

RFL Our League Life

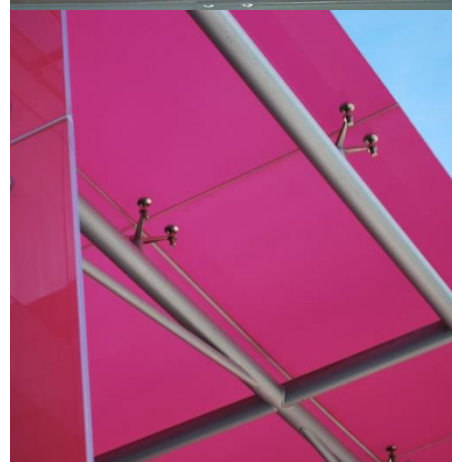
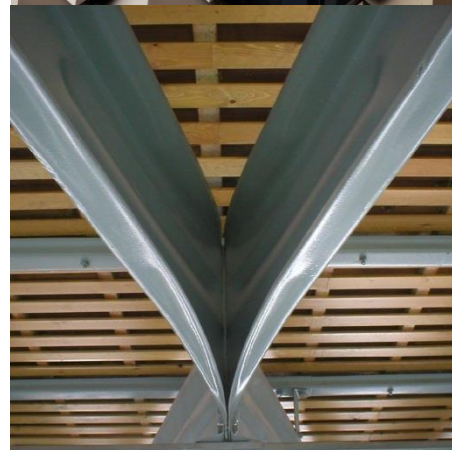
Transport Assessment

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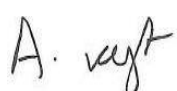


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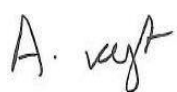
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- Plan 79493-CUR-00-XX-DR-TP-06001-P01** – (Location Plan) Regional Level
- Plan 79493-CUR-00-XX-DR-TP-06002-P01** – (Location Plan) Local Level
- Plan 79493-CUR-00-XX-DR-TP-06003-P01** – (Accessibility) Indicative Walking Catchment
- Plan 79493-CUR-00-XX-DR-TP-06004-P01** – (Accessibility) Indicative Cycle Catchment
- Plan 79493-CUR-00-XX-DR-TP-06005-P01** – (Accessibility) Indicative Public Transport Catchment

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- Drawing 79493-CUR-00-XX-DR-TP-05001-P01** – Swept Path Analysis – 12m Rigid Bus/Coach
- Drawing 79493-CUR-00-XX-DR-TP-05004-P01** – Swept Path Analysis – Ambulance
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Appendix B – MCC Waste Pro-Forma

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1.0 Introduction

1.1 Project Introduction

- 1.1.1 Curtins has been appointed on behalf of the Rugby Football League (RFL) to provide traffic and transportation advice in relation to the development of an Our League Life National Community Hub.
- 1.1.2 The Application Site ("the Site") is located within Beswick, East Manchester in a strategically important location within the wider Etihad Campus area. The Site is located off Kirkstead Close, to the north of Bell Crescent. The Site is situated within the Ancoats and Beswick Ward.
- 1.1.3 The Proposed Development comprises the development of the Our League Life National Community Hub (hereafter referred to as the 'OLL Hub'). The OLL Hub provides an opportunity for the RFL to utilise its strengths in northern communities and act as a vehicle for social mobility. The OLL Hub will celebrate, expand and roll out existing good practice in Rugby League communities across the north of England, adding value, and providing coordination. It provides a place for training in all aspects of the game from groundsmen, media through to sports science. It will also be used by the national teams on occasions for training purposes.
- 1.1.4 The proposals for the OLL Hub include the demolition of the existing building on-Site and the erection of a training facility building (Use Class F1(a)) and ancillary uses comprising classrooms, seminar rooms, ancillary offices, flexible conferencing space and workspace and an ancillary café / kitchen. It also includes ancillary changing facilities and a 900-seat spectator stand, together with an upgrading of the existing rugby pitch, the erection of floodlighting, and related access and highways works.
- 1.1.5 The planning description for the proposed development is reproduced in its entirety below:

"Full Planning Permission for the demolition of existing building on-Site and the erection of a learning and training facility building (Use Class F1(a)) including classrooms, seminar rooms, offices, flexible conferencing space and workspace, kitchen facilities, changing facilities, a new spectator stand and ancillary community space, together with an upgraded rugby pitch for use as a training facility and occasional match and events venue, and related boundary treatment, access and highways works and other associated works."
- 1.1.6 The proposed development plans are included in **Appendix A**.

1.2 Purpose of the Report

- 1.2.1 This Transport Assessment (TA) has been prepared to inform Highway Officers at Manchester City Council (MCC) and Transport for Greater Manchester (TfGM) with regard to the development proposals and their potential impact on the surrounding area from a traffic and transportation perspective.

1.3 Scope of the Report

Scoping Discussions

1.3.1 Curtins met with MCC Highways and liaised with TfGM on the 15th September 2021 to discuss the project.

1.3.2 It was agreed at that meeting and in following correspondence that a Transport Assessment and Travel Plan would be required. This should include the following:

- An audit of accessibility by all modes of travel including walking, cycling, and public transport;
- A review of highway safety within the vicinity of the Site for the most recent five years;
- Drawings of any changes to the adopted highway network, if proposed (none proposed);
- Swept path analysis drawings to demonstrate the proposed servicing arrangements;
- Details of proposed car and cycle parking arrangements and justification for the provision;
- Details of vehicular trips and commentary on any highway impacts;
- Junction modelling of the Grey Mare Lane/Alan Turing Way junction;
- Consideration of pedestrian crossing improvements at the Grey Mare Lane/Alan Turing Way junction;
- Confirmation that the OLL Hub will be cognisant of the proposed Arena Controlled Parking Zone (CPZ) that is due to be implemented in 2023; and
- A review of the relevant local and national transport planning policy.

1.3.3 This TA has been written in accordance with the following key documents and policies, with full details provided in **Section 7**:

- National Planning Policy Framework, Ministry of Housing, Communities & Local Government (MHCLG), 2021;
- National Planning Practice Guidance, MHCLG, 2014 (Travel Plans, Transport Assessments and Statements);
- Manchester Core Strategy, MCC, 2012; and
- Greater Manchester Transport Strategy, TfGM, 2017.

1.4 Structure of the Report

1.4.1 Following on from this introduction, **Section 2** of this report considers the Site location and existing situation. **Section 2** also considers the Site location and surrounding highway network, including a review of the Personal Injury Accident records within the vicinity of the Site.

1.4.2 **Section 3** considers the Site's accessibility by sustainable modes of transport, including walking, cycling and public transport.

- 1.4.3 **Section 4** gives an overview of the development proposals including details on proposed access, car and cycle parking, and a servicing and waste collection strategy.
- 1.4.4 **Section 5** considers the traffic forecasting for the proposals.
- 1.4.5 **Section 6** considers parking justification and strategy.
- 1.4.6 **Section 7** summarises key national and local transport planning policy, and **Section 8** provides a report summary and conclusion.

2.0 Existing Situation

2.1 Site Location

2.1.1 The Site is located within the Ancoats & Beswick ward of Manchester, approximately 2.5km to the east of Manchester city centre and approximately 750m to the south of the Etihad Stadium.

2.1.2 **Plan 79493-CUR-00-XX-DR-TP-06001-P01** to the rear of the report illustrates the location of the Site in relation to the surrounding area, and **Plan 79493-CUR-00-XX-DR-TP-06002-P01** to the rear of the report shows the Site in a more local context relating to the local highway network.

2.1.3 **Figure 2.1** also shows the location of the Site in relation to the surrounding highway network:

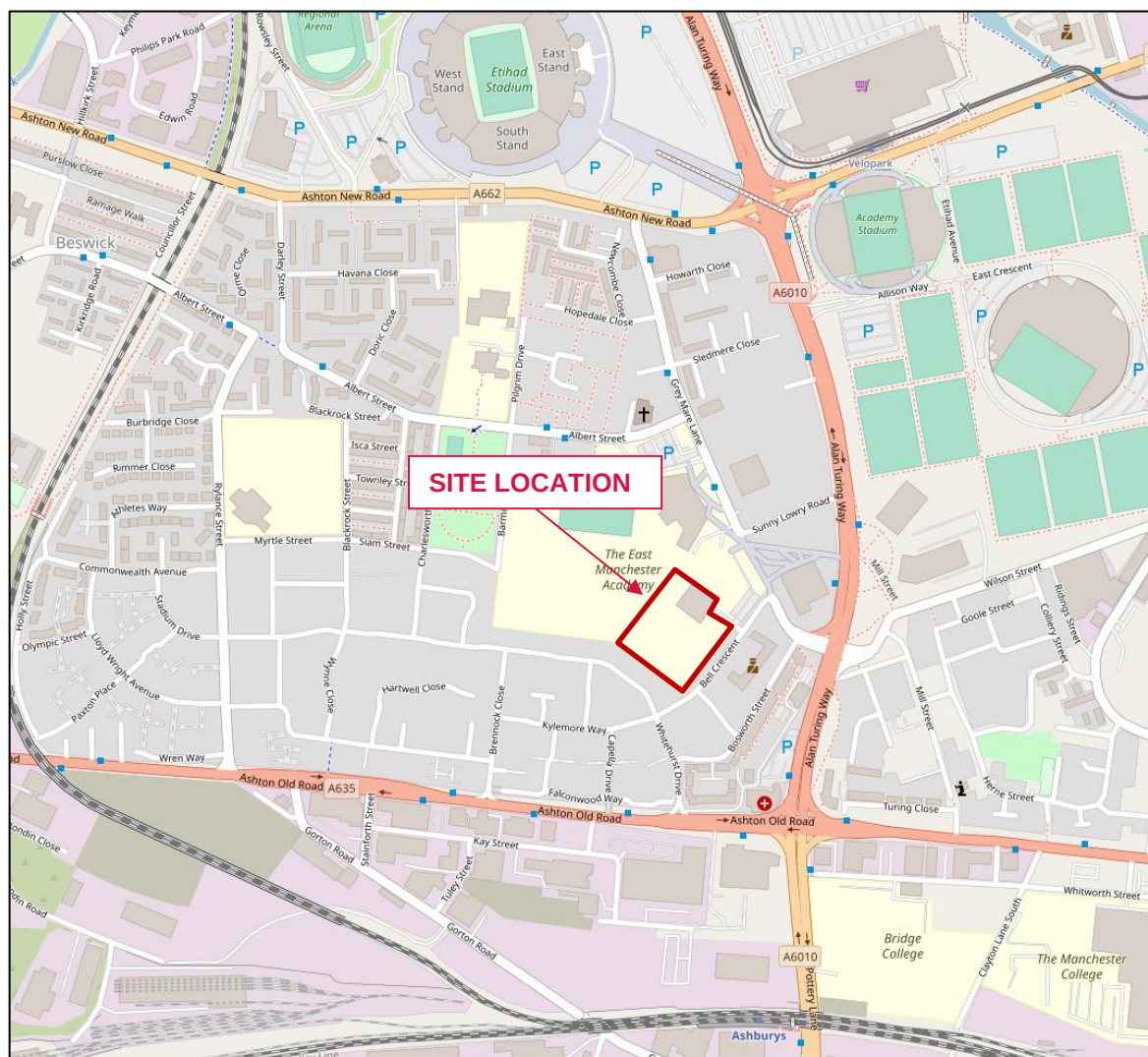


Figure 2.1 – Location Plan in Relation to the Local Highway Network

(Source: OpenStreetMap)

- 2.1.4 The East Manchester Academy and associated sports fields are located immediately to the north and north-west of the Site. To the south-west of the existing sports pitch a line of trees forms a boundary between the Site and the rear gardens of the two-storey residential properties along Metcombe Way. Bell Crescent borders the Site from the south to the east.
- 2.1.5 A surface car park is located to the north-east of the Site and comprises of circa 170 car parking spaces.
- 2.1.6 The wider area is characterised by a mixture of residential properties and much larger buildings used for sports, leisure and education.
- 2.1.7 The East Manchester Leisure Centre is located to the junction of Bell Crescent and Grey Mare Lane to the east of the Site, whilst the Manchester City Football Club Training Ground is located to the east of Alan Turing Way, circa 300m from the Site.
- 2.1.8 The Etihad Stadium is also located circa 600m to the north of the Site. The Co-op Live Arena is also currently under construction to the north of the Etihad Stadium and is scheduled to open late 2023.

2.2 Existing Site Use

- 2.2.1 The Site currently comprises an existing sports pitch and the single storey Beswick Local Shops, which have been vacant for a number of years. The Site also comprises surface car parking spaces for 28 vehicles, albeit this is currently inaccessible.
- 2.2.2 The Site is currently accessed from Kirkstead Close which connects to Bell Crescent, onto Grey Mare Lane and then onto Alan Turing Way; a major arterial route through East Manchester.
- 2.2.3 The sports pitch currently comprises rugby posts and a tall metal structure providing netting behind. A transparent metal fence lines the boundary to Bell Crescent to the south and East of the Site.

2.3 Existing Access

Vehicular Access

- 2.3.1 Access into the existing MCC car park from Bell Crescent is achieved via a standard three arm priority junction.
- 2.3.2 Access into the recreational field itself is currently limited, with no vehicular access or pedestrian access onto the field from either Bell Crescent or the adjacent MCC car park.
- 2.3.3 There is also no access into the Vacant Beswick Local Shops car park, which is currently inaccessible.
- 2.3.4 The existing MCC car park has circa 170 bays including 10 accessible bays for disabled users.

2.3.5 On-Site observations on the 24th August 2021 and 2nd September 2021 during the off-peak mid-morning period, on a weekday showed the car park to be at circa 15-20% of capacity, suggesting very low usage.

2.3.6 The car park has a 2m height restriction which prohibits large vehicles from using the car park. There is also an event day restriction which only permits a maximum stay of 1 hour 45 minutes between 10am and 10pm. There is nothing on the signage to specify the nature of the event, but it is assumed that these are matches at the Etihad. There is a removable part of the sign where the date of the next two events is displayed. At the time of the first Site visit the two dates displayed corresponded to matches at the Etihad. There do not appear to be any other time restrictions and there is no charge to park.

Pedestrian Access

2.3.7 As with vehicular access, there is currently no pedestrian access onto the fields or the vacant Beswick Local Shops from either the MCC car park or Bell Crescent.

2.3.8 The main pedestrian access to the MCC car park is via the pedestrianised area of public realm to the north and Bell Crescent/Grey Mare Lane to the east and north east. This connects the East Manchester Leisure Centre towards the car park and the East Manchester Academy.

2.4 Surrounding Highway Network

Bell Crescent

2.4.1 Bell Crescent forms the eastern boundary of the Site and provides access to the MCC car park.

2.4.2 It extends for circa 220m in a north-easterly direction from a four-arm junction with Kylemore Way, Metcombe Way and Whitehurst Drive to a three-arm junction connecting Bell Crescent to the East Manchester Leisure Centre and Grey Mare Lane.

2.4.3 It has a width of circa 7m and has footways on both sides. The footway on the western side of Bell Crescent, adjacent to the MCC car park and Site is circa 3m wide although further south the footway width increases to circa 4.5m. The street is well lit and the speed limit is 20mph.

2.4.4 There are double yellow lines on both sides of the road in the immediate vicinity of the Site to prevent on-street parking. There is also a lay-by on the western side of Bell Crescent adjacent to the MCC car park access which has a single yellow line across it. There is no sign in place to state what the single yellow restriction is.

2.4.5 On-Site observations on the 2nd September 2021 showed there to be minimal car traffic on the road.

Grey Mare Lane

- 2.4.6 At the northern end of Bell Crescent the road bears east and becomes Grey Mare Lane.
- 2.4.7 Grey Mare Lane then extends for a distance of circa 100m before forming a major signalised junction with Alan Turing Way and Wilson Street.
- 2.4.8 The road has a width of circa 7m, a 20mph speed limit and there are footways and street lighting on both sides. The footways vary in width but are generally in excess of 2m. This is due to the presence of a shared pedestrian/cycleway. There is also a zebra cycle crossing.
- 2.4.9 A c. 80m stretch of Grey Mare Lane continues in a north-westerly direction from the junction with Bell Crescent and this forms part of the pedestrianised area of public realm. Beyond this the road continues for c. 450m north to a three-arm junction with Ashton New Road.
- 2.4.10 On sight observations indicate that whilst the Grey Mare Lane/Alan Turing Way junction was busy for much of the day, the actual number of movements on Grey Mare Lane itself were minimal during the off-peak period.

Alan Turing Way

- 2.4.11 Alan Turing Way is a major dual carriageway extending on a north/south alignment with two lanes in each direction and a 30mph speed limit. The total width of Alan Turing Way varies, but it is in the region of circa 18m, consisting of two southbound lanes, two northbound lanes and a central island.
- 2.4.12 There are footways on both sides of the carriageway which vary in width between 1.6m and 3m. Street lighting is also present on both sides of the carriageway.
- 2.4.13 The northern and western arms of the Grey Mare Lane/Alan Turing Way junction have good pedestrian crossing facilities with tactile paving and push button traffic lights. The southern and eastern arms do not have either, albeit there are dropped kerbs. MCC Highways have suggested the proposed development may be required to implement push button crossing facilities on these arms.
- 2.4.14 Approximately 70m north of the Grey Mare Lane/ Alan Turing Way junction, there is a toucan crossing on Alan Turing Way connecting the pedestrianised area of public realm with several educational and sports facilities on the eastern side of the road.
- 2.4.15 There are marked cycle lanes along the entire length of the road between the junctions with Ashton New Road and Ashton Old Road and parts of this are fully segregated.

2.4.16 Between the junctions with Ashton Old Road and Ashton New Road, there are five bus stops on Alan Turing Way. These are the Velopark Metrolink (Stop F), Prentice Walk, Wilson Street, Grey Mare Lane, and Alan Turing Way (Stop C).

2.4.17 On Site observations demonstrate that Alan Turing Way is a busy A road, albeit any queuing that was observed in the vicinity of the Site generally cleared when the signals turned green.

Ashton New Road

2.4.18 Circa 380m north of the Grey Mare Lane/Alan Turing Way junction, a signalised junction connects Alan Turing Way with Ashton New Road. Ashton New Road is a single carriageway with 30mph speed limits and marked cycle lanes.

Ashton Old Road

2.4.19 Approximately 250m to the south of the Grey Mare Lane/Alan Turing Way junction, the northern arms of Alan Turing Way connect via a signalised junction with its southern arm and the eastern and western arms of Ashton Old Road.

2.4.20 Ashton Old Road is a single carriageway with 30mph speed limits and on the western arm, marked cycle lanes.

2.5 Highway Safety

2.5.1 Personal Injury Accident (PIA) data for the key junctions on the highway network adjacent to the Site has been obtained from the TfGM reported road accidents website for the most recent five years. The details of the search are contained in **Figure 2.2**, and a breakdown of the information is contained in **Table 2.1**:

Junction/Link	Slight	Serious	Fatal	Totals
Alan Turing Way/ Ashton New Road	10	2	0	12
Alan Turing Way/ Ashton Old Road	12	4	0	16
Alan Turing Way/ Grey Mare Lane	3	2	0	5
Totals	25	8	0	33

Table 2.1 – Personal Injury Accident Data Summary

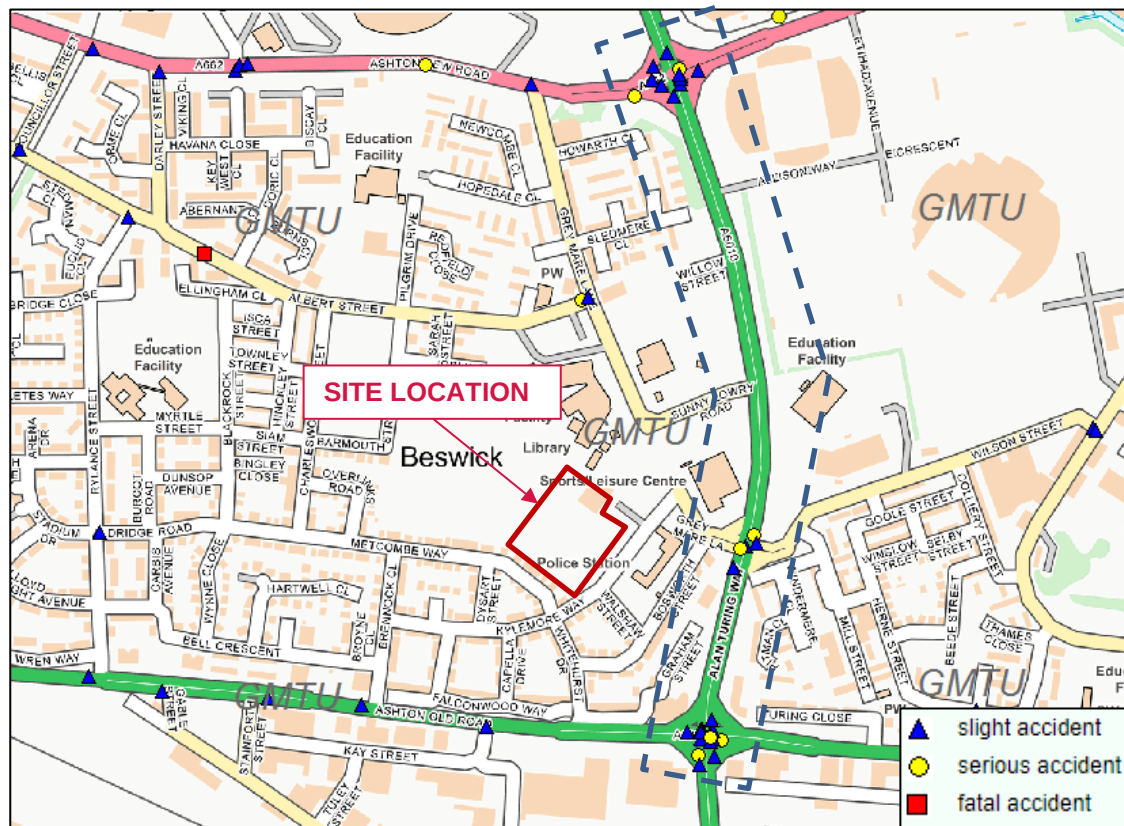


Figure 2.2 – Area Assessed for Personal Injury Accident Data (5 years)

(Source: TfGM Reported Road Accidents)

- 2.5.2 There has been a total of 33 accidents in the latest five-year period available, comprising 25 'slight' and 8 'serious' incidents. There have not been any fatal incidents in the vicinity of the Site.
- 2.5.3 The 12 incidents at Alan Turing Way/Ashton New Road junction are evenly spread among the most recent five-year period. There were two 'slight' incidents in each of 2016, 2019, and 2020, four 'slight' incidents in 2018, and one 'serious' incident in each of 2017 and 2018.
- 2.5.4 The 16 incidents at the Alan Turing Way/Ashton Old Road junction are again evenly spread among the most recent five-year period. There were four 'slight' incidents in 2016, two 'slight' incidents in each of 2017, 2018, 2019 and 2020, one 'serious' incident in each of 2017 and 2019, and two 'serious' incidents in 2018.
- 2.5.5 The remaining five accidents occurred at the Grey Mare Lane/Alan Turing Way junction.
- 2.5.6 Considering the size of the study area, the number of movements along the corridor and the temporal distribution of accidents, it can be concluded that the number and severity of accidents does not appear to be unusually high.

- 2.5.7 No significant correlations have been identified to suggest that highway condition, layout or design were significant contributory factors in any of the collisions.

3.0 Accessibility by Sustainable Modes of Travel

3.1 Introduction

- 3.1.1 A key element of national and local policy is to ensure that new developments are located in areas where alternative modes of travel are available. This supports the aims of integrating planning and transport, providing more sustainable transport choices, and reducing overall travel and car use.
- 3.1.2 The accessibility of the proposed development is considered in this context for the following modes of travel:
- Pedestrian Accessibility;
 - Cycle Accessibility; and
 - Public Transport Accessibility.

3.2 Pedestrian Accessibility

- 3.2.1 Research has indicated that acceptable walking distances depend on a number of factors, including the quality of the development, the type of amenity offered, the surrounding area, and other local facilities. The Chartered Institution of Highways and Transportation (CIHT) document entitled 'Providing for Journeys on Foot' suggests walking distances which are relevant to this planning application. These are reproduced in **Table 3.1**:

CIHT Category	Town Centres (m)	Commuting/School/ Sightseeing (m)	Elsewhere (m)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

Table 3.1 – CIHT Recommended Walking Distances

- 3.2.2 The Department for Transport's 2018 National Travel Survey states that: *"Walking was the most frequent mode used for short trips: 80% of trips under one mile [1.6km] were walks."* This indicates that walking is the natural first choice for most local trips.
- 3.2.3 To assist in summarising the accessibility of the Site by foot, an indicative pedestrian catchment plan has been produced. **Plan 79493-CUR-00-XX-DR-TP-06003-P01** to the rear of the report shows distances of 500m, 1,000m and 2,000m which are termed 'Desirable', 'Acceptable' and the 'Preferred Maximum' by the CIHT for education trips; which are considered a good approximation for trips associated with the development.
- 3.2.4 In addition to the many residential properties within 500m of the Site in Beswick, future Site users could access a Tesco Express, several schools including, New East Manchester Academy, Connell Co-op College, a church, hot food takeaway, Beswick Library, the East Manchester Leisure Centre, and

several medical centres including dentists, GP, and the Manchester Institute of Health and Performance. There are also many bus stops within this walking catchment.

- 3.2.5 Located within the 500m – 1,000m catchment lies Ashburys train station, the Etihad stadium, the Velopark tram stop, Eastlands District Centre and parts of The Manchester College's Openshaw campus. The Manchester College is the largest provider of further education in the UK.
- 3.2.6 Within the wider 1,000m – 2,000m catchment, there are several more tram and train stations, the National Cycling Centre, and many residential and retail properties.
- 3.2.7 Located just outside the 2,000m catchment is Manchester Piccadilly, the busiest station in the city, and parts of Manchester City Centre.
- 3.2.8 The pedestrian infrastructure which connects the Site to the above facilities is generally excellent and there are well lit, wide footways with a number of controlled crossing points across key roads.
- 3.2.9 As mentioned earlier in this report, the northern and western arms of the Grey Mare Lane/Alan Turing Way junction have good pedestrian crossing facilities with tactile paving and push button controlled crossing points. In comparison, the southern and eastern arms have dropped kerbs and the crossings are controlled, albeit they do not have push button facilities. MCC Highways have suggested the proposed development may be required to implement push button crossing facilities on the two arms where they are not present.
- 3.2.10 Whilst the introduction and promotion of sustainable infrastructure is fully supported by the RFL where necessary, it is not considered that these improvements should be funded and delivered by this development. This is on the basis that the primary bus, tram and rail infrastructure which is predicted to be the origin and destination of many walking trips is located to the north, west and south of the Site rather than to the east.
- 3.2.11 The key desire lines are therefore already well served by excellent pedestrian infrastructure and these facilities also provide opportunities for users in the east to cross in a safe manner. For example, users arriving/departing from the east of the Site, but north of Wilson Street can use the existing push button crossing on the northern side of the Alan Turing Way Junction. Users to the south of Wilson Street can use the Alan Turing Way/Ashton Old Road junction before heading north.
- 3.2.12 In summary, the Site is considered to be highly accessible by foot and well connected to nearby complementary land uses.

3.3 Cycle Accessibility

- 3.3.1 Cycling is a cheap, efficient, and healthy way to travel. Cycling also provides a predictable arrival time which depending on location, can be quicker than driving or using public transport, and is subject to fewer delays.
- 3.3.2 In order to assist in assessing the accessibility of the Site by cycle, **Plan 79493-CUR-00-XX-DR-TP-06004-P01** to the rear of the report presents an 8km cycle catchment for the Site. The 8km (5-mile) maximum acceptable cycling distance refers to a recommendation by the Chartered Institution for Highways and Transport in the document *'Planning for Cycling'* (2014) which states: *"The majority of cycling trips are for short distances, with 80% being less than five miles and with 40% being less than two miles."* However, most trips by all modes are relatively short with 68% less than 5 miles long, according to the 2018 National Travel Survey; so cycling is a potential mode for most of these shorter trips.
- 3.3.3 The 8km catchment encompasses all of Manchester City Centre including all major transport links, shopping centres, bars, restaurants, leisure centres, tourist attractions and places of worship. The catchment also extends as far as Blackley and Moston to the north, Dukinfield and Ashton-under-Lyne to the east, Didsbury and Withington to the south, and Salford and beyond to the west.
- 3.3.4 Existing cycle infrastructure allows easy cycle access to Manchester City Centre, with direct access to Manchester Piccadilly Station along the on-road route on Ashton Old Road and Fairfield Street. All major train and bus stations within Manchester city centre are within 8km of the Site and are accessible following Sustrans cycle routes.
- 3.3.5 The local cycle network within the vicinity of the Site is reproduced in **Figure 3.1** below:

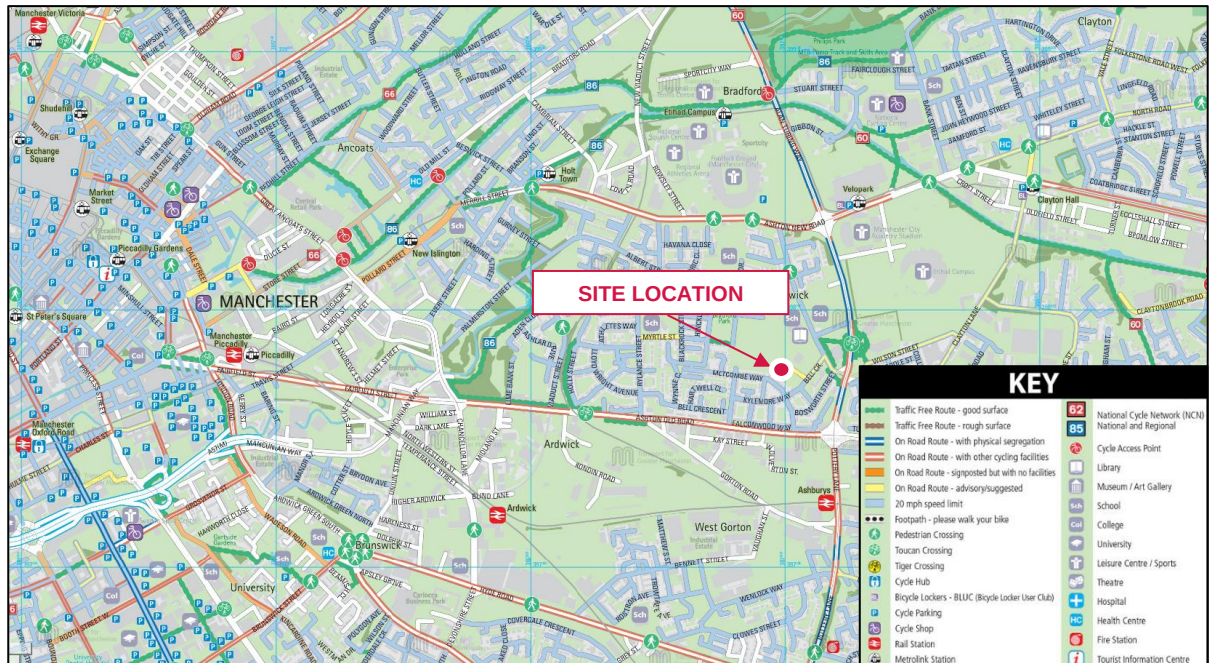


Figure 3.1 – Local Cycle Network
(Source: TfGM)

- 3.3.6 The local cycle network shown above is also a part of Greater Manchester's cycling and walking infrastructure proposal, named "Bee Network". The 'Bee Network' are signed routes that mark the most direct and pleasant way to navigate an area on foot or by bike.
- 3.3.7 The Site is located within the 'Beswick Active Neighbourhood', allowing users of the Site to benefit from the public realm improvements for better safety, speed and quality of commute by foot or bike. The scheme creates a 'filtered neighbourhood' prioritising people over cars by blocking some routes for cars, and improving the neighbourhood's infrastructure for and attractiveness to walkers and cyclists.
- 3.3.8 There is a national cycle network within proximity to the Site, Route 60 which can be accessed via the primarily fully segregated cycle lanes along Alan Turing Way. The route runs mostly traffic-free from North Manchester to East Manchester and connects to National Cycle Routes 66, 85 and 6. It is also in proximity to Regional Cycle Route 86 which connects Etihad stadium to Piccadilly Gardens.

3.4 Public Transport Accessibility

- 3.4.1 **Plan 79493-CUR-00-XX-DR-TP-06002-P01** to the rear of this report demonstrates the areas accessible via public transport within 20, 40 and 60 minutes of the Site. These include:
- 20 minutes – Manchester Piccadilly; the NOMA development housing office, residential, retail and leisure uses; Ardwick; Belle Vue; Gorton;
 - 40 minutes – Salford Central; Manchester Victoria; Cheetham Hill; Harpurhey; Failsworth; Fairfield; Hattersley, Marple; Levenshulme, Deansgate, Manchester Oxford Road; and

- 60 minutes – Eccles; Bolton; Clifton; Mills Hill; Rochdale; Greenfield; Glossop; New Mills Central; Macclesfield; Stockport; Manchester Airport; Altrincham; Trafford Park.

3.4.2 Accessibility by bus, rail and Metrolink are considered further below, with a local public transport network map included in **Figure 3.2** below:



Figure 3.2 – Public Transport Network in the vicinity of the Site
(Source: TfGM)

Bus Accessibility

- 3.4.3 Guidance from the Chartered Institution of Highways and Transportation (CIHT) document 'Guidelines for Planning for Public Transport in Development' indicates that ideally, a bus stop should be located within 400m from a new development.
- 3.4.4 There are several bus stops comfortably within 400m walk of the Site along Grey Mare Lane with the closest being a c. 250m walk east of the Site. A summary of the buses that serve this stop is provided in **Table 3.2** below:

Bus Service	Route	Peak Frequency		
		Weekday	Saturday	Sun/Hols
53 orbits	Pendleton – Old Trafford – Higher Crumpsall – Cheetham Hill	30 mins	30 mins	Hourly
217	Manchester – Clayton – Droylsden - Ashton	Hourly	Hourly	Hourly

Table 3.2 – Summary of Bus Services From Grey Mare Lane

- 3.4.5 The Site is also within an 800m walk of the Ashton New Road (Stop C) and Grey Mare Lane (Stop A) bus stops on Ashton New Road north of the Site, which run additional services as follows in **Table 3.3**:

Bus Service	Route	Peak Hourly Frequency		
		Mon – Fri	Sat	Sun/Hols
217 as above, with the addition of:				
216	Manchester – Clayton – Ashton – Stalybridge	10 mins	10 mins	15 mins
230	Manchester – Clayton – Droylsden – Ashton	30 mins	30 mins	Hourly
231	Manchester – Clayton – Droylsden – Hartshead – Ashton	30 mins	30 mins	Hourly

Table 3.3 – Summary of Bus Services From Ashton New Road

- 3.4.6 It is noted that the provision of bus services will change over time in response to current circumstances. The bus times are accurate at the time of writing, whereas up-to-date bus times can be found on TfGM's website: tfgm.com/public-transport/bus.
- 3.4.7 Overall, the Site is considered to be well served by bus.

Rail Accessibility

- 3.4.8 The Chartered Institution of Highways and Transportation (CIHT) document, '*Planning for Public Transport in Developments*' notes that those travelling to a Site by rail will typically be prepared to walk further to the Site than those travelling by bus, with a preferred distance of 800m.
- 3.4.9 The closest rail station to the development is Ashburys, which is within an 800m walk to the south of the Site – satisfying the CIHT's recommendation. There is no step-free access to the platforms, ticket office or cycle storage at this station. **Table 3.4** shows the frequencies of regular trains that run from Ashburys:

Service	Service Frequency per Hour		
	Peak Weekday	Peak Saturday	Peak Sunday
Manchester Piccadilly to Hadfield Calling at: Manchester Piccadilly, Ashburys, Guide Bridge, Flowery Field, Newton for Hyde, Godley, Hattersley, Broadbottom, Dinting, Glossop, Hadfield.	2 per hour each way	2 per hour each way	1 per hour each way
Manchester Piccadilly to New Mills Central Calling at: Manchester Piccadilly, Ashburys, Belle Vue, Ryder Brow, Reddish North, Brinnington, Bredbury, Romiley, Marple, Strines, New Mills Central.	1 per hour each way	1 per hour each way	1 per day each way

Service	Service Frequency per Hour		
	Peak Weekday	Peak Saturday	Peak Sunday
Manchester Piccadilly to Rose Hill Marple Calling at: Manchester Piccadilly, Ashburys, Fairfield, Guide Bridge, Hyde North, Hyde Central, Woodley, Romiley, Rose Hill Marple.	1 per hour each way	1 per hour each way	No services

Table 3.4 – Summary of Rail Services calling at Ashburys

- 3.4.10 The trains that service Ashburys rail station regularly run 7 days a week from a number of different locations within the Northwest; this provides frequent access for users of the Site and is a viable alternative to private car use.
- 3.4.11 Northern Rail offers space for up to two bikes on all trains for no extra charge, however these are allocated on a first-come, first-serve basis.
- 3.4.12 As mentioned above, Manchester Piccadilly, which can be used to travel to much of Greater Manchester and the wider UK, is within circa 2.5km of the Site and could be accessed by a multi-modal journey.
- 3.4.13 It is noted that the provision of rail services will change over time in response to current circumstances. The rail frequencies are accurate at the time of writing, whereas up-to-date rail times can be found on Northern Rail's website: northernrailway.co.uk/travel/timetables.
- 3.4.14 It is considered the Site is accessible via rail.

Metrolink (Light Rail) Accessibility

- 3.4.15 The nearest Metrolink station, Velopark, is located approximately 1km to the north of the Site. This station has step free access to both platforms. There are 3 cycle lockers and 5 cycle stands available. The following services calls at the Velopark Metrolink station: **Blue Line** – Eccles to Ashton-under-Lyne.
- 3.4.16 The line runs at a frequency of every 12 minutes between 06:00 – 00:00 Monday to Saturday, and between 07:00 – 00:00 on Sundays.
- 3.4.17 The start and end times for the specific station that Site users wish to call at will change over time in response to current circumstances. The Metrolink frequencies are accurate at the time of writing, whereas up-to-date times can be found on the Metrolink website at: <https://tfgm.com/public-transport/tram/tram-schedule>.
- 3.4.18 Users can change at Piccadilly, St Peter's Square and Cornbrook to access the entire Metrolink network, including accessing additional services to East Didsbury, Rochdale, Manchester Airport and the Trafford Centre, as shown in the Metrolink map in **Figure 3.5**.

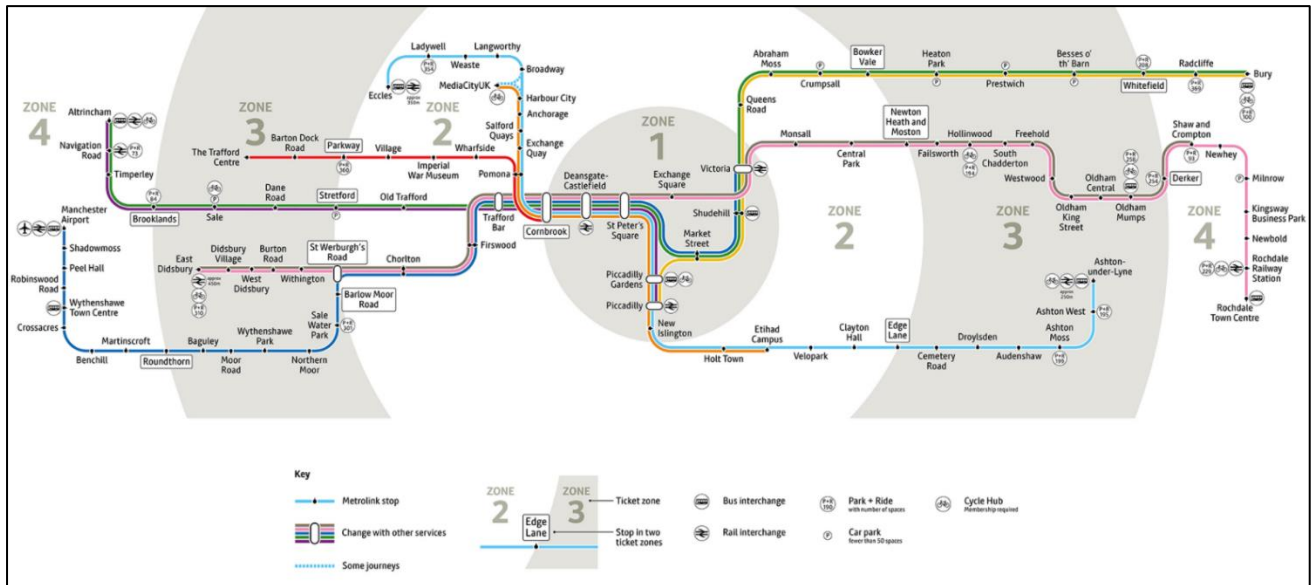


Figure 3.3 – TfGM Metrolink Network Map

(Source: TfGM, 2021)

3.4.19 In summary, it is considered the Site is highly accessible by Metrolink.

3.5 Summary

3.5.1 In summary, it is considered the Site is highly accessible by sustainable modes of transport. The surrounding area exhibits good levels of pedestrian and cycling infrastructure, and there are a number of public transport opportunities within acceptable walking distance of the Site.

3.5.2 This is further evidenced by the Greater Manchester Accessibility Levels (GMAL) tool which is a measure of the accessibility of a point to both the conventional public transport network (i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), considering walk access time, service availability, and average waiting time. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region.

3.5.3 The accessibility index score is categorised into eight levels (1 to 8), where level 8 represents a high level of accessibility (described as 'excellent') and level 1 a low level of accessibility (described as 'very poor'). The Site is located in an area with a GMAL rating of 6.

4.0 Development Proposals

4.1 RFL Vision

- 4.1.1 The mission of the RFL is to consistently deliver great rugby league experiences and the vision is to be a growing, accessible and vibrant sport. The RFL is an organisation that prides itself on the following core values: United, Respect, Excellence and Professional.
- 4.1.2 The RFL has a reach, visibility and value beyond its core followers to make a major contribution to health outcomes, crime reduction, improved education and employment outcomes, volunteering opportunities and improved life satisfaction.
- 4.1.3 The RFL Our League Life concept seeks to capitalise on rugby league as not just a great sport but also a vehicle for social mobility.
- 4.1.4 Overall, the Our League Life proposals will make a real impact through innovative education and training for young people and the wider community of Greater Manchester.

