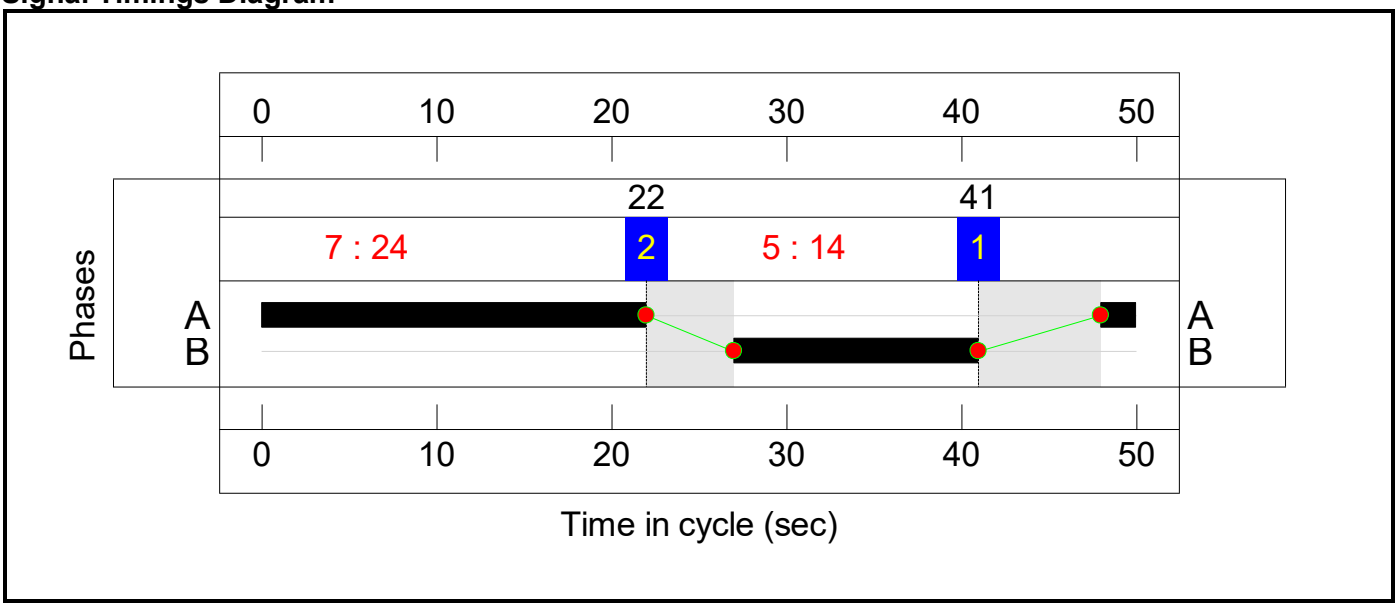
Stage Timings

Stage	1	2
Duration	24	14
Change Point	41	22

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	NE Circ Ahead Right	Traffic	24	48	22
B	A20 WB Jnc at M20 J10a Left Ahead	Traffic	14	27	41

Signal Timings Diagram



Lane Green Times

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J1:1/1	M20 EB Off-Slip Ahead Left	U	B	39	0
J1:1/2	M20 EB Off-Slip Ahead	U	B	39	0
J1:1/3	M20 EB Off-Slip Ahead	U	B	39	0
J1:2/1	W Circ Ahead Left	U	A	7	34
J1:2/2	W Circ Ahead	U	A	7	34

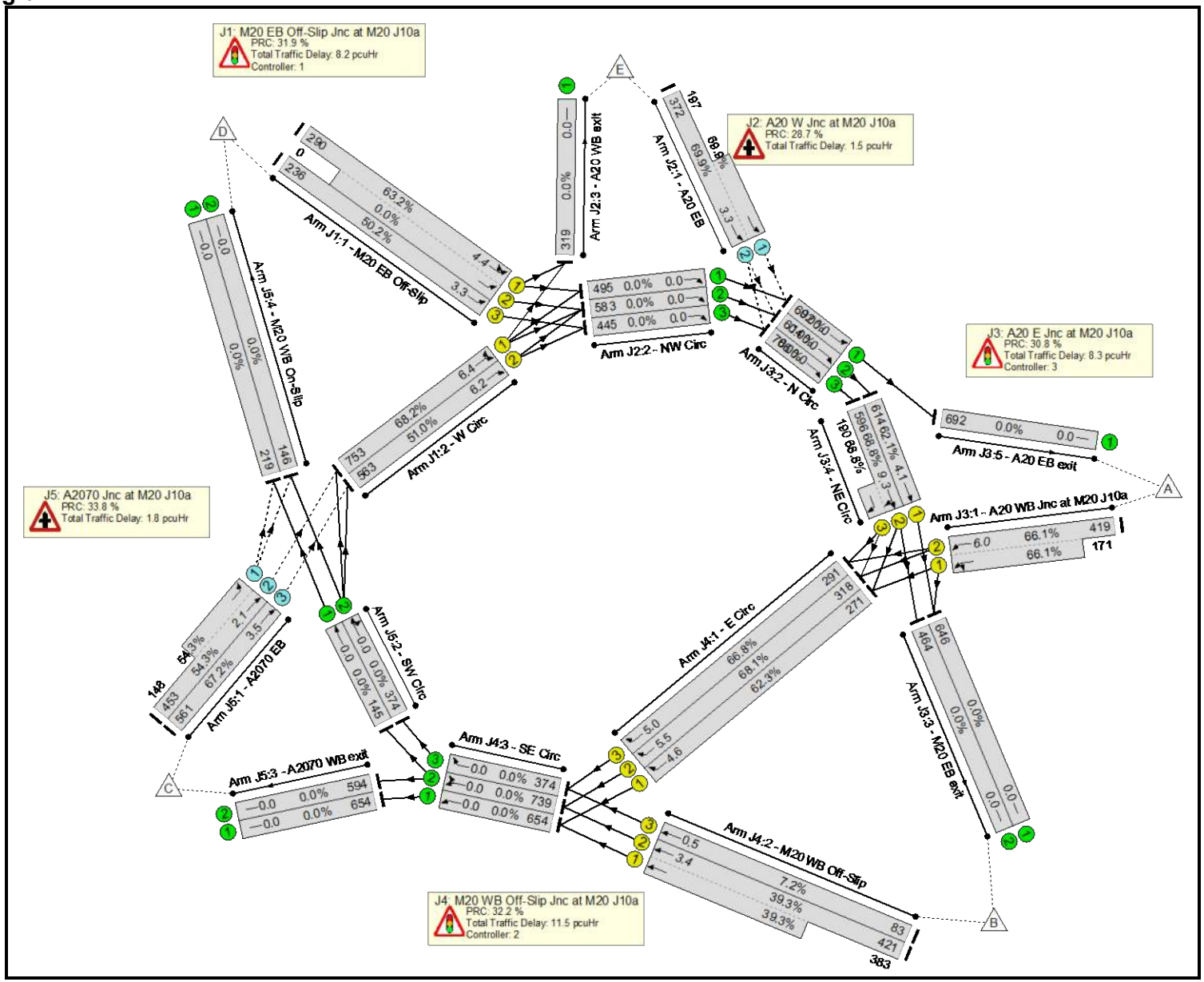
Junction: J2: A20 W Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Junction: J3: A20 E Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J3:1/1	A20 WB Jnc at M20 J10a Left Ahead	U	B	27	41
J3:1/2	A20 WB Jnc at M20 J10a Ahead	U	B	27	41
J3:4/1	NE Circ Ahead	U	A	48	22
J3:4/2	NE Circ Ahead Right	U	A	48	22
J3:4/3	NE Circ Right	U	A	48	22

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J4:1/1	E Circ Right	U	A	17	27
J4:1/2	E Circ Right	U	A	17	27
J4:1/3	E Circ Right	U	A	17	27
J4:2/1	M20 WB Off-Slip Ahead	U	B	32	10
J4:2/2	M20 WB Off-Slip Ahead	U	B	32	10
J4:2/3	M20 WB Off-Slip Ahead	U	B	32	10

Junction: J5: A2070 Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: J7) M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**69.9%**
J1: M20 EB Off-Slip Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**68.2%**
1/1+1/2	M20 EB Off-Slip Ahead Left	U	N/A	N/A	C1:B		1	11	-	-	290	1913:2200	459+0	63.2 : 0.0%
1/3	M20 EB Off-Slip Ahead	U	N/A	N/A	C1:B		1	11	-	-	236	1959	470	50.2%
2/1	W Circ Ahead Left	U	N/A	N/A	C1:A		1	27	-	-	753	1971	1104	68.2%
2/2	W Circ Ahead	U	N/A	N/A	C1:A		1	27	-	-	563	1972	1104	51.0%
J2: A20 W Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**69.9%**
1/2+1/1	A20 EB Ahead	O	N/A	N/A	-		-	-	-	-	569	1960:1965	532+282	69.9 : 69.9%
2/1	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	495	Inf	Inf	0.0%
2/2	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	583	Inf	Inf	0.0%
2/3	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	445	Inf	Inf	0.0%
3/1	A20 WB exit	U	N/A	N/A	-		-	-	-	-	319	Inf	Inf	0.0%
J3: A20 E Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**68.8%**
1/2+1/1	A20 WB Jnc at M20 J10a Left Ahead	U	N/A	N/A	C3:B		1	14	-	-	590	2114:1960	634+259	66.1 : 66.1%
2/1	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	692	Inf	Inf	0.0%
2/2	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	614	Inf	Inf	0.0%
2/3	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	786	Inf	Inf	0.0%
3/1	M20 EB exit	U	N/A	N/A	-		-	-	-	-	646	Inf	Inf	0.0%

3/2	M20 EB exit	U	N/A	N/A	-		-	-	-	-	464	Inf	Inf	0.0%
4/1	NE Circ Ahead	U	N/A	N/A	C3:A		1	24	-	-	614	1978	989	62.1%
4/2+4/3	NE Circ Ahead Right	U	N/A	N/A	C3:A		1	24	-	-	786	2125:1971	866+276	68.8 : 68.8%
5/1	A20 EB exit	U	N/A	N/A	-		-	-	-	-	692	Inf	Inf	0.0%
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**68.1%**
1/1	E Circ Right	U	N/A	N/A	C2:A		1	10	-	-	271	1976	435	62.3%
1/2	E Circ Right	U	N/A	N/A	C2:A		1	10	-	-	318	2124	467	68.1%
1/3	E Circ Right	U	N/A	N/A	C2:A		1	10	-	-	291	1981	436	66.8%
2/2+2/1	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	28	-	-	804	2142:1950	1071+975	39.3 : 39.3%
2/3	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	28	-	-	83	2000	1160	7.2%
3/1	SE Circ Ahead	U	N/A	N/A	-		-	-	-	-	654	Inf	Inf	0.0%
3/2	SE Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	739	Inf	Inf	0.0%
3/3	SE Circ Right	U	N/A	N/A	-		-	-	-	-	374	Inf	Inf	0.0%
J5: A2070 Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**67.2%**
1/2+1/1	A2070 EB Ahead Left	O	N/A	N/A	-		-	-	-	-	601	2089:1988	834+273	54.3 : 54.3%
1/3	A2070 EB Ahead	O	N/A	N/A	-		-	-	-	-	561	2087	834	67.2%
2/1	SW Circ Ahead	U	N/A	N/A	-		-	-	-	-	145	Inf	Inf	0.0%
2/2	SW Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	374	Inf	Inf	0.0%
3/1	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	654	Inf	Inf	0.0%
3/2	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	594	Inf	Inf	0.0%
4/1	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	219	Inf	Inf	0.0%

4/2	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	146	Inf	Inf	0.0%

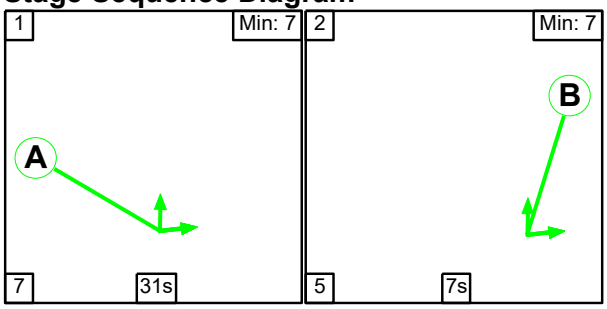
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: J7) M20 J10a	**-**	**-**	**2901**	**0**	**0**	**19.6**	**11.8**	**0.0**	**31.4**	**-**	**-**	**-**	**-**	
J1: M20 EB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**5.3**	**2.9**	**0.0**	**8.2**	**-**	**-**	**-**	**-**	
1/1+1/2	290	290	-	-	-	1.4	0.8	-	2.2	27.6	3.5	0.8	4.4	
1/3	236	236	-	-	-	1.1	0.5	-	1.6	24.1	2.8	0.5	3.3	
2/1	753	753	-	-	-	1.4	1.1	-	2.5	11.7	5.3	1.1	6.4	
2/2	563	563	-	-	-	1.4	0.5	-	1.9	12.4	5.6	0.5	6.2	
J2: A20 W Jnc at M20 J10a	**-**	**-**	**1138**	**0**	**0**	**0.4**	**1.2**	**0.0**	**1.5**	**-**	**-**	**-**	**-**	
1/2+1/1	569	569	1138	0	0	0.4	1.2	-	1.5	9.8	2.2	1.2	3.3	
2/1	495	495	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	583	583	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	445	445	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J3: A20 E Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**5.4**	**2.9**	**0.0**	**8.3**	**-**	**-**	**-**	**-**	
1/2+1/1	590	590	-	-	-	2.4	1.0	-	3.4	20.7	5.0	1.0	6.0	
2/1	692	692	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	614	614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/2	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	614	614	-	-	-	1.0	0.8	-	1.8	10.8	3.3	0.8	4.1	
4/2+4/3	786	786	-	-	-	2.0	1.1	-	3.1	14.1	8.2	1.1	9.3	