4.2 Overview of Proposals

- 4.2.1 The Proposed Development comprises the OLL Hub which provides an opportunity for the RFL to utilise its strengths in northern communities and act as a vehicle for social mobility. The OLL Hub will celebrate, expand and roll out existing good practice in Rugby League communities across the north of England, adding value, and providing coordination. It provides a place for training in all aspects of the game from groundsmen, media through to sports science. It will also be used by the national teams on occasions for training purposes.
- 4.2.2 The proposals for the OLL Hub include the demolition of the existing building on-site and the erection of a training facility building (Use Class F1(a)) and ancillary uses comprising classrooms, seminar rooms, ancillary offices, flexible conferencing space and workspace and an ancillary café / kitchen. It also includes ancillary changing facilities and a 900-seat spectator stand, together with an upgrading of the existing rugby pitch, the erection of floodlighting, and related access and highways works.
- 4.2.3 The ground floor of the stand interior will house rooms for offices, meetings, stores, changing, toilets, media, first aid, IT servers, kitchen, laundry and more. There will be six entrances for fans, admin, the public, kitchen, plant, and fans/ first aid/ FM.
- 4.2.4 Along with access to the exterior seating on the stands, the first floor will feature rooms for classes, seminars, flexible learning, tutorials, stores, and conferences/ social/ workspace.
- 4.2.5 The operational parameters of the Proposed Development are set out in Section 4.2 below and the Operational management strategy submitted in support of the planning application.

4.2.6 The planning description for the proposed development is reproduced in its entirety below:

“Full Planning Permission for the demolition of existing building on-Site and the erection of a learning and training facility building (Use Class F1(a)) including classrooms, seminar rooms, offices, flexible conferencing space and workspace, kitchen facilities, changing facilities, a new spectator stand and ancillary community space, together with an upgraded rugby pitch for use as a training facility and occasional match and events venue, and related boundary treatment, access and highways works and other associated works.”

4.2.7 The proposed layout plans are included in **Appendix A**.

4.3 Potential Usage

4.3.1 Whilst the proposals are bespoke in nature and the curriculum is by no means fixed, detailed discussions with the RFL have suggested that the OLL Hub will predominantly be used for the following operations:

- On-pitch and off-pitch training and seminars for the following user groups;
 - An RFL community (amateur) club;
 - England Men’s and Women’s Teams for occasional training;
 - The East Manchester Academy; and
 - Occasional events, such as youth tournaments for ages 7 -19.
- Presentation evenings may also be held in the main function room which will have a capacity of up to 200.

4.3.2 The OLL Hub will also provide a curriculum offering Level 2, 3, and 4 qualifications to 16-21 year olds, and other people of all ages.

4.3.3 This will likely include: sports management, coaching, leadership, business administration, nutrition and physiology, grounds maintenance and sports facilities management, extending to Digital Marketing, PR & Communications, sports coaching, fitness programmes, leadership and motivation, health and safety and event management.

General Weekday Activities

4.3.4 It is understood from detailed discussions with the RFL that the hub would be open from 8:30 to 17:30 and 18:00 to 21:00 on Mondays to Fridays throughout the year. However, the core training groups and term times will only run for 30 weeks per annum (April to October), with reduced usage outside of this.

4.3.5 The majority of activity would occur between 08:30 and 17:30 when there could be a maximum of 25 staff, circa 150 16–21-year-old full-time students and circa 40 adult student/players. There could be an additional 30 players and staff in the evening, but this would be outside of the peak periods.

Weekend Activities

- 4.3.6 It is understood that the OLL Hub could potentially host tournaments at the community and junior levels with a maximum of circa 1000 attendees including players and supporters.
- 4.3.7 These tournaments would be held on weekends between April and October, largely outside the football season and there could be up to 10 per annum.
- 4.3.8 They would likely take place between 10:30 and 19:00, albeit there would be staggered arrivals and departures to minimise impacts and parking demand during any one hour. Events will also be arranged so they do not coincide with major events at the Etihad.
- 4.3.9 In addition to these events, the OLL Hub will host smaller community RL club matches of maximum 240 players/supporters on a Saturday between 2pm and 6pm between April and October.

4.4 Proposed Access

Vehicular Access

- 4.4.1 Access from Bell Crescent into the MCC car park would remain unchanged post development and cars utilising the new lay-by in front of the stand would have unrestricted access.
- 4.4.2 No modifications are suggested to the existing car park entrance, albeit the existing height restriction barrier may need to be unlockable in the rare event that larger maintenance vehicles or emergency vehicles require access to the Site.
- 4.4.3 If emergency access is required to the Site, there are two service roads on either side of the stand that provide access for ambulances that need to get onto the pitch. These are shown in **Drawing 79493-CUR-00-XX-DR-TP-05004-P01**.
- 4.4.4 Coaches will not be permitted to access the MCC car park. It is envisaged that instead medium-sized coaches will pull up in the two existing on-street lay-bys on Bell Crescent, as shown in **Drawing 79493-CUR-00-XX-DR-TP-05001-P01**. Coaches can then either wait here or park off-Site, returning to collect users at a later time.
- 4.4.5 There may also be opportunities for larger coaches to drop off/pick up on the northern section of Grey Mare Lane utilising the section of road that extends between Ashton New Road and Alan Turing Way.

Pedestrian and Cycle Access

- 4.4.6 Pedestrians and cyclists will be able to access the Site from Bell Crescent and the MCC car park.

4.5 Parking

- 4.5.1 It is acknowledged by the RFL that parking on residential streets and parking in inappropriate places is a concern for local residents given the proximity of the Etihad Stadium and the recently consented Arena.
- 4.5.2 On this basis, the RFL are happy to commit to no large events taking place at the same time as major events are taking place at the Etihad Stadium.
- 4.5.3 With regard to parking for everyday operations outside of these event times, the RFL are in discussions with MCC with regards to future amendments to the local CPZ that are being developed in response to the development of the Co-op Live arena north of the Etihad Stadium, which is currently under construction. Although the exact scope of the CPZ is yet to be defined, recent discussions with MCC have indicated that the RFL will have the right to use circa 50 car parking spaces within this car park once the CPZ is operational.
- 4.5.4 This quantum of parking is considered to be appropriate to accommodate the everyday activities of staff and some of the demand from students.
- 4.5.5 The New East Manchester Academy car park has approximately 80 spaces. For weekend events when additional parking is needed, it is understood that the RFL is aiming to reach an agreement with the Academy to utilise some of the parking located at the Academy, if and when required.
- 4.5.6 There is also the option for visitors to use the existing MCC car park in the same way as members of the public can at present when the CPZ is not operational.
- 4.5.7 Further detail on parking is provided in Section 6.

Cycle Parking

- 4.5.8 Cycle parking standards are set out in the MCC Core Strategy **Appendix B**.
- 4.5.9 As this is a bespoke development there are no directly comparable land use types and it is necessary to utilise either higher education or stadia as set out below:
- Higher/further education – 1 space per 5 staff and 1 space per 3 students; and
 - Stadia – 1 space per 20 seats.
- 4.5.10 Higher Education and stadia both equate to circa 50 spaces and therefore this level of provision has been provided.
- 4.5.11 The cycle parking is located in 3 covered and secure locations in accordance with the guidance. The RFL will monitor demand for cycle parking and if the provision needs to be increased this will be considered as part of the Travel Plan process.

4.6 Servicing and Refuse Collection

- 4.6.1 The refuse store for the proposed development will be located in a secure compound adjacent to the eastern façade of the stand.
- 4.6.2 On refuse collection days, the bins will be pulled by Site operatives to the adopted highway adjacent to Bell Crescent. Once the refuse has been collected the bins will be pulled back.
- 4.6.3 It is envisaged that private refuse vehicles will pull up on Bell Crescent or utilise the existing lay-by that is located adjacent to the MCC car park access.
- 4.6.4 Full details are provided in the MCC Waste Pro-Forma which has been completed and this is included as **Appendix B**. Swept Path analysis of a refuse vehicle is also included in this document.

5.0 Trip Forecasting and Highway Impact

5.1 Introduction

- 5.1.1 This section of the report details the methodology used to predict the demand associated with the proposed development and derive future year traffic flows in order to assess the impact of the Site.

5.2 Scope of Assessment

- 5.2.1 It has been agreed with MCC Highways and TfGM that this TA should focus on the potential highway impacts at the Grey Mare Lane/Alan Turing Way junction on a weekday and a Saturday.
- 5.2.2 To obtain base flows for this junction Curtins commissioned an independent traffic survey company to undertake full turning movements on Thursday 23rd September between 07:00 – 09:00 and 15:00 – 18:00 at 15-minute intervals. The peak hours identified were 08:00 – 09:00 and 16:30 – 17:30 respectively.
- 5.2.3 A Saturday survey was also undertaken on the 25th September 2021 between the hours of 09:00 – 17:00. The peak period occurred between 11:45 and 12:45. The results, including queue surveys are included in **Appendix C**.
- 5.2.4 **Traffic Figures 1 to 3** at the rear of the report show the '2021 Observed' peak hour traffic flows for the AM, PM and Saturday peaks respectively. All Traffic Figures are provided in **Appendix D**.

5.3 Assessment Years and Traffic Growth

- 5.3.1 In accordance with planning policy, the impact of the proposed development should be assessed for the application year (2021) and the future year of 2026 which is assumed to be 5 years after year of application.
- 5.3.2 In some cases, TEMPRO growth factors are applied to the traffic surveys to establish a future year base. However, in this instance it is not considered that this would be appropriate.
- 5.3.3 The First Report of the Commission on Travel Demand entitled 'All Change? The future of travel demand and the implications for policy and planning ("All Change")' was published in May 2018. The report demonstrates that the evidence of previous transport planning, based on growing car ownership and use, is now limited and sometimes wrong (this point is also recognised in the Department for Transport Road Traffic Forecast Report - RTF18).
- 5.3.4 Evidence in All Change shows that people generally make 16% fewer trips than in 1996, travel 10% fewer miles than in 2002 and spend 22 hours less time travelling than in 2008. This shift is associated with societal shifts in how we work and shop; changing demographics; shifts in income across the population; as well as increased urbanisation. All of these changes are underpinned by and connected

to the rise in internet and communication technologies. The report identifies a number of trends that should be considered in the development planning process. These are identified as follows:

- Retail (increases in online shopping);
- Need for travel (generally people are travelling less and shorter distances);
- Commuting patterns (employees working from home and not having fixed place of work/hours);
- Age/Gender (fewer young drivers)
- Socio-economic conditions (decline in home ownership and wage stagnation);
- Geographic differences (expansion of urban areas);
- Changing transport technologies (increase in shared mobility);
- Walking/cycling (uptake in cycling and walking activity); and,
- Rail travel (increase in rail patronage).

5.3.5 Additional evidence of changes in travel behaviour can be found in The National Travel Survey (NTS) 2019. The travel survey indicated that the total distance travelled per person per year has fallen by 10% between 2002 and 2019. Distance by all motorised private transport has fallen by 14% since 2003, and as a car driver by 13% since 2007. Miles travelled by surface rail have also increased by over 50% since 2003.

5.3.6 TRICS has also undertaken research into changes in travel patterns/trends. This process has demonstrated that there has been a decline in car trip rates recorded in TRICS. When comparing with the NTS 2002-2017 the TRICS data shows residential trip rates to have declined by 12% compared with 9% overall trip rate decline.

5.3.7 All of the above evidence was prior to the emergence of COVID-19 and there is a feeling amongst transport planning professionals that traffic patterns may not return to 'normal' anytime soon, if ever. It is considered likely that the emergence of trends such as home working, hybrid working, flexible working and peak spreading will only be enhanced as a result of COVID-19.

5.3.8 For the above reasons, no traffic growth has been applied in the core scenario.

5.3.9 Notwithstanding the above, a 2026 sensitivity test has been undertaken by applying appropriate TEMPro growth factors. This is in recognition of potential committed development in the area.

5.4 Existing Traffic Generation

5.4.1 The existing Rugby pitch is currently used by the New East Manchester Academy. However, this is considered to be an ancillary use to the Academy and hence is unlikely to generate any primary trips on a regular basis. For robustness, it has been assumed that there is no existing generation.

- 5.4.2 The former Beswick Local Shops part of the Site would have historically generated trips and the level of traffic generation could have been reasonably high, particularly at the weekend. Notwithstanding, the Site has been closed for some time and therefore is assumed to generate no trips.

5.5 Anticipated Trip Generation

- 5.5.1 The proposed development is bespoke and there are no comparable precedents to determine trip generation. It has therefore been agreed with MCC Highways and TfGM that a first principles approach can be applied using a combination of TRICS data and usage assumptions. This is summarised below.
- 5.5.2 The usual method to determine trip generation is to use TRICS which is an industry standard software package containing examples of trip rates and modal split data from a variety of developments.
- 5.5.3 In this case, the most comparable type of developments that are represented in TRICS were 'College and University', 'Leisure Centre' and 'Five-a-side Football'. Trip rates for these uses have been extracted from the TRICS database and the full results are contained in **Appendix E**.
- 5.5.1 The data enabled calculation of the total number of people trips, vehicle trips (driver) and vehicle occupants (driver and passenger) for the three uses of the Site, and the average of the three uses as summarised in **Table 5.1** below:

Trips	Trip Rate Daily			
	Arrive	Depart	Total	Percent Split
College and University				
Total People	8.925	8.846	17.771	100%
Total Vehicles	2.985	2.972	5.957	34%
Vehicle Occupants	4.391	4.389	8.78	49%
Five-a-Side Football				
Total People	53.751	56.08	109.831	100%
Total Vehicles	25.039	26.23	51.269	47%
Vehicle Occupants	38.416	41.132	79.548	72%
Leisure Centre				
Total People	454.941	454.749	909.69	100%
Total Vehicles	183.995	184.637	368.632	41%
Vehicle Occupants	273.151	274.796	547.947	60%
Combined				
Total People	-	-	-	100%
Total Vehicles	-	-	-	40%
Vehicle Occupants	-	-	-	61%

Table 5.1 – TRICS Modal Split Data

- 5.5.2 Table 5.1 demonstrates that on average circa 61% of all trips to and from these type of land uses are by car, albeit many of these are passengers and only circa 40% are drivers. The remaining 39% of users travel by sustainable modes such as walking, cycling and public transport.
- 5.5.3 The above data implies a car occupancy of circa 1.5 people. This is considered to be low for the proposed uses, whereby numerous students or families are likely to travel together, particularly to the weekend events.
- 5.5.4 Whilst not completely comparable to the proposed use and potentially overestimating car usage, it has been agreed with MCC Highways that the above approach provides an evidenced approach to be mindful of when considering vehicular trip generation. On this basis the above modal split has been applied to the different developments uses as summarised below.

General Weekday Activities

- 5.5.5 It is understood from detailed discussions with the RFL that the hub would be open from 8:30 to 17:30 and 18:00 to 21:00 on Mondays to Fridays throughout the year. However, the core training groups and term times will only run for 30 weeks per annum (April to October), with reduced usage outside of this.
- 5.5.6 For the core training groups, the majority of activity would occur between 08:30 and 17:30 when there could be a maximum of 25 staff, circa 150 16–21-year-old full-time students and circa 40 adult student/players. There could be an additional 30 players and staff in the evening, but this would be outside of the peak periods.
- 5.5.7 For assessment purposes and to ensure robustness it has been assumed that:
- All staff would arrive and depart during the highway AM and PM peak periods set out above. 40% of these staff are envisaged to be car drivers.
 - All F/T students would arrive and depart during the highway AM and PM peak periods. 30% of these would be car drivers. This is to reflect that the fact that many people of this age can't drive and are more likely to use sustainable modes of travel or car share.
 - All adult students/players would arrive and depart during the highway AM and PM peak periods set out above. 40% of these staff are envisaged to be car drivers.

	Modal Split (Car)	AM Arrivals	PM Departures
25 Staff	40%	10	10
150 F/T Students (16-21)	30%	45	45
40 Adult Learners/Players	40%	16	16

	Modal Split (Car)	AM Arrivals	PM Departures
Total		71	71

Table 5.2 – General Weekday Activities Trip Generation

- 5.5.8 The above demonstrates that in total there could be circa 71 trips in the AM and PM peak periods.
- 5.5.9 The 18:00 to 21:00 period has not been considered as usage during this time is outside of the peaks and is likely to be significantly less than the daytime activities.

Weekend Events

- 5.5.10 It is understood from detailed discussions with the RFL that the OLL Hub could potentially host large tournaments at the community and junior levels with circa 1000 attendees including payers and supporters.
- 5.5.11 These tournaments would be held on weekends between April and October outside the football season and there could be approximately 10 per annum.
- 5.5.12 They would likely take place between 10:30 and 19:00, albeit there would be staggered arrivals and departures.
- 5.5.13 For assessment purposes and to ensure robustness it has been assumed that:
- There could be circa 6 coaches each carrying up to 35 players/supporters. All arrive and depart during the network peak hour period.
 - Of the remaining 790 players/supporters, 30% would arrive and depart by car. This equates to 237 vehicles.
 - The above arrivals and departures are envisaged to be staggered over three sessions which equates to 79 arrivals and 79 departures by car in a crossover hour.

	Modal Split (Car)	Saturday Peak Arrival	Saturday Peak Departures
Coach		6	6
790 Players/Supporters In Three Shifts	30%	79	79
Total		85	85

Table 5.3 – Weekend Activities Trip Generation

- 5.5.14 The above demonstrates that in total there could be circa 85 arrivals and 85 departures in the worst case Saturday peak period. This equates to a total of 170 two-way car trips.

5.5.15 In addition to the tournament events, the OLL Hub will host smaller weekend events of circa 240 players/supporters on a Saturday between 2pm and 6pm between April and October.

5.5.16 On the basis that circa 40% will drive and arrive at 2pm, departing at 6pm, there would be circa 40 car trips in each hour. This is significantly less than the tournament events so has not been assessed further in this report.

5.6 Trip Distribution & Assignment

5.6.1 To assess the impact of the above trips it is necessary to assign the traffic to the base traffic flows. However, as the development is not yet open there can be no certainty regarding where players, staff and supporters will arrive and depart from. Therefore a variety of assumptions have been made as summarised below.

5.6.2 The local areas of Bolton, Bury, Rochdale, Oldham, Hyde, Stockport, Altrincham and Salford were selected as a sample of the most likely locations that people will travel from to use the Site. It has been assumed that a uniform 12.5% of Site users will travel from each location.

5.6.3 These locations were chosen as they are geographically spread around Greater Manchester and each has a different route to and from the Site. Anyone arriving from further afield is still likely to follow one of these routes.

5.6.4 Google Maps Route Planner was run for arrivals and departures on Saturday 11th September 2021 and weekday arrivals and departures on Monday 13th September 2021.

5.6.5 Google Maps recommended that those originating in Bolton, Altrincham and Salford should arrive and depart along the western arm of Ashton Old Road on all selected journeys, and those from Hyde and Stockport use Ashton Old Road.

5.6.6 It recommends that those from Bury and Rochdale use Ashton New Road on all journeys while those from Oldham use it for the arrivals and the eastern arm of Ashton New Road for departures on both selected days.

5.6.7 This suggests there will be a near even split of future Site users using the Alan Turing Way/Ashton Old Road and Alan Turing Way/Ashton New Road junctions, to the north and south respectively.

5.6.8 **Traffic Figures 4 to 6** at the rear of the report show the development trips assigned to the network for the AM, PM and Saturday peaks respectively.

5.6.9 **Traffic Figures 7 to 9** at the rear of the report show the development trips and 2021 base flows for the AM, PM and Saturday peaks respectively.

- 5.6.10 **Traffic Figures 10 to 12** at the rear of the report show the 2026 base flows for the AM, PM and Saturday peaks respectively.
- 5.6.11 **Traffic Figures 13 to 15** at the rear of the report show the development trips and 2026 base flows for the AM, PM and Saturday peaks respectively.

5.7 Grey Mare Lane/Alan Turing Way Junction Modelling

- 5.7.1 The traffic flows described above have been used to model the Grey Mare Lane/Alan Turing Way Junction in the 2021 base and 2026 with and without development scenarios.
- 5.7.2 The junction operates under signal control and has been modelled utilising JCT Consultancy's LinSig programme.
- 5.7.3 LinSig allows traffic engineers to model traffic signals and their effect on traffic capacities and queuing. As well as modelling the effects of traffic signals LinSig also optimises signal timings to reduce delay or increase capacity at a junction or group of interlinked junctions.
- 5.7.4 LinSig results refer to the Degree of Saturation (DoS) and Mean Maximum Queue (MMQ) predicted in each lane of the junction. A DoS of 100% indicates that the lane in question is operating at its theoretical capacity (point of saturation), whilst a DoS of 90% or less indicates that the lane is operating within its practical capacity.
- 5.7.5 The controller data and traffic signal timing information for the Grey Mare Lane/Alan Turing Way junction has been obtained from the Urban Traffic Control (UTC) Team at TfGM. This information confirmed that the signals operate under SCOOT Control with a maximum cycle time of 104 seconds.
- 5.7.6 On the above basis the cycle time of the LinSig model has been optimised within a maximum cycle time of 104 seconds. This process has been undertaken with due accordance to the observed queue lengths on Site to ensure that the model represents a suitable basis for assessing any potential development impacts.

Base Model Results

- 5.7.7 **Tables 5.4 and 5.5** provide the 2021 and 2026 baseline traffic model results for the Weekday AM/PM and Saturday peak periods.

Arm		2021 AM Peak		2021 PM Base		2021 Weekend Base	
		DoS	MMQ	DoS	MMQ	DoS	MMQ
1/1	A6010 Alan Turing Way (North) Ahead Left	89.2%	14	40.1%	7	49.3%	7
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	90.6%	16	56.3%	8	53.4%	8
2/1	Wilson Street - Feeder Lane Ahead	19.9%	0	8.7%	0	6.5%	0
3/2+3/1	Wilson Street Left Ahead	82.0%	7	56.8%	4	22.6%	1
3/3	Wilson Street Right	31.4%	2	30.4%	2	22.6%	1

Arm		2021 AM Peak		2021 PM Base		2021 Weekend Base	
		DoS	MMQ	DoS	MMQ	DoS	MMQ
4/1	A6010 Alan Turing Way (South) Left Ahead	89.6%	14	70.8%	18	64.4%	10
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	94.7%	16	75.1%	19	67.4%	11
5/1	Grey Mare Lane - Feeder Lane Ahead	7.1%	0	8.3%	0	5.4%	0
6/2+6/1	Grey Mare Lane Ahead Left	12.0%	1	26.9%	2	12.7%	1
6/3	Grey Mare Lane Right	6.7%	0	5.8%	1	3.3%	0

Table 5.4 – Grey Mare Lane/Alan Turing Way Capacity Assessment Results (2021 Base)

Arm		2026 AM Peak		2026 PM Base		2026 Weekend Base	
		DoS	MMQ	DoS	MMQ	DoS	MMQ
42.2%	A6010 Alan Turing Way (North) Ahead Left	96.1%	19	43.0%	8	53.0%	8
52.5%	A6010 Alan Turing Way (North) Ahead Right	96.8%	21	60.7%	9	57.1%	8
9.3%	Wilson Street - Feeder Lane Ahead	21.3%	0	9.3%	0	6.9%	0
71.4%	Wilson Street Left Ahead	87.7%	8	60.6%	4	24.2%	1
37.8%	Wilson Street Right	33.6%	2	32.6%	2	24.1%	1
75.2%	A6010 Alan Turing Way (South) Left Ahead	96.6%	20	76.9%	21	69.3%	11
82.3%	A6010 Alan Turing Way (South) Right Ahead	101.6%	23	87.6%	22	72.0%	12
9.0%	Grey Mare Lane - Feeder Lane Ahead	7.6%	0	9.0%	0	5.7%	0
31.3%	Grey Mare Lane Ahead Left	13.7%	1	28.9%	2	14.3%	1
7.3%	Grey Mare Lane Right	7.3%	0	6.4%	1	3.4%	0

Table 5.5 – Grey Mare Lane/Alan Turing Way Capacity Assessment Results (2026 Base)

5.7.8 The above tables demonstrate that the Grey Mare Lane/Alan Turing Way traffic signals operate within capacity in the 2021 AM peak scenario. In 2026 AM peak scenarios the junction is predicted to operate over practical capacity but remain under theoretical capacity. In the 2021 and 2026 Weekday PM and Saturday peak hours the traffic signals operate within both practical and theoretical capacity.

Base + Dev Model Results

5.7.9 **Tables 5.6** and **5.7** provide the baseline + development traffic model results for the Weekday AM/PM and Saturday peak periods.

Arm		2021 AM		2021 PM		2021 Weekend	
		DoS	MMQ	DoS	MMQ	DoS	MMQ
1/1	A6010 Alan Turing Way (North) Ahead Left	89.9%	14	40.1%	7	50.3%	7
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	91.5%	16	56.3%	8	66.7%	7
2/1	Wilson Street - Feeder Lane Ahead	19.9%	0	8.7%	0	6.5%	0
3/2+3/1	Wilson Street Left Ahead	82.0%	7	56.8%	4	22.6%	1
3/3	Wilson Street Right	31.4%	2	30.4%	2	22.6%	1
4/1	A6010 Alan Turing Way (South) Left Ahead	92.8%	16	70.8%	18	67.5%	11
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	94.7%	18	75.1%	19	70.5%	12
5/1	Grey Mare Lane - Feeder Lane Ahead	7.1%	0	11.9%	0	9.6%	0
6/2+6/1	Grey Mare Lane Ahead Left	12.0%	1	34.3%	3	18.1%	1
6/3	Grey Mare Lane Right	6.7%	0	18.8%	2	12.4%	1

Table 5.6 – Grey Mare Lane/Alan Turing Way Capacity Assessment Results (2021 Base + Dev)

Arm		2026 AM		2026 PM		2026 Weekend	
		DoS	MMQ	DoS	MMQ	DoS	MMQ
1/1	A6010 Alan Turing Way (North) Ahead Left	96.8%	20	43.0%	8	54.3%	8
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	97.6%	23	60.7%	9	76.1%	8
2/1	Wilson Street - Feeder Lane Ahead	21.3%	0	9.3%	0	6.9%	0
3/2+3/1	Wilson Street Left Ahead	87.7%	8	60.6%	4	24.2%	1
3/3	Wilson Street Right	33.6%	2	32.6%	2	24.1%	1
4/1	A6010 Alan Turing Way (South) Left Ahead	99.7%	25	76.9%	21	72.4%	12
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	101.6%	29	87.6%	22	75.1%	13
5/1	Grey Mare Lane - Feeder Lane Ahead	7.6%	0	12.5%	0	10.0%	0
6/2+6/1	Grey Mare Lane Ahead Left	13.7%	1	36.0%	3	19.8%	2
6/3	Grey Mare Lane Right	7.3%	0	19.1%	2	12.7%	1

Table 5.7 – Grey Mare Lane/Alan Turing Way Capacity Assessment Results (2026 Base + Dev)

- 5.7.10 For the reasons set out in detail within **Section 5.3** above the core scenarios for assessment are considered to be the 2021 Base and 2021 Base + Dev scenarios. Notwithstanding the above, a 2026 sensitivity test has been undertaken by applying appropriate TEMPro growth factors.
- 5.7.11 In the 2021 Base + Dev scenarios, with the proposed development in place, there are no noticeable increases in DoS or MMQs at the Grey Mare Lane/Alan Turing Way traffic signals across all peak hours considered.
- 5.7.12 For the sensitivity test, whilst the 2026 AM peak base scenario is anticipated to operate over capacity, there are no noticeable increases in DoS or MMQs with the proposed development in place. In the 2026 PM and Weekday peaks the junctions are predicted to continue to operate within capacity with the proposed development in place.

5.8 Highway Impact Summary

- 5.8.1 The highway impacts of the traffic predicted to be generated by the proposed development have been assessed at the Grey Mare Lane/Alan Turing Way traffic signals.
- 5.8.2 Those impacts have been demonstrated to be immaterial and are far from being able to be categorised as severe. Therefore, no highway capacity mitigation measures are proposed in order to make the development proposals acceptable in planning terms.

6.0 Parking

6.1 Introduction

- 6.1.1 This section of the report considers parking in relation to the proposed development.

6.2 Proposed Demand

- 6.2.1 Based on detailed discussions with the RFL it is understood that the majority of general weekday activity would occur between 08:30 and 17:30 when there could be a maximum of 25 staff, circa 150 16–21 year old full-time students and circa 40 adult student/players.
- 6.2.2 Based on the trip generation set out in the previous section, the potential demand for parking could be circa 71 spaces, albeit this is considered worst case and in reality demand will be spread out throughout the day.
- 6.2.3 With regard to weekend activities and again based on the previous section, the demand for parking on a normal weekend community day could be circa 40 spaces. However, the demand for a large event could be circa 170 spaces.

6.3 Proposed Provision

- 6.3.1 The RFL are in discussions with MCC with regards to future amendments to the local CPZ that are being developed in response to development of the Co-op Live arena north of the Etihad Stadium, which is currently under construction. Although the exact scope of this is yet to be defined, recent discussions with MCC have indicated that the RFL will have the right to use circa 50 car parking spaces within this car park once the CPZ is operational. This quantum of parking is considered to be appropriate to accommodate staff and the majority of users on a weekday. If any additional parking is required, there is ample capacity in the adjacent MCC car park as summarised later on in this section.
- 6.3.2 For the larger weekend events when additional parking is needed, it is understood that the RFL is aiming to reach an agreement to utilise some of the parking that is located at the New East Manchester Academy. There are approximately 80 spaces in the Academy car park, and it is understood that any agreement could allow the usage of some or all of these spaces. This plus the 50 spaces equates to circa 130 spaces.
- 6.3.3 There is also the option for visitors to use the existing MCC car park in the same way as members of the public can at present and this could accommodate the remaining spaces that may be needed to satisfy the 170 space parking demand.
- 6.3.4 It is understood that the RFL may also seek similar arrangements with other nearby facilities if demand exceeds the 170 spaces.

6.4 MCC Car Park Capacity

6.4.1 To determine how much capacity is potentially available at the MCC car park a parking accumulation survey was undertaken on Thursday 23rd September 2021 and Saturday 25th September 2021. The results of the surveys are presented in **Table 6.1** below.

Time	Thursday 23 rd September 2021		Saturday 25 th September 2021	
	Accumulation	Percent of Total Capacity (170), %	Accumulation	Percent of Total Capacity (170), %
07:00 - 07:15	30	17.6	5	2.9
07:15 - 07:30	35	20.6	10	5.9
07:30 - 07:45	35	20.6	12	7.1
07:45 - 08:00	33	19.4	12	7.1
08:00 - 08:15	31	18.2	14	8.2
08:15 - 08:30	23	13.5	14	8.2
08:30 - 08:45	24	14.1	16	9.4
08:45 - 09:00	25	14.7	23	13.5
09:00 - 09:15	29	17.1	30	17.6
09:15 - 09:30	29	17.1	46	27.1
09:30 - 09:45	31	18.2	49	28.8
09:45 - 10:00	32	18.8	53	31.2
10:00 - 10:15	31	18.2	42	24.7
10:15 - 10:30	36	21.2	49	28.8
10:30 - 10:45	35	20.6	51	30.0
10:45 - 11:00	37	21.8	53	31.2
11:00 - 11:15	33	19.4	55	32.4
11:15 - 11:30	33	19.4	58	34.1
11:30 - 11:45	29	17.1	61	35.9
11:45 - 12:00	34	20.0	55	32.4
12:00 - 12:15	37	21.8	49	28.8
12:15 - 12:30	37	21.8	36	21.2
12:30 - 12:45	39	22.9	35	20.6
12:45 - 13:00	39	22.9	30	17.6

Time	Thursday 23 rd September 2021		Saturday 25 th September 2021	
	Accumulation	Percent of Total Capacity (170), %	Accumulation	Percent of Total Capacity (170), %
13:00 - 13:15	44	25.9	26	15.3
13:15 - 13:30	43	25.3	22	12.9
13:30 - 13:45	43	25.3	21	12.4
13:45 - 14:00	41	24.1	18	10.6
14:00 - 14:15	44	25.9	14	8.2
14:15 - 14:30	49	28.8	15	8.8
14:30 - 14:45	36	21.2	14	8.2
14:45 - 15:00	32	18.8	18	10.6
15:00 - 15:15	36	21.2	17	10.0
15:15 - 15:30	31	18.2	16	9.4
15:30 - 15:45	28	16.5	18	10.6
15:45 - 16:00	29	17.1	17	10.0
16:00 - 16:15	26	15.3	14	8.2
16:15 - 16:30	32	18.8	15	8.8
16:30 - 16:45	35	20.6	10	5.9
16:45 - 17:00	40	23.5	4	2.4
17:00 - 17:15	42	24.7	4	2.4
17:15 - 17:30	43	25.3	4	2.4
17:30 - 17:45	36	21.2	4	2.4
17:45 - 18:00	37	21.8	4	2.4
18:00 - 18:15	35	20.6	4	2.4
18:15 - 18:30	40	23.5	4	2.4
18:30 - 18:45	39	22.9	5	2.9
18:45 - 19:00	39	22.9	5	2.9

Table 6.1 – Car Park Accumulation Survey

6.4.2 The above table demonstrates that the peak weekday utilisation of the car park occurs between 13:00 – 14:30, with a high of 28.8% of spaces occupied between 14:15 – 14:30.

- 6.4.3 The results showed a lower quartile of 31 vehicles (18.2%), an upper quartile of 39 vehicles (22.9%), and a mean of 35 vehicles (20.6%) occupying the car park between 07:00 – 19:00 on Thursday 23rd September 2021.
- 6.4.4 The peak weekend utilisation of the car park occurs between 9:45 – 10:00 and 10:30 – 12:00 when the accumulation of vehicles in the car park is equal to or exceeds 30%. The results showed a lower quartile of 12 vehicles (6.8%), an upper quartile of 38 vehicles (22.1%), and a mean of 24 vehicles (14.1%) occupying the car park between 07:00 – 19:00 on Thursday 23rd September 2021.
- 6.4.5 It is evident that there is circa 70% capacity available during the weekday and circa 65% capacity available during the weekend. This equates to circa 110 to 120 free spaces.

6.5 Parking Management

- 6.5.1 It is acknowledged by the RFL that parking on residential streets and parking in inappropriate places is a concern for local residents given the proximity of the Etihad Stadium and the recently consented Arena.
- 6.5.2 Therefore, until the new CPZ is established in line with the completion of the Co-Op Live arena development, the existing controls on the car park relating to when there is a match on at the Etihad Stadium will remain unaffected.
- 6.5.3 Furthermore, the RFL has committed to no tournament events whilst events are taking place at the Etihad Stadium.
- 6.5.4 The RFL will also continue to work with MCC Highways regarding the upcoming Controlled Parking Zone proposals that are being developed in advance of the Arena opening. Once implemented, it is expected that the RFL will have the right to park in circa 50 spaces in the MCC Car Park.
- 6.5.5 If there is an event at the Etihad Stadium or Arena and the OLL Hub is in use (for a smaller event), staff and users will be informed in advance and alternative travel arrangements will be made for any demand above the 50 allocated spaces.
- 6.5.6 In summary, the RFL are content that there is sufficient parking available for their needs and there will be no significant impact on nearby residential areas.

7.0 Transport Planning Policy

7.1 Introduction

- 7.1.1 The following section sets out key local and national transport planning policies, and how the proposals relate to them.

7.2 National Planning Policy Framework (2021)

- 7.2.1 NPPF sets out the current national transport planning policy and outlines the important role that transport policies have to play in facilitating sustainable development.

- 7.2.2 Paragraph 11 states that:

“Plans and decisions should apply a presumption in favour of sustainable development.”

- 7.2.3 For decision taking this means granting permission unless:

“...any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies.”

- 7.2.4 Section 9 of the NPPF is entitled *Promoting Sustainable Transport* and outlines the important role that transport policies have to play in facilitating sustainable development. The section states that:

“The planning system should actively manage patterns of growth ...Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.”

- 7.2.5 The document emphasises the need for developments to offer a choice of sustainable modes of transport to *“reduce congestion and emissions, and improve air quality and public health”* and provide *“safe and suitable access”* for all users.

- 7.2.6 Paragraph 112 of the NPPF states that applications for development should:

- *“give priority to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
- *address the needs of people with disabilities and reduced mobility in relation to all modes of transport; and*
- *create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards.”*

7.2.7 The proposed development at the Site is situated in an accessible location. There is good walking and cycling infrastructure adjacent to the Site, and public transport is accessible within an acceptable walking distance. There are 10 disabled parking bays in the adjacent car park. Secure, sheltered storage for 50 cycles will be provided on-Site.

7.2.8 The proposed development accords with the general principles of the NPPF.

7.3 National Planning Practice Guidance (NPPG)

7.3.1 In addition to the NPPF, a National Planning Practice Guidance (NPPG) document has also been developed by the Ministry of Housing, Communities & Local Government in 2012, with a revised version in 2018. It brings together planning practice guidance for England and sits alongside the NPPF. Within this document there is a specific section that clarifies the over-arching principles on Travel Plans, Transport Assessments and Transport Statements. The guidance states that:

“Travel Plans, Transport Assessments and Statements can positively contribute to:

- *Encouraging sustainable travel;*
- *Lessening traffic generation and its detrimental impacts;*
- *Reducing carbon emissions and climate impacts;*
- *Creating accessible, connected, inclusive communities;*
- *Improving health outcomes and quality of life;*
- *Improving road safety; and*
- *Reducing the need for new development to increase existing road capacity or provide new roads.”*

7.3.2 The guidance on Transport Assessments and Statements re-iterates the circumstances in which either document would usually be required. It is clear that a development of the size and nature of this development requires a Transport Assessment. It also clarifies the process for establishing a scope for what the documents should contain. The NPPG has been considered in the production of this TA and the accompanying Interim Travel Plan (ITP) (Document Reference: **79493-CUR-00-XX-RP-TP-002**).

7.3.3 As outlined above, this TA demonstrates that the Site is accessible by active and sustainable modes of travel, and that safe and suitable access can be gained to the development. The development proposals therefore apply the principles set out in the NPPG and will seek to create a sustainable development.

7.4 Manchester Core Strategy (2012 – 2027)

7.4.1 The Manchester Core Strategy envisions that by 2027 “the Eastlands area of the Regional Centre [will be] a national attraction for sport, leisure and recreation”.

7.4.2 Policy EC1 states that MCC will support developments providing education and other employment generating uses particularly in the Eastlands area, while Policy EN12 sets out “enhanc[ing] existing

facilities and provide new spaces and facilities [for open space, sport, and recreation] in accessible locations” in East Manchester as a priority area. The development would provide a sports destination and teaching facilities for the local community in what has been demonstrated to be an accessible area.

7.4.3 Policy EC7 identifies the Eastlands Strategic Employment location as being suitable for sports destinations. The Site is located on the outskirts of this area, as defined by the Manchester Core Strategy.

7.4.4 Policy EN10 promotes developments that “improve the quality and quantity of accessible open space, sport and recreation in the local area” and the delivery strategy includes a target of 100% planning permission approvals for EN10-compliant proposals. The development would provide a hub for community rugby and sport education, adding to the range of excellent sports facilities in the Eastlands area.

7.4.5 The Manchester Core Strategy promotes similar principles to the NPPF. It contains three specific “Transport” policies, comprising:

- Policy T1 – Sustainable Transport;
- Policy T2 – Accessible Areas of Opportunity and Need; and
- Policy T3 – Strategic Integration.

7.4.6 Policy T1 focuses on sustainable transport and access for all. The accessibility of the Site would encourage users of the proposed development to travel by sustainable modes.

7.4.7 Policy T2 of the Manchester Core Strategy states:

“The Council will actively manage the pattern of development to ensure that [outside the City Centre]... all new development should provide appropriate car parking facilities, taking account of the guidance in appendix B... In all parts of the City proposals should have regard to the need for disabled and cycle parking, in line with appendix B.”

7.4.8 It is considered the proposed parking provision is reflective of the highly accessible nature of the development, whilst considering the realistic requirements of the users. The development would benefit from sustainable transport links across the city centre.

7.4.9 Policy T3 is in relation to strategic integration of developments with the sustainable transport network. The proposed development would not prejudice the implementation of any of the strategic integration projects.

7.5 Greater Manchester Transport Strategy 2040

7.5.1 In 2021 TfGM updated the 2040 Vision for Transport to deliver a transport system which enables residents, businesses and visitors in Greater Manchester to travel to a wide range of different destinations and opportunities, and where sustainable transport can be a viable and attractive alternative to the car.

7.5.2 Under Policy 3, the Transport Strategy states that TfGM will “maintain a programme of interventions designed to encourage people to make sustainable journeys. We will support this through journey planning tools and information to encourage travel behaviour change and mode shift, and in order to make the most efficient use of available capacity (particularly during peak periods).” Such interventions comprise:

- *“Reducing the carbon and environmental cost of journeys;*
- *New ways of working which make the best use of the transport network;*
- *Maximising the benefit of new, integrated transport infrastructure and services;*
- *Delivering public health benefits through enabling more active travel;*
- *Supporting town and city centre economic vitality and sustainability;*
- *Improving access to key services and jobs;*
- *Maximising sustainable travel in new developments; and*
- *Becoming more resilient to disruption.”*

7.5.3 The above measures and additional initiatives have also been provided in greater detail in the accompanying Interim Travel Plan (**Document Reference 79493-CUR-00-XX-RP-TP-002**).

7.5.4 Under Policy 4, TfGM will also “work with developers to ensure that new developments are accessible by sustainable modes, and to reduce transport emissions and impacts on the highway network.” This will be in accordance with the principles of:

- *“Reducing the need to travel;*
- *Reducing the need to travel by car, and the distance travelled;*
- *Maximising accessibility by sustainable modes;*
- *Making the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes;*
- *Maximising opportunities to provide additional public transport; and*
- *Designing to encourage active travel.”*

7.5.5 It is considered that the development proposals will not adversely impact the transport network, and instead would support the Transport Strategy by enhancing opportunities for sustainable travel by integrating into existing infrastructure.

7.6 Conclusions

- 7.6.1 It is considered that the proposed development is in line with national and local transport policies and guidance. The Site is located within an area which has a range of existing local facilities and plenty of sustainable travel choices.

8.0 Summary and Conclusions

8.1 Summary

- 8.1.1 Curtins has been appointed on behalf of the Rugby Football League (RFL) to provide traffic and transportation advice in relation to the development of an Our League Life National Community Hub in the Beswick area of Manchester.
- 8.1.2 The Proposed Development comprises the development of the Our League Life National Community Hub (hereafter referred to as the 'OLL Hub'). The OLL Hub provides an opportunity for the RFL to utilise its strengths in northern communities and act as a vehicle for social mobility. The OLL Hub will celebrate, expand and roll out existing good practice in Rugby League communities across the north of England, adding value, and providing coordination. It provides a place for training in all aspects of the game from groundsmen, media through to sports science. It will also be used by the national teams on occasions for training purposes.
- 8.1.3 The proposals for the OLL Hub include the demolition of the existing building on-site and the erection of a training facility building (Use Class F1(a)) and ancillary uses comprising classrooms, seminar rooms, ancillary offices, flexible conferencing space and workspace and an ancillary café / kitchen. It also includes ancillary changing facilities and a 900-seat spectator stand, together with an upgrading of the existing rugby pitch, the erection of floodlighting, and related access and highways works.
- 8.1.4 The development description is set out below:
- "Full Planning Permission for the demolition of existing building on-Site and the erection of a learning and training facility building (Use Class F1(a)) including classrooms, seminar rooms, offices, flexible conferencing space and workspace, kitchen facilities, changing facilities, a new spectator stand and ancillary community space, together with an upgraded rugby pitch for use as a training facility and occasional match and events venue, and related boundary treatment, access and highways works and other associated works."*
- 8.1.5 A review of highway safety in the vicinity of the Site has been undertaken. It is not considered that there is an existing safety issue that is likely to be exacerbated by the proposed development.
- 8.1.6 A review of baseline conditions demonstrates that the Site is accessible by sustainable modes of transport. The surrounding area exhibits excellent levels of pedestrian and cycling infrastructure and there are public transport opportunities within acceptable walking distance of the Site.
- 8.1.7 With regard to parking, the RFL are in discussions with MCC with regards to future amendments to the local CPZ that are being developed in response to development of the Co-op Live arena north of the Etihad Stadium, which is currently under construction. Although the exact scope of this is yet to be

defined, recent discussions with MCC have indicated that the RFL will have the right to use circa 50 car parking spaces within this car park once the CPZ is operational. This quantum of parking is considered to be appropriate to accommodate staff and the majority of users on a weekday. For larger events, parking may be available at the New East Manchester Academy – pending agreement – and the adjacent MCC public car park. This provision is considered appropriate based on the demand.

- 8.1.8 The highway impacts of the proposals have been assessed at the Grey Mare Lane/Alan Turing Way junction for a weekday and weekend and this demonstrates no severe highway impacts.
- 8.1.9 A review of relevant local and national transport planning guidance has been undertaken and it is considered that the proposed development conforms with such policy.

8.2 Conclusions

- 8.2.1 From a traffic and transportation perspective there are no reasons why the development proposals should not be granted planning approval.

Plans

Plan 79493-CUR-00-XX-DR-TP-06001-P01 – (Location Plan) Regional Level

Plan 79493-CUR-00-XX-DR-TP-06002-P01 – (Location Plan) Local Level

Plan 79493-CUR-00-XX-DR-TP-06003-P01 – (Accessibility) Indicative Walking Catchment

Plan 79493-CUR-00-XX-DR-TP-06004-P01 – (Accessibility) Indicative Cycle Catchment

Plan 79493-CUR-00-XX-DR-TP-06005-P01 – (Accessibility) Indicative Public Transport Catchment



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OURLEAGUE LIFE NATIONAL HUB - MANCHESTER

Drg Title:
SITE LOCATION
REGIONAL VIEW

Status:
PRELIMINARY

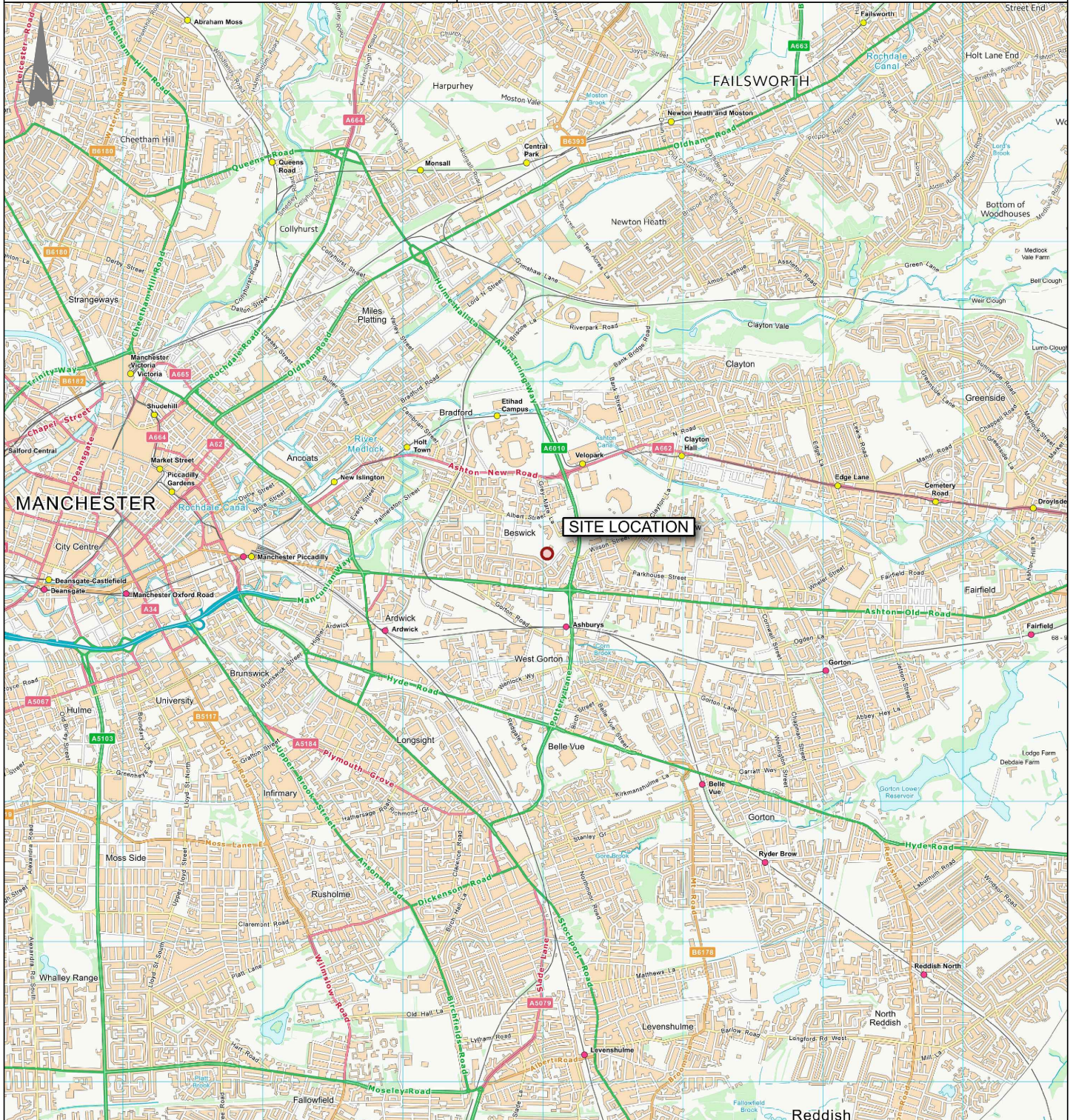
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Designed By: JM Date: 08/09/21

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

79493 - CUR - 00 - XX - DR - TP - 06001 - P01



KEY: Site



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Project:
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Drg Title:

SITE LOCATION LOCAL VIEW

Status:
PRELIMINARY

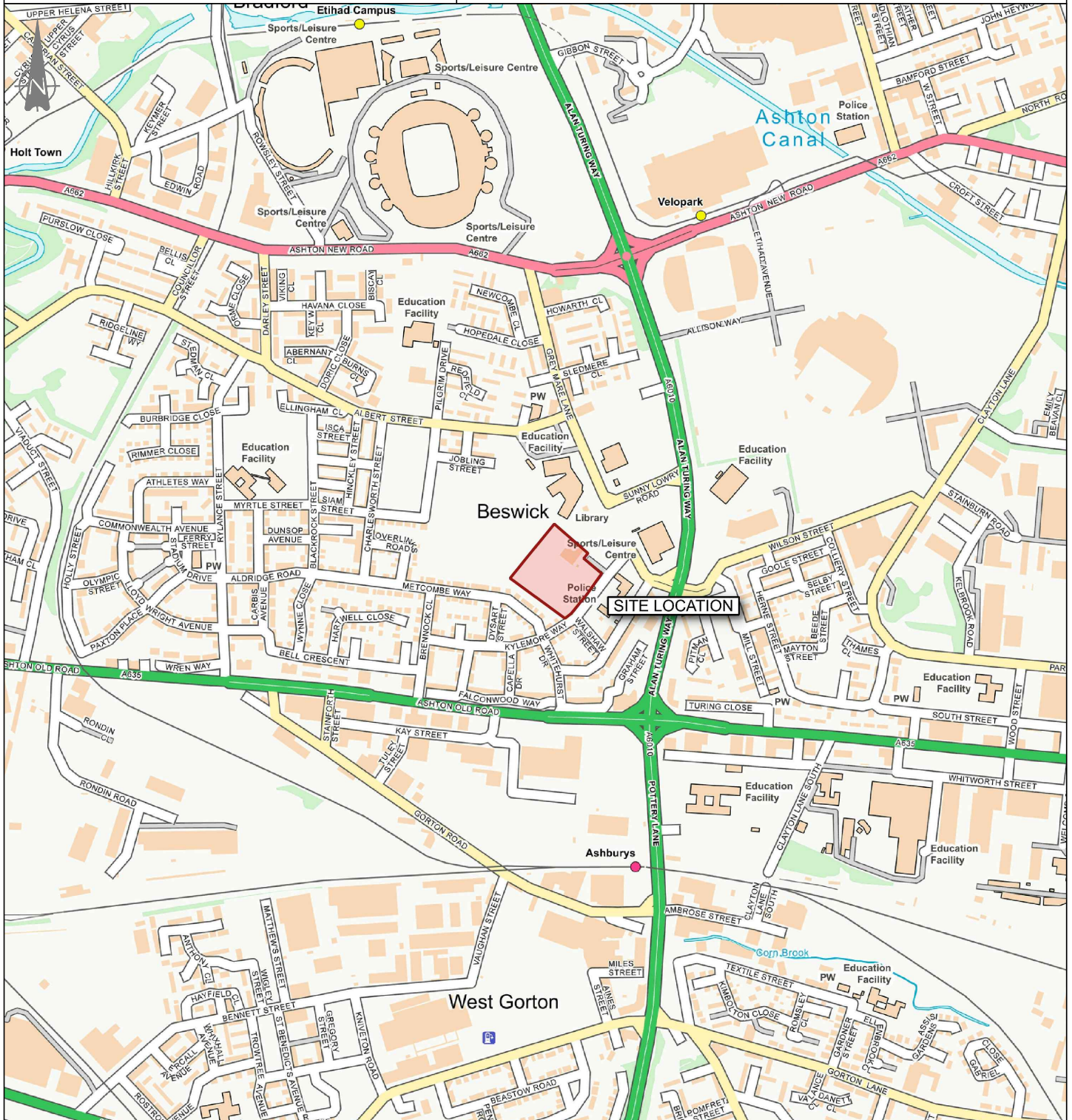
Drawn By: JM Checked By: AV

Designed By: JM Date: 08/09/21

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

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KEY: Site

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Project:
OURLEAGUE LIFE NATIONAL HUB - MANCHESTER

Drg Title:
**ACCESSIBILITY
INDICATIVE WALKING CATCHMENT**

Status:
PRELIMINARY

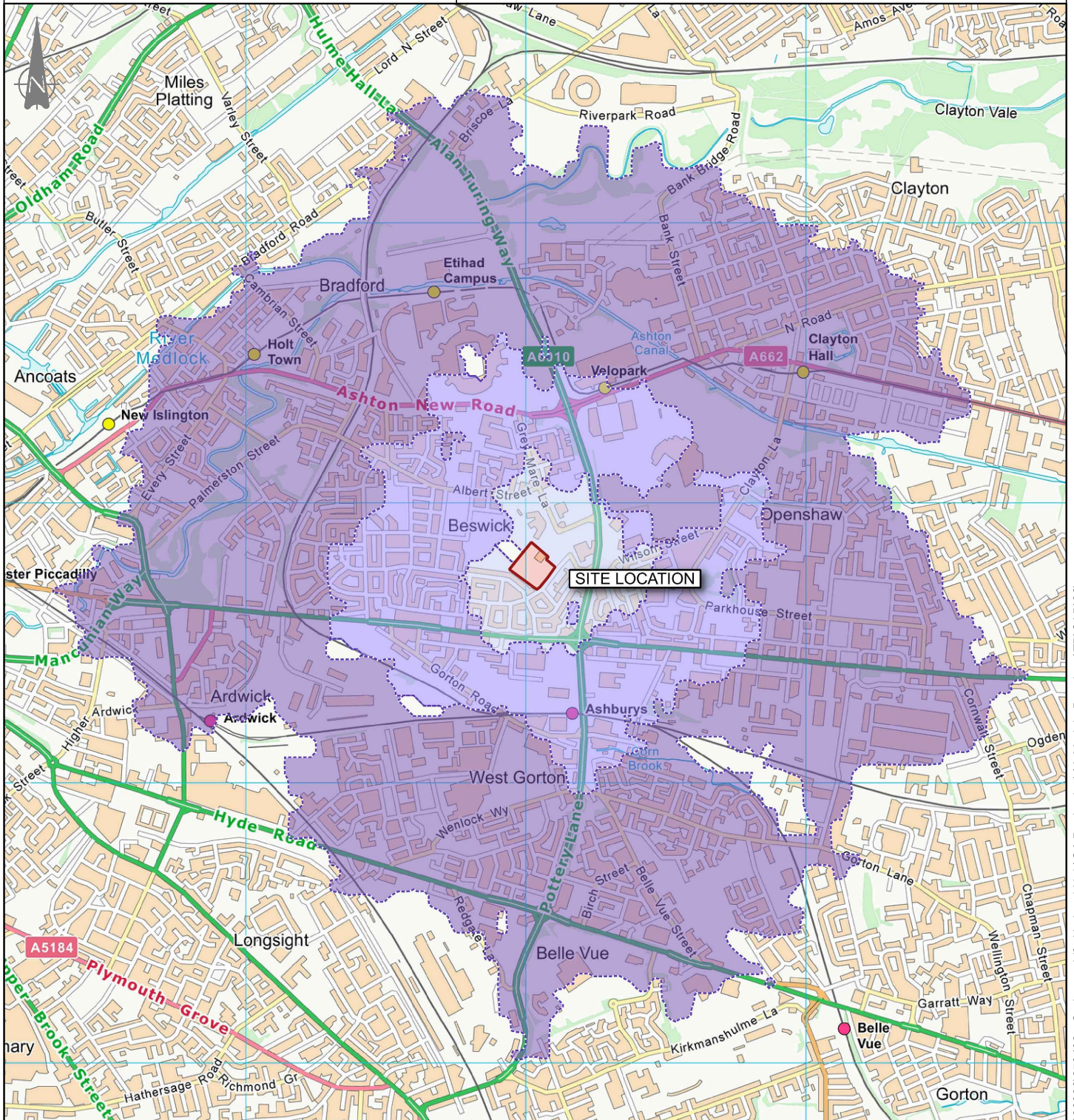
Drawn By: JM Checked By: AV

Designed By: JM Date: 08/09/21

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

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KEY: Site
 Walking Catchment:
500m
1000m
2000m

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Project:
OURLEAGUE LIFE NATIONAL HUB - MANCHESTER

Drg Title:
**ACCESSIBILITY
INDICATIVE CYCLE CATCHMENT**

Status:
PRELIMINARY

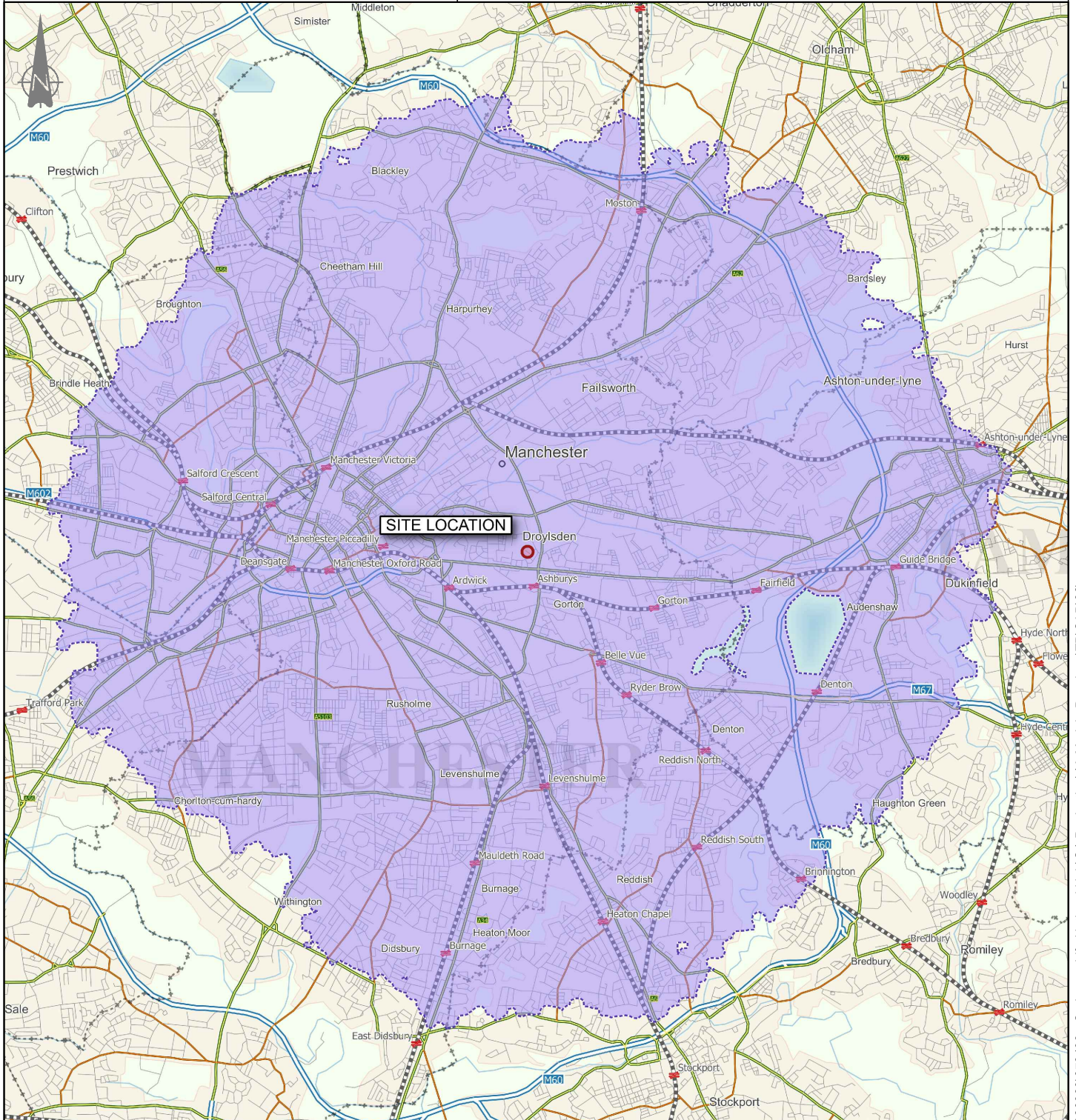
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Designed By: JM Date: 08/09/21

Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

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KEY: Site Cycle Catchment:
8000m

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\\mats02\Projects\079001 - OurLeague Life National Hub\Q4-Production\4A-Models-Drawings\TP\CAD\061



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Project: OURLEAGUE LIFE NATIONAL HUB - MANCHESTER

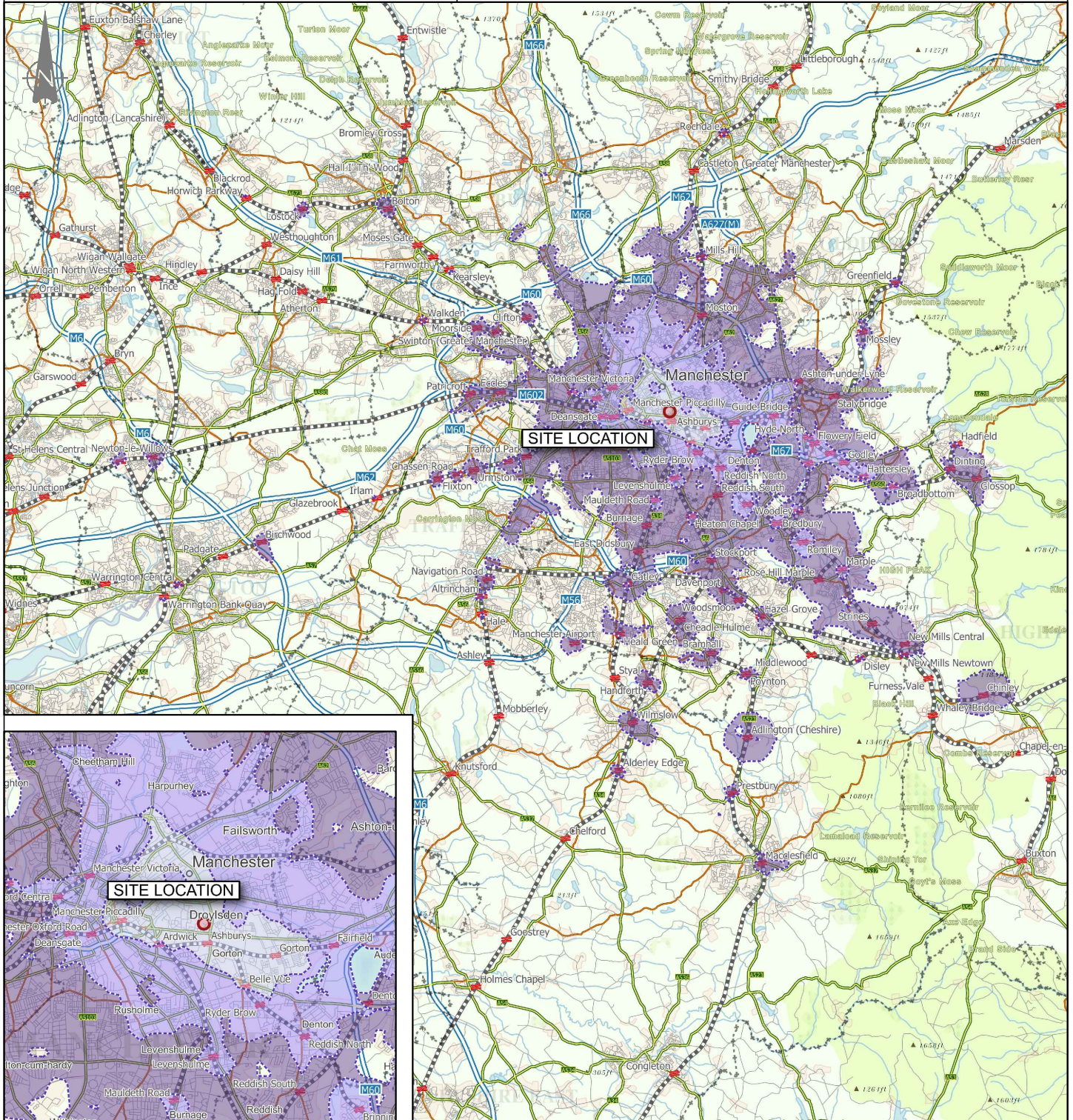
Status: PRELIMINARY

Drg Title: ACCESSIBILITY
INDICATIVE PUBLIC
TRANSPORT CATCHMENT

Drawn By: JM Checked By: AV
Designed By: JM Date: 08/09/21
Scale: NTS

Project No: Originator: Volume: Level: Type: Role: Category / Number: Rev:

79493 - CUR - 00 - XX - DR - TP - 06005 - P01



KEY: Site
 Public Transport Catchment:
 20 minutes
 40 minutes
 60 minutes

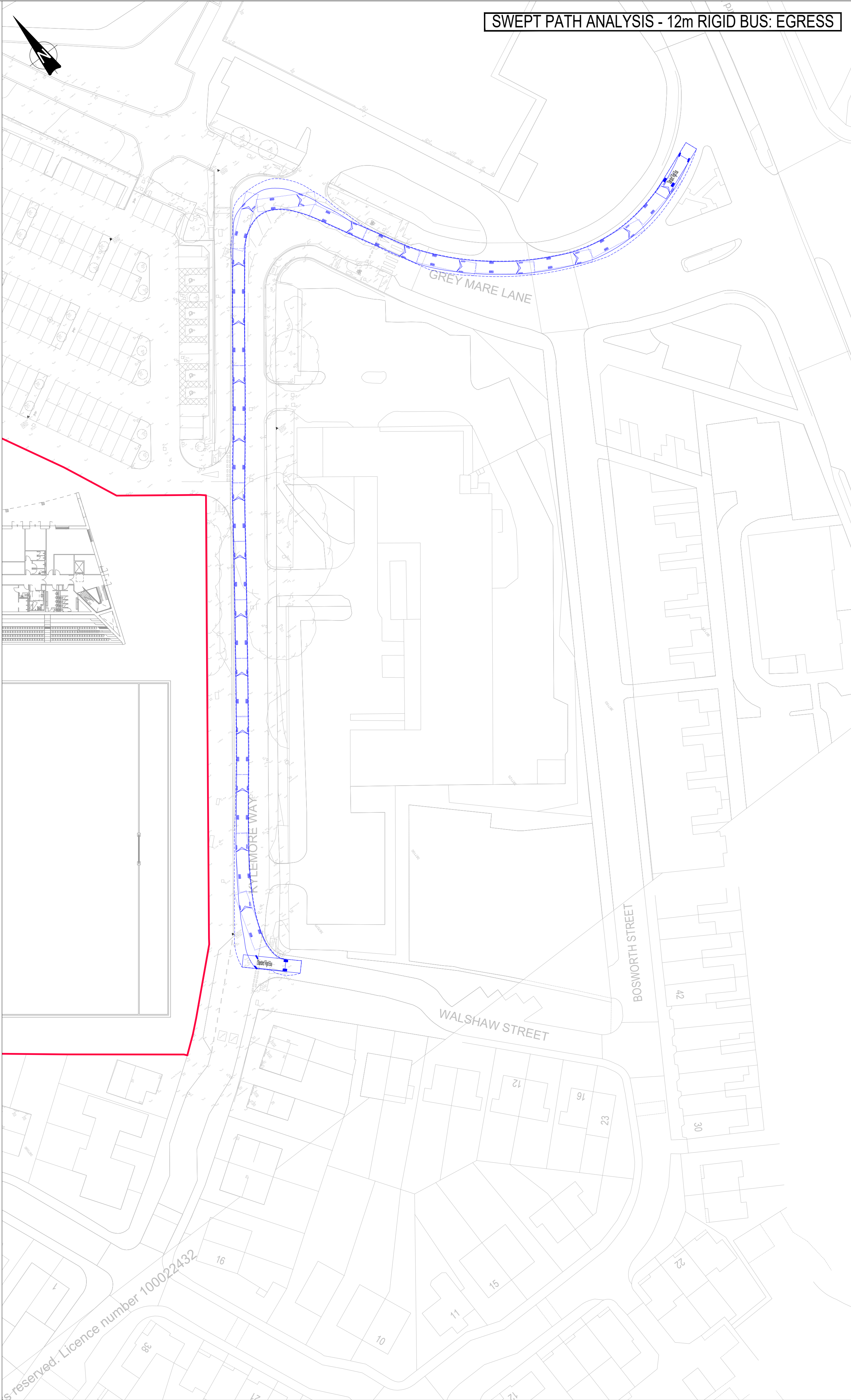
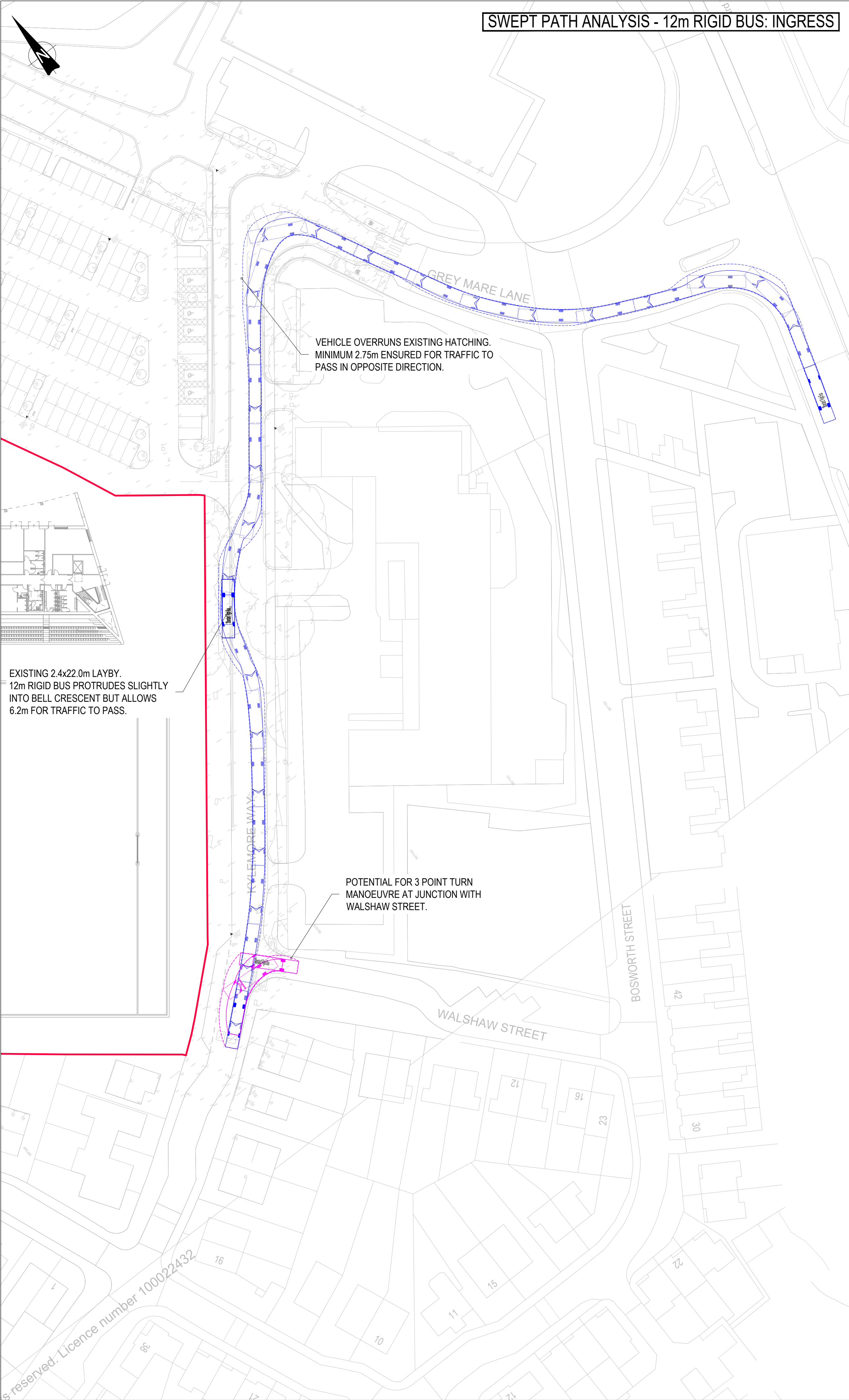
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Drawings

Drawing 79493-CUR-00-XX-DR-TP-05001-P01 – Swept Path Analysis – 12m Rigid Bus

Drawing 79493-CUR-00-XX-DR-TP-05004-P01 – Swept Path Analysis – Ambulance

Drawing 79493-CUR-00-XX-DR-TP-05005-P01 – Swept Path Analysis – 11.2m Refuse Vehicle



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- DRAWING BASED ON OS MAPPING AND TOPOGRAPHICAL SURVEY.

KEY: — INDICATIVE REDLINE BOUNDARY

VEHICLE PROFILE:

Standard Rigid Bus	12.000m
Overall Length	2.500m
Overall Width	3.000m
Min Body Ground Clearance	0.300m
Track Width	2.350m
Lock to Lock Time	4.05s
Wall to Wall Turning Radius	10.771m

Rev:	Description:	Date:	By:	Chkd:			
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Status:	PRELIMINARY						
Project:	OURLEAGUE NATIONAL LIFE HUB - MANCHESTER						
Orig Title:	SWEPT PATH ANALYSIS 12m RIGID BUS OPTION A						
Size:	Date:	Drawn By:	Designed By:	Checked By:			
A1	19/10/21	JM	JM	AV			
Scale:	1:500						
Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
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 - DRAWING BASED ON LANDSCAPE LAYOUT, OS BASE & TOPO SURVEY. DRAWING REFERENCE: RFLH-LL(90)/001 Site Plan (Rev 03)

KEY: ——— INDICATIVE REDLINE BOUNDARY AS SUPPLIED BY STERRY-WALTERS

VEHICLE PROFILE:

7.5t Panel Van
Overall Length 7.210m
Overall Width 2.150m
Overall Body Height 2.544m
Min Body Ground Clearance 0.335m
Track Width 1.850m
Lock to lock time 4.10s
Kerb to Kerb Turning Radius 7.400m



SWEPT PATH ANALYSIS - AMBULANCE: EGRESS

Rev:	Description:	Date:	By:	Chkd:
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Status: PRELIMINARY

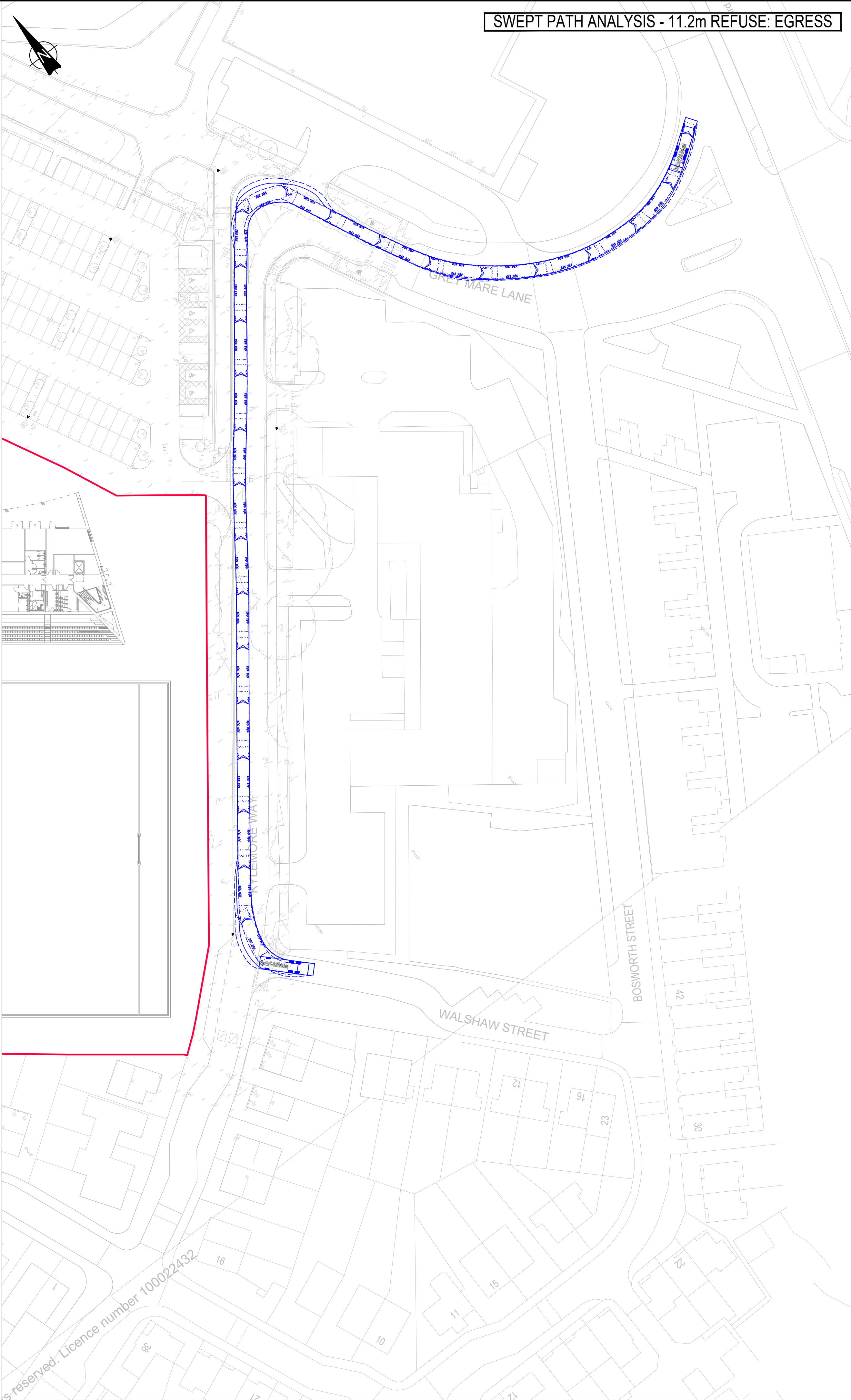
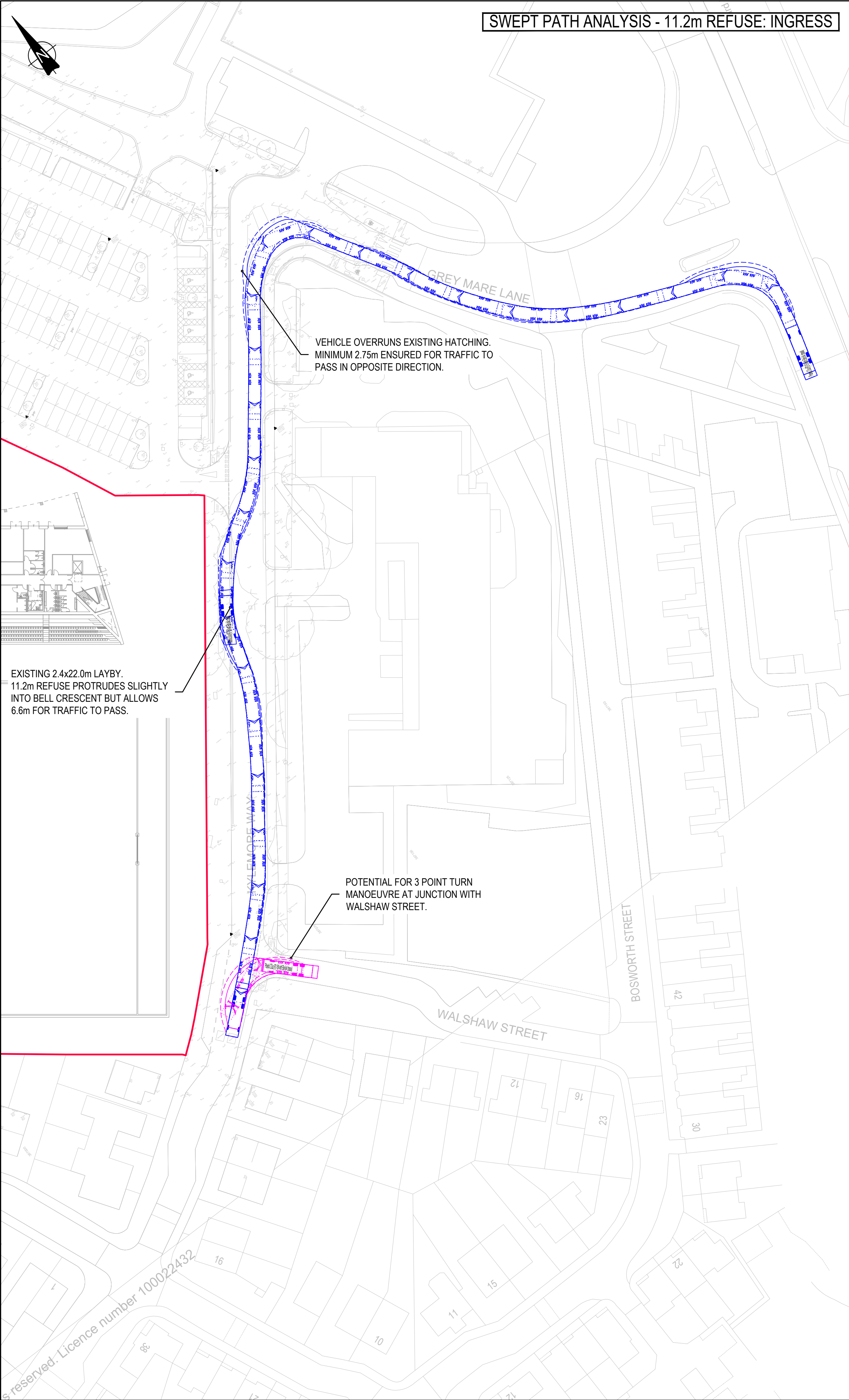
Project: OURLEAGUE NATIONAL LIFE HUB - MANCHESTER

Dwg Title: SWEPT PATH ANALYSIS AMBULANCE

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	03/11/21	JM	JM	AV

Scale: 1:500

Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
79493 - CUR - 00	- XX	- DR	- TP	- 05004	- P01		



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KEY: ——— INDICATIVE REDLINE BOUNDARY

VEHICLE PROFILE:

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

Overall Length	11.200m
Overall Width	2.400m
Overall Body Height	2.300m
Track Width	2.300m
Body Ground Clearance	2.300m
Lock to lock time	4.80s
Kerb to Kerb Turning Radius	9.500m

P02	UPDATED REFUSE ROUTE	08/11/21	HD	AV
Rev:	Description:	Date:	By:	Chkd:

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Status: PRELIMINARY

Project: OURLEAGUE NATIONAL LIFE HUB - MANCHESTER

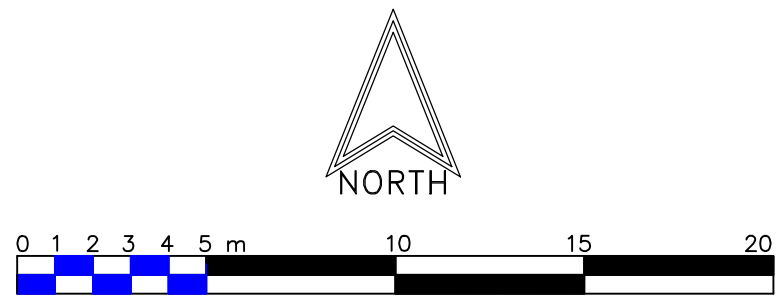
Orig Title: SWEPT PATH ANALYSIS
11.2m REFUSE
LAY-BY OPTION

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	08/11/21	HD	HD	AV

Scale: 1:500

Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
79493	- CUR	- 00	- XX	- DR	- TP	- 05005	- P01

Appendix A – Proposed Layout



LEGEND

- Unit Paving: Tobermore Braemar Slabs 600x300x80mm
- thick
- Iona White
- Islay Rose
- Jura Grey
- Alto Silver
- Arran Stone
- Cara Slate
- Unit Paving Details: Tobermore Braemar Slabs 200x100x80mm thick
- Innis Grey
- Asphalt Vehicular Paving to Engineer's Spec
- Asphalt Pedestrian Paving to Engineer's Spec
- Synthetic Turf 3G to WRA Standards along Touchline
- High Quality Amenity Turf
- Ornamental Shrub Planting
- Existing Planting



03	Gate and native hedging added to northern boundary	02 Nov 21	GW
02	Maintenance access to front of building increased to 2m	28 Oct 21	GW
01	Cycle parking added, paving set out to unit sizes	19 Oct 21	GW

original by GW 17-10-21

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Facilities Consultants
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Tel: 01868 660070 M: 07779 795443
www.sterry-walters.com

Client
OURLEAGUE

Project
**RFL NATIONAL HUB
GREY MARE LANE, MANCHESTER**

Drawing Title
SITE PLAN

S-WP Project Number 2021.09.13	Scale 1:200
Plot Size ISO full bleed A1 (594.00 x 841.00 MM)	Plot Date: 2 November 2021

Project	Consultant	Volume	Level	Type	Role	Number	Status
RFLH SWP	-00	-EX	-DR	-L	-9001	-S1	

RIBA Stage: **3-Developed Design** Revision **03**

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Appendix B – MCC Waste Proforma

Appendix E Proforma for Planning Applications



**MANCHESTER
CITY COUNCIL**

Planning Application – Waste Management Strategy

Planning Application Number: TBC

Date Submitted: TBC

Estimated volumes/ m² required by the development

Low Rise Domestic

Waste Types	Capacity Required (litres)	Number of bins required per household	Confirm what is to be provided
General refuse	140 / 240	1 x wheeled bin	
Pulpable Recycling	140 / 240	1 x wheeled bin	
Mixed Recycling	140 / 240	1 x wheeled bin	
Garden Waste	140 / 240	1 x wheeled bin	
Food Waste	23	1 x 23 litre caddy	

High Rise Apartment Developments

	Yes/No - how much space has been provided?
0.43m ² has been provided per apartment for the container space. Space to manoeuvre and access containers individually has also been provided so that each container can be accessed and removed for collection individually.	