5/1	692	692	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**8.3**	**3.2**	**0.0**	**11.5**	**-**	**-**	**-**	**-**
1/1	271	271	-	-	-	2.0	0.8	-	2.8	37.2	3.8	0.8	4.6
1/2	318	318	-	-	-	2.1	1.1	-	3.1	35.5	4.4	1.1	5.5
1/3	291	291	-	-	-	2.9	1.0	-	3.9	48.1	4.0	1.0	5.0
2/2+2/1	804	804	-	-	-	1.2	0.3	-	1.6	6.9	3.0	0.3	3.4
2/3	83	83	-	-	-	0.1	0.0	-	0.1	6.3	0.5	0.0	0.5
3/1	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	739	739	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/3	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: A2070 Jnc at M20 J10a	**-**	**-**	**1763**	**0**	**0**	**0.2**	**1.6**	**0.0**	**1.8**	**-**	**-**	**-**	**-**
1/2+1/1	601	601	1202	0	0	0.1	0.6	-	0.7	4.1	1.5	0.6	2.1
1/3	561	561	561	0	0	0.1	1.0	-	1.2	7.5	2.5	1.0	3.5
2/1	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	146	146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	31.9	Total Delay for Signalled Lanes (pcuHr):	8.20	Cycle Time (s): 50
C2	PRC for Signalled Lanes (%):	32.2	Total Delay for Signalled Lanes (pcuHr):	11.52	Cycle Time (s): 50
C3	PRC for Signalled Lanes (%):	30.8	Total Delay for Signalled Lanes (pcuHr):	8.30	Cycle Time (s): 50
	PRC Over All Lanes (%):	28.7	Total Delay Over All Lanes(pcuHr):	31.41	

Scenario 3: '2036 Base+Sev AM Peak' (FG3: '2036 Base+Sev AM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1

Stage Sequence Diagram



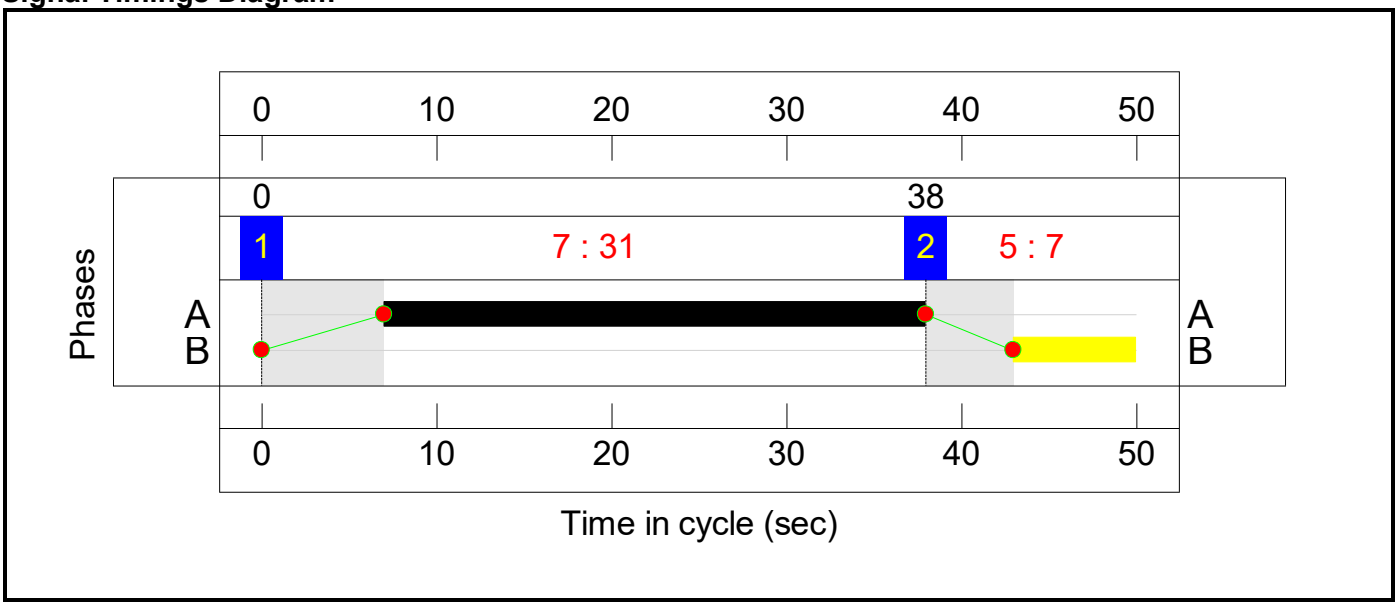
Stage Timings

Stage	1	2
Duration	31	7
Change Point	0	38

Phase Timings

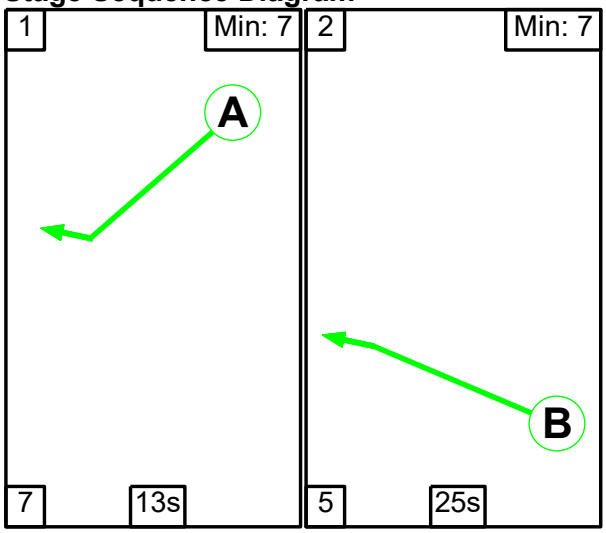
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	W Circ Ahead Left	Traffic	31	7	38
B	M20 EB Off-Slip Ahead Left	Traffic	7	43	0

Signal Timings Diagram



Controller :C2

Stage Sequence Diagram



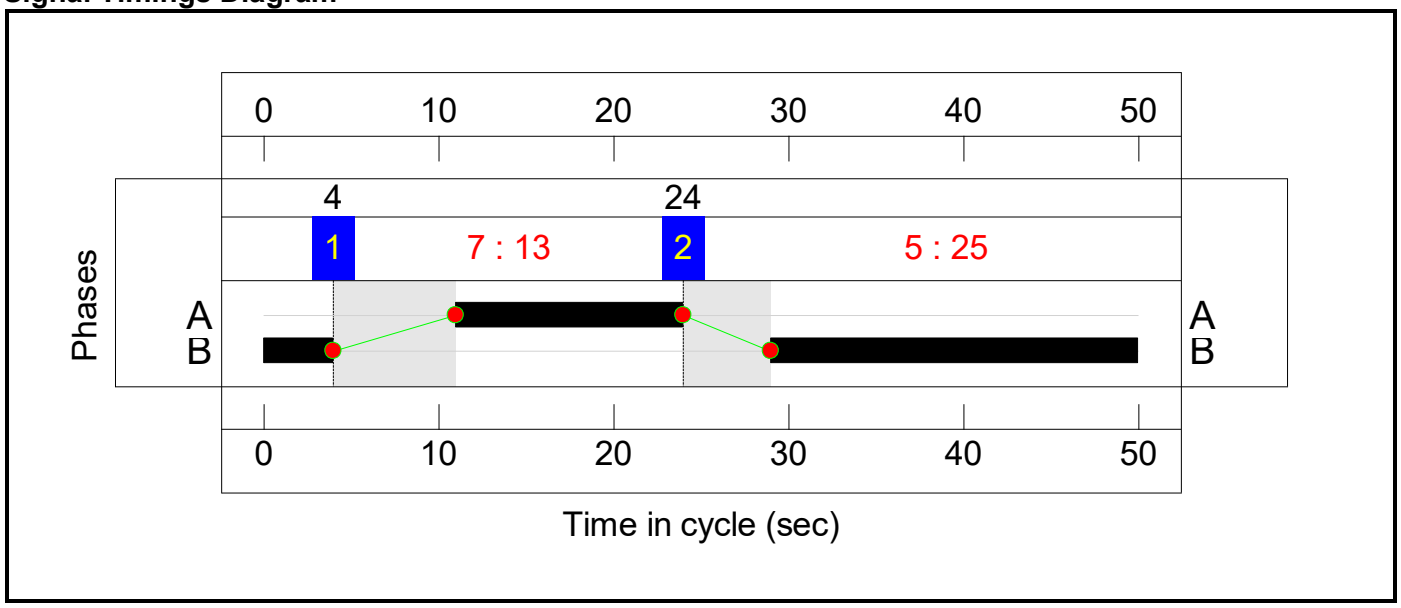
Stage Timings

Stage	1	2
Duration	13	25
Change Point	4	24

Phase Timings

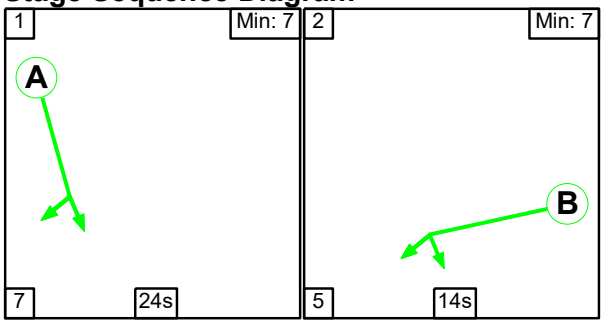
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	E Circ Right	Traffic	13	11	24
B	M20 WB Off-Slip Ahead	Traffic	25	29	4

Signal Timings Diagram



Controller :C3

Stage Sequence Diagram



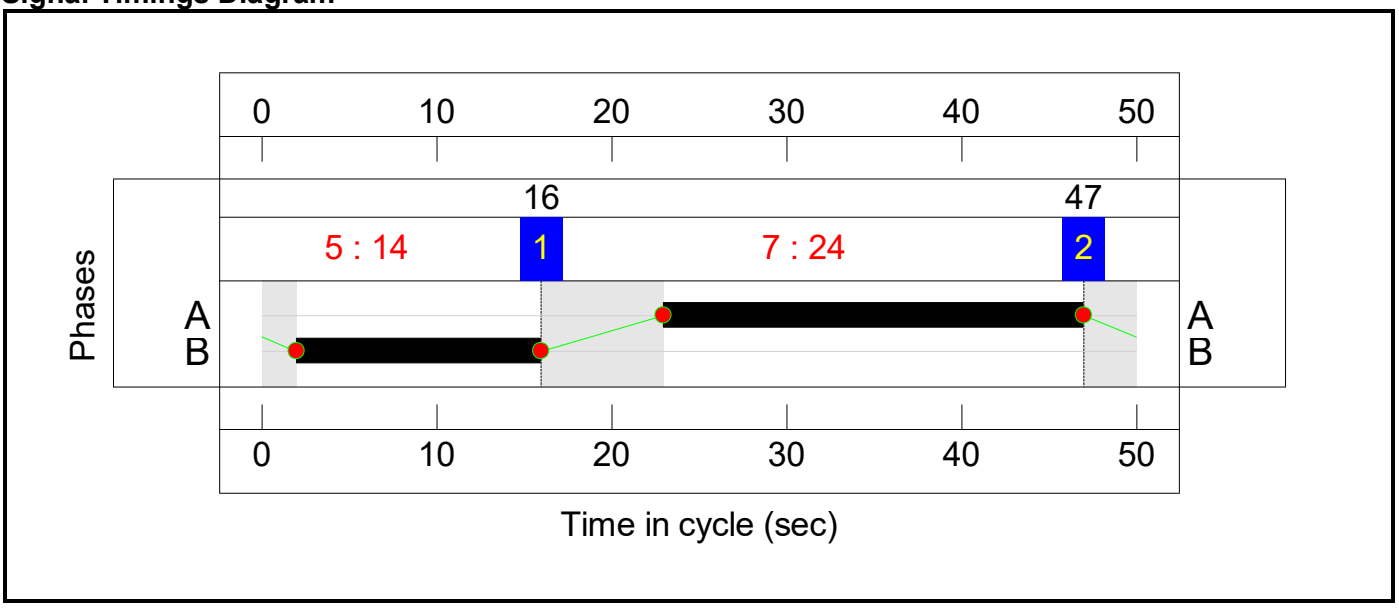
Stage Timings

Stage	1	2
Duration	24	14
Change Point	16	47

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	NE Circ Ahead Right	Traffic	24	23	47
B	A20 WB Jnc at M20 J10a Left Ahead	Traffic	14	2	16

Signal Timings Diagram



Lane Green Times

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J1:1/1	M20 EB Off-Slip Ahead Left	U	B	43	0
J1:1/2	M20 EB Off-Slip Ahead	U	B	43	0
J1:1/3	M20 EB Off-Slip Ahead	U	B	43	0
J1:2/1	W Circ Ahead Left	U	A	7	38
J1:2/2	W Circ Ahead	U	A	7	38

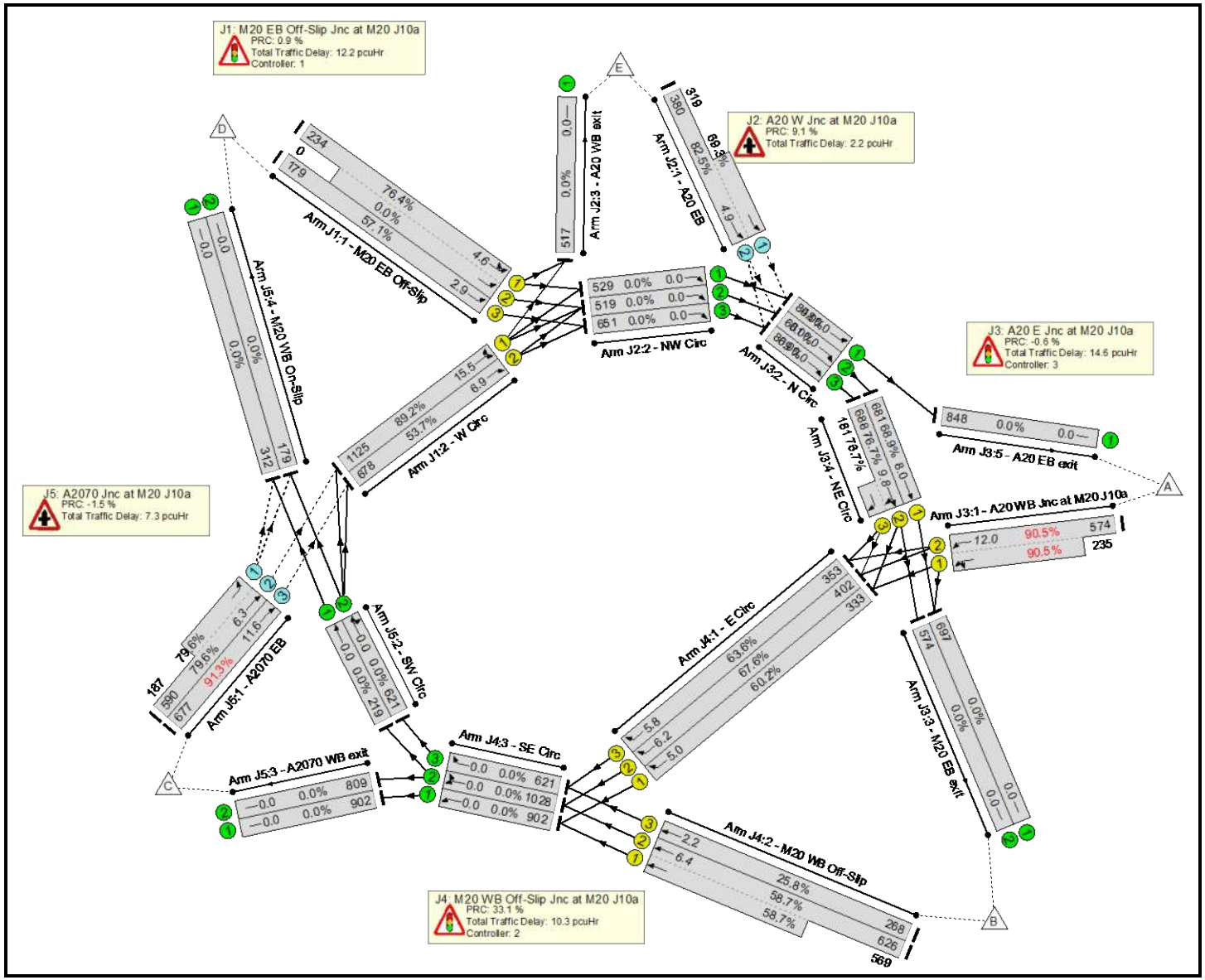
Junction: J2: A20 W Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Junction: J3: A20 E Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J3:1/1	A20 WB Jnc at M20 J10a Left Ahead	U	B	2	16
J3:1/2	A20 WB Jnc at M20 J10a Ahead	U	B	2	16
J3:4/1	NE Circ Ahead	U	A	23	47
J3:4/2	NE Circ Ahead Right	U	A	23	47
J3:4/3	NE Circ Right	U	A	23	47

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J4:1/1	E Circ Right	U	A	11	24
J4:1/2	E Circ Right	U	A	11	24
J4:1/3	E Circ Right	U	A	11	24
J4:2/1	M20 WB Off-Slip Ahead	U	B	29	4
J4:2/2	M20 WB Off-Slip Ahead	U	B	29	4
J4:2/3	M20 WB Off-Slip Ahead	U	B	29	4

Junction: J5: A2070 Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: J7) M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**91.3%**
J1: M20 EB Off-Slip Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**89.2%**
1/1+1/2	M20 EB Off-Slip Ahead Left	U	N/A	N/A	C1:B		1	7	-	-	234	1914:2200	306+0	76.4 : 0.0%
1/3	M20 EB Off-Slip Ahead	U	N/A	N/A	C1:B		1	7	-	-	179	1959	313	57.1%
2/1	W Circ Ahead Left	U	N/A	N/A	C1:A		1	31	-	-	1125	1970	1261	89.2%
2/2	W Circ Ahead	U	N/A	N/A	C1:A		1	31	-	-	678	1972	1262	53.7%
J2: A20 W Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**82.5%**
1/2+1/1	A20 EB Ahead	O	N/A	N/A	-		-	-	-	-	699	1960:1965	461+461	82.5 : 69.3%
2/1	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	529	Inf	Inf	0.0%
2/2	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	519	Inf	Inf	0.0%
2/3	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	651	Inf	Inf	0.0%
3/1	A20 WB exit	U	N/A	N/A	-		-	-	-	-	517	Inf	Inf	0.0%
J3: A20 E Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.5%**
1/2+1/1	A20 WB Jnc at M20 J10a Left Ahead	U	N/A	N/A	C3:B		1	14	-	-	809	2114:1976	634+260	90.5 : 90.5%
2/1	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	848	Inf	Inf	0.0%
2/2	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	681	Inf	Inf	0.0%
2/3	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	869	Inf	Inf	0.0%
3/1	M20 EB exit	U	N/A	N/A	-		-	-	-	-	697	Inf	Inf	0.0%

3/2	M20 EB exit	U	N/A	N/A	-		-	-	-	-	574	Inf	Inf	0.0%
4/1	NE Circ Ahead	U	N/A	N/A	C3:A		1	24	-	-	681	1978	989	68.9%
4/2+4/3	NE Circ Ahead Right	U	N/A	N/A	C3:A		1	24	-	-	869	2121:1971	897+236	76.7 : 76.7%
5/1	A20 EB exit	U	N/A	N/A	-		-	-	-	-	848	Inf	Inf	0.0%
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**67.6%**
1/1	E Circ Right	U	N/A	N/A	C2:A		1	13	-	-	333	1976	553	60.2%
1/2	E Circ Right	U	N/A	N/A	C2:A		1	13	-	-	402	2124	595	67.6%
1/3	E Circ Right	U	N/A	N/A	C2:A		1	13	-	-	353	1981	555	63.6%
2/2+2/1	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	25	-	-	1195	2142:1950	1066+969	58.7 : 58.7%
2/3	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	25	-	-	268	2000	1040	25.8%
3/1	SE Circ Ahead	U	N/A	N/A	-		-	-	-	-	902	Inf	Inf	0.0%
3/2	SE Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1028	Inf	Inf	0.0%
3/3	SE Circ Right	U	N/A	N/A	-		-	-	-	-	621	Inf	Inf	0.0%
J5: A2070 Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**91.3%**
1/2+1/1	A2070 EB Ahead Left	O	N/A	N/A	-		-	-	-	-	777	2089:1988	741+235	79.6 : 79.6%
1/3	A2070 EB Ahead	O	N/A	N/A	-		-	-	-	-	677	2087	741	91.3%
2/1	SW Circ Ahead	U	N/A	N/A	-		-	-	-	-	219	Inf	Inf	0.0%
2/2	SW Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	621	Inf	Inf	0.0%
3/1	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	902	Inf	Inf	0.0%
3/2	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	809	Inf	Inf	0.0%
4/1	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	312	Inf	Inf	0.0%

4/2	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	179	Inf	Inf	0.0%

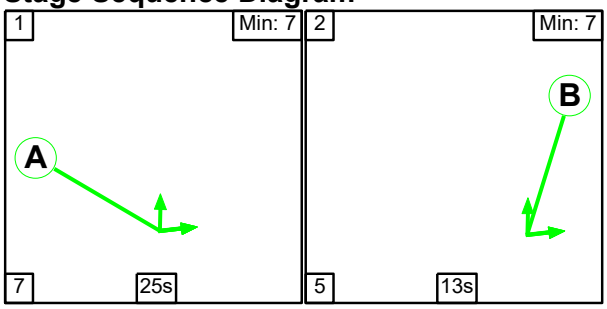
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: J7) M20 J10a	**-**	**-**	**3629**	**0**	**0**	**21.3**	**25.4**	**0.0**	**46.7**	**-**	**-**	**-**	**-**	
J1: M20 EB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**5.5**	**6.7**	**0.0**	**12.2**	**-**	**-**	**-**	**-**	
1/1+1/2	234	234	-	-	-	1.3	1.6	-	2.9	44.0	3.1	1.6	4.6	
1/3	179	179	-	-	-	1.0	0.7	-	1.6	32.7	2.3	0.7	2.9	
2/1	1125	1125	-	-	-	2.0	3.9	-	5.9	19.0	11.6	3.9	15.5	
2/2	678	678	-	-	-	1.2	0.6	-	1.8	9.5	6.3	0.6	6.9	
J2: A20 W Jnc at M20 J10a	**-**	**-**	**1398**	**0**	**0**	**0.7**	**1.6**	**0.0**	**2.2**	**-**	**-**	**-**	**-**	
1/2+1/1	699	699	1398	0	0	0.7	1.6	-	2.2	11.5	3.4	1.6	4.9	
2/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	517	517	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J3: A20 E Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**7.6**	**7.1**	**0.0**	**14.6**	**-**	**-**	**-**	**-**	
1/2+1/1	809	809	-	-	-	3.6	4.3	-	7.9	35.2	7.7	4.3	12.0	
2/1	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	681	681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/2	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	681	681	-	-	-	1.3	1.1	-	2.4	12.4	6.9	1.1	8.0	
4/2+4/3	869	869	-	-	-	2.7	1.6	-	4.3	18.0	8.2	1.6	9.8	

5/1	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**6.8**	**3.5**	**0.0**	**10.3**	**-**	**-**	**-**	**-**
1/1	333	333	-	-	-	1.3	0.8	-	2.0	21.7	4.2	0.8	5.0
1/2	402	402	-	-	-	1.8	1.0	-	2.8	25.3	5.2	1.0	6.2
1/3	353	353	-	-	-	0.5	0.9	-	1.4	14.1	4.9	0.9	5.8
2/2+2/1	1195	1195	-	-	-	2.7	0.7	-	3.4	10.3	5.7	0.7	6.4
2/3	268	268	-	-	-	0.5	0.2	-	0.7	9.0	2.0	0.2	2.2
3/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	1028	1028	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/3	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: A2070 Jnc at M20 J10a	**-**	**-**	**2231**	**0**	**0**	**0.8**	**6.5**	**0.0**	**7.3**	**-**	**-**	**-**	**-**
1/2+1/1	777	777	1554	0	0	0.3	1.9	-	2.2	10.2	4.4	1.9	6.3
1/3	677	677	677	0	0	0.5	4.6	-	5.1	27.2	7.0	4.6	11.6
2/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	809	809	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	312	312	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	179	179	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	12.20	Cycle Time (s): 50
C2	PRC for Signalled Lanes (%):	33.1	Total Delay for Signalled Lanes (pcuHr):	10.29	Cycle Time (s): 50
C3	PRC for Signalled Lanes (%):	-0.6	Total Delay for Signalled Lanes (pcuHr):	14.61	Cycle Time (s): 50
	PRC Over All Lanes (%):	-1.5	Total Delay Over All Lanes(pcuHr):	46.67	

Scenario 4: '2036 Base+Sev PM Peak' (FG4: '2036 Base+Sev PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1

Stage Sequence Diagram



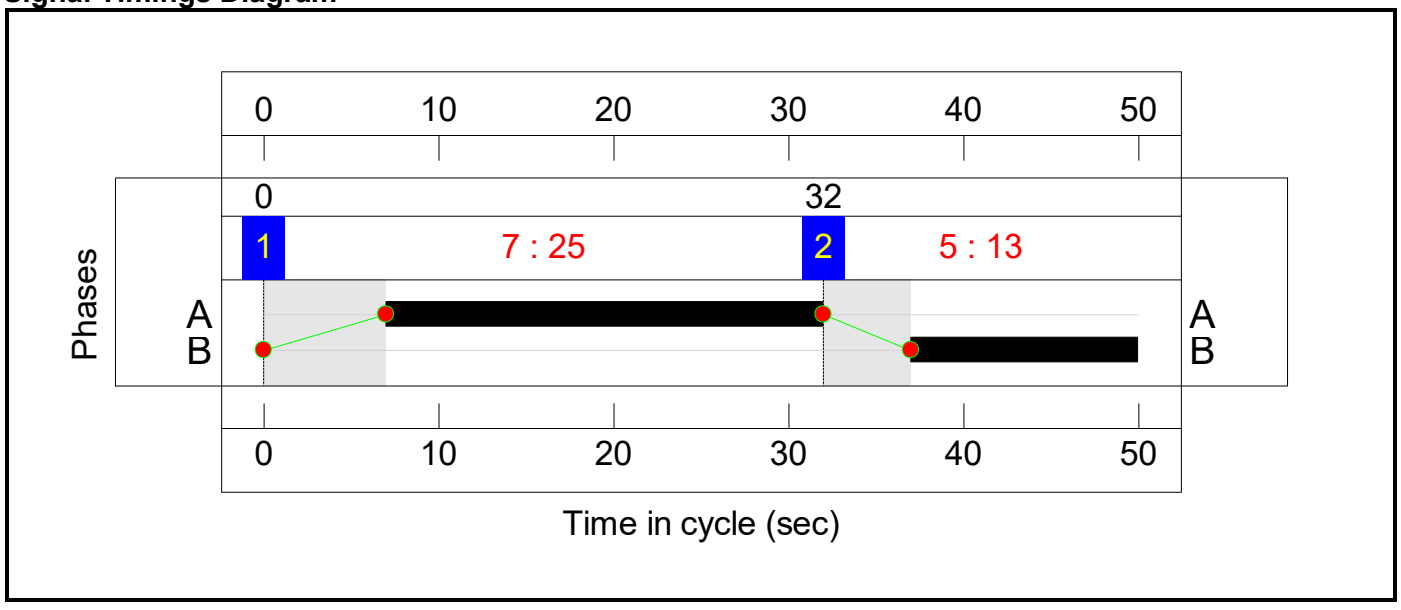
Stage Timings

Stage	1	2
Duration	25	13
Change Point	0	32

Phase Timings

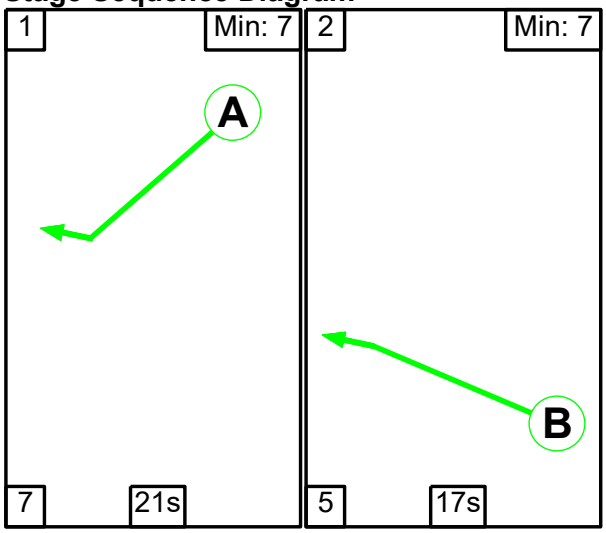
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	W Circ Ahead Left	Traffic	25	7	32
B	M20 EB Off-Slip Ahead Left	Traffic	13	37	0