Commercial Developments

Please state number of bins you propose, showing calculations where appropriate.

6 x 1,100l bins across all waste types (general waste and recycling) - refer to Technical Note appended to the rear of this proforma for calculations.

Has / will a contract be obtained with a licenced waste carrier?



Mixed Use Developments

Are the stores for residential and commercial separate from each other?



Internal Stores (Residential and Commercial)

Please provide details of internal stores / segregation of waste and recycling.

--

Storage Areas for Waste Containers (Residential and Commercial)

Please provide details of container stores, attaching plans if appropriate.

The RFL staff will store waste internally before taking it to the external waste store for storage and collection. The secure, purpose-built bin store is on the southeast of the site adjacent to Kirkstead Close and Bell Crescent, a 20m walking distance to the existing dropped kerb on Bell Crescent.

It is envisaged that a private collector would collect the waste once per week for the proposed development, with an additional collection arranged the day after large events. The bin store has been sized to contain 6 no. 1,100L bins to accommodate this frequency of collections.

Ensure all bins in the store are accessible



Ensure recycling facilities are as easy to access as general refuse



Please confirm details of waste store ventilation and hygiene / cleaning proposals

Ventilation -	Consideration has been given to appropriately ventilate the waste storage facilities. Details have been provided in relevant documentation.
Hygiene -	Storage areas will be constructed with impermeable materials. The management company will be responsible of cleaning the facilities.

Please provide details of who will be responsible for placing the bins at the collection point and returning them to the store / property promptly e.g. resident / management company

The RFL staff.

Please ensure that you have attached:

Detailed plans of waste stores	☒
Location plans showing stores	☒
Location plans showing the proposed collection point and the route the collection vehicle will take	☒

Please ensure that you have completed this form in accordance with our GD04 Waste Storage and Collection Guidance for New Developments

Our Reference: 79493-CUR-00-XX-CO-TP-001-V01

10 November 2021

Re: RFL Our League Life (79493) – Waste Management Strategy – Commercial Developments

Standard Daily Operational Requirements

GFA of proposed development = 1,980sqm

MCC's GD 04 (v6.00) guidance recommends that 2,600L of total waste be provided per 1,000sqm of GFA, with 50% of this capacity being retained for recycling for offices, which are considered the most appropriate category for the standard daily operational requirements for the proposed development.

Waste Types	Required Storage	Storage Provided for Weekly Collection
General Waste	2,059L	2 x 1,100L bins
Dried Mixed Recycling	2,317L	3 x 1,100L bins
Glass	772L	1 x 1,100L bins
Total	5,148L	6 x 1,100L bins

6 no. 1,100L Eurobins, including recycling, will be provided in the secure bin store.

Large Event Requirements

A review of commercially available bins indicates that a typical 1,100L bin has a capacity of 410kg – 510kg.

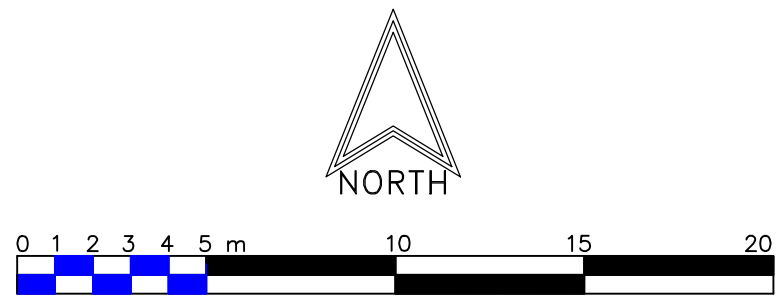
The Co-op Live Arena assumed 0.31kg of waste will be generated per guest per event, based on waste generation data for a range of other music-focused arena developments.

The proposed development will have a 900-seat spectator stand.

As a worst-case scenario for this pro-forma, it is assumed that the 1,100L bins on-site will have a capacity of 410kg, and there will be full capacity of 900 spectators at each large event with each of these generating 0.31kg of waste. Therefore, this calculates as:

$$(900 \times 0.31) / 410 = 0.68 \text{ no. } 1,100\text{L bins}$$

One additional 1,100L bin equivalent of waste will be generated per large event. It is proposed that the day after large events an additional private collection is arranged, and the 6-bin capacity will be retained.



LEGEND

- Unit Paving: Tobermore Braemar Slabs 600x300x80mm thick
 - Iona White
 - Islay Rose
 - Jura Grey
 - Alto Silver
 - Arran Stone
 - Cara Slate
- Unit Paving Details: Tobermore Braemar Slabs 200x100x80mm thick
 - Innis Grey
- Asphalt Vehicular Paving to Engineer's Spec
- Asphalt Pedestrian Paving to Engineer's Spec
- Synthetic Turf 3G to WRA Standards along Touchline
- High Quality Amenity Turf
- Ornamental Shrub Planting
- Existing Planting



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02	Maintenance access to front of building increased to 2m	28 Oct 21	GW
01	Cycle parking added, paving set out to unit sizes	19 Oct 21	GW

original by GW 17-10-21

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Client
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Project
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GREY MARE LANE, MANCHESTER**

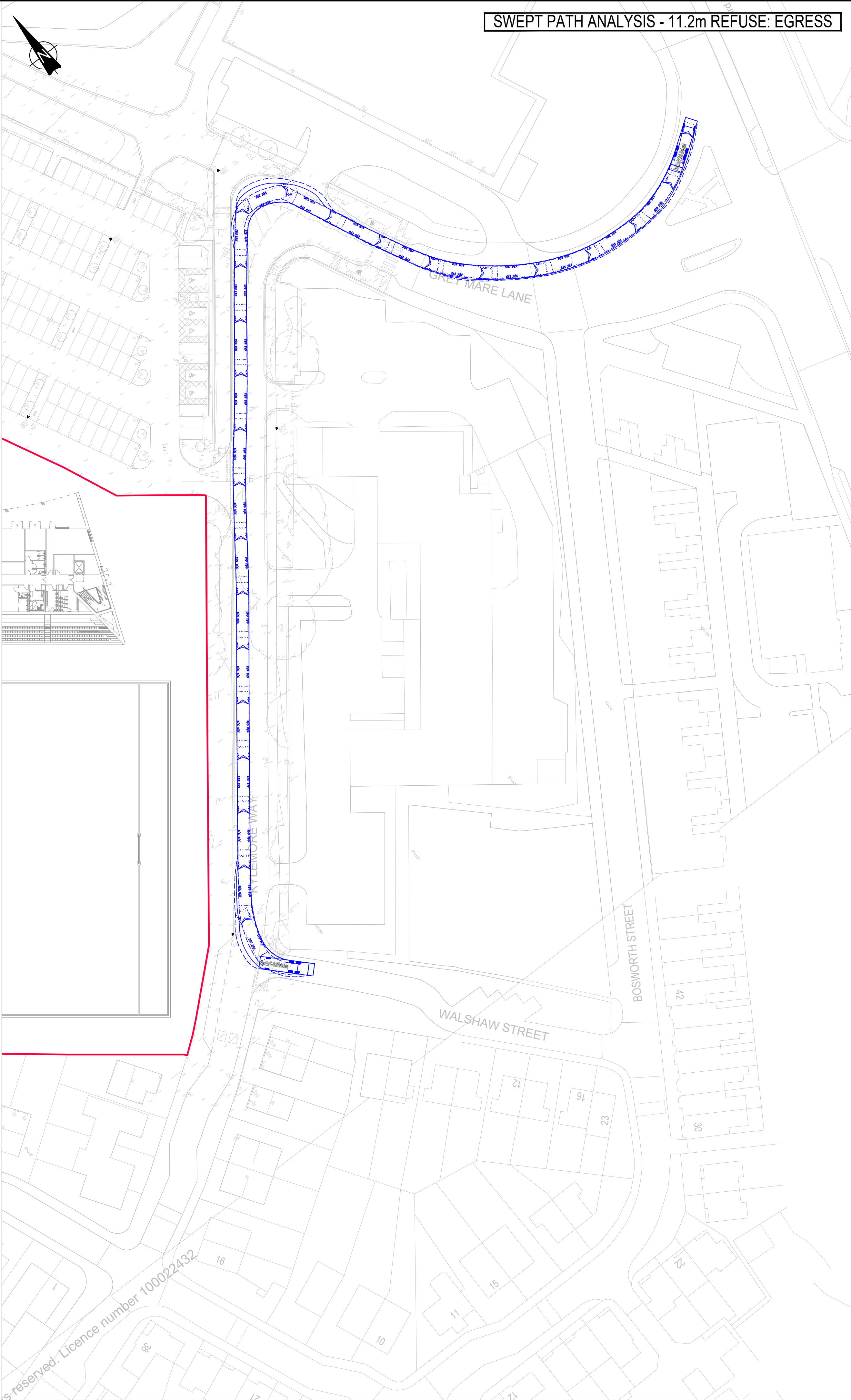
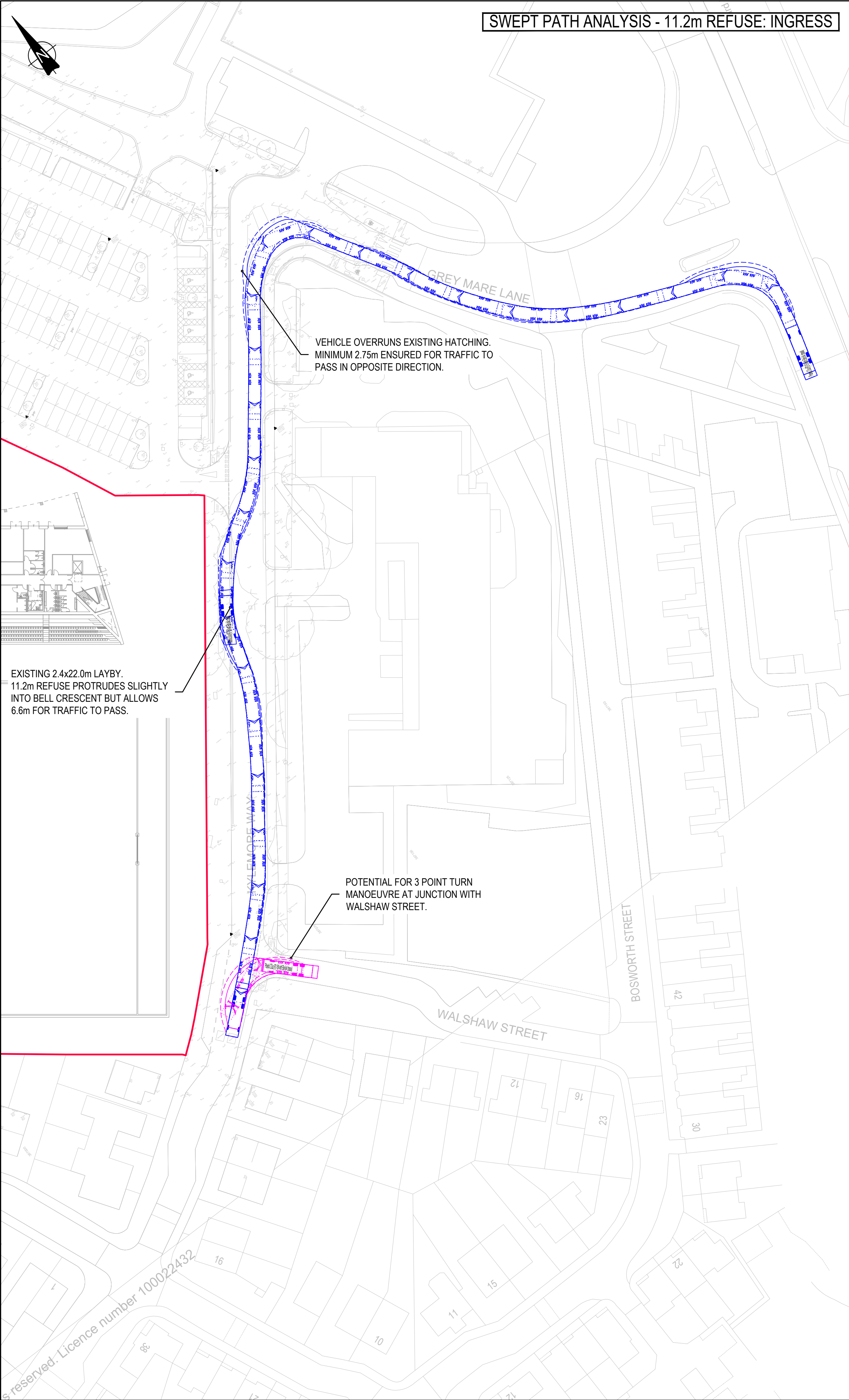
Drawing Title
SITE PLAN

S-WP Project Number 2021.09.13	Scale 1:200
Plot Size ISO full bleed A1 (594.00 x 841.00 MM)	Plot Date: 2 November 2021

Project	Consultant	Volume	Level	Type	Role	Number	Status
RFLH SWP	-00	-EX	-DR	-L	-9001	-S1	

RIBA Stage: **3-Developed Design** Revision **03**

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KEY: ——— INDICATIVE REDLINE BOUNDARY

VEHICLE PROFILE:

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

Overall Length	11.200m
Overall Width	2.400m
Overall Body Height	2.300m
Track Width	2.300m
Body Ground Clearance	2.300m
Lock to lock time	4.80s
Kerb to Kerb Turning Radius	9.500m

P02	UPDATED REFUSE ROUTE	08/11/21	HD	AV
Rev:	Description:	Date:	By:	Chkd:

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Status: **PRELIMINARY**

Project: **OURLEAGUE NATIONAL LIFE HUB - MANCHESTER**

Orig Title: **SWEPT PATH ANALYSIS
11.2m REFUSE
LAY-BY OPTION**

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	08/11/21	HD	HD	AV

Scale: 1:500

Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
79493	- CUR	- 00	- XX	- DR	- TP	- 05005	- P01

Appendix C – Traffic Surveys

Manchester

Thursday 23rd September 2021

Junction: 1

Approach: Alan Turing Way North

	To Wilson Street								To Alan Turing Way (S)								To Grey Mare Lane							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	4	1	0	0	0	5	1	3	162	18	12	1	0	197	0	0	4	0	0	0	0	4
07:15 - 07:30	0	0	4	0	1	0	0	5	0	1	159	32	10	4	1	207	0	0	4	0	0	0	0	4
07:30 - 07:45	0	0	11	0	0	0	0	11	3	0	185	34	14	4	1	241	0	0	4	0	0	0	0	4
07:45 - 08:00	0	0	13	3	0	0	0	16	1	1	244	43	14	3	0	306	0	0	5	0	0	0	0	5
Hourly Total	0	0	32	4	1	0	0	37	5	5	750	127	50	12	2	951	0	0	17	0	0	0	0	17
08:00 - 08:15	0	0	15	1	0	0	0	16	0	1	237	34	10	3	1	286	0	0	5	1	0	0	0	6
08:15 - 08:30	0	0	30	6	0	0	0	36	3	1	238	37	15	6	0	300	0	0	12	0	0	0	0	12
08:30 - 08:45	0	0	15	1	0	0	0	16	0	5	250	52	7	5	1	320	0	0	8	1	0	0	0	9
08:45 - 09:00	0	0	10	0	0	0	0	10	2	4	224	45	9	6	2	292	0	0	8	1	0	0	0	9
Hourly Total	0	0	70	8	0	0	0	78	5	11	949	168	41	20	4	1198	0	0	33	3	0	0	0	36
TOTAL	0	0	102	12	1	0	0	115	10	16	1699	295	91	32	6	2149	0	0	50	3	0	0	0	53
15:00 - 15:15	0	0	14	1	1	0	0	16	0	2	202	35	9	4	1	253	0	0	12	0	0	0	0	12
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15:30 - 15:45	0	0	11	2	0	0	0	13	0	0	206	30	8	6	0	250	0	0	7	1	0	0	0	8
15:45 - 16:00	0	0	13	3	0	0	0	16	1	0	195	20	8	2	3	229	0	0	3	1	2	0	0	6
Hourly Total	0	0	48	6	1	0	0	55	3	3	817	122	37	14	7	1003	0	0	28	2	2	0	0	32
16:00 - 16:15	0	0	11	0	0	0	0	11	1	1	189	27	6	0	1	225	0	0	9	0	0	0	0	9
16:15 - 16:30	0	0	16	3	1	0	0	20	1	1	190	26	10	1	0	229	0	0	10	0	0	0	0	10
16:30 - 16:45	0	0	17	0	0	0	0	17	0	0	202	24	5	2	2	235	0	0	9	1	0	0	0	10
16:45 - 17:00	0	0	9	0	0	0	0	9	3	0	216	21	4	3	1	248	0	0	14	0	0	0	0	14
Hourly Total	0	0	53	3	1	0	0	57	5	2	797	98	25	6	4	937	0	0	42	1	0	0	0	43
17:00 - 17:15	0	0	14	2	0	0	0	16	5	0	188	20	5	2	0	220	0	0	9	1	0	0	0	10
17:15 - 17:30	0	0	15	2	0	0	0	17	2	0	202	22	5	0	2	233	0	0	5	0	0	0	0	5
17:30 - 17:45	0	0	10	0	1	0	0	11	4	0	212	15	4	1	0	236	0	0	10	0	0	0	0	10
17:45 - 18:00	0	0	20	0	0	0	0	20	2	1	233	19	4	1	1	261	0	0	9	3	0	0	0	12
Hourly Total	0	0	59	4	1	0	0	64	13	1	835	76	18	4	3	950	0	0	33	4	0	0	0	37
TOTAL	0	0	160	13	3	0	0	176	21	6	2449	296	80	24	14	2890	0	0	103	7	2	0	0	112

Manchester
Thursday 23rd September 2021

Junction: 1
Approach: Wilson Street

	To Alan Turing Way (S)								To Grey Mare Lane								To Alan Turing Way (N)							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	1	0	31	5	1	0	0	38	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
07:15 - 07:30	0	0	25	2	0	0	0	27	0	0	4	0	0	0	0	4	0	0	9	1	0	0	0	10
07:30 - 07:45	0	0	44	9	0	0	0	53	0	0	7	0	0	0	0	7	0	0	8	3	2	0	0	13
07:45 - 08:00	0	0	88	18	0	0	0	106	0	0	4	3	1	0	0	8	0	0	13	1	0	0	0	14
Hourly Total	1	0	188	34	1	0	0	224	0	0	17	3	1	0	0	21	0	0	34	5	2	0	0	41
08:00 - 08:15	0	0	61	6	0	0	0	67	0	0	12	0	0	0	0	12	0	0	15	1	0	0	0	16
08:15 - 08:30	0	0	59	3	1	0	0	63	0	0	17	1	1	0	0	19	0	0	25	2	0	0	0	27
08:30 - 08:45	0	0	46	6	3	1	0	56	0	0	18	1	0	0	0	19	0	0	21	3	1	0	0	25
08:45 - 09:00	0	0	35	6	1	0	0	42	0	1	18	0	0	0	0	19	0	0	29	1	1	0	0	31
Hourly Total	0	0	201	21	5	1	0	228	0	1	65	2	1	0	0	69	0	0	90	7	2	0	0	99
TOTAL	1	0	389	55	6	1	0	452	0	1	82	5	2	0	0	90	0	0	124	12	4	0	0	140
15:00 - 15:15	0	0	16	4	1	0	0	21	0	0	13	2	0	0	0	15	0	0	22	2	2	0	0	26
15:15 - 15:30	0	0	20	4	0	0	0	24	0	0	5	0	0	0	0	5	0	0	14	3	0	0	0	17
15:30 - 15:45	0	0	24	7	1	0	0	32	0	0	8	1	0	0	0	9	0	0	13	1	0	0	0	14
15:45 - 16:00	0	0	32	3	1	0	1	37	0	0	2	0	0	0	0	2	0	0	16	2	0	0	0	18
Hourly Total	0	0	92	18	3	0	1	114	0	0	28	3	0	0	0	31	0	0	65	8	2	0	0	75
16:00 - 16:15	0	1	30	2	1	0	0	34	0	0	5	1	0	0	0	6	0	0	17	2	1	0	0	20
16:15 - 16:30	0	0	22	1	0	0	0	23	0	0	5	1	0	0	0	6	0	0	8	0	0	0	0	8
16:30 - 16:45	0	2	38	3	2	0	0	45	0	0	3	1	0	0	0	4	1	1	16	2	0	0	0	20
16:45 - 17:00	0	0	21	0	0	0	0	21	0	0	5	0	0	0	0	5	0	0	12	1	0	0	0	13
Hourly Total	0	3	111	6	3	0	0	123	0	0	18	3	0	0	0	21	1	1	53	5	1	0	0	61
17:00 - 17:15	2	0	18	1	0	0	0	21	0	0	5	0	0	0	0	5	0	0	11	0	0	0	0	11
17:15 - 17:30	0	0	17	1	0	0	0	18	0	0	0	1	0	0	0	1	0	0	12	2	0	0	0	14
17:30 - 17:45	0	0	18	5	0	0	0	23	0	0	8	0	1	0	0	9	0	0	12	0	0	0	0	12
17:45 - 18:00	0	0	18	2	1	0	0	21	0	0	2	0	0	0	0	2	0	0	13	0	0	0	0	13
Hourly Total	2	0	71	9	1	0	0	83	0	0	15	1	1	0	0	17	0	0	48	2	0	0	0	50
TOTAL	2	3	274	33	7	0	1	320	0	0	61	7	1	0	0	69	1	1	166	15	3	0	0	186

Manchester

Thursday 23rd September 2021

Junction: 1

Approach: Alan Turing Way South

	To Grey Mare Lane								To Alan Turing Way (N)								To Wilson Street							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	3	0	0	0	0	3	1	1	142	14	14	3	1	176	0	0	11	3	1	0	0	15
07:15 - 07:30	0	0	6	1	0	0	0	7	3	0	164	32	10	5	1	215	0	0	16	2	0	0	0	18
07:30 - 07:45	0	0	3	0	0	0	0	3	2	0	165	30	20	7	3	227	0	0	11	0	1	0	0	12
07:45 - 08:00	0	0	10	0	0	0	0	10	2	1	212	34	13	6	3	271	0	0	22	2	1	0	0	25
Hourly Total	0	0	22	1	0	0	0	23	8	2	683	110	57	21	8	889	0	0	60	7	3	0	0	70
08:00 - 08:15	0	0	21	1	1	0	0	23	2	0	230	31	7	5	4	279	0	0	24	2	1	1	1	29
08:15 - 08:30	0	0	14	0	0	0	0	14	0	2	215	32	14	3	4	270	0	0	31	4	2	0	0	37
08:30 - 08:45	0	0	18	0	0	0	0	18	4	1	221	35	11	4	1	277	0	0	18	1	0	0	0	19
08:45 - 09:00	0	0	8	3	0	0	0	11	3	1	275	41	12	6	5	343	1	2	19	1	0	0	0	23
Hourly Total	0	0	61	4	1	0	0	66	9	4	941	139	44	18	14	1169	1	2	92	8	3	1	1	108
TOTAL	0	0	83	5	1	0	0	89	17	6	1624	249	101	39	22	2058	1	2	152	15	6	1	1	178
15:00 - 15:15	0	0	5	0	0	0	0	5	0	1	246	33	8	4	2	294	0	0	13	6	0	0	0	19
15:15 - 15:30	0	0	11	1	0	0	0	12	0	3	249	47	19	2	1	321	0	0	19	4	0	0	0	23
15:30 - 15:45	0	0	10	2	0	0	0	12	0	2	220	52	11	3	4	292	0	0	29	5	2	0	0	36
15:45 - 16:00	0	0	13	0	0	0	0	13	2	1	246	45	11	2	3	310	0	0	31	6	0	0	0	37
Hourly Total	0	0	39	3	0	0	0	42	2	7	961	177	49	11	10	1217	0	0	92	21	2	0	0	115
16:00 - 16:15	0	0	10	0	0	0	0	10	2	2	294	33	9	7	2	349	0	0	31	6	1	0	0	38
16:15 - 16:30	2	0	9	0	0	0	0	11	0	0	324	46	10	4	0	384	0	0	36	3	0	0	0	39
16:30 - 16:45	1	0	13	1	0	0	0	15	3	1	311	31	7	5	0	358	0	0	42	5	0	0	0	47
16:45 - 17:00	0	0	9	0	0	0	0	9	1	0	382	42	9	2	1	437	0	0	37	9	1	0	0	47
Hourly Total	3	0	41	1	0	0	0	45	6	3	1311	152	35	18	3	1528	0	0	146	23	2	0	0	171
17:00 - 17:15	0	0	6	1	0	0	0	7	2	2	337	41	17	0	0	399	1	0	21	5	0	0	0	27
17:15 - 17:30	0	0	4	1	0	0	0	5	0	3	380	36	11	2	0	432	0	0	29	5	0	0	0	34
17:30 - 17:45	0	0	4	1	0	0	0	5	4	1	361	23	6	1	0	396	0	0	32	3	0	0	0	35
17:45 - 18:00	1	0	2	0	0	0	0	3	1	1	332	23	5	3	1	366	0	0	30	5	0	0	0	35
Hourly Total	1	0	16	3	0	0	0	20	7	7	1410	123	39	6	1	1593	1	0	112	18	0	0	0	131
TOTAL	4	0	96	7	0	0	0	107	15	17	3682	452	123	35	14	4338	1	0	350	62	4	0	0	417

Manchester
Thursday 23rd September 2021
Junction: 1
Approach: Grey Mare Lane

	To Alan Turing Way (N)								To Wilson Street								To Alan Turing Way (S)							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	4	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 - 07:30	0	0	5	1	1	0	0	7	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
07:30 - 07:45	0	0	11	0	0	0	0	11	0	0	2	1	0	0	0	3	0	0	1	0	0	0	0	1
07:45 - 08:00	0	0	12	1	0	0	0	13	0	0	6	1	0	0	0	7	0	0	6	1	0	0	0	7
Hourly Total	0	0	32	4	1	0	0	37	0	0	9	2	0	0	0	11	0	0	7	1	0	0	0	8
08:00 - 08:15	0	0	13	1	0	0	0	14	0	0	4	0	0	0	0	4	0	0	9	0	0	0	0	9
08:15 - 08:30	0	0	18	1	0	0	0	19	0	0	10	0	1	0	0	11	1	0	16	0	0	0	0	17
08:30 - 08:45	0	0	17	1	0	0	0	18	0	0	7	2	0	0	0	9	0	0	6	0	0	0	0	6
08:45 - 09:00	0	0	16	1	0	0	0	17	0	0	13	1	0	0	0	14	0	0	6	0	0	0	0	6
Hourly Total	0	0	64	4	0	0	0	68	0	0	34	3	1	0	0	38	1	0	37	0	0	0	0	38
TOTAL	0	0	96	8	1	0	0	105	0	0	43	5	1	0	0	49	1	0	44	1	0	0	0	46
15:00 - 15:15	0	0	18	1	1	0	0	20	0	0	8	1	0	0	0	9	0	0	2	0	0	0	0	2
15:15 - 15:30	0	0	17	4	1	0	0	22	0	0	14	1	0	0	0	15	0	0	10	1	0	0	0	11
15:30 - 15:45	0	0	13	0	0	0	0	13	1	0	13	3	0	0	0	17	1	0	1	0	0	0	0	2
15:45 - 16:00	0	0	5	2	0	0	0	7	0	0	18	2	0	0	0	20	0	0	6	2	0	0	0	8
Hourly Total	0	0	53	7	2	0	0	62	1	0	53	7	0	0	0	61	1	0	19	3	0	0	0	23
16:00 - 16:15	0	0	24	3	0	0	0	27	0	0	12	4	0	0	0	16	0	0	9	0	0	0	0	9
16:15 - 16:30	0	0	17	1	0	0	0	18	0	0	13	3	0	0	0	16	0	0	0	1	0	0	0	1
16:30 - 16:45	0	0	23	1	0	0	0	24	1	0	15	8	0	0	0	24	0	0	4	0	0	0	0	4
16:45 - 17:00	0	0	14	2	0	0	0	16	0	0	15	2	0	0	0	17	0	0	4	0	0	0	0	4
Hourly Total	0	0	78	7	0	0	0	85	1	0	55	17	0	0	0	73	0	0	17	1	0	0	0	18
17:00 - 17:15	0	0	21	1	0	0	0	22	0	0	14	3	0	0	0	17	2	0	5	0	0	0	0	7
17:15 - 17:30	0	0	16	2	0	0	0	18	0	0	9	2	0	0	0	11	0	0	6	1	0	0	0	7
17:30 - 17:45	0	1	17	1	0	0	0	19	0	0	13	0	0	0	0	13	0	0	6	0	0	0	0	6
17:45 - 18:00	0	0	14	1	0	0	0	15	0	0	9	0	0	0	0	9	0	0	4	1	0	0	0	5
Hourly Total	0	1	68	5	0	0	0	74	0	0	45	5	0	0	0	50	2	0	21	2	0	0	0	25
TOTAL	0	1	199	19	2	0	0	221	2	0	153	29	0	0	0	184	3	0	57	6	0	0	0	66

Manchester

Saturday 25th September 2021

Junction: 1

Approach: Alan Turing Way North

	To Wilson Street								To Alan Turing Way (S)								To Grey Mare Lane							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
09:00 - 09:15	0	0	9	0	0	0	0	9	1	2	105	16	5	2	1	132	0	0	6	0	0	0	0	6
09:15 - 09:30	0	0	4	1	1	0	0	6	2	1	110	16	3	0	0	132	0	0	8	0	0	0	0	8
09:30 - 09:45	0	0	3	1	0	0	0	4	0	2	120	16	6	1	0	145	0	0	8	1	0	0	0	9
09:45 - 10:00	0	0	8	2	0	0	0	10	1	0	161	16	2	1	1	182	0	0	4	1	0	0	0	5
Hourly Total	0	0	24	4	1	0	0	29	4	5	496	64	16	4	2	591	0	0	26	2	0	0	0	28
10:00 - 10:15	0	0	8	1	0	0	0	9	1	0	157	14	7	2	1	182	0	0	3	0	0	0	0	3
10:15 - 10:30	0	0	6	1	0	0	0	7	0	0	152	13	4	1	0	170	0	0	17	2	0	0	0	19
10:30 - 10:45	0	1	5	1	0	0	0	7	0	0	184	21	7	0	1	213	0	0	13	0	0	0	0	13
10:45 - 11:00	0	0	6	0	1	0	0	7	0	0	179	15	3	0	0	197	0	0	9	1	0	0	0	10
Hourly Total	0	1	25	3	1	0	0	30	1	0	672	63	21	3	2	762	0	0	42	3	0	0	0	45
11:00 - 11:15	0	0	4	1	0	0	0	5	0	0	194	22	6	2	1	225	0	0	7	1	0	0	0	8
11:15 - 11:30	0	0	7	0	0	0	0	7	2	1	160	16	5	2	0	186	0	0	12	0	0	0	0	12
11:30 - 11:45	0	0	12	1	0	0	0	13	1	1	190	15	0	0	0	207	0	0	4	0	0	0	0	4
11:45 - 12:00	0	1	5	0	0	0	0	6	0	1	219	16	1	0	1	238	0	0	8	0	0	0	0	8
Hourly Total	0	1	28	2	0	0	0	31	3	3	763	69	12	4	2	856	0	0	31	1	0	0	0	32
12:00 - 12:15	0	0	10	1	0	0	0	11	0	1	196	26	2	0	1	226	0	0	3	0	0	0	0	3
12:15 - 12:30	0	0	13	1	0	0	0	14	0	0	210	11	5	1	1	228	0	0	10	1	0	0	0	11
12:30 - 12:45	0	0	5	1	0	0	0	6	0	0	190	14	3	1	1	209	0	0	16	1	0	0	0	17
12:45 - 13:00	0	0	1	3	0	0	0	4	1	2	199	15	6	1	0	224	0	0	4	0	0	0	0	4
Hourly Total	0	0	29	6	0	0	0	35	1	3	795	66	16	3	3	887	0	0	33	2	0	0	0	35
13:00 - 13:15	0	0	9	0	0	0	0	9	1	1	175	20	5	1	1	204	0	0	4	0	0	0	0	4
13:15 - 13:30	0	0	15	1	0	0	0	16	0	1	201	11	6	0	0	219	0	0	11	0	0	0	0	11
13:30 - 13:45	0	0	9	2	0	0	0	11	2	1	185	18	1	0	0	207	0	0	9	0	0	0	0	9
13:45 - 14:00	0	0	9	0	0	0	0	9	0	1	190	11	3	1	1	207	0	0	10	2	0	0	0	12
Hourly Total	0	0	42	3	0	0	0	45	3	4	751	60	15	2	2	837	0	0	34	2	0	0	0	36
14:00 - 14:15	0	0	3	0	0	0	0	3	0	2	175	14	6	0	1	198	0	0	8	1	0	0	0	9
14:15 - 14:30	0	0	7	0	0	0	0	7	3	2	166	16	2	1	0	190	0	0	7	0	0	0	0	7
14:30 - 14:45	0	0	9	1	0	0	0	10	0	0	191	13	4	0	2	210	0	0	6	1	0	0	0	7
14:45 - 15:00	0	0	5	0	0	0	0	5	1	1	181	18	3	0	0	204	0	0	7	0	0	0	0	7
Hourly Total	0	0	24	1	0	0	0	25	4	5	713	61	15	1	3	802	0	0	28	2	0	0	0	30
15:00 - 15:15	0	0	5	0	0	0	0	5	0	0	212	16	3	0	1	232	0	0	5	0	0	0	0	5
15:15 - 15:30	0	0	11	1	0	0	0	12	0	0	189	16	1	0	0	206	0	0	8	1	0	0	0	9
15:30 - 15:45	0	0	11	0	1	0	0	12	1	0	194	12	4	0	1	212	0	0	12	1	0	0	0	13
15:45 - 16:00	0	0	7	0	0	0	0	7	0	1	165	8	2	0	0	176	0	0	11	0	0	0	0	11
Hourly Total	0	0	34	1	1	0	0	36	1	1	760	52	10	0	2	826	0	0	36	2	0	0	0	38
16:00 - 16:15	0	0	7	0	0	0	0	7	1	0	176	16	1	0	1	195	0	0	4	0	1	0	0	5
16:15 - 16:30	0	0	8	2	0	0	0	10	1	0	160	11	9	0	0	181	0	0	3	0	0	0	0	3
16:30 - 16:45	0	0	10	0	1	0	0	11	2	0	171	14	1	0	0	188	0	0	4	0	0	0	0	4
16:45 - 17:00	0	0	3	0	0	0	0	3	1	2	164	7	1	0	1	176	0	0	5	0	0	0	0	5
Hourly Total	0	0	28	2	1	0	0	31	5	2	671	48	12	0	2	740	0	0	16	0	1	0	0	17
TOTAL	0	2	234	22	4	0	0	262	22	23	5621	483	117	17	18	6301	0	0	246	14	1	0	0	261

Manchester
Saturday 25th September 2021

Junction: 1
Approach: Wilson Street

	To Alan Turing Way (S)								To Grey Mare Lane								To Alan Turing Way (N)							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
09:00 - 09:15	0	0	10	2	1	0	0	13	0	0	3	0	0	0	0	3	0	0	3	1	0	0	0	4
09:15 - 09:30	0	0	13	1	0	0	0	14	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
09:30 - 09:45	0	0	7	0	0	0	0	7	0	0	1	0	0	0	0	1	0	0	5	1	0	0	0	6
09:45 - 10:00	0	0	11	2	1	0	0	14	0	0	1	1	0	0	0	2	0	0	5	1	0	0	0	6
Hourly Total	0	0	41	5	2	0	0	48	0	0	7	1	0	0	0	8	0	0	16	3	0	0	0	19
10:00 - 10:15	0	0	14	1	1	0	0	16	0	0	4	0	0	0	0	4	0	0	7	0	0	0	0	7
10:15 - 10:30	0	0	9	1	0	0	0	10	0	0	6	0	0	0	0	6	0	0	8	0	0	0	0	8
10:30 - 10:45	0	1	16	2	0	0	0	19	0	0	2	1	0	0	0	3	0	0	4	2	0	0	0	6
10:45 - 11:00	0	0	16	1	0	0	0	17	1	0	2	0	0	0	0	3	0	0	9	4	1	0	0	14
Hourly Total	0	1	55	5	1	0	0	62	1	0	14	1	0	0	0	16	0	0	28	6	1	0	0	35
11:00 - 11:15	0	0	5	2	1	0	0	8	0	0	1	0	0	0	0	1	0	0	10	0	1	0	0	11
11:15 - 11:30	0	0	12	0	0	0	0	12	0	0	2	0	0	0	0	2	0	0	6	2	0	0	0	8
11:30 - 11:45	0	0	14	0	0	0	0	14	0	0	1	1	0	0	0	2	0	1	10	1	0	0	0	12
11:45 - 12:00	0	0	10	1	1	0	0	12	0	0	0	0	0	0	0	0	0	0	14	3	0	0	0	17
Hourly Total	0	0	41	3	2	0	0	46	0	0	4	1	0	0	0	5	0	1	40	6	1	0	0	48
12:00 - 12:15	0	1	8	1	0	0	0	10	0	0	5	1	0	0	0	6	0	0	14	0	0	0	0	14
12:15 - 12:30	0	0	15	1	0	0	0	16	0	0	3	0	0	0	0	3	0	0	12	3	0	0	0	15
12:30 - 12:45	0	0	16	0	0	0	0	16	0	0	6	0	0	0	0	6	0	0	12	3	0	0	0	15
12:45 - 13:00	0	0	16	0	0	0	0	16	0	0	2	0	0	0	0	2	0	0	9	1	0	0	0	10
Hourly Total	0	1	55	2	0	0	0	58	0	0	16	1	0	0	0	17	0	0	47	7	0	0	0	54
13:00 - 13:15	0	0	10	0	1	0	0	11	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10
13:15 - 13:30	0	0	12	1	0	0	0	13	0	0	1	0	0	0	0	1	0	0	10	0	0	0	0	10
13:30 - 13:45	0	0	14	2	0	0	0	16	0	0	0	0	0	0	0	0	1	0	11	1	0	0	0	13
13:45 - 14:00	0	1	17	2	0	0	0	20	1	0	4	1	0	0	0	6	0	0	10	2	0	0	0	12
Hourly Total	0	1	53	5	1	0	0	60	1	0	5	1	0	0	0	7	1	0	41	3	0	0	0	45
14:00 - 14:15	0	0	7	0	0	0	0	7	1	0	4	0	0	0	0	5	0	0	12	0	0	0	0	12
14:15 - 14:30	0	0	13	0	0	0	0	13	0	0	2	0	0	0	0	2	0	0	10	0	0	0	0	10
14:30 - 14:45	0	0	11	2	0	0	0	13	0	0	1	0	0	0	0	1	0	0	7	1	0	0	0	8
14:45 - 15:00	0	0	7	2	0	0	0	9	1	0	3	0	0	0	0	4	0	0	8	1	0	0	0	9
Hourly Total	0	0	38	4	0	0	0	42	2	0	10	0	0	0	0	12	0	0	37	2	0	0	0	39
15:00 - 15:15	0	0	3	1	0	0	0	4	0	0	1	0	0	0	0	1	0	0	4	0	0	0	0	4
15:15 - 15:30	0	1	19	0	0	0	0	20	0	0	4	0	0	0	0	4	0	0	4	2	0	0	0	6
15:30 - 15:45	0	0	6	0	0	0	0	6	0	0	3	0	0	0	0	3	0	0	8	0	2	0	0	10
15:45 - 16:00	0	0	11	0	0	0	0	11	0	0	1	0	0	0	0	1	0	0	7	1	0	0	0	8
Hourly Total	0	1	39	1	0	0	0	41	0	0	9	0	0	0	0	9	0	0	23	3	2	0	0	28
16:00 - 16:15	1	0	9	0	1	0	0	11	0	0	3	0	0	0	0	3	0	0	10	1	0	0	0	11
16:15 - 16:30	0	0	8	1	0	0	0	9	0	0	0	1	0	0	0	1	0	0	5	0	0	0	0	5
16:30 - 16:45	0	0	9	0	0	0	0	9	0	0	3	0	0	0	0	3	0	0	16	2	0	0	0	18
16:45 - 17:00	0	0	7	1	0	0	0	8	0	0	0	1	0	0	0	1	0	0	9	0	1	0	0	10
Hourly Total	1	0	33	2	1	0	0	37	0	0	6	2	0	0	0	8	0	0	40	3	1	0	0	44
TOTAL	1	4	355	27	7	0	0	394	4	0	71	7	0	0	0	82	1	1	272	33	5	0	0	312

Manchester

Saturday 25th September 2021

Junction: 1

Approach: Alan Turing Way South

	To Grey Mare Lane								To Alan Turing Way (N)								To Wilson Street							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
09:00 - 09:15	0	0	1	0	0	0	0	1	0	0	145	17	15	2	0	179	0	0	5	2	0	0	0	7
09:15 - 09:30	0	0	7	0	0	0	0	7	1	2	140	17	6	1	1	168	0	0	5	0	0	0	0	5
09:30 - 09:45	0	0	6	0	0	0	0	6	3	0	158	17	7	0	1	186	0	0	7	1	0	0	0	8
09:45 - 10:00	0	0	12	1	0	0	0	13	0	0	159	20	3	2	0	184	0	0	2	3	0	0	0	5
Hourly Total	0	0	26	1	0	0	0	27	4	2	602	71	31	5	2	717	0	0	19	6	0	0	0	25
10:00 - 10:15	0	0	4	0	0	0	0	4	1	3	182	12	5	0	1	204	0	0	5	1	0	0	0	6
10:15 - 10:30	0	0	9	0	0	0	0	9	1	0	203	16	4	1	0	225	0	0	12	1	1	0	0	14
10:30 - 10:45	0	0	9	1	1	0	0	11	0	0	186	20	3	0	2	211	0	0	10	0	0	0	0	10
10:45 - 11:00	0	0	7	0	0	0	0	7	1	0	232	13	4	1	0	251	0	0	7	1	0	0	0	8
Hourly Total	0	0	29	1	1	0	0	31	3	3	803	61	16	2	3	891	0	0	34	3	1	0	0	38
11:00 - 11:15	0	0	7	0	0	0	0	7	1	2	174	22	4	1	1	205	0	0	11	0	0	0	0	11
11:15 - 11:30	0	0	11	0	0	0	0	11	1	0	184	19	2	0	1	207	0	0	6	2	0	0	0	8
11:30 - 11:45	0	0	2	0	0	0	0	2	0	1	250	20	4	3	0	278	0	0	9	0	0	0	0	9
11:45 - 12:00	0	0	6	0	0	0	0	6	1	0	253	23	5	0	0	282	0	1	8	2	0	0	0	11
Hourly Total	0	0	26	0	0	0	0	26	3	3	861	84	15	4	2	972	0	1	34	4	0	0	0	39
12:00 - 12:15	0	0	5	0	0	0	0	5	1	1	235	19	5	0	0	261	0	0	11	1	0	0	0	12
12:15 - 12:30	1	0	7	0	0	0	0	8	5	3	253	31	1	1	0	294	0	0	8	1	0	0	0	9
12:30 - 12:45	0	0	6	1	0	0	0	7	0	0	331	21	4	1	1	358	0	0	8	0	1	0	0	9
12:45 - 13:00	1	0	7	0	0	0	0	8	0	1	253	23	5	2	1	285	0	0	11	2	0	0	0	13
Hourly Total	2	0	25	1	0	0	0	28	6	5	1072	94	15	4	2	1198	0	0	38	4	1	0	0	43
13:00 - 13:15	0	0	4	0	0	0	0	4	0	1	248	23	5	2	1	280	0	0	13	2	0	0	0	15
13:15 - 13:30	0	0	6	0	0	0	0	6	0	1	244	21	4	0	2	272	0	0	10	1	0	0	0	11
13:30 - 13:45	0	0	2	1	0	0	0	3	0	0	263	15	2	0	1	281	0	0	8	1	0	0	0	9
13:45 - 14:00	0	0	2	0	0	0	0	2	1	0	247	14	3	0	1	266	0	0	12	3	0	0	0	15
Hourly Total	0	0	14	1	0	0	0	15	1	2	1002	73	14	2	5	1099	0	0	43	7	0	0	0	50
14:00 - 14:15	0	0	6	0	0	0	0	6	1	1	237	19	2	0	1	261	0	0	9	0	0	0	0	9
14:15 - 14:30	0	0	8	0	0	0	0	8	0	0	225	12	6	0	0	243	0	0	9	2	0	0	0	11
14:30 - 14:45	0	0	3	0	1	0	0	4	1	1	210	18	3	0	1	234	0	0	15	2	0	0	0	17
14:45 - 15:00	0	0	6	1	0	0	0	7	0	0	247	14	3	3	0	267	0	0	11	2	0	0	0	13
Hourly Total	0	0	23	1	1	0	0	25	2	2	919	63	14	3	2	1005	0	0	44	6	0	0	0	50
15:00 - 15:15	0	0	3	0	0	0	0	3	0	2	262	20	5	1	1	291	0	0	17	0	1	0	0	18
15:15 - 15:30	0	0	3	0	0	0	0	3	0	0	233	16	1	0	0	250	0	0	15	4	1	0	0	20
15:30 - 15:45	0	0	5	1	0	0	0	6	2	1	263	22	6	0	0	294	0	0	10	1	0	0	0	11
15:45 - 16:00	0	0	5	0	0	0	0	5	0	1	214	13	0	0	0	228	0	0	16	0	0	0	0	16
Hourly Total	0	0	16	1	0	0	0	17	2	4	972	71	12	1	1	1063	0	0	58	5	2	0	0	65
16:00 - 16:15	0	0	4	0	0	0	0	4	0	2	253	17	1	1	2	276	0	0	21	2	1	0	0	24
16:15 - 16:30	0	0	3	0	0	0	0	3	2	1	236	15	3	1	0	258	0	0	15	1	0	0	0	16
16:30 - 16:45	0	0	4	0	0	0	0	4	1	0	269	8	3	1	0	282	0	0	13	1	1	0	0	15
16:45 - 17:00	0	0	5	0	0	0	0	5	1	0	254	11	4	0	0	270	0	0	20	4	0	0	0	24
Hourly Total	0	0	16	0	0	0	0	16	4	3	1012	51	11	3	2	1086	0	0	69	8	2	0	0	79
TOTAL	2	0	175	6	2	0	0	185	25	24	7243	568	128	24	19	8031	0	1	339	43	6	0	0	389

Manchester

Saturday 25th September 2021

Junction: 1

Approach: Grey Mare Lane

	To Alan Turing Way (N)								To Wilson Street								To Alan Turing Way (S)							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
09:00 - 09:15	0	0	8	0	0	0	0	8	0	0	2	1	0	0	0	3	0	0	4	0	0	0	0	4
09:15 - 09:30	0	0	3	0	0	0	0	3	0	0	2	1	0	0	0	3	0	0	2	0	0	0	0	2
09:30 - 09:45	0	0	6	1	0	1	0	8	0	0	4	0	0	0	0	4	0	0	2	0	0	0	0	2
09:45 - 10:00	0	0	6	0	0	0	0	6	0	0	2	1	0	0	0	3	0	0	5	2	0	0	0	7
Hourly Total	0	0	23	1	0	1	0	25	0	0	10	3	0	0	0	13	0	0	13	2	0	0	0	15
10:00 - 10:15	0	0	15	1	0	0	0	16	0	0	9	1	0	0	0	10	0	0	4	0	0	0	0	4
10:15 - 10:30	0	0	17	2	0	0	0	19	0	0	5	1	0	0	0	6	0	0	3	0	0	0	0	3
10:30 - 10:45	0	0	14	0	1	0	0	15	0	0	4	0	0	0	0	4	0	0	3	0	0	0	0	3
10:45 - 11:00	0	0	8	0	0	0	0	8	0	0	4	1	0	0	0	5	0	0	4	0	0	0	0	4
Hourly Total	0	0	54	3	1	0	0	58	0	0	22	3	0	0	0	25	0	0	14	0	0	0	0	14
11:00 - 11:15	0	0	6	1	0	0	0	7	0	0	4	1	1	0	0	6	0	0	9	0	0	0	0	9
11:15 - 11:30	0	0	16	1	0	0	0	17	0	0	5	0	0	0	0	5	0	0	6	0	0	0	0	6
11:30 - 11:45	0	0	7	0	0	0	0	7	0	0	4	1	0	0	0	5	0	0	5	0	0	0	0	5
11:45 - 12:00	0	0	16	1	0	0	0	17	0	0	2	1	0	0	0	3	0	0	2	0	0	0	0	2
Hourly Total	0	0	45	3	0	0	0	48	0	0	15	3	1	0	0	19	0	0	22	0	0	0	0	22
12:00 - 12:15	0	0	11	1	0	0	0	12	0	0	5	1	0	0	0	6	0	0	6	0	0	0	0	6
12:15 - 12:30	0	0	17	1	0	0	0	18	0	0	7	0	0	0	0	7	0	0	7	0	0	0	0	7
12:30 - 12:45	0	0	20	1	0	0	0	21	0	0	4	1	0	0	0	5	0	0	4	0	0	0	0	4
12:45 - 13:00	0	0	9	0	0	0	0	9	0	0	8	0	0	0	0	8	0	0	5	0	0	0	0	5
Hourly Total	0	0	57	3	0	0	0	60	0	0	24	2	0	0	0	26	0	0	22	0	0	0	0	22
13:00 - 13:15	0	0	9	0	0	0	0	9	0	0	7	0	0	0	0	7	0	0	3	0	0	0	0	3
13:15 - 13:30	1	0	10	0	0	0	0	11	0	0	4	0	0	0	0	4	0	0	7	0	0	0	0	7
13:30 - 13:45	0	0	5	1	0	0	0	6	0	0	3	1	0	0	0	4	0	0	4	0	0	0	0	4
13:45 - 14:00	0	0	10	1	1	0	0	12	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3
Hourly Total	1	0	34	2	1	0	0	38	0	0	15	1	0	0	0	16	0	0	17	0	0	0	0	17
14:00 - 14:15	0	0	8	2	0	0	0	10	0	0	2	1	0	0	0	3	0	0	2	0	0	0	0	2
14:15 - 14:30	0	0	12	1	0	0	0	13	0	0	2	0	0	0	0	2	0	0	4	0	0	0	0	4
14:30 - 14:45	0	0	13	1	0	0	0	14	0	0	3	0	0	0	0	3	0	0	7	0	0	0	0	7
14:45 - 15:00	0	0	8	1	0	0	0	9	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
Hourly Total	0	0	41	5	0	0	0	46	0	0	10	1	0	0	0	11	0	0	14	0	0	0	0	14
15:00 - 15:15	0	0	7	0	0	0	0	7	0	0	4	0	0	0	0	4	0	0	2	0	0	0	0	2
15:15 - 15:30	0	0	6	0	0	0	0	6	0	0	2	0	0	0	0	2	0	0	3	1	0	0	0	4
15:30 - 15:45	0	0	9	0	0	0	0	9	0	0	3	0	0	0	0	3	0	0	2	0	0	0	0	2
15:45 - 16:00	0	0	10	1	0	0	0	11	0	0	4	0	0	0	0	4	0	0	3	0	0	0	0	3
Hourly Total	0	0	32	1	0	0	0	33	0	0	13	0	0	0	0	13	0	0	10	1	0	0	0	11
16:00 - 16:15	0	0	10	0	0	0	0	10	0	0	4	0	0	0	0	4	0	0	1	0	0	0	0	1
16:15 - 16:30	0	0	4	2	0	0	0	6	0	0	5	2	0	0	0	7	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	9	0	0	0	0	9	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3
16:45 - 17:00	0	0	8	0	0	0	0	8	0	0	6	2	0	0	0	8	0	0	5	0	0	0	0	5
Hourly Total	0	0	31	2	0	0	0	33	0	0	16	4	0	0	0	20	0	0	9	0	0	0	0	9
TOTAL	1	0	317	20	2	1	0	341	0	0	125	17	1	0	0	143	0	0	121	3	0	0	0	124

Manchester - Queue Survey, Thursday 23th September 2021

Produced by Road Data Services Ltd.

Lane 1 is nearside lane

			Alan Turing Way (North)			Wilson Street			Alan Turing Way (South)			Grey Mare Lane		
Time			Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3
7:00	-	7:05	5	4	0	4	1	0	4	4	1	0	0	1
7:05	-	7:10	4	6	1	6	1	0	5	3	2	0	0	1
7:10	-	7:15	7	5	1	6	0	3	4	3	1	0	0	0
7:15	-	7:20	3	3	0	4	1	1	6	2	1	0	1	0
7:20	-	7:25	7	4	0	4	1	0	2	3	1	0	0	1
7:25	-	7:30	4	4	0	4	1	3	2	1	0	0	0	2
7:30	-	7:35	4	5	1	6	1	2	5	4	0	0	0	3
7:35	-	7:40	5	4	0	6	2	3	5	4	2	1	1	2
7:40	-	7:45	6	4	0	8	1	3	3	4	2	0	1	1
7:45	-	7:50	3	5	1	13	2	3	5	4	2	2	2	2
7:50	-	7:55	6	9	0	7	1	6	5	3	1	2	2	0
7:55	-	8:00	7	4	1	9	1	1	5	3	3	1	1	1
8:00	-	8:05	7	5	1	5	2	4	5	3	0	1	0	3
8:05	-	8:10	8	12	1	13	3	2	10	5	2	1	1	2
8:10	-	8:15	18	16	1	11	1	1	11	6	7	2	0	2
8:15	-	8:20	14	10	0	7	1	4	6	7	7	1	1	2
8:20	-	8:25	30	30	1	20	4	2	5	4	7	4	0	4
8:25	-	8:30	30	33	0	8	5	2	7	4	2	4	3	1
8:30	-	8:35	37	35	0	9	2	5	4	3	1	1	2	1
8:35	-	8:40	32	30	0	16	1	5	4	2	2	1	1	1
8:40	-	8:45	32	30	0	9	3	1	7	2	0	1	0	2
8:45	-	8:50	20	17	1	5	5	6	9	6	1	0	2	0
8:50	-	8:55	16	20	1	5	2	3	5	5	2	2	3	2
8:55	-	9:00	12	8	1	9	2	5	5	7	2	0	2	2
15:00	-	15:05	6	5	1	3	2	3	10	8	0	2	2	3
15:05	-	15:10	6	3	4	5	3	4	9	11	2	0	1	4
15:10	-	15:15	5	3	3	3	2	4	4	4	1	0	1	2
15:15	-	15:20	5	4	0	2	0	3	6	7	1	3	2	3
15:20	-	15:25	5	3	0	4	1	2	5	8	0	1	3	3
15:25	-	15:30	6	6	0	4	1	3	4	5	1	1	2	3
15:30	-	15:35	7	5	0	2	5	1	7	7	1	0	5	2
15:35	-	15:40	9	4	2	6	1	4	6	7	2	0	3	1
15:40	-	15:45	5	6	1	6	1	1	4	3	3	0	1	1
15:45	-	15:50	2	3	1	6	1	3	9	10	3	1	3	1
15:50	-	15:55	3	4	1	4	1	2	8	11	3	2	2	1
15:55	-	16:00	2	2	0	5	0	4	5	6	2	1	4	0
16:00	-	16:05	5	1	0	7	4	2	6	5	1	3	2	3
16:05	-	16:10	5	4	1	4	1	2	7	6	2	2	0	3
16:10	-	16:15	4	2	2	4	1	3	7	6	2	1	3	4
16:15	-	16:20	4	5	2	5	1	2	5	9	2	0	4	1
16:20	-	16:25	5	5	1	4	1	2	5	11	4	0	1	2
16:25	-	16:30	5	4	0	5	0	2	6	7	2	0	0	2
16:30	-	16:35	5	7	1	5	1	1	8	12	4	1	6	4
16:35	-	16:40	6	4	1	9	2	2	6	14	3	1	2	2
16:40	-	16:45	5	8	2	14	1	8	7	13	3	0	2	4

16:45	-	16:50	8	7	2	5	3	1	6	7	2	0	1	2
16:50	-	16:55	5	2	1	3	0	3	7	8	3	2	3	2
16:55	-	17:00	5	3	3	2	1	2	6	8	3	0	2	3
17:00	-	17:05	6	4	3	4	0	3	7	6	1	0	3	1
17:05	-	17:10	4	3	2	2	1	1	6	6	2	2	1	5
17:10	-	17:15	2	2	1	2	1	1	8	10	1	2	1	0
17:15	-	17:20	5	3	0	5	0	1	7	8	2	2	3	3
17:20	-	17:25	5	4	0	2	1	2	9	5	2	0	2	3
17:25	-	17:30	10	8	1	2	1	4	9	13	1	3	1	2
17:30	-	17:35	5	3	1	6	1	1	8	7	2	1	1	2
17:35	-	17:40	3	1	0	4	1	3	9	9	1	1	1	4
17:40	-	17:45	5	4	4	2	1	1	5	7	2	1	1	2
17:45	-	17:50	5	4	2	4	0	2	8	6	1	1	2	3
17:50	-	17:55	4	5	0	2	1	1	4	5	2	2	2	2
17:55	-	18:00	5	4	0	4	0	4	12	12	1	1	1	2

Queues are maximum queues observed in each 5 minute period

Manchester - Queue Survey, Saturday 25th September 2021

Produced by Road Data Services Ltd.

Lane 1 is nearside lane

			Alan Turing Way (North)			Wilson Street			Alan Turing Way (South)			Grey Mare Lane		
Time			Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3	Lane 1	Lane 2	Lane 3
9:00	-	9:05	4	4	1	1	0	0	4	1	0	1	1	1
9:05	-	9:10	7	6	1	2	1	1	2	1	1	0	0	1
9:10	-	9:15	5	6	2	4	1	2	4	3	0	2	0	1
9:15	-	9:20	9	4	1	1	0	2	3	2	0	0	0	1
9:20	-	9:25	7	5	1	1	0	0	2	5	0	0	1	0
9:25	-	9:30	7	6	1	4	1	0	5	1	1	0	0	0
9:30	-	9:35	6	4	1	1	0	1	7	6	1	0	1	1
9:35	-	9:40	5	4	1	3	0	1	2	3	0	0	0	1
9:40	-	9:45	6	5	1	1	0	1	2	2	0	0	1	2
9:45	-	9:50	6	5	1	2	0	1	3	4	0	1	0	1
9:50	-	9:55	3	4	1	1	2	1	6	5	1	1	0	0
9:55	-	10:00	3	5	0	2	0	1	7	5	1	0	0	0
10:00	-	10:05	10	6	1	3	1	1	7	8	1	1	1	2
10:05	-	10:10	4	5	1	1	1	1	5	10	1	0	2	3
10:10	-	10:15	5	6	1	2	1	1	5	10	1	0	0	1
10:15	-	10:20	2	2	1	1	2	2	11	8	3	1	1	2
10:20	-	10:25	3	3	1	1	2	1	7	6	0	1	1	1
10:25	-	10:30	3	4	3	1	1	0	3	7	1	0	1	2
10:30	-	10:35	5	3	2	2	1	3	9	12	1	1	1	2
10:35	-	10:40	3	2	1	1	0	1	2	2	1	0	1	2
10:40	-	10:45	3	2	0	4	1	2	3	3	1	1	1	2
10:45	-	10:50	3	3	1	5	1	4	4	6	1	0	1	2
10:50	-	10:55	3	4	1	2	1	0	4	5	0	2	1	0
10:55	-	11:00	4	4	1	3	0	2	3	3	0	0	2	1
11:00	-	11:05	6	4	1	1	1	1	3	4	0	1	2	1
11:05	-	11:10	11	7	1	1	0	2	2	2	1	1	0	0
11:10	-	11:15	5	4	1	2	0	2	3	2	0	2	1	0
11:15	-	11:20	6	4	2	1	1	2	2	3	0	1	1	3
11:20	-	11:25	5	6	0	2	0	1	5	4	1	0	1	2
11:25	-	11:30	9	6	2	2	1	3	5	7	1	2	0	0
11:30	-	11:35	6	5	1	4	1	1	4	3	0	0	1	0
11:35	-	11:40	4	5	0	3	0	2	0	3	0	1	1	2
11:40	-	11:45	5	8	2	2	1	2	6	3	1	2	0	1
11:45	-	11:50	5	6	2	2	0	2	3	3	1	0	1	1
11:50	-	11:55	4	4	1	2	0	4	5	4	1	0	1	2
11:55	-	12:00	6	5	2	0	0	1	3	4	0	0	0	2
12:00	-	12:05	12	10	0	0	1	1	4	5	0	0	3	2
12:05	-	12:10	12	6	0	3	1	2	3	6	2	1	1	0
12:10	-	12:15	6	3	0	4	2	3	5	4	1	1	2	1
12:15	-	12:20	5	3	2	1	1	1	5	5	1	1	3	3
12:20	-	12:25	5	6	1	3	1	2	2	5	1	3	2	1
12:25	-	12:30	5	4	2	3	1	4	4	4	0	0	0	3
12:30	-	12:35	2	4	2	2	2	3	3	4	0	0	1	2
12:35	-	12:40	5	4	2	2	2	2	3	1	0	1	1	2
12:40	-	12:45	6	5	1	3	2	1	4	5	0	1	0	2
12:45	-	12:50	6	5	1	4	1	2	6	7	1	0	1	2

12:50	-	12:55	4	3	1	3	1	1	5	5	1	1	1	2
12:55	-	13:00	6	5	1	3	0	2	4	4	0	1	1	2
13:00	-	13:05	7	5	1	2	0	2	4	2	1	0	0	1
13:05	-	13:10	9	5	0	2	0	3	3	4	2	0	1	0
13:10	-	13:15	7	5	0	2	0	1	3	4	0	1	1	1
13:15	-	13:20	9	10	1	0	0	1	4	3	0	1	0	2
13:20	-	13:25	11	8	1	2	0	2	5	2	1	2	1	2
13:25	-	13:30	6	5	1	4	0	2	5	3	0	0	2	1
13:30	-	13:35	4	7	0	3	0	2	4	3	1	0	0	2
13:35	-	13:40	2	3	2	2	0	2	4	6	0	1	0	2
13:40	-	13:45	6	5	1	4	0	1	3	4	1	0	0	1
13:45	-	13:50	4	3	0	4	0	2	3	4	1	0	1	0
13:50	-	13:55	3	2	1	3	1	1	4	3	1	0	0	1
13:55	-	14:00	4	2	3	2	0	1	3	3	1	1	0	2
14:00	-	14:05	4	2	1	2	1	2	4	3	0	0	0	1
14:05	-	14:10	3	3	1	1	0	2	4	3	0	0	1	1
14:10	-	14:15	8	6	1	1	1	2	5	2	0	0	0	1
14:15	-	14:20	6	4	0	2	0	3	4	1	1	0	0	3
14:20	-	14:25	6	6	1	2	0	2	3	3	0	1	0	1
14:25	-	14:30	9	7	1	2	1	1	4	3	1	0	0	1
14:30	-	14:35	7	5	1	2	0	2	5	3	1	2	0	2
14:35	-	14:40	6	5	1	5	1	0	5	6	0	1	0	0
14:40	-	14:45	5	3	1	1	0	2	3	6	1	0	1	3
14:45	-	14:50	4	3	1	1	0	1	3	3	0	0	0	1
14:50	-	14:55	5	4	2	1	1	1	5	7	0	0	0	1
14:55	-	15:00	7	6	0	2	1	2	6	9	1	0	1	1
15:00	-	15:05	12	11	0	0	0	1	11	12	1	1	0	2
15:05	-	15:10	6	9	0	1	1	1	9	11	1	1	1	0
15:10	-	15:15	5	4	0	1	0	0	9	6	2	0	1	1
15:15	-	15:20	6	2	0	3	2	1	2	1	2	1	1	1
15:20	-	15:25	3	1	0	1	2	0	4	4	1	1	0	1
15:25	-	15:30	4	3	2	1	0	2	6	6	2	0	1	2
15:30	-	15:35	4	0	1	0	4	3	3	1	0	1	1	1
15:35	-	15:40	3	2	2	2	1	0	2	2	0	0	0	1
15:40	-	15:45	8	7	0	2	0	2	6	6	0	1	1	1
15:45	-	15:50	3	4	0	1	1	3	3	3	0	0	0	2
15:50	-	15:55	2	1	0	2	0	1	7	5	1	0	2	1
15:55	-	16:00	5	3	1	1	0	1	6	7	0	1	0	1
16:00	-	16:05	6	3	1	2	1	1	11	12	2	1	1	1
16:05	-	16:10	7	10	0	2	1	3	6	4	2	0	0	1
16:10	-	16:15	8	7	0	1	0	2	2	3	0	0	0	1
16:15	-	16:20	10	13	0	1	0	1	6	3	1	0	0	1
16:20	-	16:25	7	7	0	3	0	1	7	3	1	0	1	1
16:25	-	16:30	9	10	1	1	0	1	7	5	0	0	1	2
16:30	-	16:35	8	13	0	1	0	3	4	7	2	1	0	1
16:35	-	16:40	5	8	0	2	2	2	11	4	1	0	0	2
16:40	-	16:45	13	7	1	1	0	2	11	9	1	1	1	1
16:45	-	16:50	7	8	0	2	0	1	5	3	1	0	0	1
16:50	-	16:55	13	11	0	1	2	1	3	5	1	1	3	2
16:55	-	17:00	7	10	2	2	0	2	3	5	1	0	3	2

Queues are maximum queues observed in each 5 minute period

Car Park 170 spaces (including 10 disabled)

	Inbound								Outbound							
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
07:00 - 07:15	0	0	6	0	0	0	0	6	0	0	1	0	0	0	0	1
07:15 - 07:30	0	0	7	0	0	0	0	7	0	0	2	0	0	0	0	2
07:30 - 07:45	0	0	8	0	0	0	0	8	0	0	8	0	0	0	0	8
07:45 - 08:00	1	0	8	0	0	0	0	9	0	0	10	1	0	0	0	11
Hourly Total	1	0	29	0	0	0	0	30	0	0	21	1	0	0	0	22
08:00 - 08:15	0	0	17	0	0	0	0	17	0	0	18	1	0	0	0	19
08:15 - 08:30	0	0	15	0	0	0	0	15	0	0	23	0	0	0	0	23
08:30 - 08:45	0	0	11	0	0	0	0	11	0	0	10	0	0	0	0	10
08:45 - 09:00	0	0	7	0	0	0	0	7	0	0	6	0	0	0	0	6
Hourly Total	0	0	50	0	0	0	0	50	0	0	57	1	0	0	0	58
09:00 - 09:15	0	0	6	1	0	0	0	7	0	0	3	0	0	0	0	3
09:15 - 09:30	0	0	6	0	0	0	0	6	0	0	6	0	0	0	0	6
09:30 - 09:45	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
09:45 - 10:00	0	0	5	0	0	0	0	5	0	0	3	1	0	0	0	4
Hourly Total	0	0	20	1	0	0	0	21	0	0	13	1	0	0	0	14
10:00 - 10:15	0	0	5	0	0	0	0	5	0	0	6	0	0	0	0	6
10:15 - 10:30	0	0	8	0	0	0	0	8	0	0	3	0	0	0	0	3
10:30 - 10:45	0	0	3	0	0	0	0	3	0	0	4	0	0	0	0	4
10:45 - 11:00	0	0	5	0	0	0	0	5	0	0	3	0	0	0	0	3
Hourly Total	0	0	21	0	0	0	0	21	0	0	16	0	0	0	0	16
11:00 - 11:15	0	0	1	0	0	0	0	1	0	0	5	0	0	0	0	5
11:15 - 11:30	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
11:30 - 11:45	0	0	3	1	0	0	0	4	0	0	7	1	0	0	0	8
11:45 - 12:00	0	0	10	0	0	0	0	10	0	0	5	0	0	0	0	5
Hourly Total	0	0	15	1	0	0	0	16	0	0	18	1	0	0	0	19
12:00 - 12:15	0	0	6	0	0	0	0	6	0	0	3	0	0	0	0	3
12:15 - 12:30	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2
12:30 - 12:45	0	0	5	0	0	0	0	5	0	0	3	0	0	0	0	3
12:45 - 13:00	0	0	4	0	0	0	0	4	0	0	4	0	0	0	0	4
Hourly Total	0	0	17	0	0	0	0	17	0	0	12	0	0	0	0	12
13:00 - 13:15	0	0	9	0	0	0	0	9	0	0	4	0	0	0	0	4
13:15 - 13:30	0	0	3	0	0	0	0	3	0	0	4	0	0	0	0	4
13:30 - 13:45	0	0	5	0	0	0	0	5	0	0	5	0	0	0	0	5
13:45 - 14:00	0	0	3	0	0	0	0	3	0	0	5	0	0	0	0	5
Hourly Total	0	0	20	0	0	0	0	20	0	0	18	0	0	0	0	18
14:00 - 14:15	0	0	11	0	0	0	0	11	0	0	8	0	0	0	0	8
14:15 - 14:30	0	0	17	0	0	0	0	17	0	0	12	0	0	0	0	12
14:30 - 14:45	0	0	10	0	0	0	0	10	0	0	23	0	0	0	0	23
14:45 - 15:00	0	0	8	0	0	0	0	8	1	0	11	0	0	0	0	12
Hourly Total	0	0	46	0	0	0	0	46	1	0	54	0	0	0	0	55
15:00 - 15:15	0	0	8	1	0	0	0	9	0	0	5	0	0	0	0	5
15:15 - 15:30	0	0	7	0	0	0	0	7	0	0	12	0	0	0	0	12
15:30 - 15:45	1	0	5	0	0	0	0	6	0	0	9	0	0	0	0	9
15:45 - 16:00	0	0	5	0	0	0	0	5	1	0	3	0	0	0	0	4
Hourly Total	1	0	25	1	0	0	0	27	1	0	29	0	0	0	0	30
16:00 - 16:15	1	0	6	0	0	0	0	7	0	0	9	1	0	0	0	10
16:15 - 16:30	0	0	7	0	0	0	0	7	0	0	1	0	0	0	0	1
16:30 - 16:45	0	0	12	0	0	0	0	12	0	0	9	0	0	0	0	9
16:45 - 17:00	0	0	8	0	0	0	0	8	0	0	3	0	0	0	0	3
Hourly Total	1	0	33	0	0	0	0	34	0	0	22	1	0	0	0	23
17:00 - 17:15	0	0	11	0	0	0	0	11	0	0	9	0	0	0	0	9
17:15 - 17:30	0	0	5	0	0	0	0	5	0	0	4	0	0	0	0	4
17:30 - 17:45	0	0	4	0	0	0	0	4	0	0	11	0	0	0	0	11
17:45 - 18:00	0	0	8	0	0	0	0	8	0	0	7	0	0	0	0	7
Hourly Total	0	0	28	0	0	0	0	28	0	0	31	0	0	0	0	31
18:00 - 18:15	0	0	7	0	0	0	0	7	0	0	9	0	0	0	0	9
18:15 - 18:30	0	0	8	0	0	0	0	8	0	0	3	0	0	0	0	3
18:30 - 18:45	0	0	4	0	0	0	0	4	0	0	5	0	0	0	0	5
18:45 - 19:00	0	0	11	0	0	0	0	11	0	0	11	0	0	0	0	11
Hourly Total	0	0	30	0	0	0	0	30	0	0	28	0	0	0	0	28
TOTAL	3	0	334	3	0	0	0	340	2	0	319	5	0	0	0	326

In at Start							
CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0	0	23	2	0	0	0	25

Accumulation							
CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0	0	28	2	0	0	0	30
0	0	33	2	0	0	0	35
0	0	33	2	0	0	0	35
1	0	31	1	0	0	0	33
1	0	30	0	0	0	0	31
1	0	22	0	0	0	0	23
1	0	23	0	0	0	0	24
1	0	24	0	0	0	0	25
1	0	27	1	0	0	0	29
1	0	27	1	0	0	0	29
1	0	29	1	0	0	0	31
1	0	31	0	0	0	0	32
1	0	30	0	0	0	0	31
1	0	35	0	0	0	0	36
1	0	34	0	0	0	0	35
1	0	36	0	0	0	0	37
1	0	32	0	0	0	0	33
1	0	32	0	0	0	0	33
1	0	28	0	0	0	0	29
1	0	33	0	0	0	0	34
1	0	36	0	0	0	0	37
1	0	36	0	0	0	0	37
1	0	38	0	0	0	0	39
1	0	38	0	0	0	0	39
1	0	43	0	0	0	0	44
1	0	42	0	0	0	0	43
1	0	42	0	0	0	0	43
1	0	40	0	0	0	0	41
1	0	43	0	0	0	0	44
1	0	48	0	0	0	0	49
1	0	35	0	0	0	0	36
0	0	32	0	0	0	0	32
0	0	35	1	0	0	0	36
0	0	30	1	0	0	0	31
1	0	26	1	0	0	0	28
0	0	28	1	0	0	0	29
1	0	25	0	0	0	0	26
1	0	31	0	0	0	0	32
1	0	34	0	0	0	0	35
1	0	39	0	0	0	0	40
1	0	41	0	0	0	0	42
1	0	42	0	0	0	0	43
1	0	35	0	0	0	0	36
1	0	36	0	0	0	0	37
1	0	34	0	0	0	0	35
1	0	39	0	0	0	0	40
1	0	38	0	0	0	0	39
1	0	38	0	0	0	0	39

Manchester
Saturday 25th September 2021

Car Park 170 spaces (including 10 disabled)

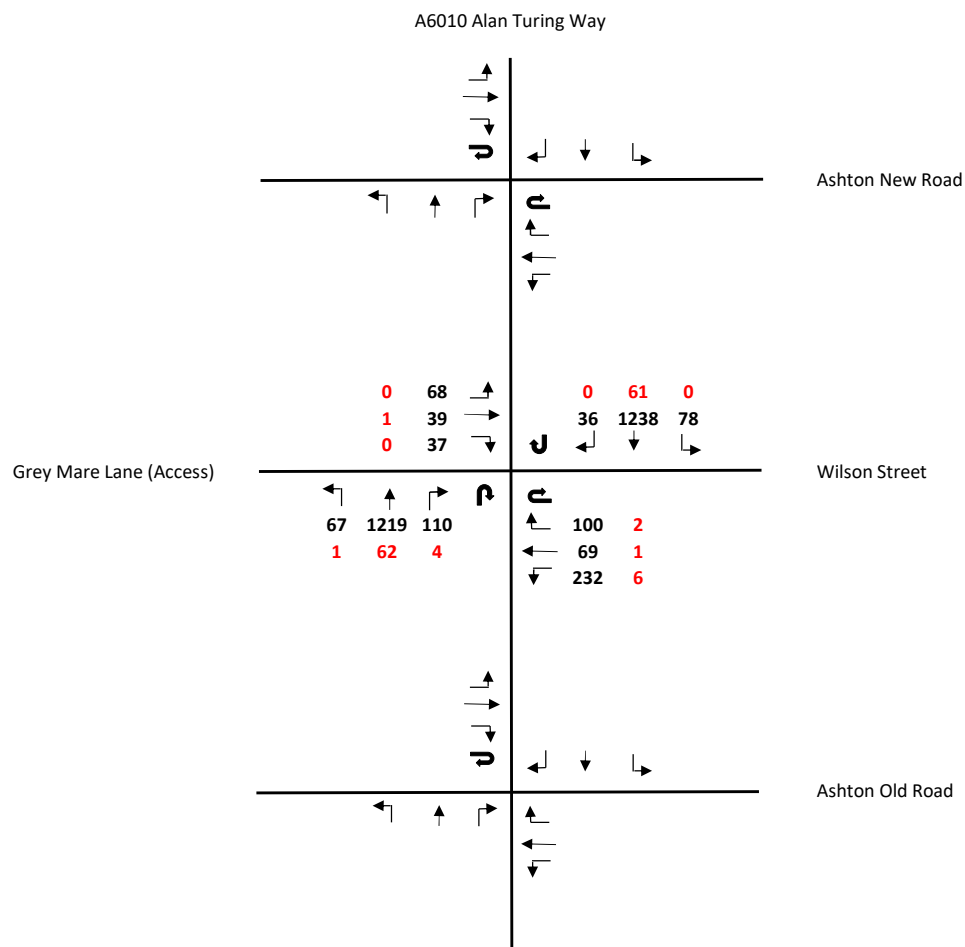
TIME	Inbound							TOTAL	Outbound							TOTAL
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS		CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	
07:00 - 07:15	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
07:15 - 07:30	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0
07:30 - 07:45	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
07:45 - 08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	11	0	0	0	0	11	0	0	1	0	0	0	0	1
08:00 - 08:15	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
08:15 - 08:30	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2
08:30 - 08:45	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
08:45 - 09:00	0	0	18	0	0	0	0	18	0	0	11	0	0	0	0	11
Hourly Total	0	0	24	0	0	0	0	24	0	0	13	0	0	0	0	13
09:00 - 09:15	0	0	8	0	0	0	0	8	0	0	1	0	0	0	0	1
09:15 - 09:30	0	0	17	1	0	0	0	18	0	0	2	0	0	0	0	2
09:30 - 09:45	0	0	7	0	0	0	0	7	0	0	4	0	0	0	0	4
09:45 - 10:00	0	0	9	0	0	0	0	9	0	0	5	0	0	0	0	5
Hourly Total	0	0	41	1	0	0	0	42	0	0	12	0	0	0	0	12
10:00 - 10:15	0	0	4	0	0	0	0	4	0	0	14	1	0	0	0	15
10:15 - 10:30	0	0	15	0	0	0	0	15	0	0	8	0	0	0	0	8
10:30 - 10:45	0	0	14	0	0	0	0	14	0	0	12	0	0	0	0	12
10:45 - 11:00	0	0	13	0	0	0	0	13	0	0	11	0	0	0	0	11
Hourly Total	0	0	46	0	0	0	0	46	0	0	45	1	0	0	0	46
11:00 - 11:15	0	0	13	0	0	0	0	13	0	0	11	0	0	0	0	11
11:15 - 11:30	0	0	12	0	0	0	0	12	0	0	9	0	0	0	0	9
11:30 - 11:45	0	0	9	0	0	0	0	9	0	0	6	0	0	0	0	6
11:45 - 12:00	0	0	9	0	0	0	0	9	0	0	15	0	0	0	0	15
Hourly Total	0	0	43	0	0	0	0	43	0	0	41	0	0	0	0	41
12:00 - 12:15	0	0	5	1	0	0	0	6	0	0	11	1	0	0	0	12
12:15 - 12:30	0	0	3	0	0	0	0	3	0	0	16	0	0	0	0	16
12:30 - 12:45	0	0	6	1	0	0	0	7	0	0	8	0	0	0	0	8
12:45 - 13:00	0	0	4	0	0	0	0	4	0	0	8	1	0	0	0	9
Hourly Total	0	0	18	2	0	0	0	20	0	0	43	2	0	0	0	45
13:00 - 13:15	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
13:15 - 13:30	0	0	4	0	0	0	0	4	0	0	8	0	0	0	0	8
13:30 - 13:45	0	0	4	0	0	0	0	4	0	0	5	0	0	0	0	5
13:45 - 14:00	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
Hourly Total	0	0	8	0	0	0	0	8	0	0	20	0	0	0	0	20
14:00 - 14:15	0	0	2	0	0	0	0	2	0	0	6	0	0	0	0	6
14:15 - 14:30	0	0	4	0	0	0	0	4	0	0	3	0	0	0	0	3
14:30 - 14:45	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
14:45 - 15:00	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0
Hourly Total	0	0	12	0	0	0	0	12	0	0	12	0	0	0	0	12
15:00 - 15:15	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
15:15 - 15:30	0	0	4	0	0	0	0	4	0	0	5	0	0	0	0	5
15:30 - 15:45	0	0	4	1	0	0	0	5	0	0	3	0	0	0	0	3
15:45 - 16:00	0	0	2	0	0	0	0	2	0	0	2	1	0	0	0	3
Hourly Total	0	0	12	1	0	0	0	13	0	0	13	1	0	0	0	14
16:00 - 16:15	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
16:15 - 16:30	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
16:30 - 16:45	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
16:45 - 17:00	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6
Hourly Total	0	0	2	0	0	0	0	2	0	0	15	0	0	0	0	15
17:00 - 17:15	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
17:15 - 17:30	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
17:30 - 17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45 - 18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	2
18:00 - 18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15 - 18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30 - 18:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
18:45 - 19:00	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1
Hourly Total	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1
TOTAL	0	0	221	4	0	0	0	225	0	0	218	4	0	0	0	222

In at Start						
CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS
0	0	2	0	0	0	0
						TOTAL
						2

Accumulation						
CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS
0	0	5	0	0	0	0
0	0	10	0	0	0	0
0	0	12	0	0	0	0
0	0	12	0	0	0	0
0	0	14	0	0	0	0
0	0	14	0	0	0	0
0	0	16	0	0	0	0
0	0	23	0	0	0	0
0	0	30	0	0	0	0
0	0	45	1	0	0	0
0	0	48	1	0	0	0
0	0	52	1	0	0	0
0	0	42	0	0	0	0
0	0	49	0	0	0	0
0	0	51	0	0	0	0
0	0	53	0	0	0	0
0	0	55	0	0	0	0
0	0	58	0	0	0	0
0	0	61	0	0	0	0
0	0	55	0	0	0	0
0	0	49	0	0	0	0
0	0	36	0	0	0	0
0	0	34	1	0	0	0
0	0	30	0	0	0	0
0	0	26	0	0	0	0
0	0	22	0	0	0	0
0	0	21	0	0	0	0
0	0	18	0	0	0	0
0	0	14	0	0	0	0
0	0	15	0	0	0	0
0	0	14	0	0	0	0
0	0	18	0	0	0	0
0	0	17	0	0	0	0
0	0	16	0	0	0	0
0	0	17	1	0	0	0
0	0	17	0	0	0	0
0	0	14	0	0	0	0
0	0	15	0	0	0	0
0	0	10	0	0	0	0
0	0	4	0	0	0	0
0	0	4	0	0	0	0
0	0	4	0	0	0	0
0	0	4	0	0	0	0
0	0	4	0	0	0	0
0	0	4	0	0	0	0
0	0	5	0	0	0	0
0	0	5	0	0	0	0
CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS
						TOTAL
						5