Signal Timings Diagram



Controller :C2

Stage Sequence Diagram



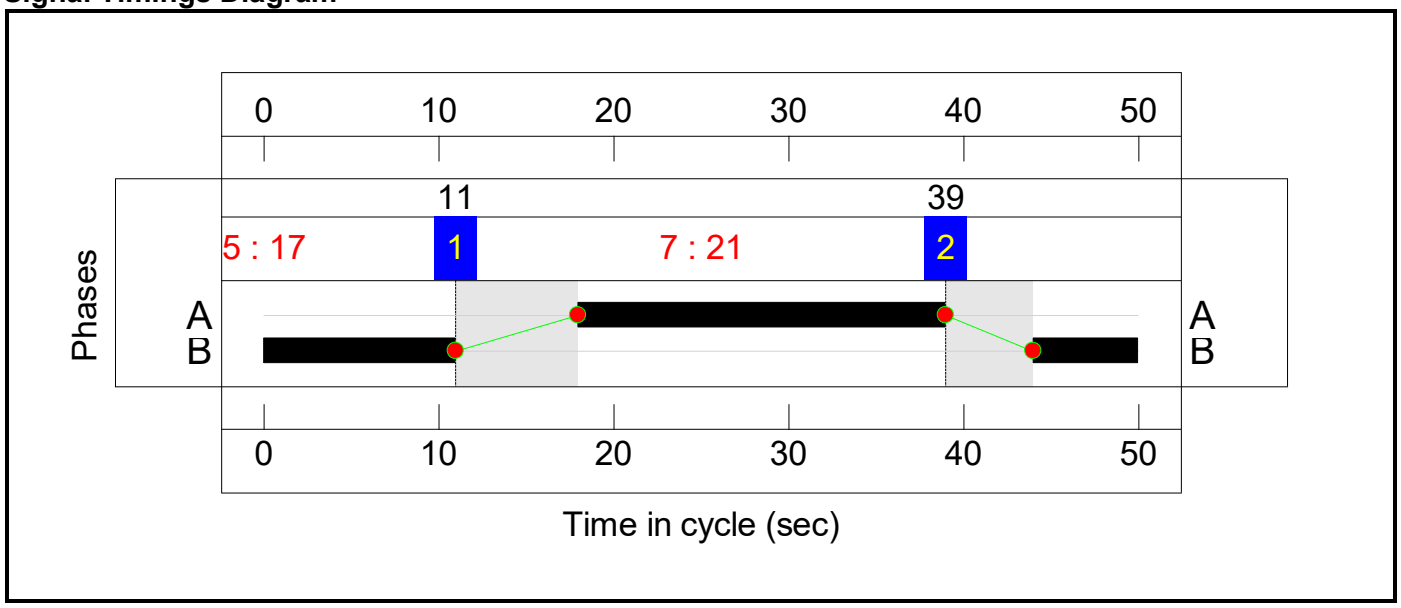
Stage Timings

Stage	1	2
Duration	21	17
Change Point	11	39

Phase Timings

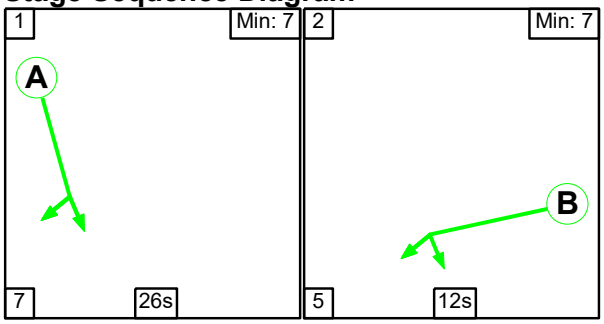
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	E Circ Right	Traffic	21	18	39
B	M20 WB Off-Slip Ahead	Traffic	17	44	11

Signal Timings Diagram



Controller :C3

Stage Sequence Diagram



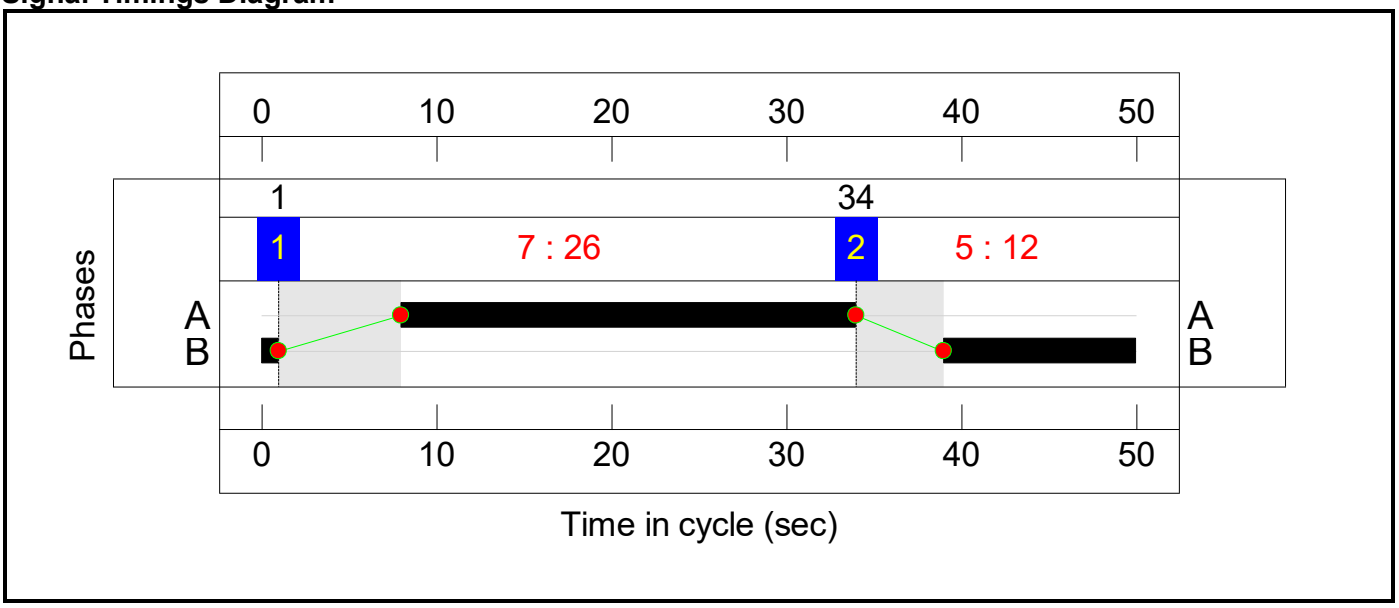
Stage Timings

Stage	1	2
Duration	26	12
Change Point	1	34

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	NE Circ Ahead Right	Traffic	26	8	34
B	A20 WB Jnc at M20 J10a Left Ahead	Traffic	12	39	1

Signal Timings Diagram



Lane Green Times

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J1:1/1	M20 EB Off-Slip Ahead Left	U	B	37	0
J1:1/2	M20 EB Off-Slip Ahead	U	B	37	0
J1:1/3	M20 EB Off-Slip Ahead	U	B	37	0
J1:2/1	W Circ Ahead Left	U	A	7	32
J1:2/2	W Circ Ahead	U	A	7	32

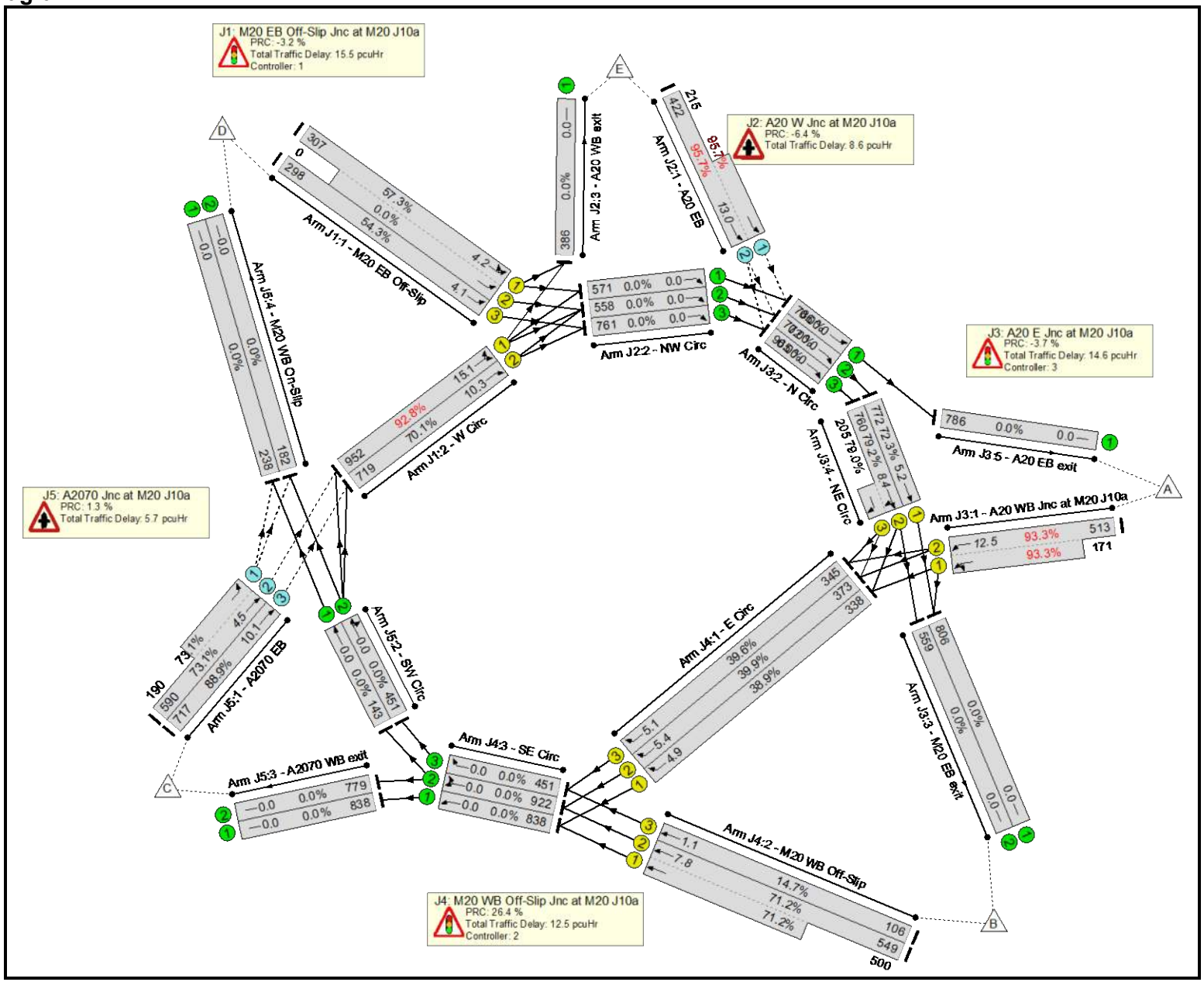
Junction: J2: A20 W Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Junction: J3: A20 E Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J3:1/1	A20 WB Jnc at M20 J10a Left Ahead	U	B	39	1
J3:1/2	A20 WB Jnc at M20 J10a Ahead	U	B	39	1
J3:4/1	NE Circ Ahead	U	A	8	34
J3:4/2	NE Circ Ahead Right	U	A	8	34
J3:4/3	NE Circ Right	U	A	8	34

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J4:1/1	E Circ Right	U	A	18	39
J4:1/2	E Circ Right	U	A	18	39
J4:1/3	E Circ Right	U	A	18	39
J4:2/1	M20 WB Off-Slip Ahead	U	B	44	11
J4:2/2	M20 WB Off-Slip Ahead	U	B	44	11
J4:2/3	M20 WB Off-Slip Ahead	U	B	44	11