In at End

Appendix D – Traffic Figures



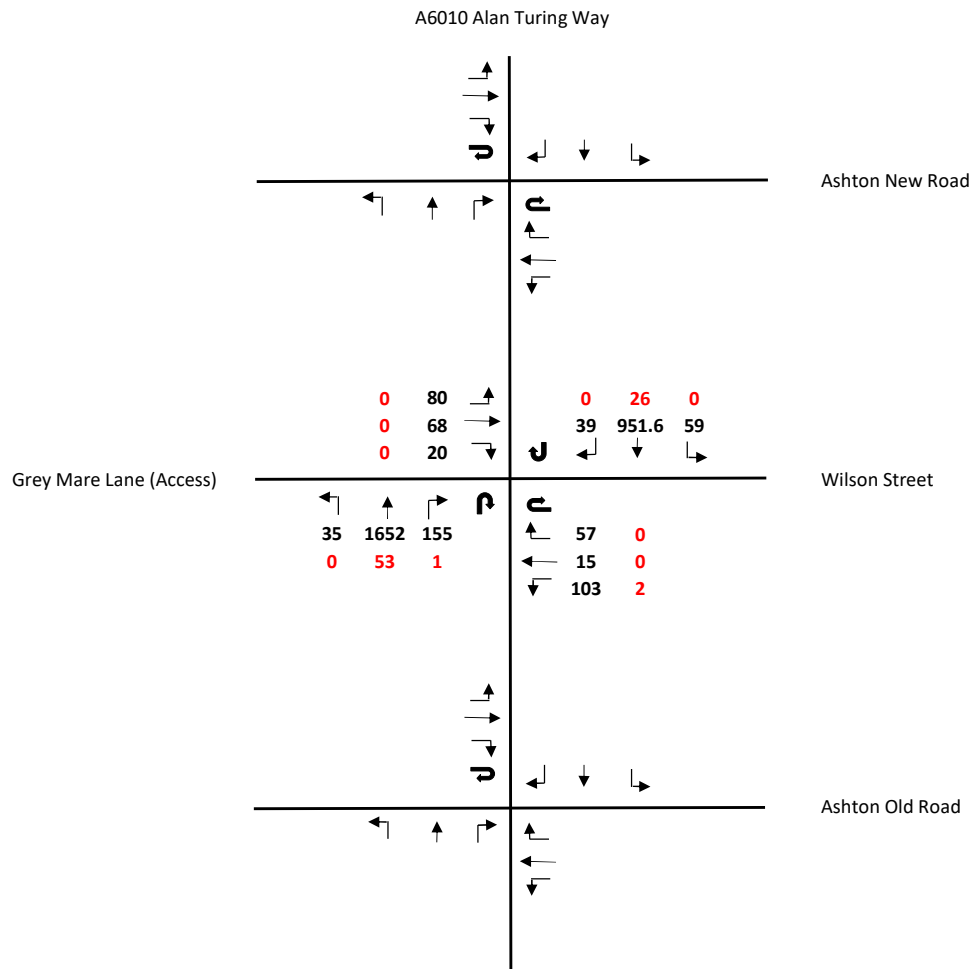
79493 - OurLeague Life National Hub

Figure 1 - 2021 Observed Flows

Weekday AM Peak: 08:00 - 09:00

Notes: PCUs in Black
HGVs in Red





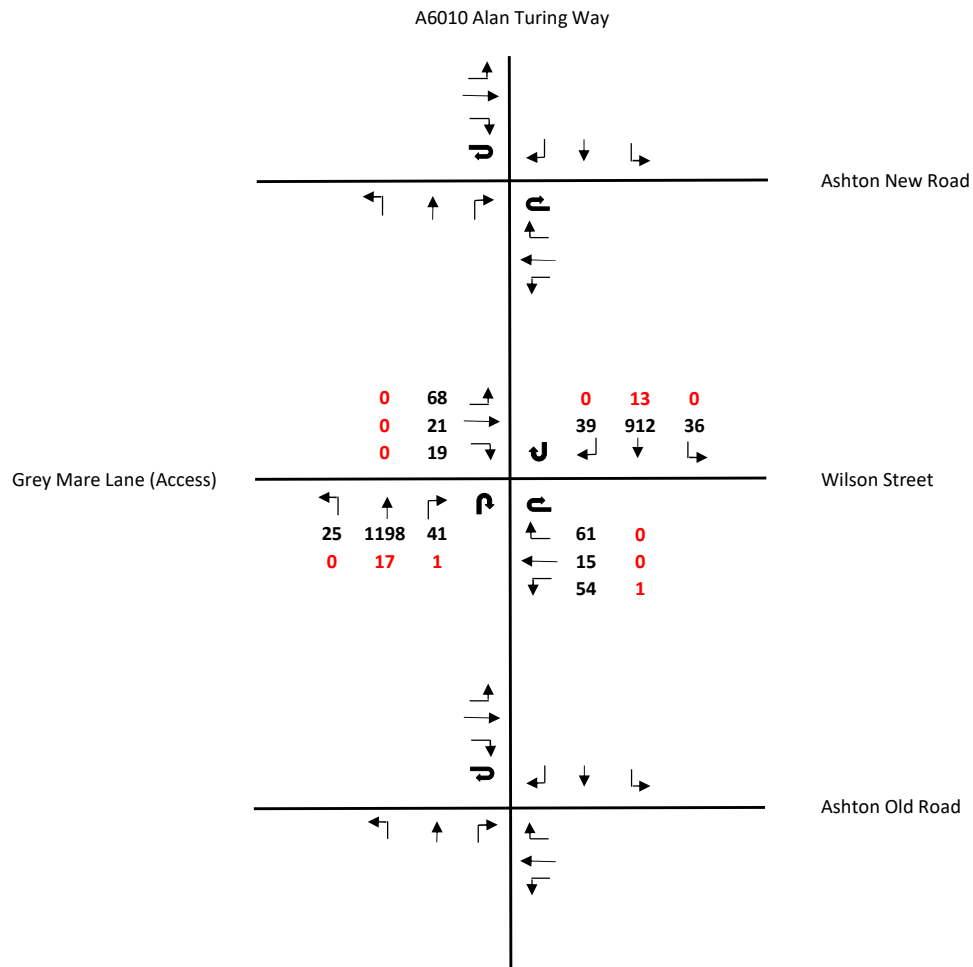
79493 - OurLeague Life National Hub

Figure 2 - 2021 Observed Flows

Weekday PM Peak: 16:30 - 17:30

Notes: PCUs in Black
HGVs in Red





79493 - OurLeague Life National Hub

Figure 3 - 2021 Observed Flows

Saturday Peak: 11:45 - 12:45

Notes: PCUs in Black
HGVs in Red



	Modal Split - Car	Weekday AM	Weekday PM	Saturday Morning Arr	Saturday Afternoon Dep	Saturday Cross Over Sensitivity	Saturday Community Match Days Arr/Dep
Every Day Use - 9am-5pm							
25 Staff	40%	10	10				
150 F/T Students (16-21)	30%	45	45				
40 Adult Learners/Players	40%	16	16				
Total		71	71				
Major Event Saturday (1000 People) - 10am to 7pm (Staggered Arrival/Departures)							
Coach 6 x 35 people = 210				6	6	12	
790 visitors/players - x3 Stagers	30%			79	79	158	
Total				85	85	170	
Community Match Days Saturday (2pm - 6pm) Apr/Oct							
240 attendees							
40 by coach							2
200 attendees - x2 Stagers	40%						40
Total							42

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Trip Generation

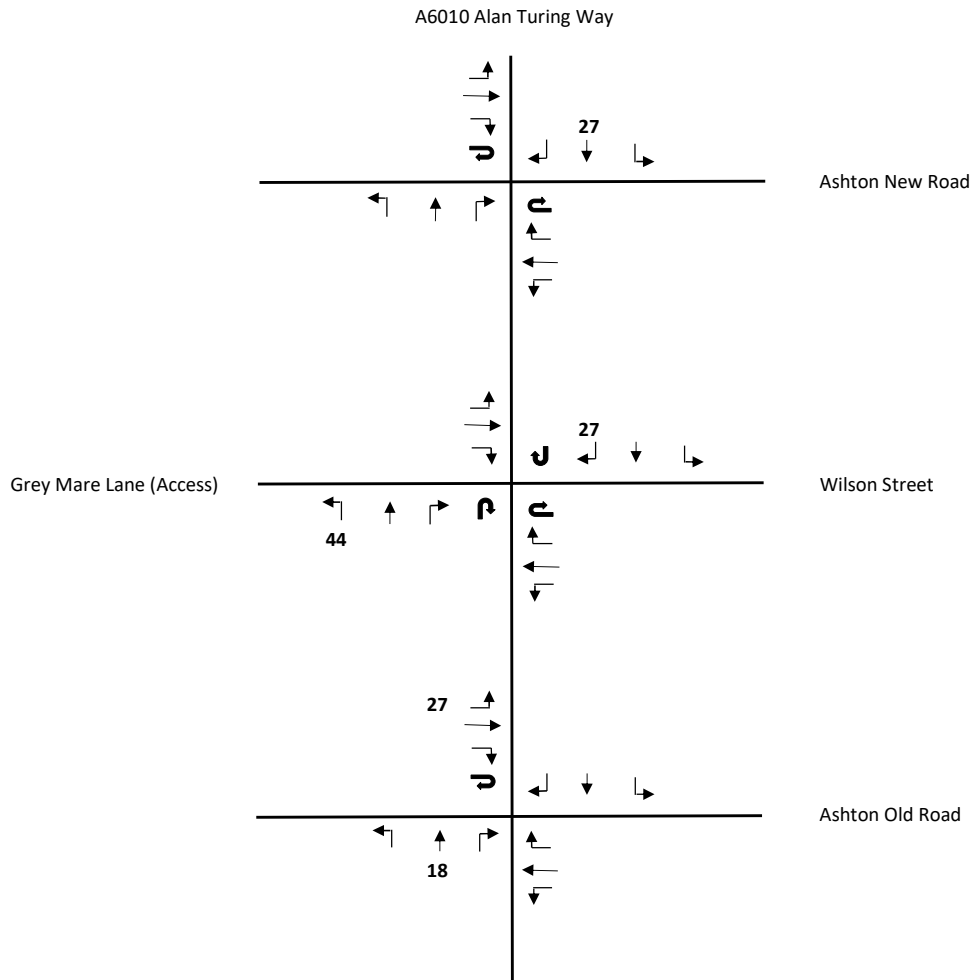


Locations	%	Weekday AM Arrivals (9am)	Weekday PM departures (5pm)	Sat Arrivals AM	Sat Departures PM
Bolton	12.5%	Old Road W	Old Road W	Old Road W	Old Road W
Bury	12.5%	A6010 N (New Road)	A6010 N (New Road)	A6010 N (New Road)	A6010 N (New Road)
Rochdale	12.5%	A6010 N (New Road)	A6010 N (New Road)	A6010 N (New Road)	A6010 N (New Road)
Oldham	12.5%	A6010 N (New Road)	New Road E	A6010 N (New Road)	New Road E
Hyde	12.5%	A6010 S (Old Road)	A6010 S (Old Road)	A6010 S (Old Road)	A6010 S (Old Road)
Stockport	12.5%	A6010 S (Old Road)	A6010 S (Old Road)	A6010 S (Old Road)	A6010 S (Old Road)
Altrincham	12.5%	Old Road W	Old Road W	Old Road W	Old Road W
Salford	12.5%	Old Road W	Old Road W	Old Road W	Old Road W

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Development Trip Distribution





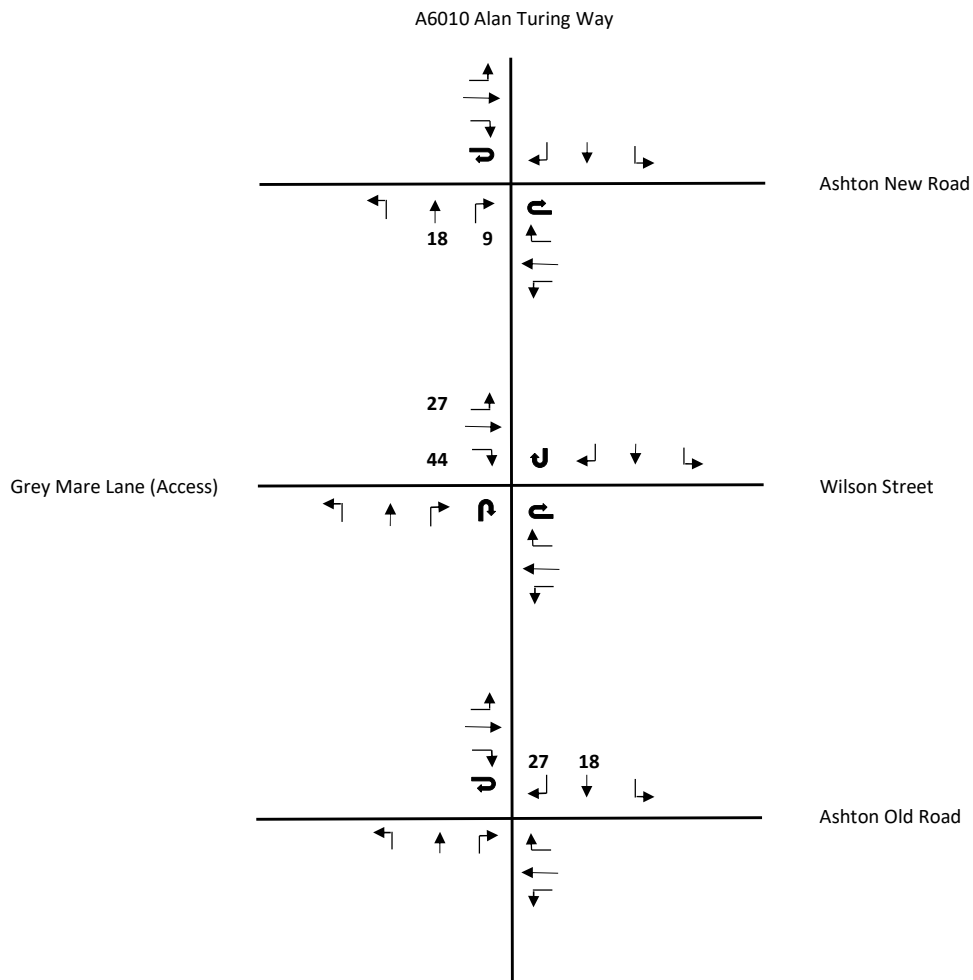
79493 - OurLeague Life National Hub

Figure 4 - Development Flows

Weekday AM Peak: 08:00 - 09:00

Notes: All Vehicles in Black





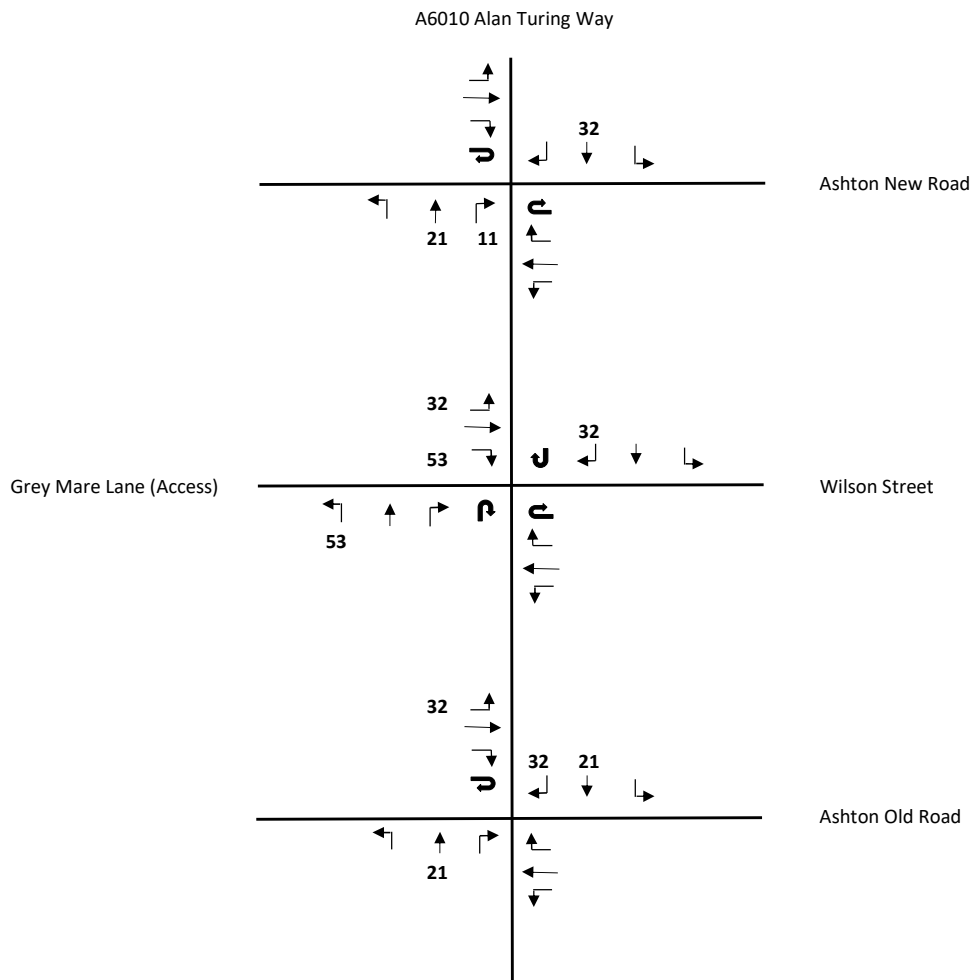
79493 - OurLeague Life National Hub

Figure 5 - Development Flows

Weekday PM Peak: 16:30 - 17:30

Notes: All Vehicles in Black





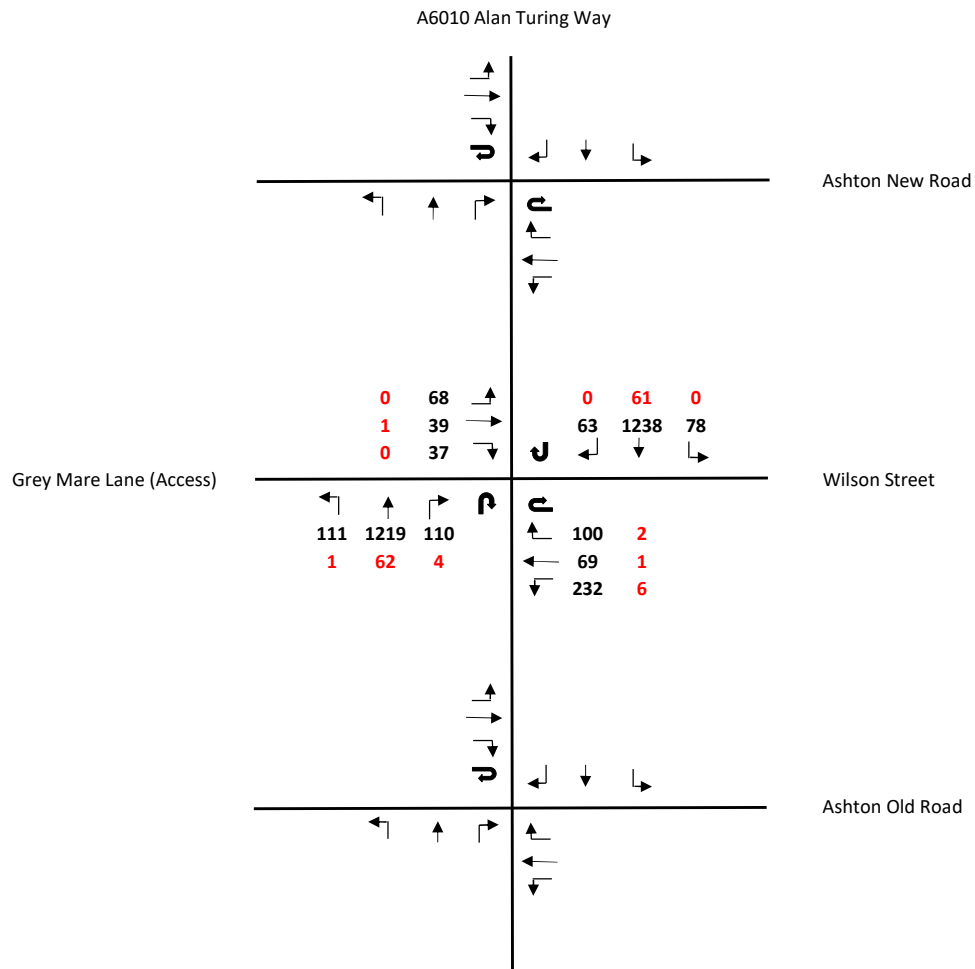
79493 - OurLeague Life National Hub

Figure 6 - Development Flows

Saturday Peak: 11:45 - 12:45

Notes: All Vehicles in Black





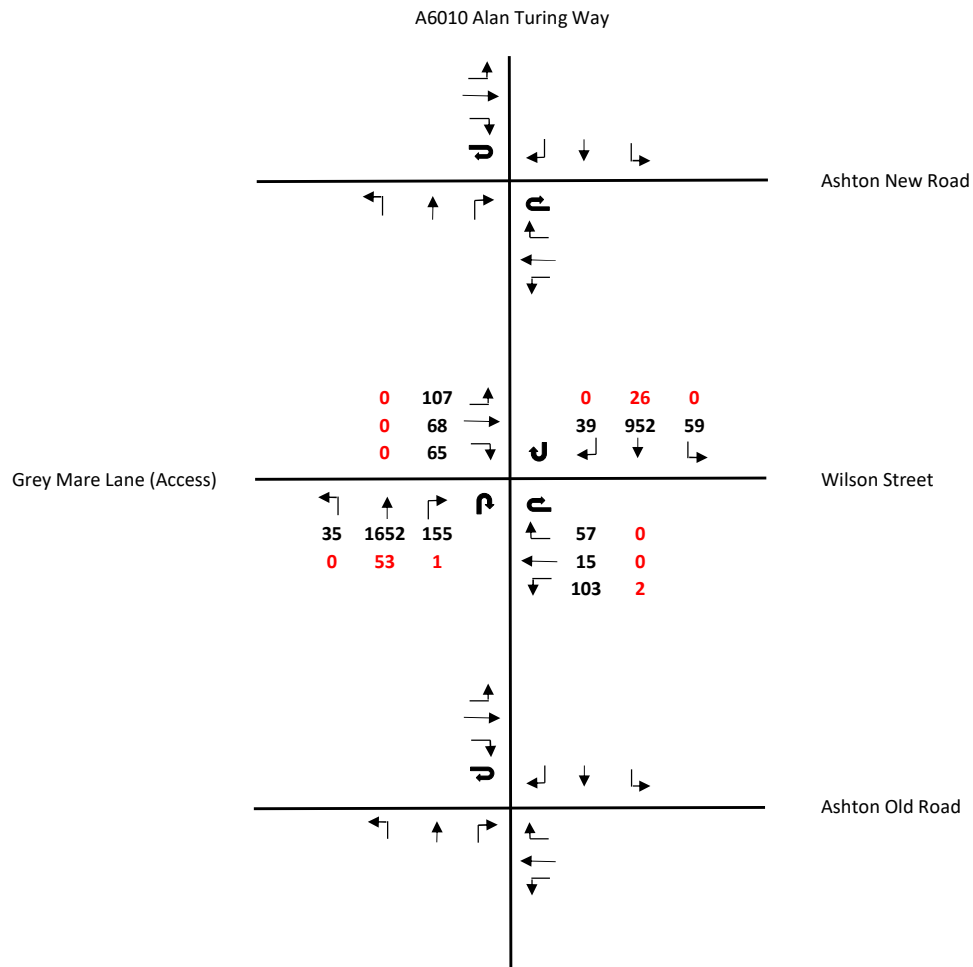
79493 - OurLeague Life National Hub

Figure 7 - 2021 Observed Flows + Development Flows

Weekday AM Peak: 08:00 - 09:00

Notes: PCUs in Black
HGVs in Red





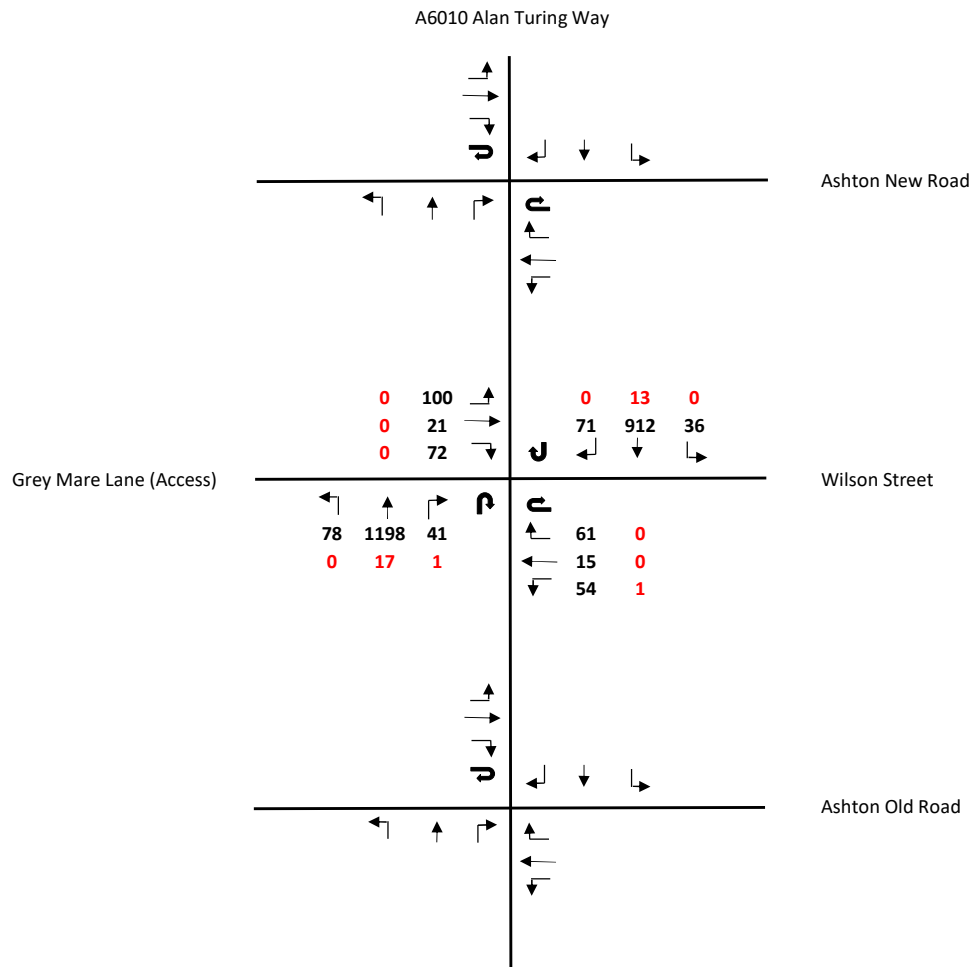
79493 - OurLeague Life National Hub

Figure 8 - 2021 Observed Flows + Development Flows

Weekday PM Peak: 16:30 - 17:30

Notes: PCUs in Black
HGVs in Red





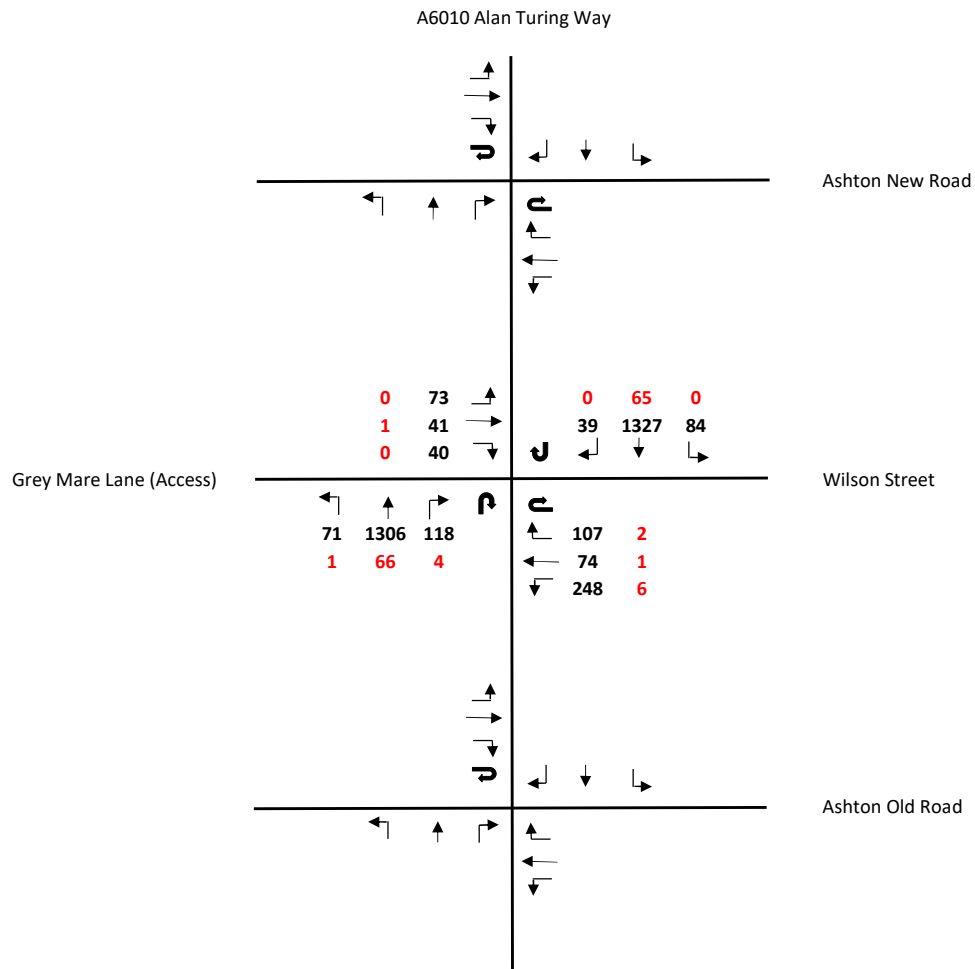
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Figure 9 - 2021 Observed Flows Plus Development Flows

Saturday Peak: 11:45 - 12:45

Notes: PCUs in Black
HGVs in Red





79493 - OurLeague Life National Hub

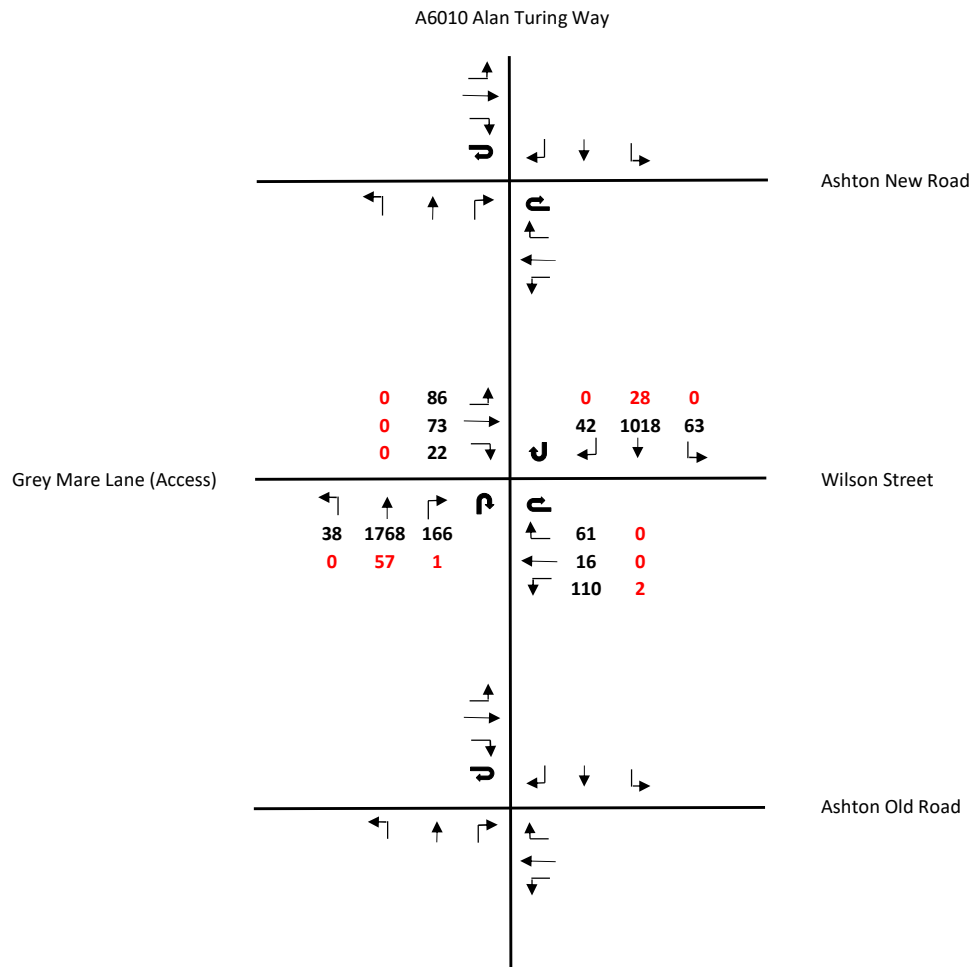
Figure 10 - 2026 Projected Flows

Thursday AM Peak: 08:00 - 09:00

TEMPro Growth Factor: 1.0719

Notes: PCUs in Black
HGVs in Red





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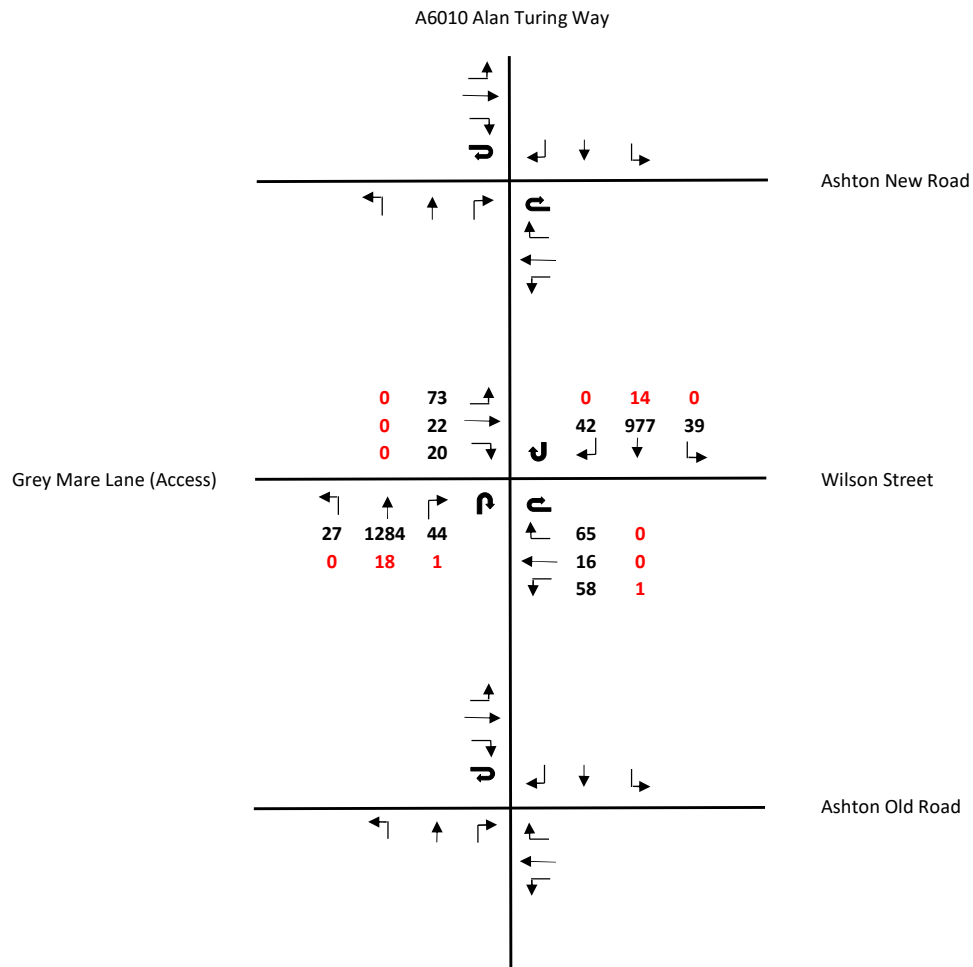
Figure 11 - 2026 Projected Flows

Thursday PM Peak: 16:30 - 17:30

TEMPro Growth Factor: 1.0703

Notes: PCUs in Black
HGVs in Red





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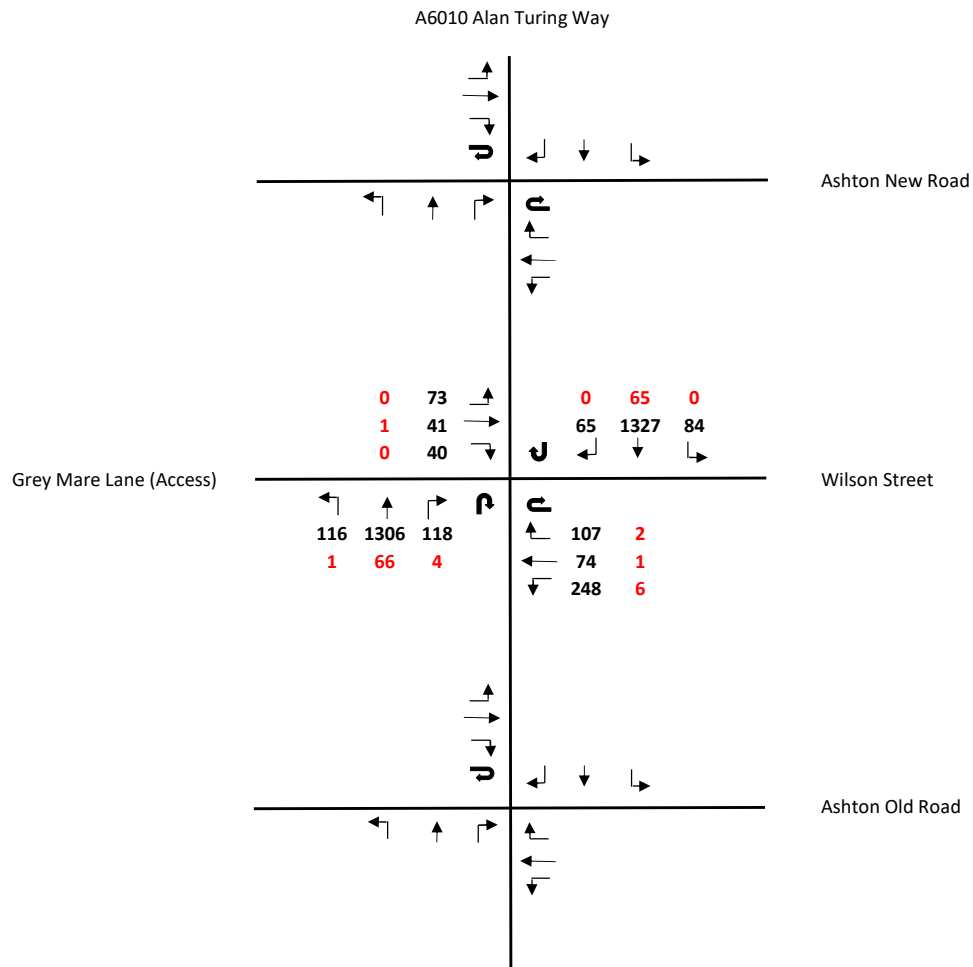
Figure 12 - 2026 Projected Flows