Junction: J5: A2070 Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: J7) M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95.7%**
J1: M20 EB Off-Slip Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.8%**
1/1+1/2	M20 EB Off-Slip Ahead Left	U	N/A	N/A	C1:B		1	13	-	-	307	1913:2200	536+0	57.3 : 0.0%
1/3	M20 EB Off-Slip Ahead	U	N/A	N/A	C1:B		1	13	-	-	298	1959	549	54.3%
2/1	W Circ Ahead Left	U	N/A	N/A	C1:A		1	25	-	-	952	1972	1025	92.8%
2/2	W Circ Ahead	U	N/A	N/A	C1:A		1	25	-	-	719	1972	1025	70.1%
J2: A20 W Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**95.7%**
1/2+1/1	A20 EB Ahead	O	N/A	N/A	-		-	-	-	-	637	1960:1965	441+225	95.7 : 95.7%
2/1	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	571	Inf	Inf	0.0%
2/2	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	558	Inf	Inf	0.0%
2/3	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	761	Inf	Inf	0.0%
3/1	A20 WB exit	U	N/A	N/A	-		-	-	-	-	386	Inf	Inf	0.0%
J3: A20 E Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**93.3%**
1/2+1/1	A20 WB Jnc at M20 J10a Left Ahead	U	N/A	N/A	C3:B		1	12	-	-	684	2114:1959	550+183	93.3 : 93.3%
2/1	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	786	Inf	Inf	0.0%
2/2	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	772	Inf	Inf	0.0%
2/3	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	969	Inf	Inf	0.0%
3/1	M20 EB exit	U	N/A	N/A	-		-	-	-	-	806	Inf	Inf	0.0%

3/2	M20 EB exit	U	N/A	N/A	-		-	-	-	-	561	Inf	Inf	0.0%
4/1	NE Circ Ahead	U	N/A	N/A	C3:A		1	26	-	-	772	1978	1068	72.3%
4/2+4/3	NE Circ Ahead Right	U	N/A	N/A	C3:A		1	26	-	-	969	2127:1971	960+259	79.2 : 79.0%
5/1	A20 EB exit	U	N/A	N/A	-		-	-	-	-	786	Inf	Inf	0.0%
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**71.2%**
1/1	E Circ Right	U	N/A	N/A	C2:A		1	21	-	-	339	1976	869	38.9%
1/2	E Circ Right	U	N/A	N/A	C2:A		1	21	-	-	374	2124	935	39.9%
1/3	E Circ Right	U	N/A	N/A	C2:A		1	21	-	-	345	1981	872	39.6%
2/2+2/1	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	17	-	-	1049	2142:1950	771+702	71.2 : 71.2%
2/3	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	17	-	-	106	2000	720	14.7%
3/1	SE Circ Ahead	U	N/A	N/A	-		-	-	-	-	839	Inf	Inf	0.0%
3/2	SE Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	923	Inf	Inf	0.0%
3/3	SE Circ Right	U	N/A	N/A	-		-	-	-	-	451	Inf	Inf	0.0%
J5: A2070 Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**88.9%**
1/2+1/1	A2070 EB Ahead Left	O	N/A	N/A	-		-	-	-	-	780	2089:1988	807+260	73.1 : 73.1%
1/3	A2070 EB Ahead	O	N/A	N/A	-		-	-	-	-	717	2087	807	88.9%
2/1	SW Circ Ahead	U	N/A	N/A	-		-	-	-	-	143	Inf	Inf	0.0%
2/2	SW Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	451	Inf	Inf	0.0%
3/1	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	839	Inf	Inf	0.0%
3/2	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	780	Inf	Inf	0.0%
4/1	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	238	Inf	Inf	0.0%

4/2	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	182	Inf	Inf	0.0%

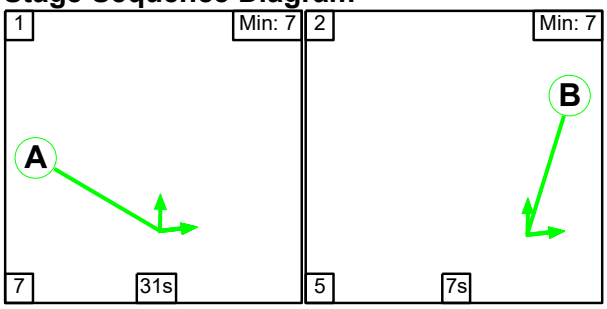
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: J7) M20 J10a	**-**	**-**	**3551**	**0**	**0**	**25.2**	**31.6**	**0.0**	**56.8**	**-**	**-**	**-**	**-**	
J1: M20 EB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**7.5**	**8.0**	**0.0**	**15.5**	**-**	**-**	**-**	**-**	
1/1+1/2	307	307	-	-	-	1.3	0.7	-	2.0	23.3	3.6	0.7	4.2	
1/3	298	298	-	-	-	1.3	0.6	-	1.9	22.5	3.5	0.6	4.1	
2/1	952	952	-	-	-	2.6	5.6	-	8.2	30.9	9.5	5.6	15.1	
2/2	719	719	-	-	-	2.4	1.2	-	3.5	17.6	9.1	1.2	10.3	
J2: A20 W Jnc at M20 J10a	**-**	**-**	**1274**	**0**	**0**	**1.2**	**7.4**	**0.0**	**8.6**	**-**	**-**	**-**	**-**	
1/2+1/1	637	637	1274	0	0	1.2	7.4	-	8.6	48.6	5.6	7.4	13.0	
2/1	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	761	761	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J3: A20 E Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**5.7**	**8.8**	**0.0**	**14.6**	**-**	**-**	**-**	**-**	
1/2+1/1	684	684	-	-	-	3.3	5.7	-	9.0	47.2	6.8	5.7	12.5	
2/1	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	772	772	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	965	965	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	806	806	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/2	559	559	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	772	772	-	-	-	0.7	1.3	-	1.9	9.1	3.9	1.3	5.2	
4/2+4/3	965	965	-	-	-	1.8	1.9	-	3.6	13.6	6.5	1.9	8.4	

5/1	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**10.2**	**2.3**	**0.0**	**12.5**	**-**	**-**	**-**	**-**
1/1	338	338	-	-	-	1.6	0.3	-	1.9	20.4	4.6	0.3	4.9
1/2	373	373	-	-	-	1.8	0.3	-	2.1	20.3	5.1	0.3	5.4
1/3	345	345	-	-	-	2.5	0.3	-	2.8	29.2	4.8	0.3	5.1
2/2+2/1	1049	1049	-	-	-	4.0	1.2	-	5.2	18.0	6.6	1.2	7.8
2/3	106	106	-	-	-	0.3	0.1	-	0.4	13.8	1.0	0.1	1.1
3/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	922	922	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/3	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: A2070 Jnc at M20 J10a	**-**	**-**	**2277**	**0**	**0**	**0.6**	**5.0**	**0.0**	**5.7**	**-**	**-**	**-**	**-**
1/2+1/1	780	780	1560	0	0	0.2	1.3	-	1.6	7.3	3.1	1.3	4.5
1/3	717	717	717	0	0	0.4	3.7	-	4.1	20.6	6.4	3.7	10.1
2/1	143	143	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	779	779	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	238	238	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-3.2	Total Delay for Signalled Lanes (pcuHr):	15.55	Cycle Time (s): 50
C2	PRC for Signalled Lanes (%):	26.4	Total Delay for Signalled Lanes (pcuHr):	12.46	Cycle Time (s): 50
C3	PRC for Signalled Lanes (%):	-3.7	Total Delay for Signalled Lanes (pcuHr):	14.56	Cycle Time (s): 50
	PRC Over All Lanes (%):	-6.4	Total Delay Over All Lanes(pcuHr):	56.84	

Scenario 5: '2036 Base+Sev 4 AM Peak' (FG5: '2036 Base+Sev 4 AM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1

Stage Sequence Diagram



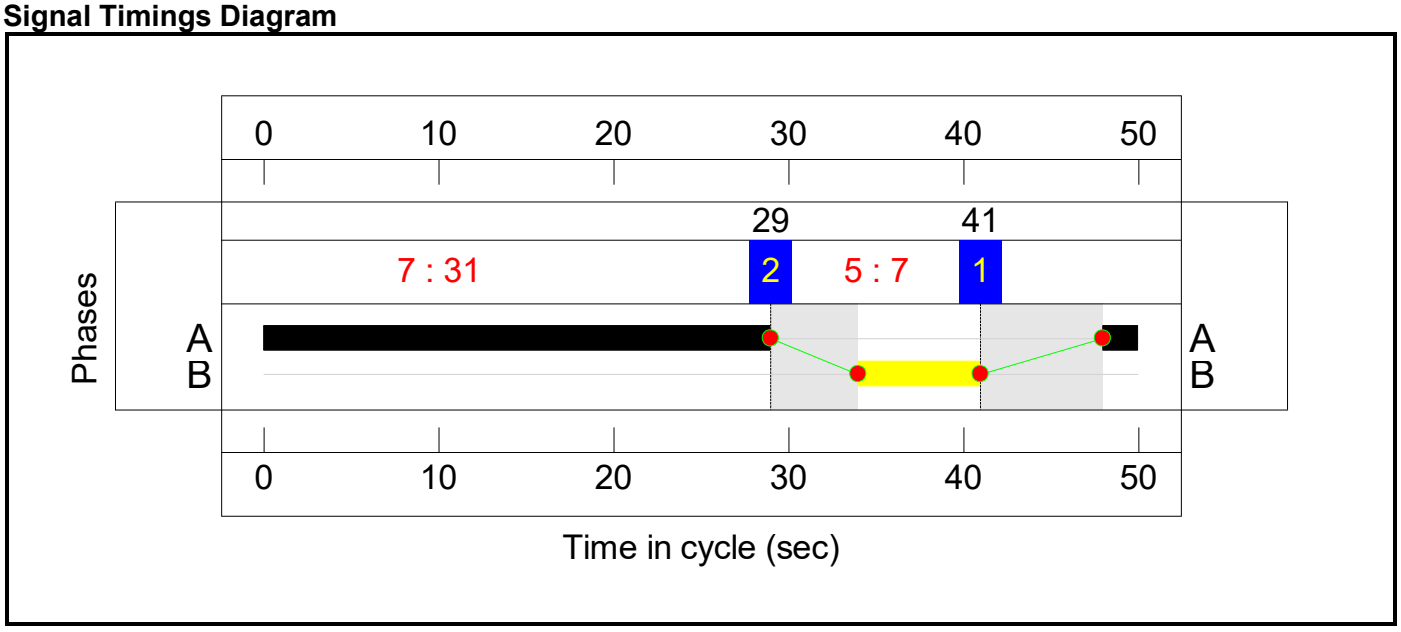
Stage Timings

Stage	1	2
Duration	31	7
Change Point	41	29

Phase Timings

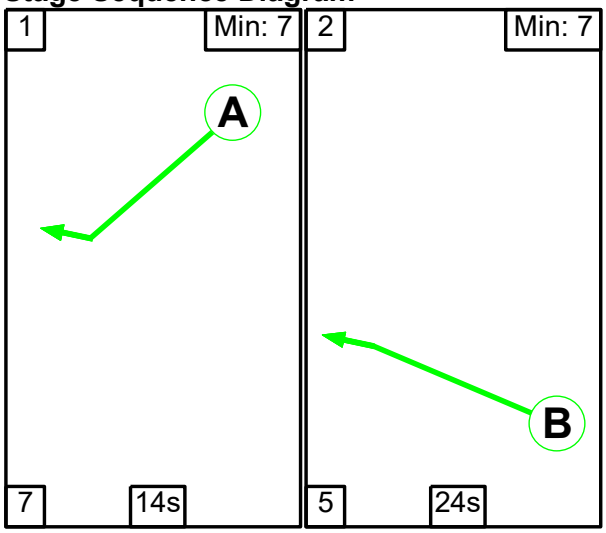
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	W Circ Ahead Left	Traffic	31	48	29
B	M20 EB Off-Slip Ahead Left	Traffic	7	34	41