Saturday Peak: 11:45 - 12:45

TEMPro Growth Factor: 1.0714

Notes: PCUs in Black
HGVs in Red





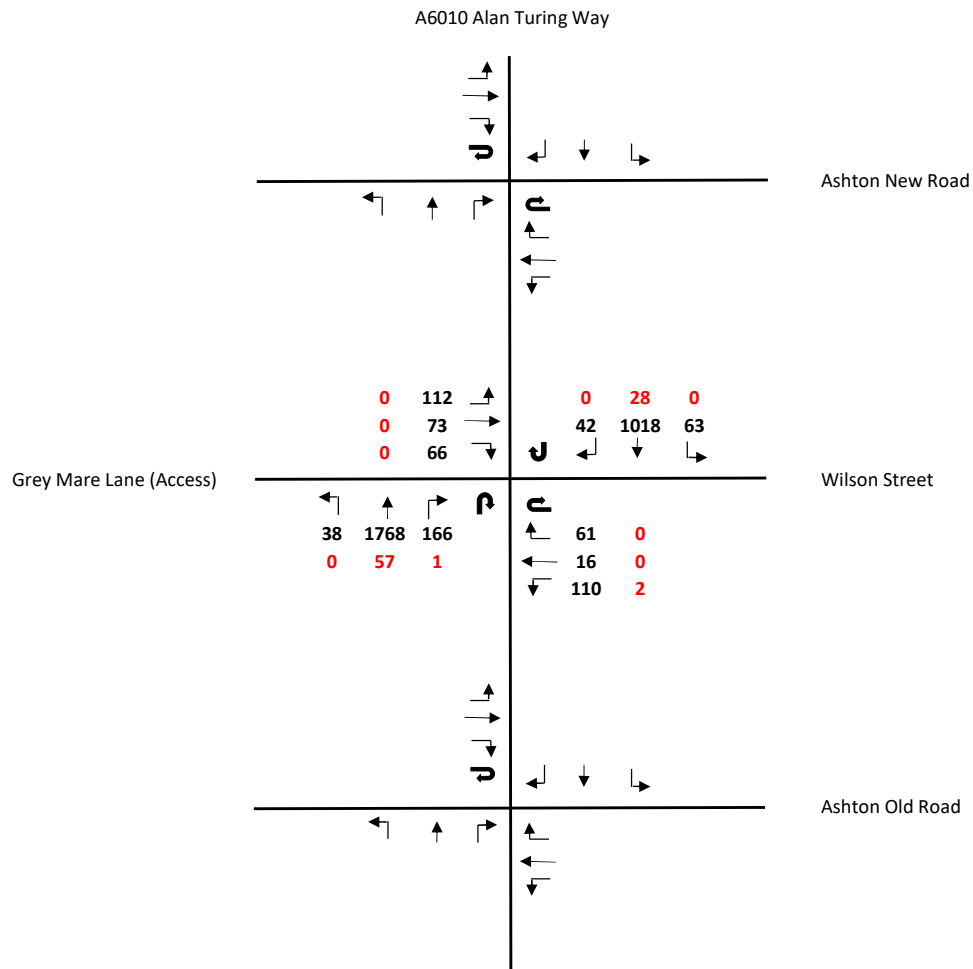
79493 - OurLeague Life National Hub

Figure 13 - 2026 Projected Flows + Development Flows

Weekday AM Peak: 08:00 - 09:00

Notes: PCUs in Black
HGVs in Red





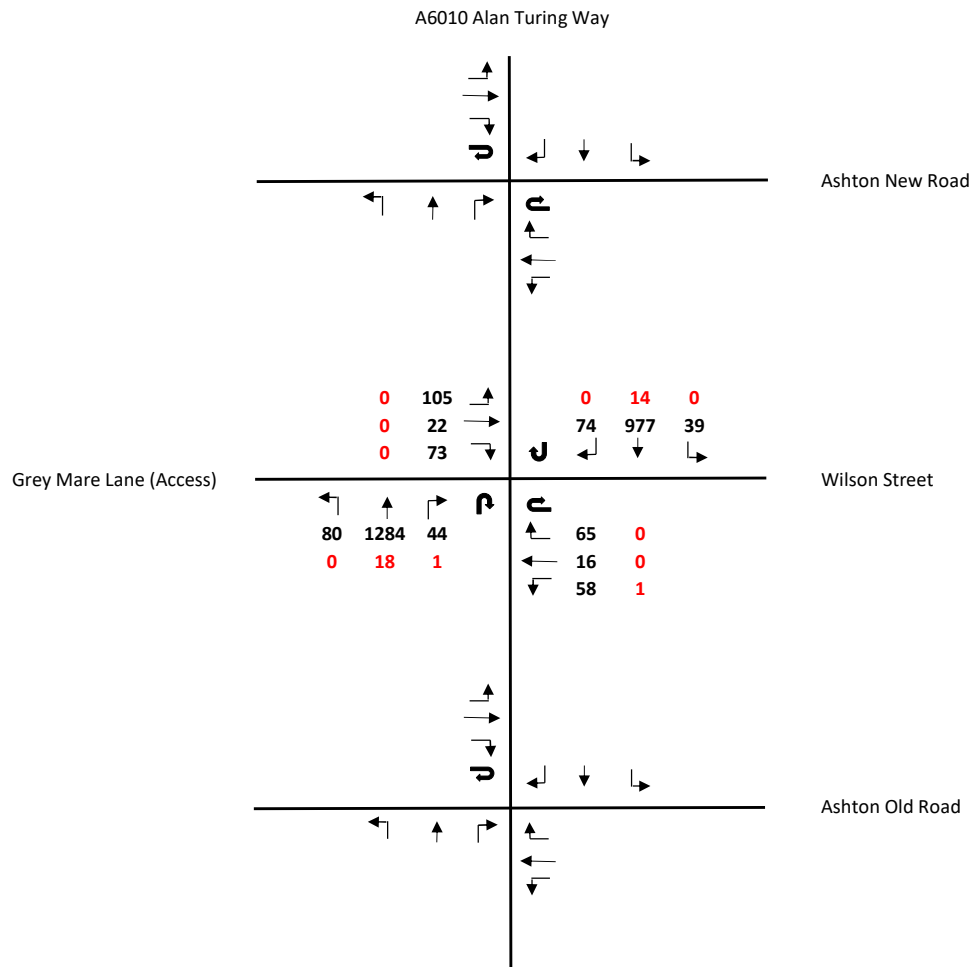
79493 - OurLeague Life National Hub

Figure 14 - 2026 Projected Flows + Development Flows

Weekday PM Peak: 16:30 - 17:30

Notes: PCUs in Black
HGVs in Red





79493 - OurLeague Life National Hub

Figure 15 - 2026 Projected Flows Plus Development Flows

Saturday Peak: 11:45 - 12:45

Notes: PCUs in Black
HGVs in Red



Appendix E – TRICS Data

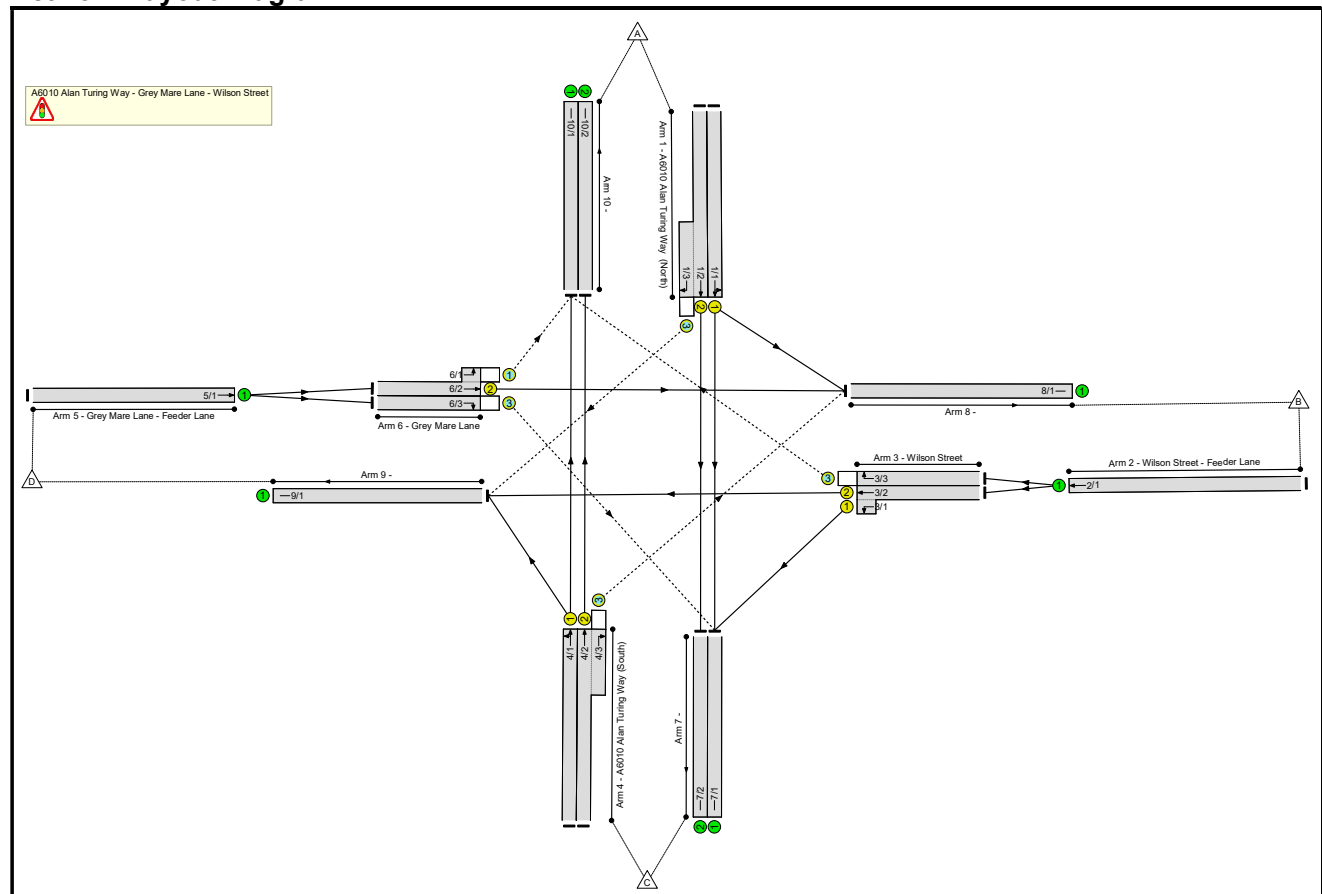
Appendix F – Junction Modelling Outputs

Full Input Data And Results
Full Input Data And Results

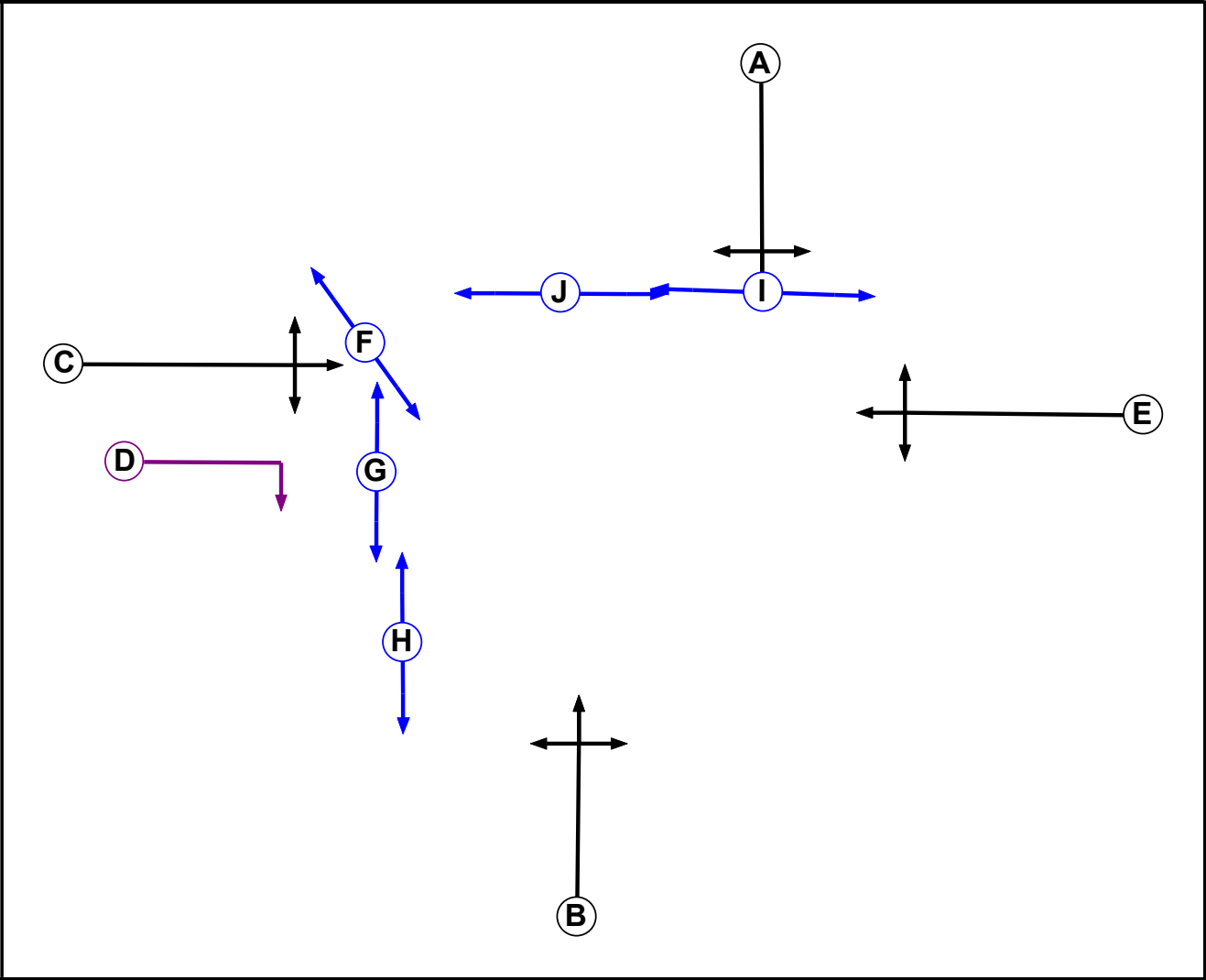
User and Project Details

Project:	OurLeague Life National Hub
Title:	
Location:	
Site Ref(s):	A6010 Alan Turing Way - Grey Mare Lane - Wilson Street
Date Started:	05-10-2021
Date Completed:	06-10-2021
Model Purpose:	Transport Assessment
Checked By:	Alex Vogt
Checked By Date:	06-10-2021
Additional detail:	
File name:	A6010 Alan Turing Way - Grey Mare Lane - Wilson Street Traffic Signals.lsg3x
Author:	Jonathan Ashcroft
Company:	Curtins
Address:	51-55 Tithebarn Street L2 2SB

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Ind. Arrow	C	7	7
E	Traffic		7	7
F	Pedestrian		5	5
G	Pedestrian		5	5
H	Pedestrian		5	5
I	Pedestrian		5	5
J	Pedestrian		5	5

Full Input Data And Results

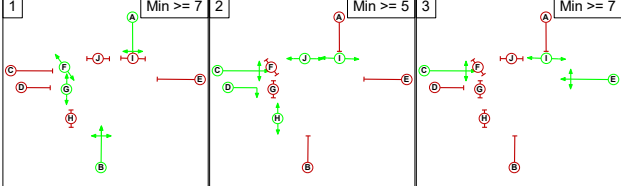
Phase Intergreens Matrix

		Starting Phase									
Terminating Phase		A	B	C	D	E	F	G	H	I	J
	A		-	6	6	7	-	-	11	5	-
	B	-		6	6	6	-	-	8	-	8
	C	7	7		-	-	5	5	-	-	-
	D	7	7	-		3	-	5	-	-	-
	E	7	7	-	5		-	-	9	-	10
	F	-	-	5	-	-		-	-	-	-
	G	-	-	6	6	-	-		-	-	-
	H	5	5	-	-	5	-	-		-	-
	I	10	-	-	-	-	-	-	-		-
	J	-	7	-	-	7	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B F G
2	C D H I J
3	C E I

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	F	Losing	1	1
2	3	D	Losing	4	4
2	3	H	Losing	2	2
3	1	C	Losing	3	3
3	1	E	Losing	3	3

Prohibited Stage Change

		To Stage		
From Stage		1	2	3
	1		11	7
	2	10		7
	3	10	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street											
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)
1/3 (A6010 Alan Turing Way (North))	9/1 (Right)	1439	0	4/1	1.09	All	2.00	-	0.50	2	2.00
				4/2	1.09	All					
3/3 (Wilson Street)	10/1 (Right)	1439	0	6/2	1.09	All	2.00	-	0.50	2	2.00
4/3 (A6010 Alan Turing Way (South))	8/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
				1/2	1.09	All					
6/1 (Grey Mare Lane)	10/1 (Left)	1439	0	3/3	1.09	All	2.00	-	0.50	2	2.00
				4/1	1.09	To 10/1 (Ahead)					
				4/2	1.09	All					
6/3 (Grey Mare Lane)	7/1 (Right)	1439	0	3/1	1.09	All	2.00	-	0.50	2	2.00
				3/2	1.09	All					

Lane Input Data

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A6010 Alan Turing Way (North))	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 7 Ahead	Inf
											Arm 8 Left	13.00
1/2 (A6010 Alan Turing Way (North))	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 7 Ahead	Inf
1/3 (A6010 Alan Turing Way (North))	O	A	2	3	8.0	Geom	-	3.30	0.00	Y	Arm 9 Right	10.50
2/1 (Wilson Street - Feeder Lane)	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 3 Ahead	Inf
3/1 (Wilson Street)	U	E	2	3	2.0	Geom	-	4.00	0.00	Y	Arm 7 Left	25.00
3/2 (Wilson Street)	U	E	2	3	5.0	Geom	-	3.50	0.00	Y	Arm 9 Ahead	Inf
3/3 (Wilson Street)	O	E	2	3	5.0	Geom	-	3.50	0.00	Y	Arm 10 Right	18.00
4/1 (A6010 Alan Turing Way (South))	U	B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 9 Left	12.00
											Arm 10 Ahead	Inf
4/2 (A6010 Alan Turing Way (South))	U	B	2	3	60.0	Geom	-	3.30	0.00	N	Arm 10 Ahead	Inf
4/3 (A6010 Alan Turing Way (South))	O	B	2	3	7.0	Geom	-	3.30	0.00	Y	Arm 8 Right	10.50
5/1 (Grey Mare Lane - Feeder Lane)	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 6 Ahead	Inf
6/1 (Grey Mare Lane)	O	C	2	3	2.0	Geom	-	4.50	0.00	Y	Arm 10 Left	35.00
6/2 (Grey Mare Lane)	U	C	2	3	8.0	Geom	-	3.30	0.00	Y	Arm 8 Ahead	Inf
6/3 (Grey Mare Lane)	O	C D	2	3	8.0	Geom	-	3.30	0.00	Y	Arm 7 Right	18.00
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-

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7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2021 Base Weekday AM Peak'	08:00	09:00	01:00	
2: '2021 Base Weekday PM Peak'	16:30	17:30	01:00	
3: '2021 Base Saturday Peak'	11:45	12:45	01:00	
4: '2021 Base + Dev Weekday AM Peak'	08:00	09:00	01:00	
5: '2021 Base + Dev Weekday PM Peak'	16:30	17:30	01:00	
6: '2021 Base + Dev Saturday Peak'	11:45	12:45	01:00	
7: '2026 Base Weekday AM Peak'	08:00	09:00	01:00	
8: '2026 Base Weekday PM Peak'	16:30	17:30	01:00	
9: '2026 Base Saturday Peak'	11:45	12:45	01:00	
10: '2026 Base + Dev Weekday AM Peak'	08:00	09:00	01:00	
11: '2026 Base + Dev Weekday PM Peak'	16:30	17:30	01:00	
12: '2026 Base + Dev Saturday Peak'	11:45	12:45	01:00	

Scenario 1: '2021 Base Weekday AM Peak' (FG1: '2021 Base Weekday AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	78	1238	36	1352
	B	100	0	232	69	401
	C	1219	110	0	67	1396
	D	68	39	37	0	144
	Tot.	1387	227	1507	172	3293

Traffic Lane Flows

Lane	Scenario 1: 2021 Base Weekday AM Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	635
1/2 (with short)	717(In) 681(Out)
1/3 (short)	36
2/1	401
3/1 (short)	232
3/2 (with short)	301(In) 69(Out)
3/3	100
4/1	638
4/2 (with short)	758(In) 648(Out)
4/3 (short)	110
5/1	144
6/1 (short)	68
6/2 (with short)	107(In) 39(Out)
6/3	37
7/1	826
7/2	681
8/1	227
9/1	172
10/1	739
10/2	648

Full Input Data And Results

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	87.7 %	1918	1918
				Arm 8 Left	13.00	12.3 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	10.5 %	1920	1920
				Arm 10 Ahead	Inf	89.5 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2021 Base Weekday PM Peak' (FG2: '2021 Base Weekday PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	59	952	39	1050
	B	57	0	103	15	175
	C	1652	155	0	35	1842
	D	80	68	20	0	168
	Tot.	1789	282	1075	89	3235

Traffic Lane Flows

Lane	Scenario 2: 2021 Base Weekday PM Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	481
1/2 (with short)	569(In) 530(Out)
1/3 (short)	39
2/1	175
3/1 (short)	103
3/2 (with short)	118(In) 15(Out)
3/3	57
4/1	856
4/2 (with short)	986(In) 831(Out)
4/3 (short)	155
5/1	168
6/1 (short)	80
6/2 (with short)	148(In) 68(Out)
6/3	20
7/1	545
7/2	530
8/1	282
9/1	89
10/1	958
10/2	831

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	87.7 %	1918	1918
				Arm 8 Left	13.00	12.3 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	4.1 %	1935	1935
				Arm 10 Ahead	Inf	95.9 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2021 Base Saturday Peak' (FG3: '2021 Base Saturday Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	36	912	39	987
	B	61	0	54	15	130
	C	1198	41	0	25	1264
	D	68	21	19	0	108
	Tot.	1327	98	985	79	2489

Traffic Lane Flows

Lane	Scenario 3: 2021 Base Saturday Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	449
1/2 (with short)	538(In) 499(Out)
1/3 (short)	39
2/1	130
3/1 (short)	54
3/2 (with short)	69(In) 15(Out)
3/3	61
4/1	589
4/2 (with short)	675(In) 634(Out)
4/3 (short)	41
5/1	108
6/1 (short)	68
6/2 (with short)	89(In) 21(Out)
6/3	19
7/1	486
7/2	499
8/1	98
9/1	79
10/1	693
10/2	634

Full Input Data And Results

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	92.0 %	1927	1927
				Arm 8 Left	13.00	8.0 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	4.2 %	1935	1935
				Arm 10 Ahead	Inf	95.8 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2021 Base + Dev Weekday AM Peak ' (FG4: '2021 Base + Dev Weekday AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	78	1238	63	1379
	B	100	0	232	69	401
	C	1219	110	0	111	1440
	D	68	39	37	0	144
	Tot.	1387	227	1507	243	3364

Traffic Lane Flows

Lane	Scenario 4: 2021 Base + Dev Weekday AM Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	640
1/2 (with short)	739(In) 676(Out)
1/3 (short)	63
2/1	401
3/1 (short)	232
3/2 (with short)	301(In) 69(Out)
3/3	100
4/1	656
4/2 (with short)	784(In) 674(Out)
4/3 (short)	110
5/1	144
6/1 (short)	68
6/2 (with short)	107(In) 39(Out)
6/3	37
7/1	831
7/2	676
8/1	227
9/1	243
10/1	713
10/2	674

Full Input Data And Results

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	87.8 %	1918	1918
				Arm 8 Left	13.00	12.2 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	16.9 %	1905	1905
				Arm 10 Ahead	Inf	83.1 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2021 Base + Dev Weekday PM Peak' (FG5: '2021 Base + Dev Weekday PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	59	952	39	1050
	B	57	0	103	15	175
	C	1652	155	0	35	1842
	D	107	68	65	0	240
	Tot.	1816	282	1120	89	3307

Traffic Lane Flows

Lane	Scenario 5: 2021 Base + Dev Weekday PM Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	481
1/2 (with short)	569(In) 530(Out)
1/3 (short)	39
2/1	175
3/1 (short)	103
3/2 (with short)	118(In) 15(Out)
3/3	57
4/1	856
4/2 (with short)	986(In) 831(Out)
4/3 (short)	155
5/1	240
6/1 (short)	107
6/2 (with short)	175(In) 68(Out)
6/3	65
7/1	590
7/2	530
8/1	282
9/1	89
10/1	985
10/2	831

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	87.7 %	1918	1918
				Arm 8 Left	13.00	12.3 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	4.1 %	1935	1935
				Arm 10 Ahead	Inf	95.9 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '2021 Base + Dev Saturday Peak' (FG6: '2021 Base + Dev Saturday Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	36	912	71	1019
	B	61	0	54	15	130
	C	1198	41	0	78	1317
	D	100	21	72	0	193
	Tot.	1359	98	1038	164	2659

Traffic Lane Flows

Lane	Scenario 6: 2021 Base + Dev Saturday Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	459
1/2 (with short)	560(In) 489(Out)
1/3 (short)	71
2/1	130
3/1 (short)	54
3/2 (with short)	69(In) 15(Out)
3/3	61
4/1	611
4/2 (with short)	706(In) 665(Out)
4/3 (short)	41
5/1	193
6/1 (short)	100
6/2 (with short)	121(In) 21(Out)
6/3	72
7/1	549
7/2	489
8/1	98
9/1	164
10/1	694
10/2	665

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	92.2 %	1928	1928
				Arm 8 Left	13.00	7.8 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	12.8 %	1914	1914
				Arm 10 Ahead	Inf	87.2 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2026 Base Weekday AM Peak' (FG7: '2026 Base Weekday AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	84	1327	39	1450
	B	107	0	248	74	429
	C	1306	118	0	71	1495
	D	73	41	40	0	154
	Tot.	1486	243	1615	184	3528

Traffic Lane Flows

Lane	Scenario 7: 2026 Base Weekday AM Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	684
1/2 (with short)	766(In) 727(Out)
1/3 (short)	39
2/1	429
3/1 (short)	248
3/2 (with short)	322(In) 74(Out)
3/3	107
4/1	688
4/2 (with short)	807(In) 689(Out)
4/3 (short)	118
5/1	154
6/1 (short)	73
6/2 (with short)	114(In) 41(Out)
6/3	40
7/1	888
7/2	727
8/1	243
9/1	184
10/1	797
10/2	689

Full Input Data And Results

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	87.7 %	1918	1918
				Arm 8 Left	13.00	12.3 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	10.3 %	1920	1920
				Arm 10 Ahead	Inf	89.7 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '2026 Base Weekday PM Peak' (FG8: '2026 Base Weekday PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	63	1018	42	1123
	B	61	0	110	16	187
	C	1768	166	0	38	1972
	D	86	73	22	0	181
	Tot.	1915	302	1150	96	3463

Traffic Lane Flows

Lane	Scenario 8: 2026 Base Weekday PM Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	516
1/2 (with short)	607(In) 565(Out)
1/3 (short)	42
2/1	187
3/1 (short)	110
3/2 (with short)	126(In) 16(Out)
3/3	61
4/1	930
4/2 (with short)	1042(In) 876(Out)
4/3 (short)	166
5/1	181
6/1 (short)	86
6/2 (with short)	159(In) 73(Out)
6/3	22
7/1	585
7/2	565
8/1	302
9/1	96
10/1	1039
10/2	876

Full Input Data And Results

Scenario 9: '2026 Base Saturday Peak' (FG9: '2026 Base Saturday Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	39	977	42	1058
	B	65	0	58	16	139
	C	1284	44	0	27	1355
	D	73	22	20	0	115
	Tot.	1422	105	1055	85	2667

Traffic Lane Flows

Lane	Scenario 9: 2026 Base Saturday Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	483
1/2 (with short)	575(In) 533(Out)
1/3 (short)	42
2/1	139
3/1 (short)	58
3/2 (with short)	74(In) 16(Out)
3/3	65
4/1	634
4/2 (with short)	721(In) 677(Out)
4/3 (short)	44
5/1	115
6/1 (short)	73
6/2 (with short)	95(In) 22(Out)
6/3	20
7/1	522
7/2	533
8/1	105
9/1	85
10/1	745
10/2	677

Full Input Data And Results

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	91.9 %	1927	1927
				Arm 8 Left	13.00	8.1 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	4.3 %	1935	1935
				Arm 10 Ahead	Inf	95.7 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '2026 Base + Dev Weekday AM Peak' (FG10: '2026 Base + Dev Weekday AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	84	1327	65	1476
	B	107	0	248	74	429
	C	1306	118	0	116	1540
	D	73	41	40	0	154
	Tot.	1486	243	1615	255	3599

Traffic Lane Flows

Lane	Scenario 10: 2026 Base + Dev Weekday AM Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	689
1/2 (with short)	787(In) 722(Out)
1/3 (short)	65
2/1	429
3/1 (short)	248
3/2 (with short)	322(In) 74(Out)
3/3	107
4/1	705
4/2 (with short)	835(In) 717(Out)
4/3 (short)	118
5/1	154
6/1 (short)	73
6/2 (with short)	114(In) 41(Out)
6/3	40
7/1	893
7/2	722
8/1	243
9/1	255
10/1	769
10/2	717

Full Input Data And Results

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	87.8 %	1918	1918
				Arm 8 Left	13.00	12.2 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	16.5 %	1906	1906
				Arm 10 Ahead	Inf	83.5 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '2026 Base + Dev Weekday PM Peak' (FG11: '2026 Base + Dev Weekday PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	63	1018	42	1123
	B	61	0	110	16	187
	C	1768	166	0	38	1972
	D	112	73	66	0	251
	Tot.	1941	302	1194	96	3533

Traffic Lane Flows

Lane	Scenario 11: 2026 Base + Dev Weekday PM Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	516
1/2 (with short)	607(In) 565(Out)
1/3 (short)	42
2/1	187
3/1 (short)	110
3/2 (with short)	126(In) 16(Out)
3/3	61
4/1	930
4/2 (with short)	1042(In) 876(Out)
4/3 (short)	166
5/1	251
6/1 (short)	112
6/2 (with short)	185(In) 73(Out)
6/3	66
7/1	629
7/2	565
8/1	302
9/1	96
10/1	1065
10/2	876

Full Input Data And Results

Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	87.8 %	1918	1918
				Arm 8 Left	13.00	12.2 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	4.1 %	1935	1935
				Arm 10 Ahead	Inf	95.9 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '2026 Base + Dev Saturday Peak' (FG12: '2026 Base + Dev Saturday Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	39	977	74	1090
	B	65	0	58	16	139
	C	1284	44	0	80	1408
	D	105	22	74	0	201
	Tot.	1454	105	1109	170	2838

Traffic Lane Flows

Lane	Scenario 12: 2026 Base + Dev Saturday Peak
Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	
1/1	495
1/2 (with short)	595(In) 521(Out)
1/3 (short)	74
2/1	139
3/1 (short)	58
3/2 (with short)	74(In) 16(Out)
3/3	65
4/1	656
4/2 (with short)	752(In) 708(Out)
4/3 (short)	44
5/1	201
6/1 (short)	105
6/2 (with short)	127(In) 22(Out)
6/3	74
7/1	588
7/2	521
8/1	105
9/1	170
10/1	746
10/2	708

Full Input Data And Results

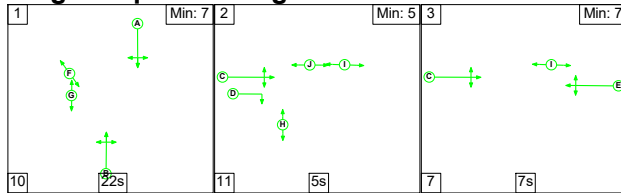
Lane Saturation Flows

Junction: A6010 Alan Turing Way - Grey Mare Lane - Wilson Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 7 Ahead	Inf	92.1 %	1927	1927
				Arm 8 Left	13.00	7.9 %		
1/2 (A6010 Alan Turing Way (North))	3.50	0.00	N	Arm 7 Ahead	Inf	100.0 %	2105	2105
1/3 (A6010 Alan Turing Way (North))	3.30	0.00	Y	Arm 9 Right	10.50	100.0 %	1702	1702
2/1 (Wilson Street - Feeder Lane)	4.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	2015	2015
3/1 (Wilson Street)	4.00	0.00	Y	Arm 7 Left	25.00	100.0 %	1901	1901
3/2 (Wilson Street)	3.50	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1965	1965
3/3 (Wilson Street)	3.50	0.00	Y	Arm 10 Right	18.00	100.0 %	1814	1814
4/1 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 9 Left	12.00	12.2 %	1916	1916
				Arm 10 Ahead	Inf	87.8 %		
4/2 (A6010 Alan Turing Way (South))	3.30	0.00	N	Arm 10 Ahead	Inf	100.0 %	2085	2085
4/3 (A6010 Alan Turing Way (South))	3.30	0.00	Y	Arm 8 Right	10.50	100.0 %	1702	1702
5/1 (Grey Mare Lane - Feeder Lane)	4.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2015	2015
6/1 (Grey Mare Lane)	4.50	0.00	Y	Arm 10 Left	35.00	100.0 %	1980	1980
6/2 (Grey Mare Lane)	3.30	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1945	1945
6/3 (Grey Mare Lane)	3.30	0.00	Y	Arm 7 Right	18.00	100.0 %	1795	1795
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2021 Base Weekday AM Peak' (FG1: '2021 Base Weekday AM Peak', Plan 1: 'Network Control Plan 1')

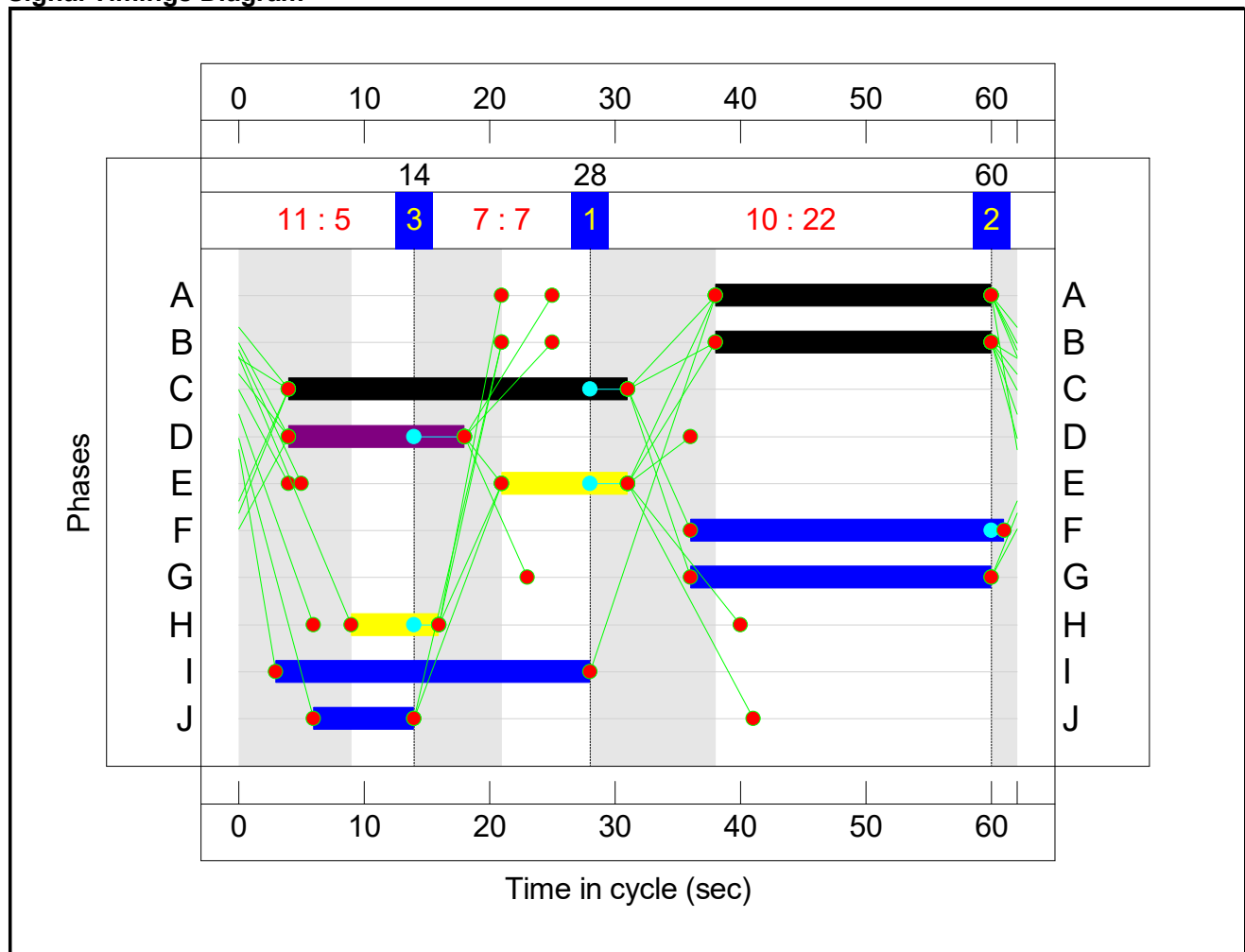
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	22	5	7
Change Point	28	60	14

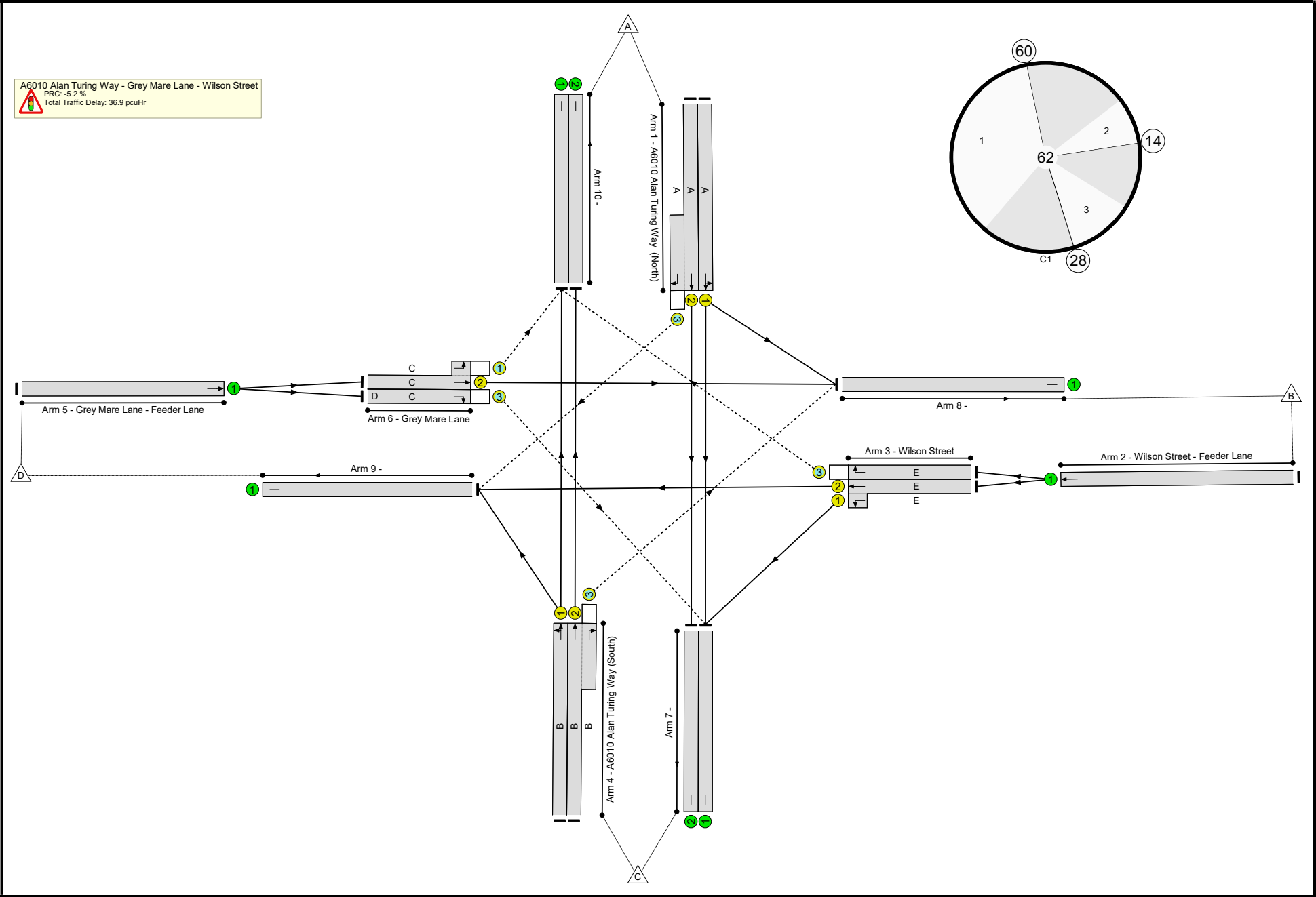
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	94.7%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	94.7%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	22	-	635	1918	712	89.2%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	22	-	717	2105:1702	751+40	90.6 : 90.6%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	401	2015	2015	19.9%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	301	1965:1901	84+283	82.0 : 82.0%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	100	1814	319	31.4%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	22	-	638	1920	712	89.6%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	22	-	758	2085:1702	713+116	90.9 : 94.7%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	144	2015	2015	7.1%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	107	1945:1980	324+564	12.0 : 12.0%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	37	1795	550	6.7%
7/1		U	N/A	N/A	-		-	-	-	826	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	681	Inf	Inf	0.0%

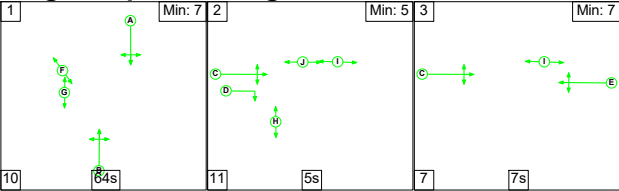
Full Input Data And Results

8/1		U	N/A	N/A	-		-	-	-	227	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	172	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	739	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	648	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	-	-	124	83	144	16.8	19.4	0.7	36.9	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	124	83	144	16.8	19.4	0.7	36.9	-	-	-	-
1/1	635	635	-	-	-	3.2	3.8	-	7.0	39.8	10.2	3.8	14.0
1/2+1/3	717	717	2	0	34	3.6	4.3	0.2	8.1	40.7	11.1	4.3	15.5
2/1	401	401	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/2+3/1	301	301	-	-	-	2.0	2.1	-	4.2	49.7	4.3	2.1	6.5
3/3	100	100	100	0	0	0.6	0.2	0.0	0.9	30.8	1.5	0.2	1.7
4/1	638	638	-	-	-	3.3	3.9	-	7.1	40.3	10.3	3.9	14.2
4/2+4/3	758	758	0	0	110	3.7	4.7	0.5	9.0	42.6	11.0	4.7	15.7
5/1	144	144	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/2+6/1	107	107	14	54	0	0.3	0.1	0.0	0.4	12.1	0.7	0.1	0.7
6/3	37	37	8	29	0	0.1	0.0	0.0	0.1	14.0	0.3	0.0	0.4
7/1	826	826	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	681	681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	227	227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	172	172	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	739	739	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	648	648	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -5.2 Total Delay for Signalled Lanes (pcuHr): 36.74 Cycle Time (s): 62 PRC Over All Lanes (%): -5.2 Total Delay Over All Lanes(pcuHr): 36.90													

Full Input Data And Results

Scenario 2: '2021 Base Weekday PM Peak' (FG2: '2021 Base Weekday PM Peak', Plan 1: 'Network Control Plan 1')

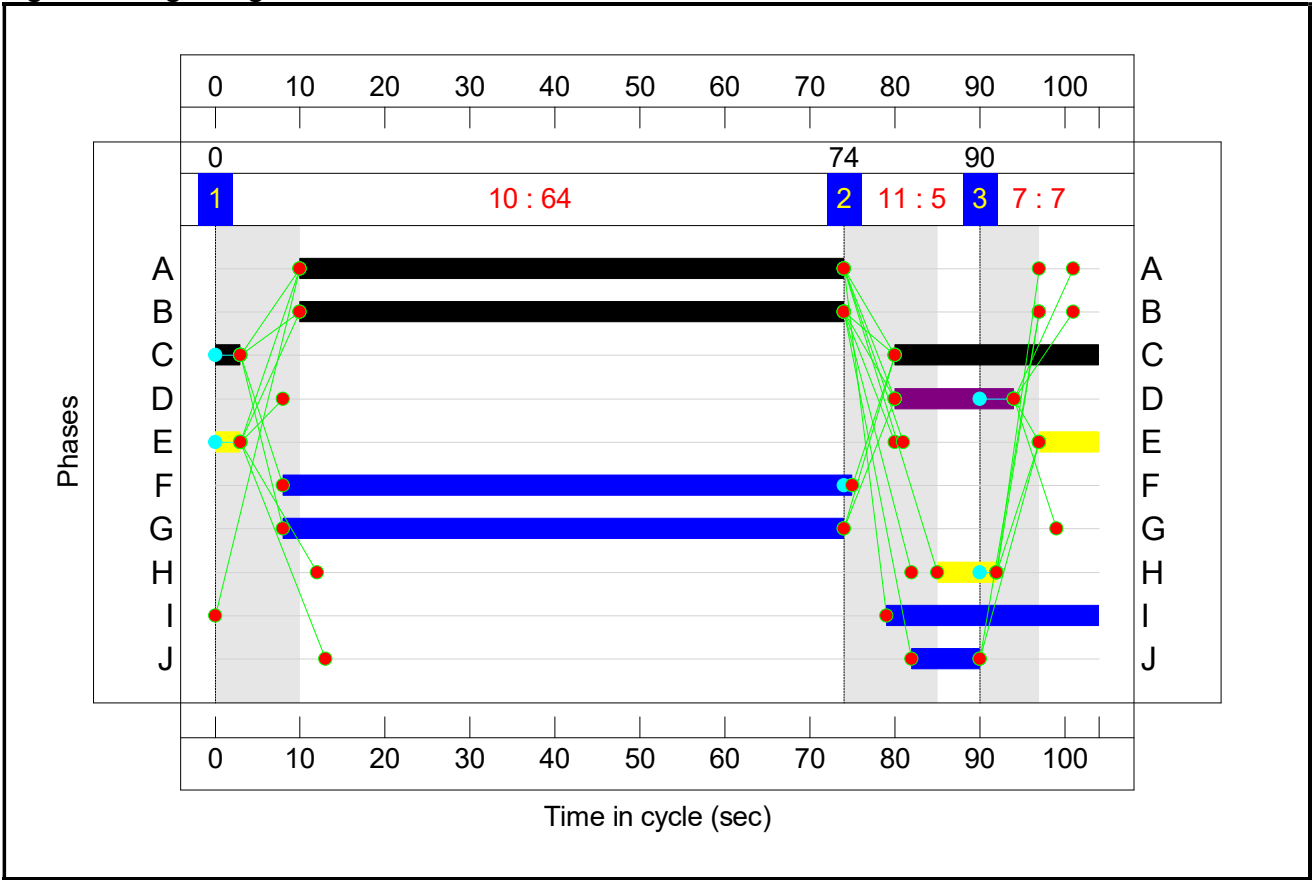
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	64	5	7
Change Point	0	74	90