Signal Timings Diagram



Controller :C2

Stage Sequence Diagram



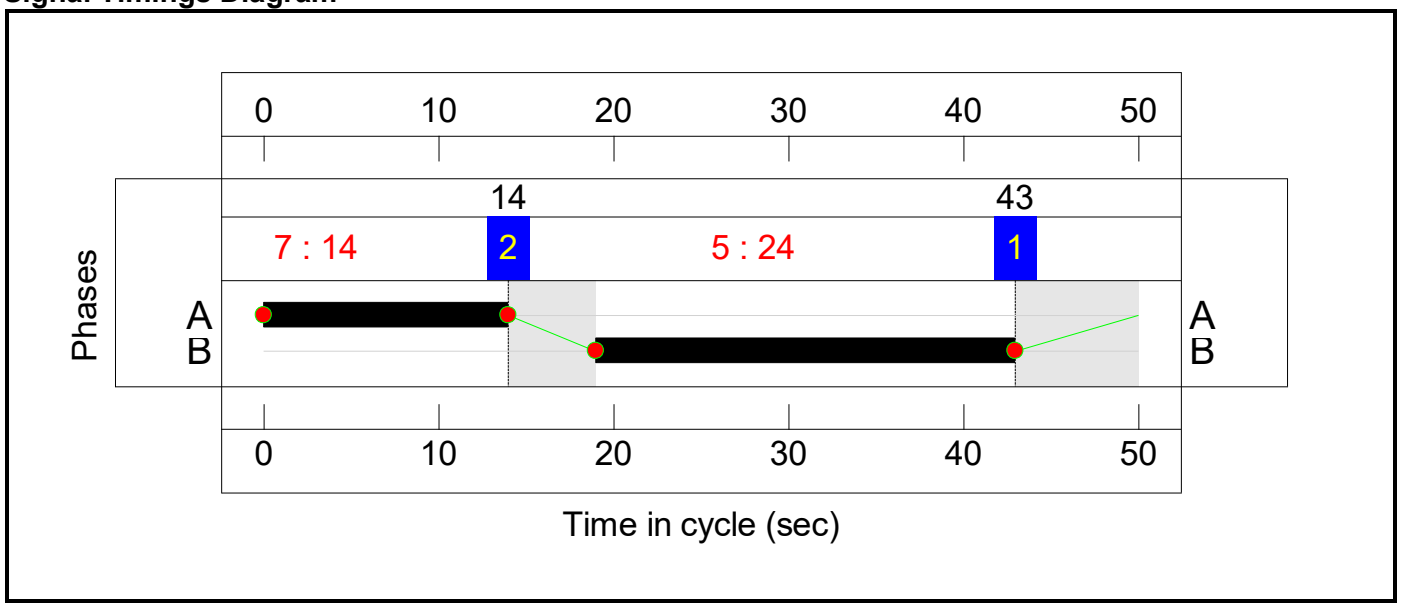
Stage Timings

Stage	1	2
Duration	14	24
Change Point	43	14

Phase Timings

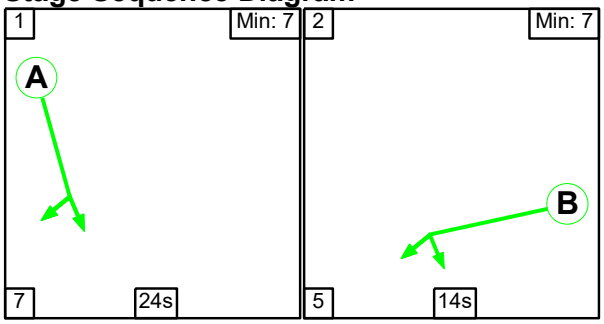
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	E Circ Right	Traffic	14	0	14
B	M20 WB Off-Slip Ahead	Traffic	24	19	43

Signal Timings Diagram



Controller :C3

Stage Sequence Diagram



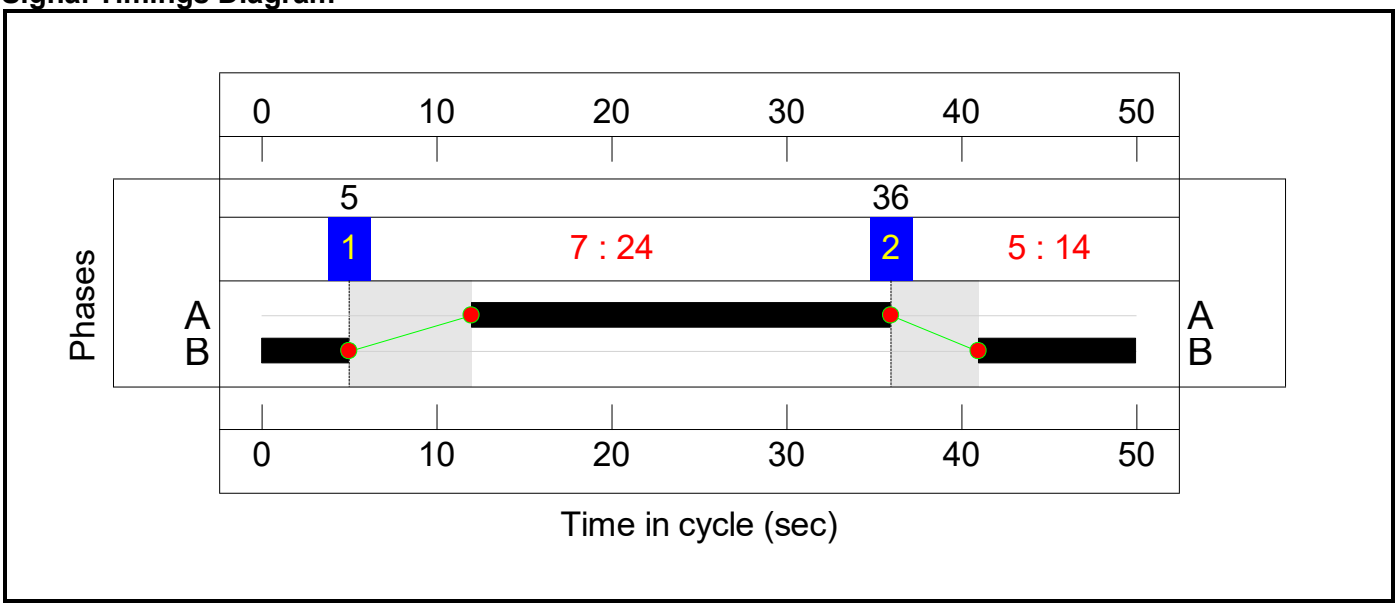
Stage Timings

Stage	1	2
Duration	24	14
Change Point	5	36

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	NE Circ Ahead Right	Traffic	24	12	36
B	A20 WB Jnc at M20 J10a Left Ahead	Traffic	14	41	5

Signal Timings Diagram



Lane Green Times

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J1:1/1	M20 EB Off-Slip Ahead Left	U	B	34	41
J1:1/2	M20 EB Off-Slip Ahead	U	B	34	41
J1:1/3	M20 EB Off-Slip Ahead	U	B	34	41
J1:2/1	W Circ Ahead Left	U	A	48	29
J1:2/2	W Circ Ahead	U	A	48	29

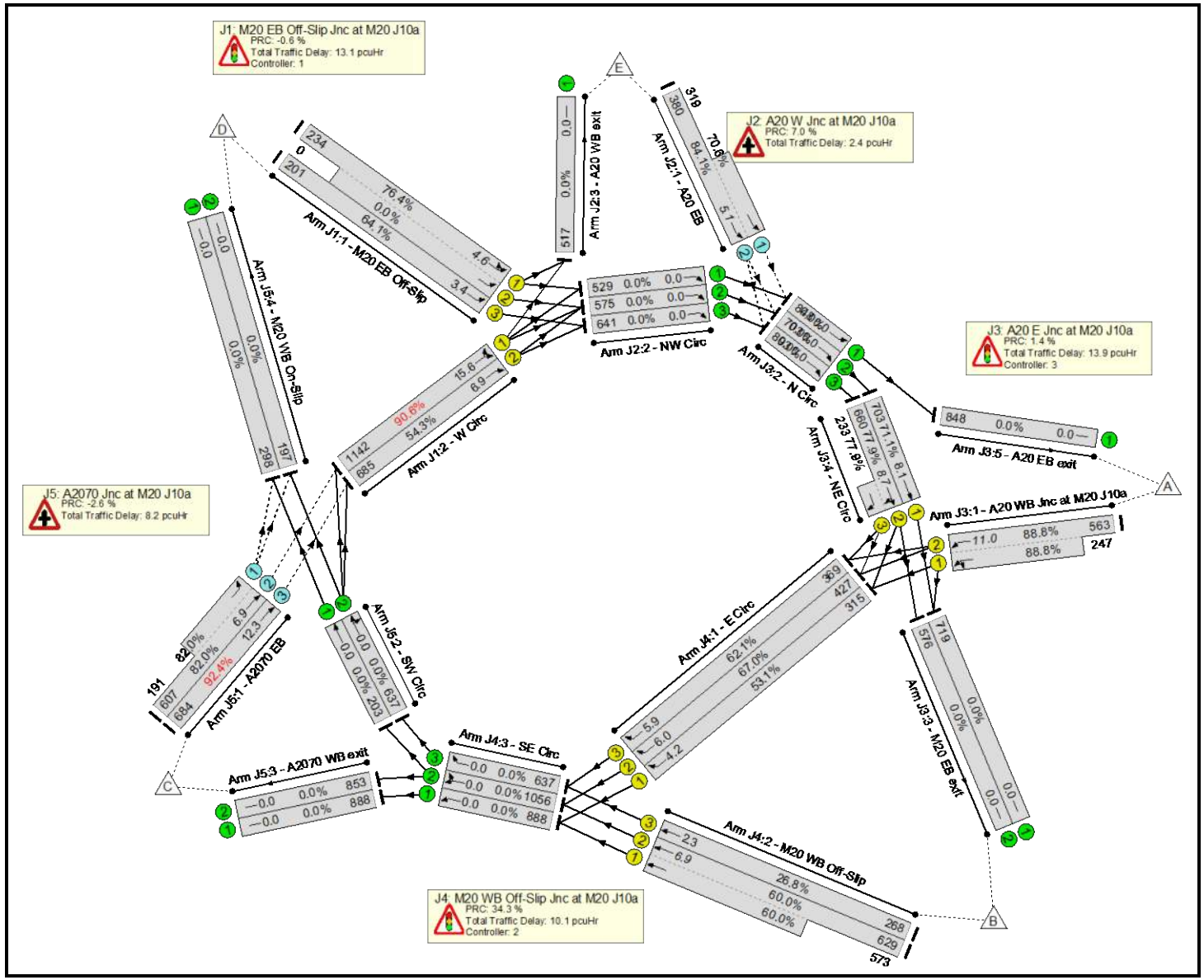
Junction: J2: A20 W Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Junction: J3: A20 E Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J3:1/1	A20 WB Jnc at M20 J10a Left Ahead	U	B	41	5
J3:1/2	A20 WB Jnc at M20 J10a Ahead	U	B	41	5
J3:4/1	NE Circ Ahead	U	A	12	36
J3:4/2	NE Circ Ahead Right	U	A	12	36
J3:4/3	NE Circ Right	U	A	12	36

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J4:1/1	E Circ Right	U	A	0	14
J4:1/2	E Circ Right	U	A	0	14
J4:1/3	E Circ Right	U	A	0	14
J4:2/1	M20 WB Off-Slip Ahead	U	B	19	43
J4:2/2	M20 WB Off-Slip Ahead	U	B	19	43
J4:2/3	M20 WB Off-Slip Ahead	U	B	19	43

Junction: J5: A2070 Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: J7) M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**92.4%**
J1: M20 EB Off-Slip Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.6%**
1/1+1/2	M20 EB Off-Slip Ahead Left	U	N/A	N/A	C1:B		1	7	-	-	234	1914:2200	306+0	76.4 : 0.0%
1/3	M20 EB Off-Slip Ahead	U	N/A	N/A	C1:B		1	7	-	-	201	1959	313	64.1%
2/1	W Circ Ahead Left	U	N/A	N/A	C1:A		1	31	-	-	1142	1970	1261	90.6%
2/2	W Circ Ahead	U	N/A	N/A	C1:A		1	31	-	-	685	1972	1262	54.3%
J2: A20 W Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**84.1%**
1/2+1/1	A20 EB Ahead	O	N/A	N/A	-		-	-	-	-	699	1960:1965	452+452	84.1 : 70.6%
2/1	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	529	Inf	Inf	0.0%
2/2	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	575	Inf	Inf	0.0%
2/3	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	641	Inf	Inf	0.0%
3/1	A20 WB exit	U	N/A	N/A	-		-	-	-	-	517	Inf	Inf	0.0%
J3: A20 E Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.8%**
1/2+1/1	A20 WB Jnc at M20 J10a Left Ahead	U	N/A	N/A	C3:B		1	14	-	-	810	2114:1976	634+278	88.8 : 88.8%
2/1	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	848	Inf	Inf	0.0%
2/2	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	703	Inf	Inf	0.0%
2/3	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	893	Inf	Inf	0.0%
3/1	M20 EB exit	U	N/A	N/A	-		-	-	-	-	719	Inf	Inf	0.0%

3/2	M20 EB exit	U	N/A	N/A	-		-	-	-	-	576	Inf	Inf	0.0%
4/1	NE Circ Ahead	U	N/A	N/A	C3:A		1	24	-	-	703	1978	989	71.1%
4/2+4/3	NE Circ Ahead Right	U	N/A	N/A	C3:A		1	24	-	-	893	2119:1971	847+299	77.9 : 77.9%
5/1	A20 EB exit	U	N/A	N/A	-		-	-	-	-	848	Inf	Inf	0.0%
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**67.0%**
1/1	E Circ Right	U	N/A	N/A	C2:A		1	14	-	-	315	1976	593	53.1%
1/2	E Circ Right	U	N/A	N/A	C2:A		1	14	-	-	427	2124	637	67.0%
1/3	E Circ Right	U	N/A	N/A	C2:A		1	14	-	-	369	1981	594	62.1%
2/2+2/1	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	24	-	-	1202	2142:1950	1048+955	60.0 : 60.0%
2/3	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	24	-	-	268	2000	1000	26.8%
3/1	SE Circ Ahead	U	N/A	N/A	-		-	-	-	-	888	Inf	Inf	0.0%
3/2	SE Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	1056	Inf	Inf	0.0%
3/3	SE Circ Right	U	N/A	N/A	-		-	-	-	-	637	Inf	Inf	0.0%
J5: A2070 Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**92.4%**
1/2+1/1	A2070 EB Ahead Left	O	N/A	N/A	-		-	-	-	-	798	2089:1988	740+233	82.0 : 82.0%
1/3	A2070 EB Ahead	O	N/A	N/A	-		-	-	-	-	684	2087	740	92.4%
2/1	SW Circ Ahead	U	N/A	N/A	-		-	-	-	-	203	Inf	Inf	0.0%
2/2	SW Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	637	Inf	Inf	0.0%
3/1	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	888	Inf	Inf	0.0%
3/2	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	853	Inf	Inf	0.0%
4/1	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	298	Inf	Inf	0.0%

4/2	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	197	Inf	Inf	0.0%

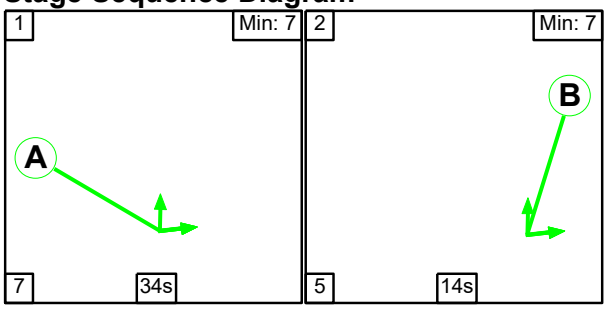
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: J7) M20 J10a	**-**	**-**	**3678**	**0**	**0**	**21.1**	**26.5**	**0.0**	**47.6**	**-**	**-**	**-**	**-**	
J1: M20 EB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**5.6**	**7.5**	**0.0**	**13.1**	**-**	**-**	**-**	**-**	
1/1+1/2	234	234	-	-	-	1.3	1.6	-	2.9	44.0	3.1	1.6	4.6	
1/3	201	201	-	-	-	1.1	0.9	-	2.0	35.4	2.6	0.9	3.4	
2/1	1142	1142	-	-	-	1.9	4.5	-	6.4	20.2	11.2	4.5	15.6	
2/2	685	685	-	-	-	1.3	0.6	-	1.8	9.7	6.3	0.6	6.9	
J2: A20 W Jnc at M20 J10a	**-**	**-**	**1398**	**0**	**0**	**0.7**	**1.7**	**0.0**	**2.4**	**-**	**-**	**-**	**-**	
1/2+1/1	699	699	1398	0	0	0.7	1.7	-	2.4	12.3	3.4	1.7	5.1	
2/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	641	641	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	517	517	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J3: A20 E Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**7.2**	**6.6**	**0.0**	**13.9**	**-**	**-**	**-**	**-**	
1/2+1/1	810	810	-	-	-	3.6	3.7	-	7.3	32.3	7.4	3.7	11.0	
2/1	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	703	703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	893	893	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	719	719	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/2	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	703	703	-	-	-	1.2	1.2	-	2.4	12.1	6.9	1.2	8.1	
4/2+4/3	893	893	-	-	-	2.5	1.7	-	4.2	17.1	7.0	1.7	8.7	

5/1	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**6.8**	**3.3**	**0.0**	**10.1**	**-**	**-**	**-**	**-**
1/1	315	315	-	-	-	0.8	0.6	-	1.4	15.5	3.7	0.6	4.2
1/2	427	427	-	-	-	1.9	1.0	-	2.9	24.4	5.0	1.0	6.0
1/3	369	369	-	-	-	0.6	0.8	-	1.4	13.6	5.1	0.8	5.9
2/2+2/1	1202	1202	-	-	-	3.0	0.7	-	3.7	11.1	6.1	0.7	6.9
2/3	268	268	-	-	-	0.5	0.2	-	0.7	9.7	2.1	0.2	2.3
3/1	888	888	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	1056	1056	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/3	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: A2070 Jnc at M20 J10a	**-**	**-**	**2280**	**0**	**0**	**0.8**	**7.3**	**0.0**	**8.2**	**-**	**-**	**-**	**-**
1/2+1/1	798	798	1596	0	0	0.3	2.2	-	2.5	11.4	4.7	2.2	6.9
1/3	684	684	684	0	0	0.5	5.1	-	5.7	29.8	7.2	5.1	12.3
2/1	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	888	888	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	197	197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-0.6	Total Delay for Signalled Lanes (pcuHr):	13.10	Cycle Time (s): 50
C2	PRC for Signalled Lanes (%):	34.3	Total Delay for Signalled Lanes (pcuHr):	10.07	Cycle Time (s): 50
C3	PRC for Signalled Lanes (%):	1.4	Total Delay for Signalled Lanes (pcuHr):	13.87	Cycle Time (s): 50
	PRC Over All Lanes (%):	-2.6	Total Delay Over All Lanes(pcuHr):	47.61	

Scenario 6: '2036 Base+Sev 4 PM Peak' (FG6: '2036 Base+Sev 4 PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1

Stage Sequence Diagram



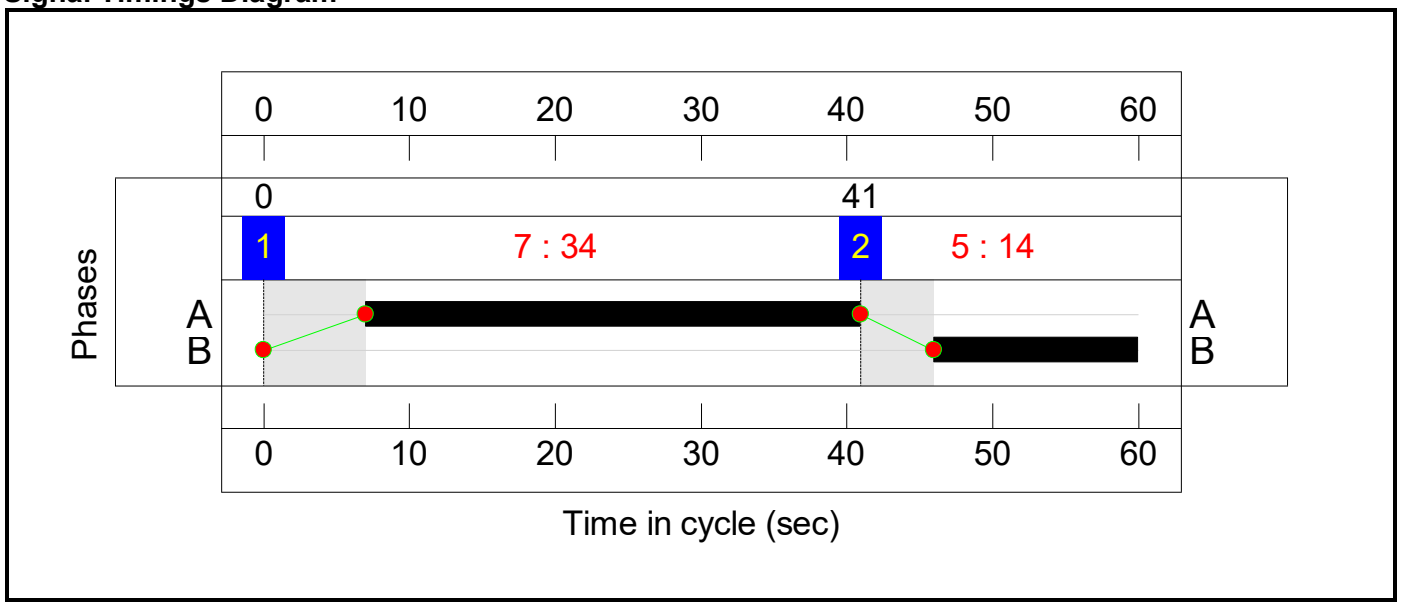
Stage Timings

Stage	1	2
Duration	34	14
Change Point	0	41

Phase Timings

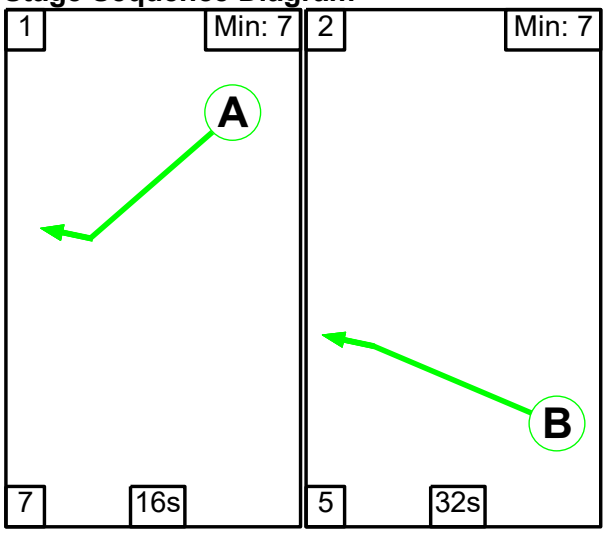
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	W Circ Ahead Left	Traffic	34	7	41
B	M20 EB Off-Slip Ahead Left	Traffic	14	46	0

Signal Timings Diagram



Controller :C2

Stage Sequence Diagram



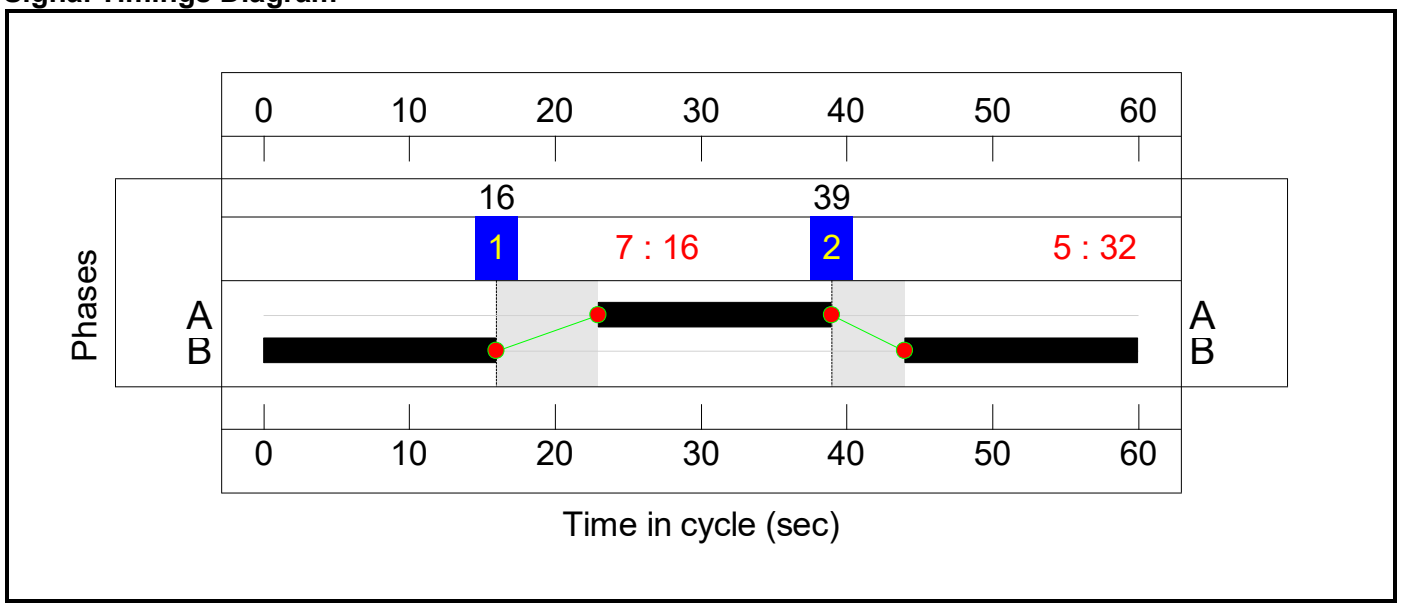
Stage Timings

Stage	1	2
Duration	16	32
Change Point	16	39

Phase Timings

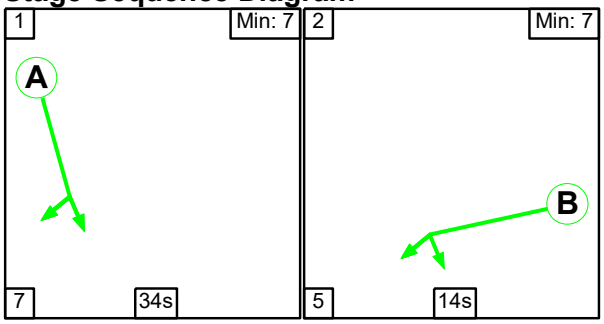
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	E Circ Right	Traffic	16	23	39
B	M20 WB Off-Slip Ahead	Traffic	32	44	16

Signal Timings Diagram



Controller :C3

Stage Sequence Diagram



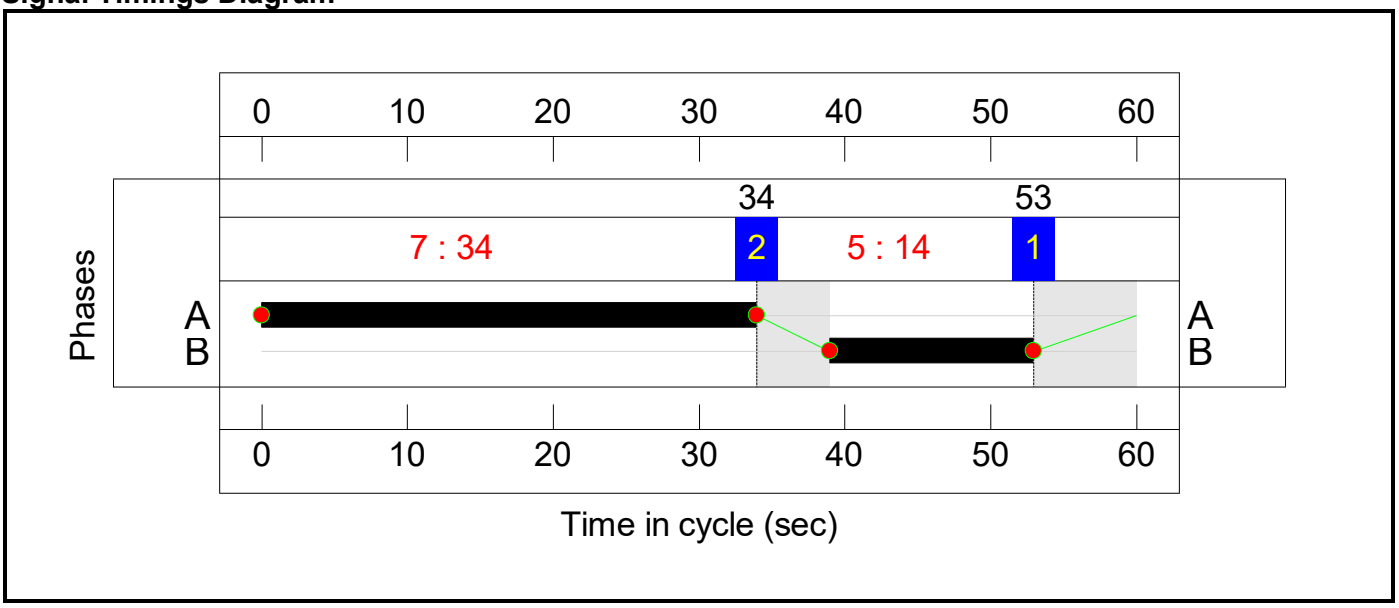
Stage Timings

Stage	1	2
Duration	34	14
Change Point	53	34

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	NE Circ Ahead Right	Traffic	34	0	34
B	A20 WB Jnc at M20 J10a Left Ahead	Traffic	14	39	53

Signal Timings Diagram



Lane Green Times

Junction: J1: M20 EB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J1:1/1	M20 EB Off-Slip Ahead Left	U	B	46	0
J1:1/2	M20 EB Off-Slip Ahead	U	B	46	0
J1:1/3	M20 EB Off-Slip Ahead	U	B	46	0
J1:2/1	W Circ Ahead Left	U	A	7	41
J1:2/2	W Circ Ahead	U	A	7	41

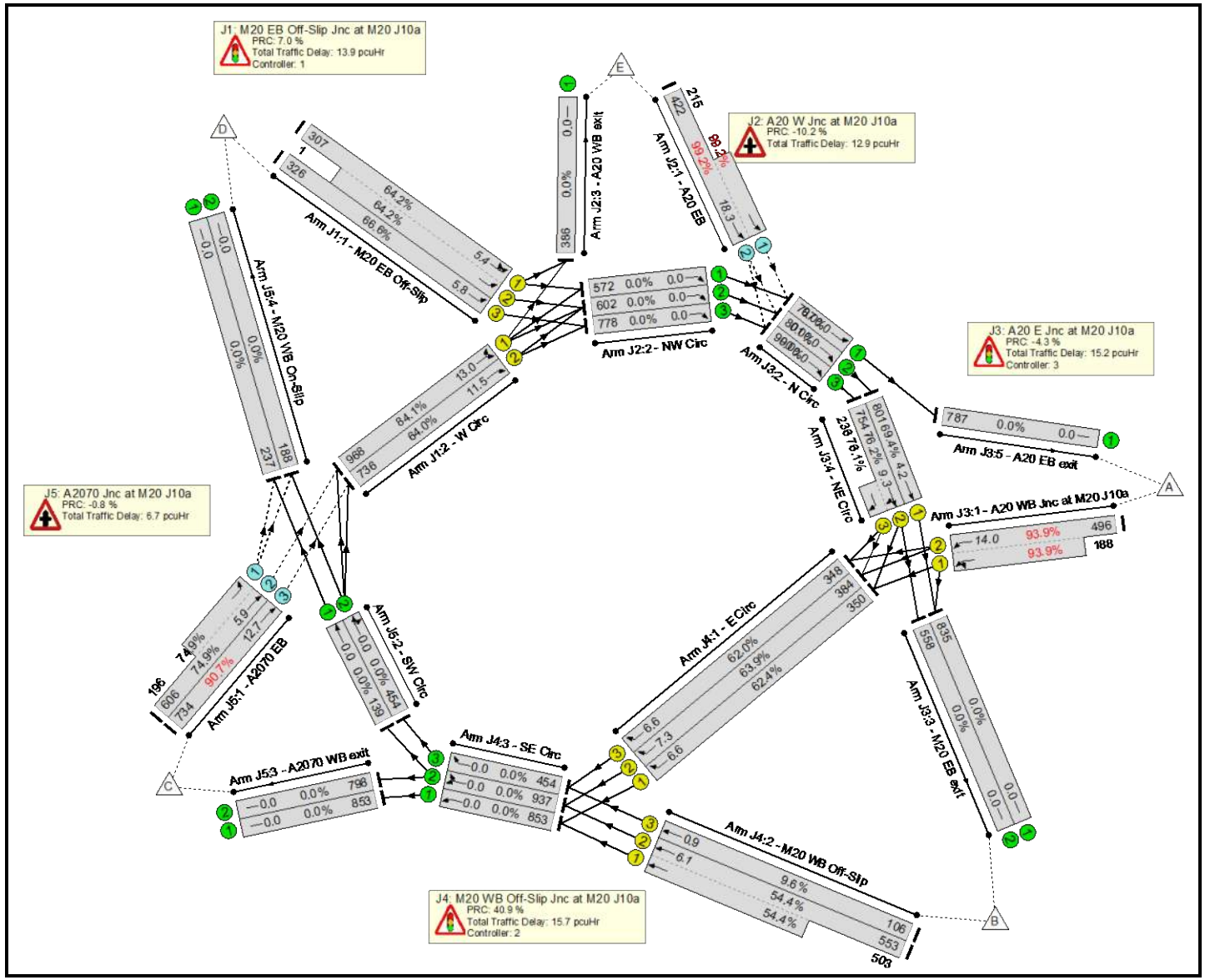
Junction: J2: A20 W Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Junction: J3: A20 E Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J3:1/1	A20 WB Jnc at M20 J10a Left Ahead	U	B	39	53
J3:1/2	A20 WB Jnc at M20 J10a Ahead	U	B	39	53
J3:4/1	NE Circ Ahead	U	A	0	34
J3:4/2	NE Circ Ahead Right	U	A	0	34
J3:4/3	NE Circ Right	U	A	0	34

Junction: J4: M20 WB Off-Slip Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
J4:1/1	E Circ Right	U	A	23	39
J4:1/2	E Circ Right	U	A	23	39
J4:1/3	E Circ Right	U	A	23	39
J4:2/1	M20 WB Off-Slip Ahead	U	B	44	16
J4:2/2	M20 WB Off-Slip Ahead	U	B	44	16
J4:2/3	M20 WB Off-Slip Ahead	U	B	44	16

Junction: J5: A2070 Jnc at M20 J10a					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
No data to display					

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: J7) M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.2%**
J1: M20 EB Off-Slip Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**84.1%**
1/1+1/2	M20 EB Off-Slip Ahead Left	U	N/A	N/A	C1:B		1	14	-	-	308	1913:2115	478+2	64.2 : 64.2%
1/3	M20 EB Off-Slip Ahead	U	N/A	N/A	C1:B		1	14	-	-	326	1959	490	66.6%
2/1	W Circ Ahead Left	U	N/A	N/A	C1:A		1	34	-	-	968	1972	1150	84.1%
2/2	W Circ Ahead	U	N/A	N/A	C1:A		1	34	-	-	736	1972	1150	64.0%
J2: A20 W Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.2%**
1/2+1/1	A20 EB Ahead	O	N/A	N/A	-		-	-	-	-	637	1960:1965	425+217	99.2 : 99.2%
2/1	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	572	Inf	Inf	0.0%
2/2	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	602	Inf	Inf	0.0%
2/3	NW Circ Ahead	U	N/A	N/A	-		-	-	-	-	778	Inf	Inf	0.0%
3/1	A20 WB exit	U	N/A	N/A	-		-	-	-	-	386	Inf	Inf	0.0%
J3: A20 E Jnc at M20 J10a	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.9%**
1/2+1/1	A20 WB Jnc at M20 J10a Left Ahead	U	N/A	N/A	C3:B		1	14	-	-	684	2114:1961	528+200	93.9 : 93.9%
2/1	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	787	Inf	Inf	0.0%
2/2	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	801	Inf	Inf	0.0%
2/3	N Circ Ahead	U	N/A	N/A	-		-	-	-	-	1001	Inf	Inf	0.0%
3/1	M20 EB exit	U	N/A	N/A	-		-	-	-	-	835	Inf	Inf	0.0%

3/2	M20 EB exit	U	N/A	N/A	-		-	-	-	-	564	Inf	Inf	0.0%
4/1	NE Circ Ahead	U	N/A	N/A	C3:A		1	34	-	-	801	1978	1154	69.4%
4/2+4/3	NE Circ Ahead Right	U	N/A	N/A	C3:A		1	34	-	-	1001	2127:1971	990+310	76.2 : 76.1%
5/1	A20 EB exit	U	N/A	N/A	-		-	-	-	-	787	Inf	Inf	0.0%
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**63.9%**
1/1	E Circ Right	U	N/A	N/A	C2:A		1	16	-	-	352	1976	560	62.4%
1/2	E Circ Right	U	N/A	N/A	C2:A		1	16	-	-	387	2124	602	63.9%
1/3	E Circ Right	U	N/A	N/A	C2:A		1	16	-	-	348	1981	561	62.0%
2/2+2/1	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	32	-	-	1056	2142:1950	1016+924	54.4 : 54.4%
2/3	M20 WB Off-Slip Ahead	U	N/A	N/A	C2:B		1	32	-	-	106	2000	1100	9.6%
3/1	SE Circ Ahead	U	N/A	N/A	-		-	-	-	-	855	Inf	Inf	0.0%
3/2	SE Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	940	Inf	Inf	0.0%
3/3	SE Circ Right	U	N/A	N/A	-		-	-	-	-	454	Inf	Inf	0.0%
J5: A2070 Jnc at M20 J10a	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**90.7%**
1/2+1/1	A2070 EB Ahead Left	O	N/A	N/A	-		-	-	-	-	802	2089:1988	809+262	74.9 : 74.9%
1/3	A2070 EB Ahead	O	N/A	N/A	-		-	-	-	-	734	2087	809	90.7%
2/1	SW Circ Ahead	U	N/A	N/A	-		-	-	-	-	140	Inf	Inf	0.0%
2/2	SW Circ Right Ahead	U	N/A	N/A	-		-	-	-	-	454	Inf	Inf	0.0%
3/1	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	855	Inf	Inf	0.0%
3/2	A2070 WB exit	U	N/A	N/A	-		-	-	-	-	800	Inf	Inf	0.0%
4/1	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	238	Inf	Inf	0.0%

4/2	M20 WB On-Slip	U	N/A	N/A	-		-	-	-	-	188	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: J7) M20 J10a	**-**	**-**	**3612**	**0**	**0**	**30.0**	**34.5**	**0.0**	**64.5**	**-**	**-**	**-**	**-**	
J1: M20 EB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**8.5**	**5.3**	**0.0**	**13.9**	**-**	**-**	**-**	**-**	
1/1+1/2	308	308	-	-	-	1.7	0.9	-	2.6	30.5	4.5	0.9	5.4	
1/3	326	326	-	-	-	1.8	1.0	-	2.8	31.1	4.8	1.0	5.8	
2/1	968	968	-	-	-	2.6	2.6	-	5.2	19.3	10.4	2.6	13.0	
2/2	736	736	-	-	-	2.4	0.9	-	3.3	16.0	10.6	0.9	11.5	
J2: A20 W Jnc at M20 J10a	**-**	**-**	**1274**	**0**	**0**	**1.4**	**11.4**	**0.0**	**12.9**	**-**	**-**	**-**	**-**	
1/2+1/1	637	637	1274	0	0	1.4	11.4	-	12.9	72.7	6.9	11.4	18.3	
2/1	572	572	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	778	778	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
J3: A20 E Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**6.5**	**8.7**	**0.0**	**15.2**	**-**	**-**	**-**	**-**	
1/2+1/1	684	684	-	-	-	4.0	6.0	-	10.0	52.8	8.0	6.0	14.0	
2/1	787	787	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	801	801	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/3	990	990	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	835	835	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/2	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	801	801	-	-	-	0.9	1.1	-	2.0	9.0	3.0	1.1	4.2	
4/2+4/3	990	990	-	-	-	1.6	1.6	-	3.2	11.7	7.7	1.6	9.3	

5/1	787	787	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J4: M20 WB Off-Slip Jnc at M20 J10a	**-**	**-**	**0**	**0**	**0**	**12.6**	**3.2**	**0.0**	**15.7**	**-**	**-**	**-**	**-**
1/1	350	350	-	-	-	3.0	0.8	-	3.8	39.3	5.8	0.8	6.6
1/2	384	384	-	-	-	3.1	0.9	-	3.9	36.9	6.4	0.9	7.3
1/3	348	348	-	-	-	3.9	0.8	-	4.7	49.1	5.8	0.8	6.6
2/2+2/1	1056	1056	-	-	-	2.4	0.6	-	3.0	10.2	5.5	0.6	6.1
2/3	106	106	-	-	-	0.2	0.1	-	0.2	8.3	0.8	0.1	0.9
3/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	937	937	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/3	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J5: A2070 Jnc at M20 J10a	**-**	**-**	**2338**	**0**	**0**	**0.9**	**5.8**	**0.0**	**6.7**	**-**	**-**	**-**	**-**
1/2+1/1	802	802	1604	0	0	0.3	1.5	-	1.8	8.0	4.4	1.5	5.9
1/3	734	734	734	0	0	0.6	4.4	-	5.0	24.4	8.4	4.4	12.7
2/1	139	139	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	237	237	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	188	188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	7.0	Total Delay for Signalled Lanes (pcuHr):	13.88	Cycle Time (s): 60
C2	PRC for Signalled Lanes (%):	40.9	Total Delay for Signalled Lanes (pcuHr):	15.74	Cycle Time (s): 60
C3	PRC for Signalled Lanes (%):	-4.3	Total Delay for Signalled Lanes (pcuHr):	15.24	Cycle Time (s): 60
	PRC Over All Lanes (%):	-10.2	Total Delay Over All Lanes(pcuHr):	64.47	

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