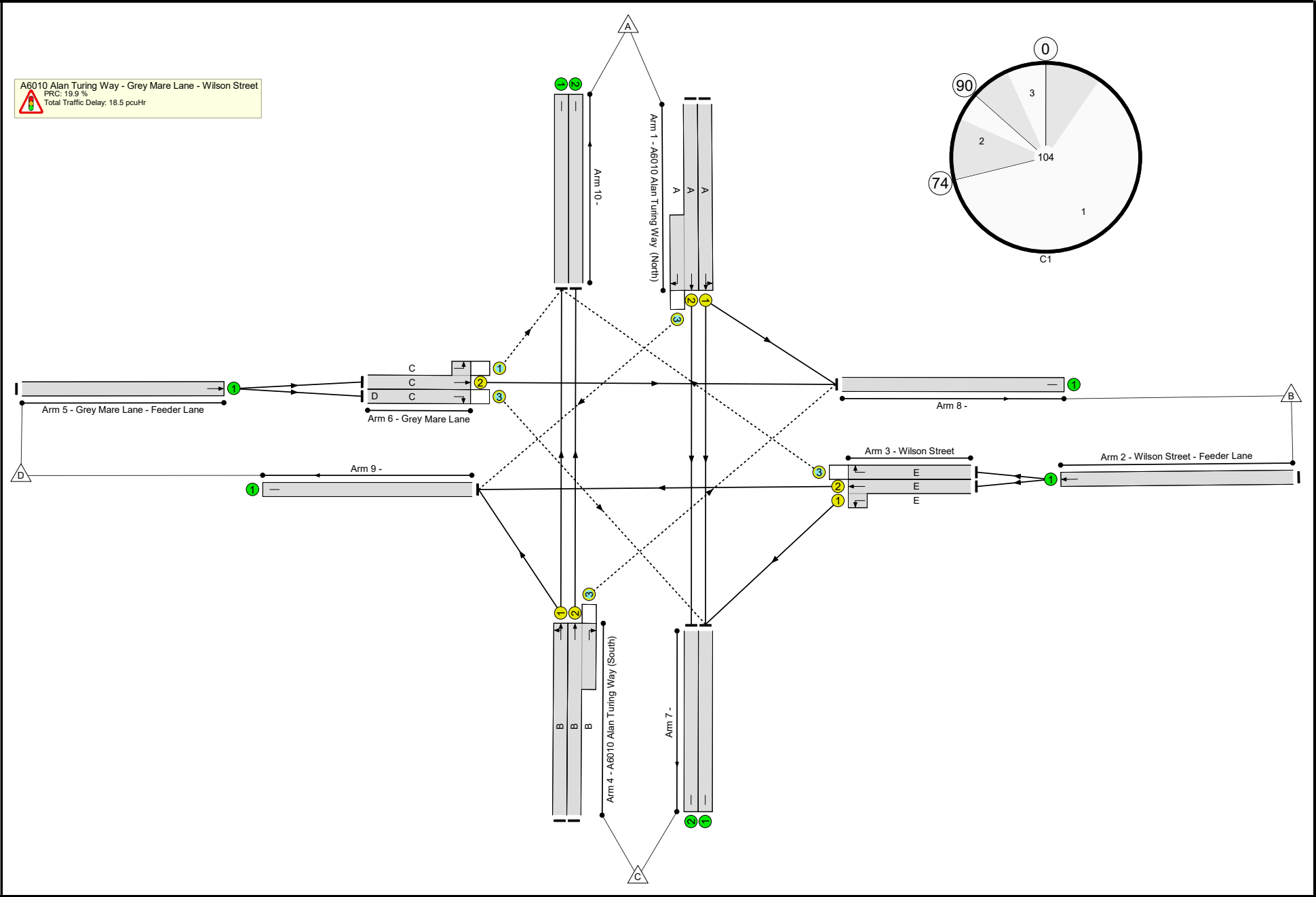
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	75.1%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	75.1%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	64	-	481	1918	1199	40.1%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	64	-	569	2105:1702	1223+69	43.3 : 56.3%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	175	2015	2015	8.7%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	118	1965:1901	26+181	56.8 : 56.8%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	57	1814	187	30.4%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	64	-	856	1935	1209	70.8%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	64	-	986	2085:1702	1107+207	75.1 : 75.1%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	168	2015	2015	8.3%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	148	1945:1980	253+297	26.9 : 26.9%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	20	1795	345	5.8%
7/1		U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	530	Inf	Inf	0.0%

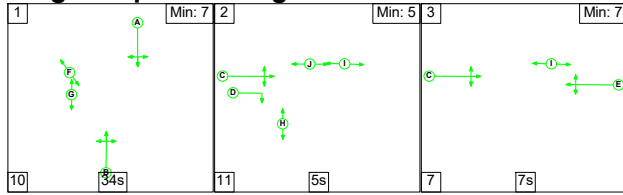
Full Input Data And Results

8/1		U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	89	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	958	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	831	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	-	-	225	88	39	12.9	4.6	1.1	18.5	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	225	88	39	12.9	4.6	1.1	18.5	-	-	-	-
1/1	481	481	-	-	-	1.3	0.3	-	1.6	12.3	6.9	0.3	7.3
1/2+1/3	569	569	0	0	39	1.5	0.4	0.5	2.4	15.2	7.7	0.4	8.0
2/1	175	175	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/2+3/1	118	118	-	-	-	1.4	0.6	-	2.1	63.7	2.9	0.6	3.6
3/3	57	57	57	0	0	0.7	0.2	0.0	0.9	57.2	1.5	0.2	1.7
4/1	856	856	-	-	-	3.1	1.2	-	4.3	18.2	16.4	1.2	17.6
4/2+4/3	986	986	155	0	0	3.4	1.5	0.6	5.5	20.1	17.9	1.5	19.4
5/1	168	168	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/2+6/1	148	148	10	70	0	1.2	0.2	0.0	1.4	33.4	1.8	0.2	1.9
6/3	20	20	3	18	0	0.2	0.0	0.0	0.2	34.0	0.4	0.0	0.5
7/1	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	530	530	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	282	282	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	89	89	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	958	958	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	831	831	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 19.9 Total Delay for Signalled Lanes (pcuHr): 18.43 Cycle Time (s): 104 PRC Over All Lanes (%): 19.9 Total Delay Over All Lanes(pcuHr): 18.52													

Full Input Data And Results

Scenario 3: '2021 Base Saturday Peak' (FG3: '2021 Base Saturday Peak', Plan 1: 'Network Control Plan 1')

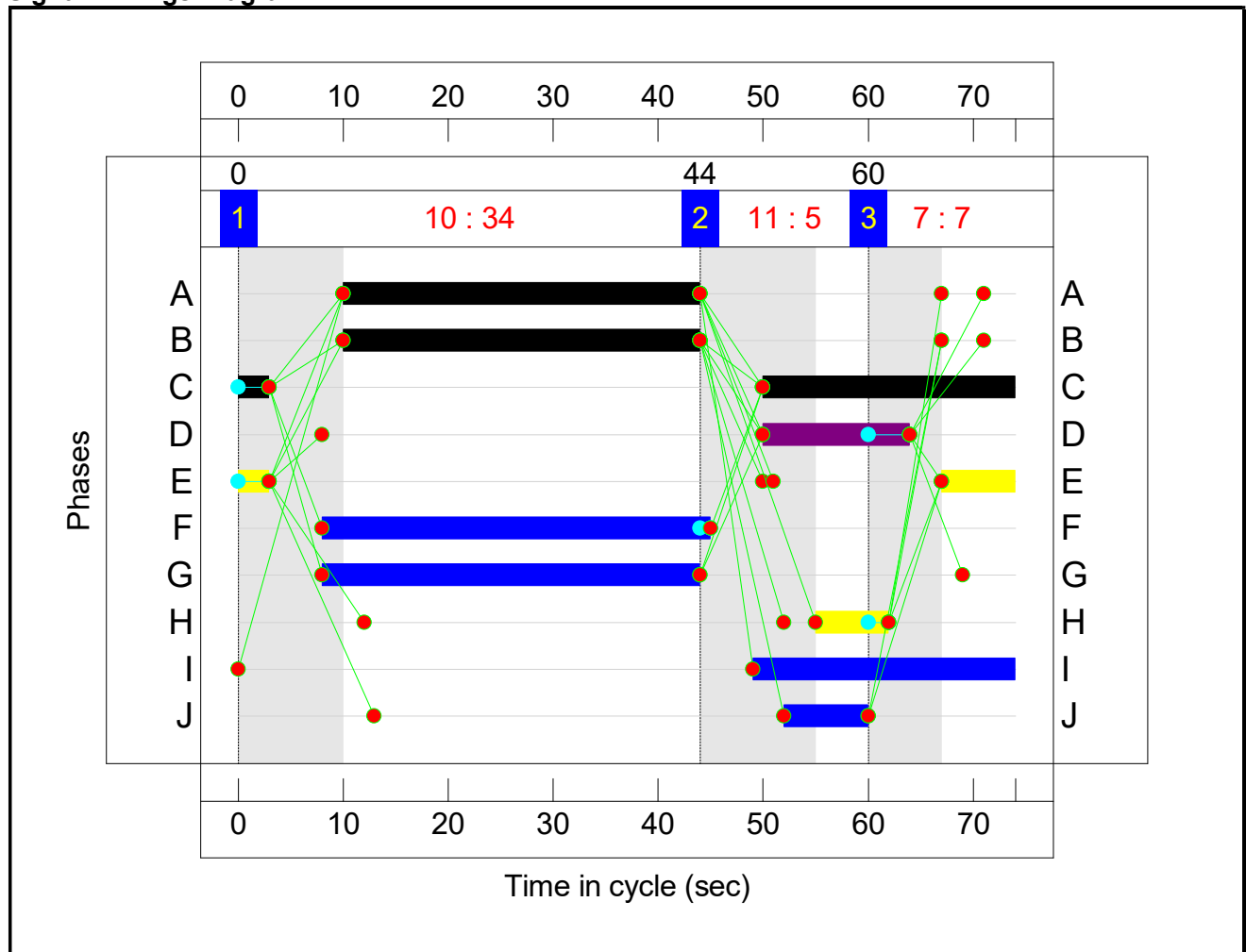
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	34	5	7
Change Point	0	44	60

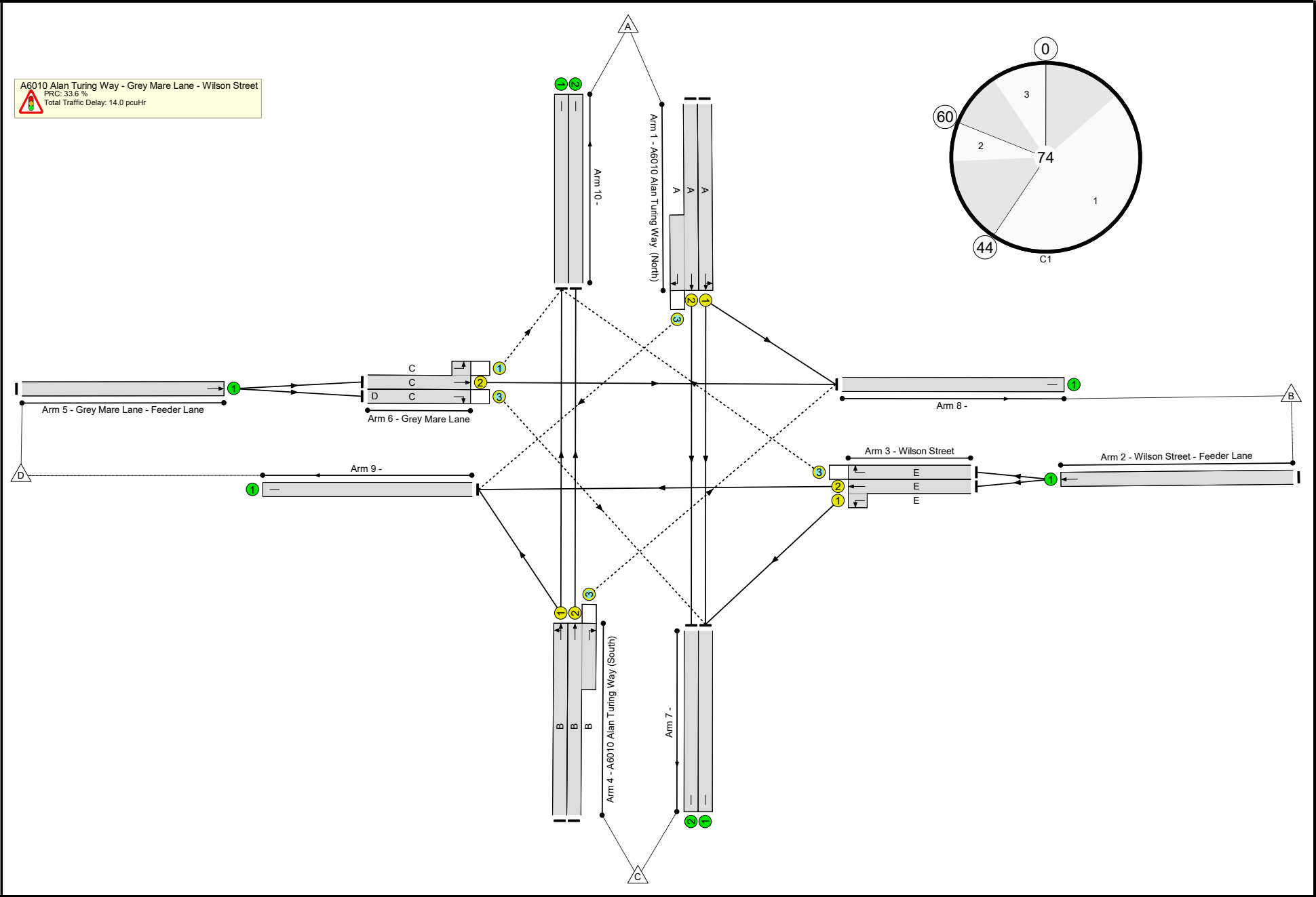
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	67.4%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	67.4%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	34	-	449	1927	911	49.3%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	34	-	538	2105:1702	934+73	53.4 : 53.4%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	130	2015	2015	6.5%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	69	1965:1901	66+239	22.6 : 22.6%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	61	1814	270	22.6%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	34	-	589	1935	915	64.4%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	34	-	675	2085:1702	941+61	67.4 : 67.4%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	108	2015	2015	5.4%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	89	1945:1980	165+533	12.7 : 12.7%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	19	1795	582	3.3%
7/1		U	N/A	N/A	-		-	-	-	486	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%

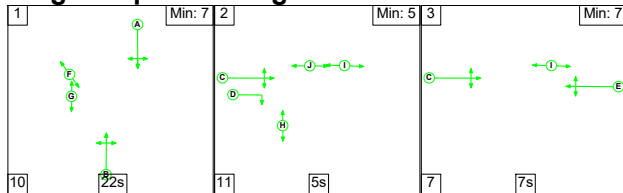
Full Input Data And Results

8/1		U	N/A	N/A	-		-	-	-	98	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	79	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	693	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	634	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	-	-	142	72	15	10.3	3.4	0.3	14.0	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	142	72	15	10.3	3.4	0.3	14.0	-	-	-	-
1/1	449	449	-	-	-	1.7	0.5	-	2.2	17.3	6.2	0.5	6.7
1/2+1/3	538	538	24	0	15	2.0	0.6	0.2	2.8	18.6	7.1	0.6	7.6
2/1	130	130	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/2+3/1	69	69	-	-	-	0.5	0.1	-	0.7	35.2	1.0	0.1	1.1
3/3	61	61	61	0	0	0.5	0.1	0.0	0.6	36.7	1.1	0.1	1.2
4/1	589	589	-	-	-	2.4	0.9	-	3.3	20.3	9.2	0.9	10.1
4/2+4/3	675	675	41	0	0	2.7	1.0	0.1	3.9	20.6	10.0	1.0	11.1
5/1	108	108	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
6/2+6/1	89	89	12	56	0	0.4	0.1	0.0	0.4	17.8	0.9	0.1	1.0
6/3	19	19	3	16	0	0.1	0.0	0.0	0.1	17.9	0.2	0.0	0.3
7/1	486	486	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	98	98	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	79	79	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	693	693	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 33.6 Total Delay for Signalled Lanes (pcuHr): 13.95 Cycle Time (s): 74 PRC Over All Lanes (%): 33.6 Total Delay Over All Lanes(pcuHr): 14.01													

Full Input Data And Results

Scenario 4: '2021 Base + Dev Weekday AM Peak ' (FG4: '2021 Base + Dev Weekday AM Peak', Plan 1: 'Network Control Plan 1')

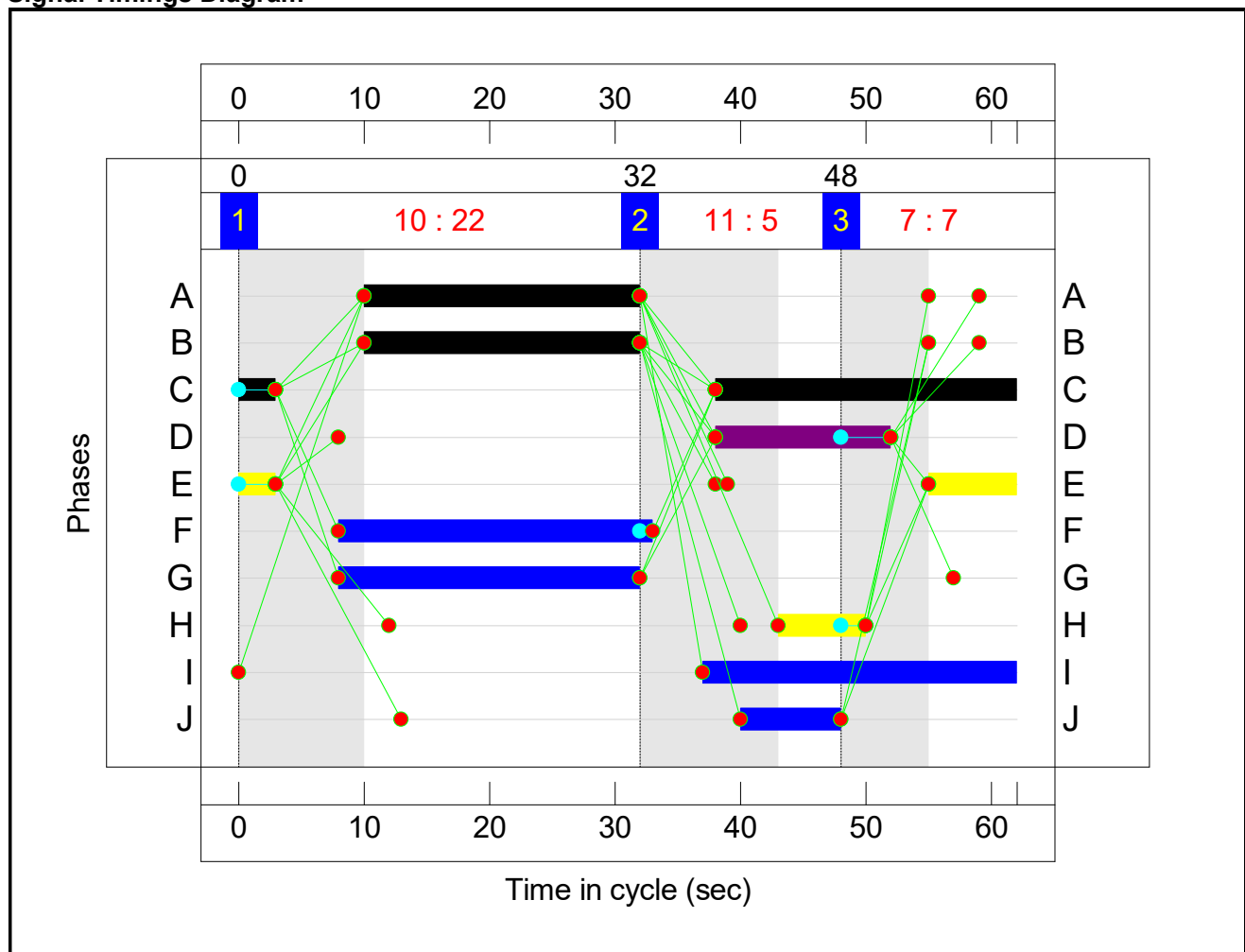
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	22	5	7
Change Point	0	32	48

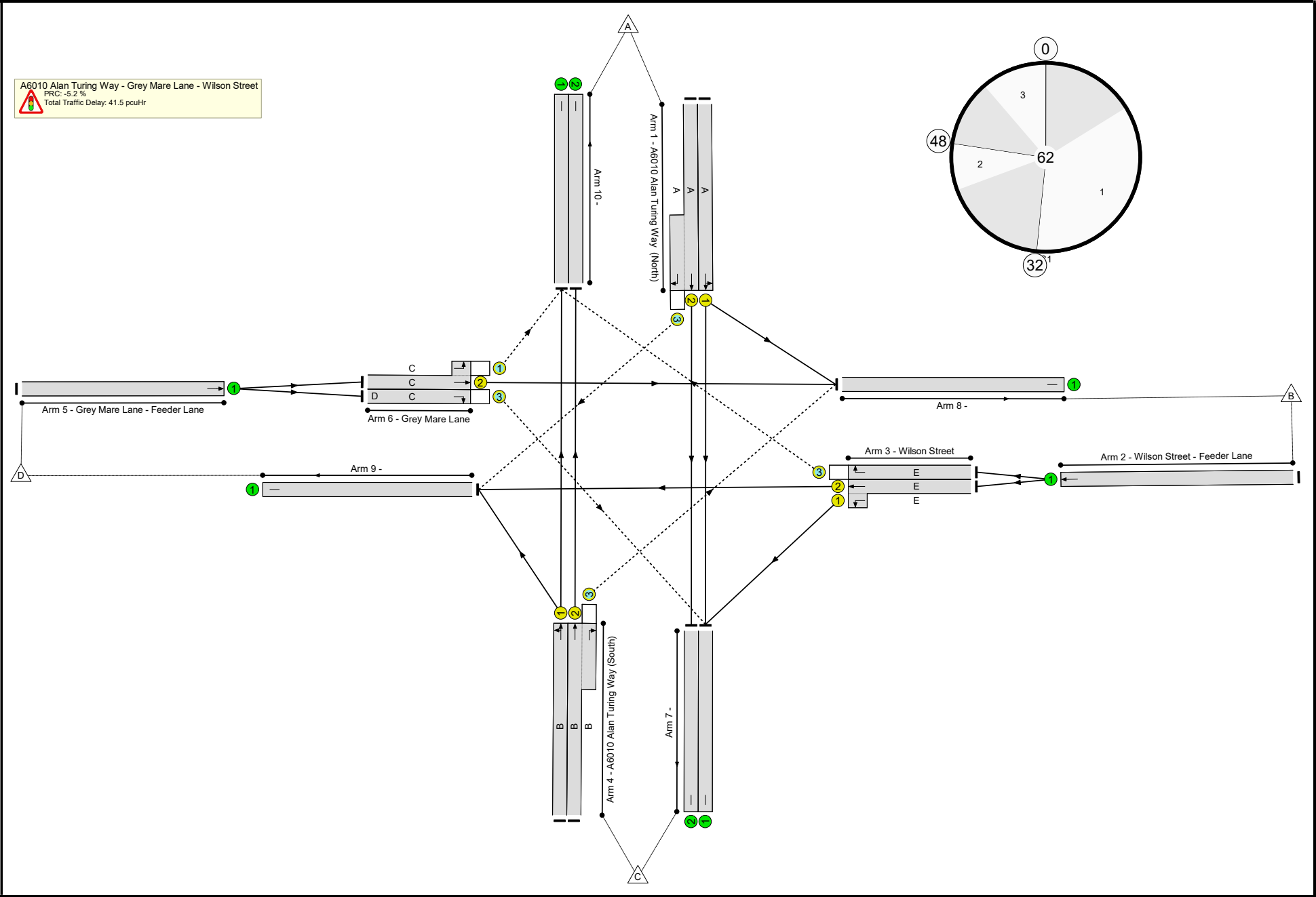
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

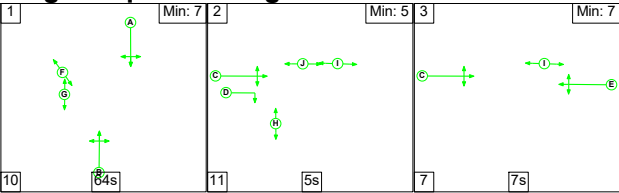
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	94.7%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	94.7%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	22	-	640	1918	712	89.9%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	22	-	739	2105:1702	739+69	91.5 : 91.5%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	401	2015	2015	19.9%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	301	1965:1901	84+283	82.0 : 82.0%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	100	1814	319	31.4%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	22	-	656	1905	707	92.8%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	22	-	784	2085:1702	715+116	94.3 : 94.7%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	144	2015	2015	7.1%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	107	1945:1980	324+564	12.0 : 12.0%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	37	1795	550	6.7%
7/1		U	N/A	N/A	-		-	-	-	831	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	676	Inf	Inf	0.0%

Full Input Data And Results

Main Input Data and Results													
8/1		U	N/A	N/A	-		-	-	-	227	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	674	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	-	-	122	83	173	17.3	23.3	0.9	41.5	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	122	83	173	17.3	23.3	0.9	41.5	-	-	-	-
1/1	640	640	-	-	-	3.3	4.0	-	7.3	41.0	10.3	4.0	14.3
1/2+1/3	739	739	0	0	63	3.7	4.7	0.3	8.7	42.5	11.2	4.7	15.9
2/1	401	401	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/2+3/1	301	301	-	-	-	2.0	2.1	-	4.2	49.7	4.3	2.1	6.5
3/3	100	100	100	0	0	0.6	0.2	0.0	0.9	30.8	1.5	0.2	1.7
4/1	656	656	-	-	-	3.4	5.3	-	8.8	48.0	10.8	5.3	16.1
4/2+4/3	784	784	0	0	110	3.9	6.5	0.5	11.0	50.6	11.7	6.5	18.2
5/1	144	144	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/2+6/1	107	107	14	54	0	0.3	0.1	0.0	0.4	12.1	0.7	0.1	0.7
6/3	37	37	8	29	0	0.1	0.0	0.0	0.1	14.0	0.3	0.0	0.4
7/1	831	831	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	676	676	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	227	227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	243	243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	674	674	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalised Lanes (%): -5.2 Total Delay for Signalised Lanes (pcuHr): 41.31 Cycle Time (s): 62													
PRC Over All Lanes (%): -5.2 Total Delay Over All Lanes(pcuHr): 41.47													

Full Input Data And Results
Scenario 5: '2021 Base + Dev Weekday PM Peak' (FG5: '2021 Base + Dev Weekday PM Peak', Plan 1: 'Network Control Plan 1')

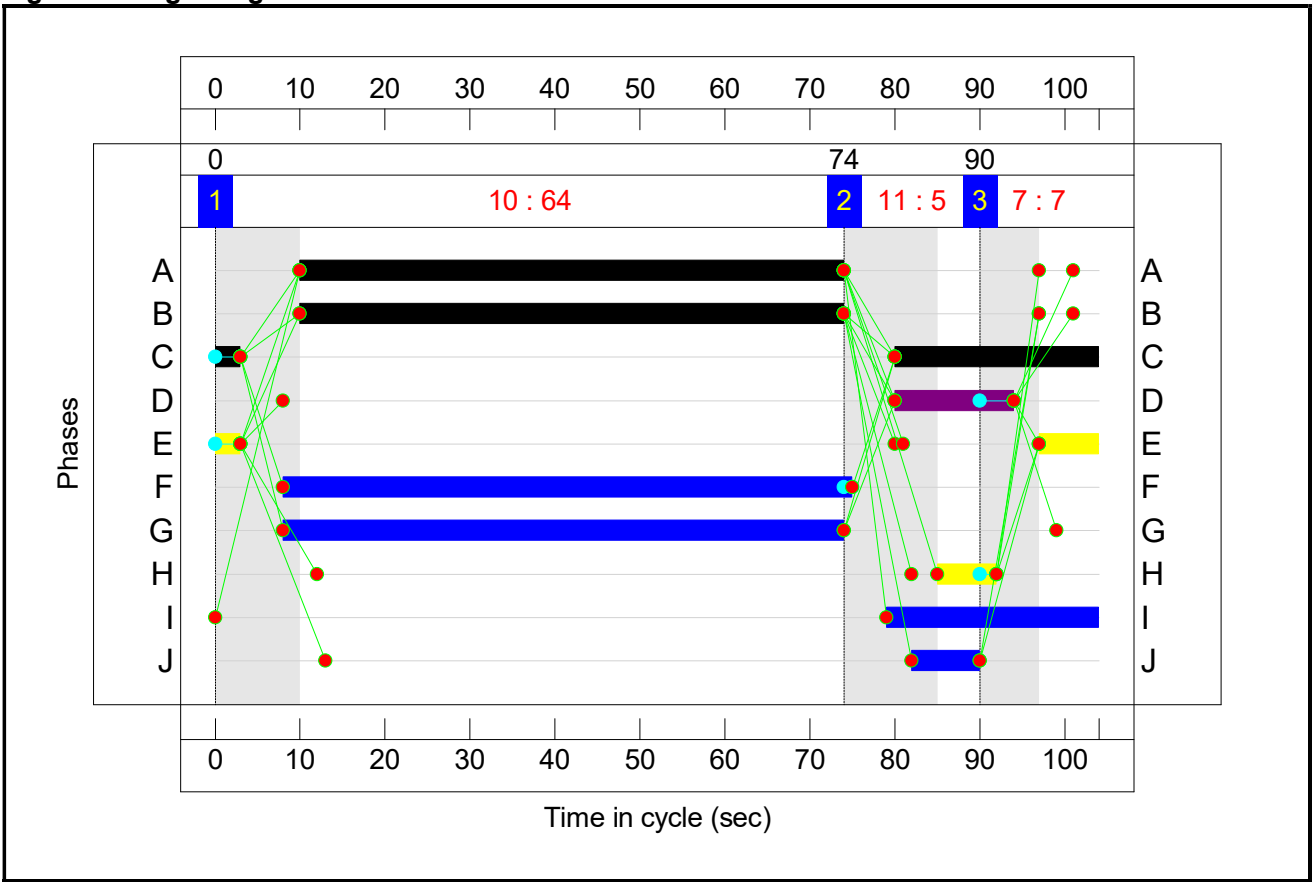
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	64	5	7
Change Point	0	74	90

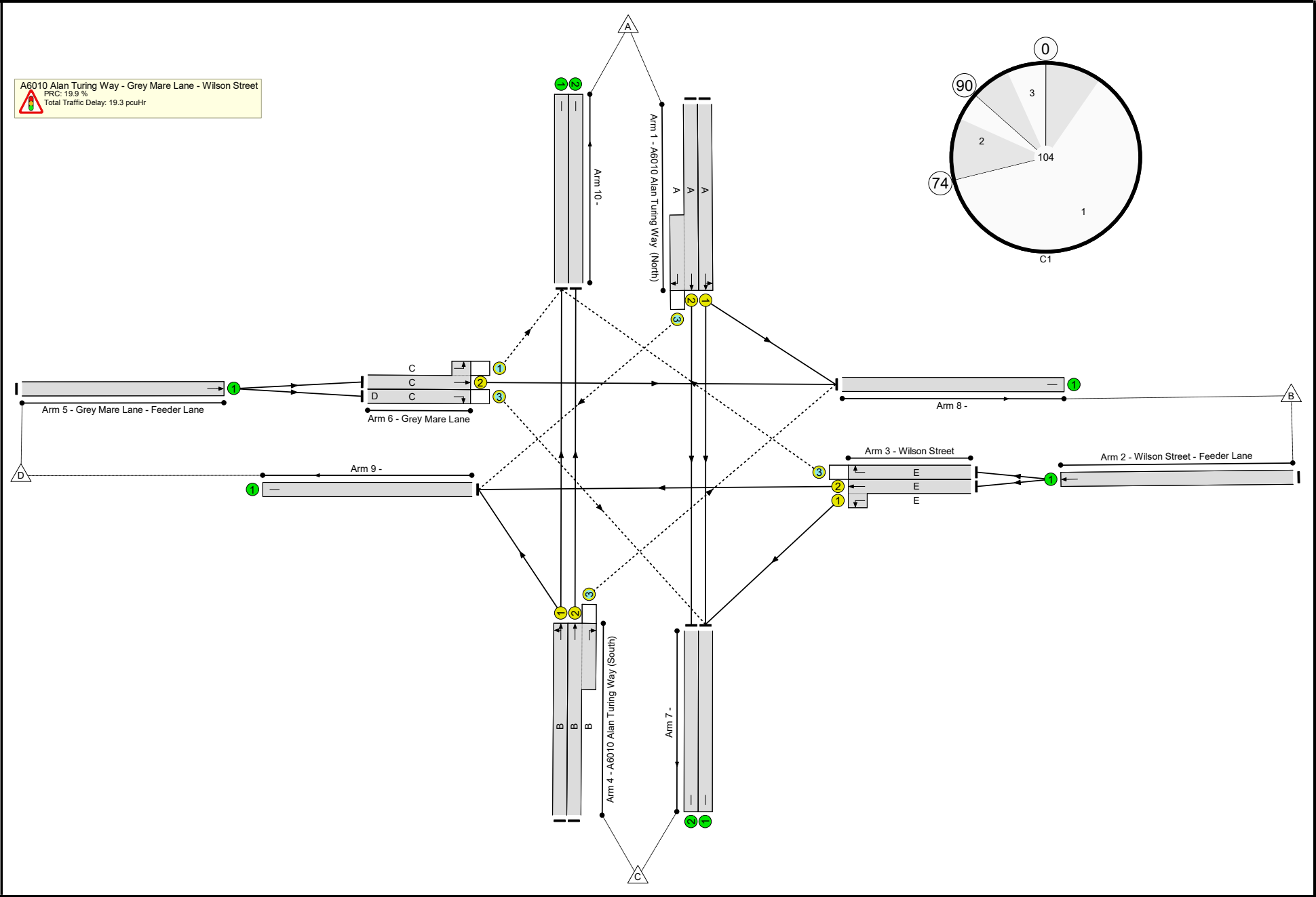
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	75.1%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	75.1%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	64	-	481	1918	1199	40.1%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	64	-	569	2105:1702	1223+69	43.3 : 56.3%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	175	2015	2015	8.7%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	118	1965:1901	26+181	56.8 : 56.8%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	57	1814	187	30.4%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	64	-	856	1935	1209	70.8%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	64	-	986	2085:1702	1107+207	75.1 : 75.1%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	240	2015	2015	11.9%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	175	1945:1980	198+312	34.3 : 34.3%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	65	1795	345	18.8%
7/1		U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	530	Inf	Inf	0.0%

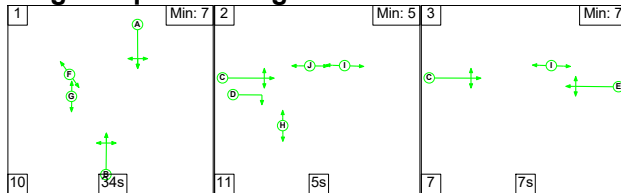
Full Input Data And Results

8/1		U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	89	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	985	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	831	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	-	-	234	151	39	13.5	4.8	1.1	19.3	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	234	151	39	13.5	4.8	1.1	19.3	-	-	-	-
1/1	481	481	-	-	-	1.3	0.3	-	1.6	12.3	6.9	0.3	7.3
1/2+1/3	569	569	0	0	39	1.5	0.4	0.5	2.4	15.2	7.7	0.4	8.0
2/1	175	175	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/2+3/1	118	118	-	-	-	1.4	0.6	-	2.1	63.7	2.9	0.6	3.6
3/3	57	57	57	0	0	0.7	0.2	0.0	0.9	57.2	1.5	0.2	1.7
4/1	856	856	-	-	-	3.1	1.2	-	4.3	18.2	16.4	1.2	17.6
4/2+4/3	986	986	155	0	0	3.4	1.5	0.6	5.5	20.1	17.9	1.5	19.4
5/1	240	240	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
6/2+6/1	175	175	13	94	0	1.4	0.3	0.0	1.7	34.7	2.7	0.3	2.9
6/3	65	65	8	57	0	0.5	0.1	0.0	0.6	35.6	1.4	0.1	1.5
7/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	530	530	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	282	282	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	89	89	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	985	985	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	831	831	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 19.9 Total Delay for Signalled Lanes (pcuHr): 19.20 Cycle Time (s): 104 PRC Over All Lanes (%): 19.9 Total Delay Over All Lanes(pcuHr): 19.31													

Full Input Data And Results

Scenario 6: '2021 Base + Dev Saturday Peak' (FG6: '2021 Base + Dev Saturday Peak', Plan 1: 'Network Control Plan 1')

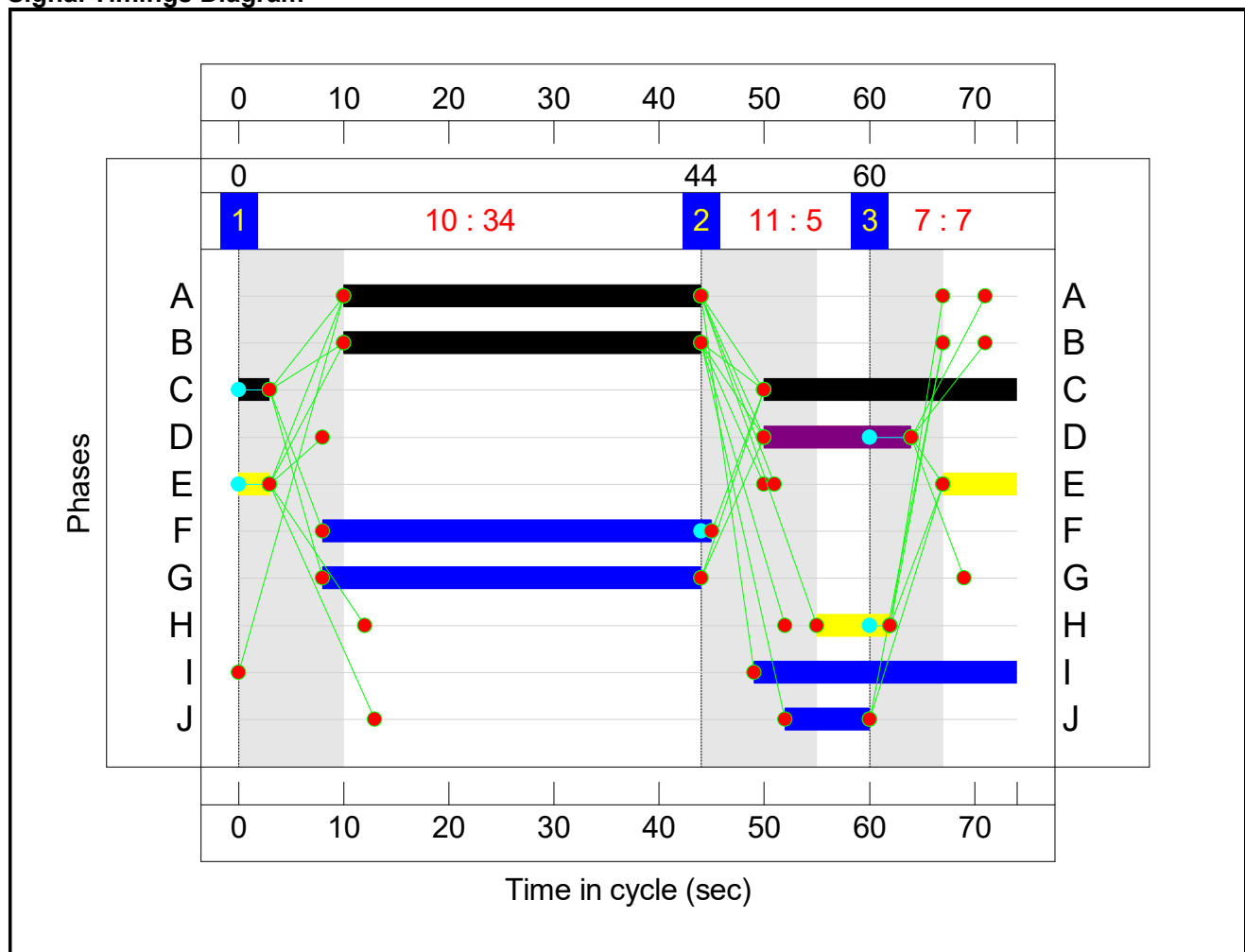
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	34	5	7
Change Point	0	44	60

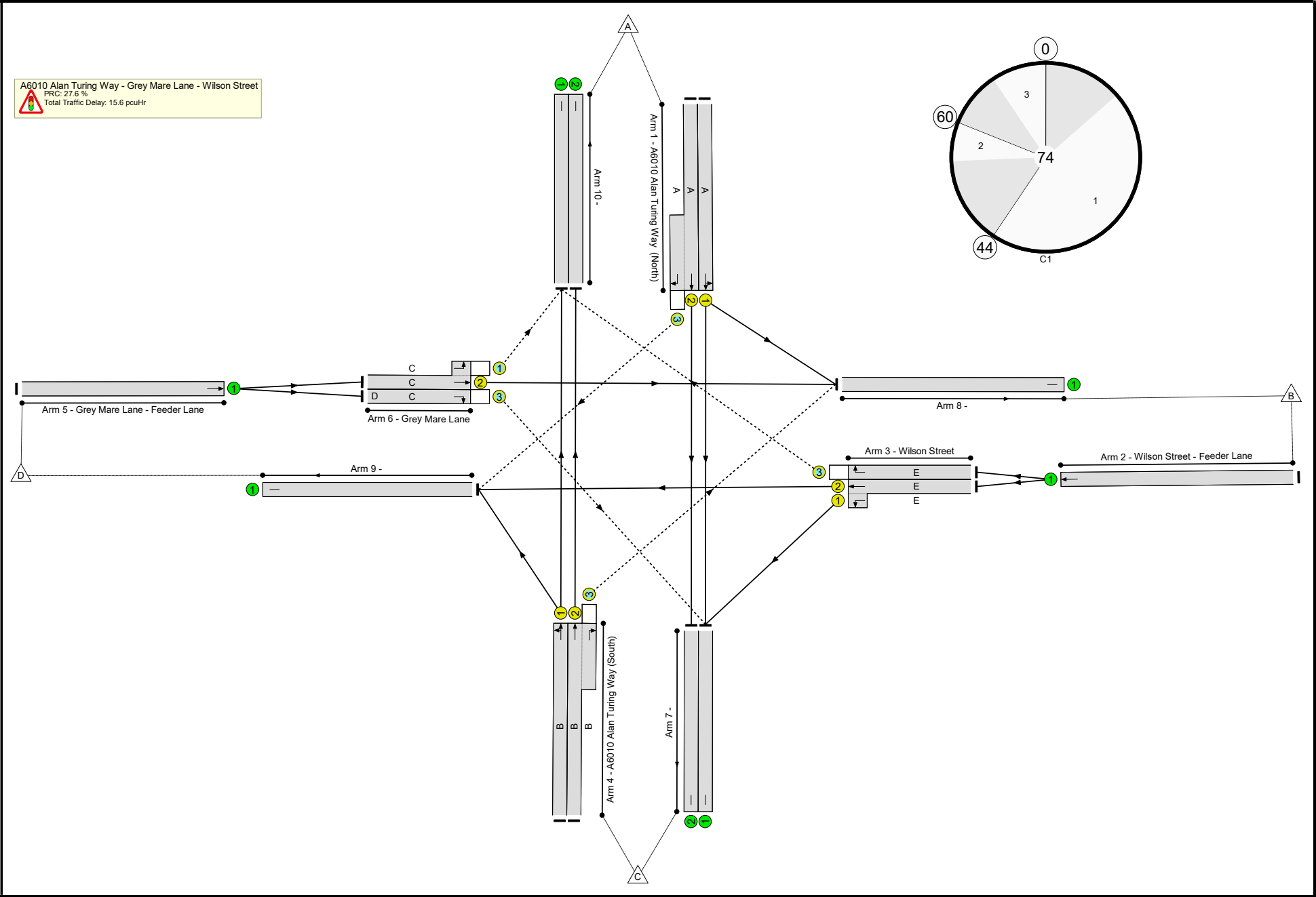
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	70.5%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	70.5%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	34	-	459	1928	912	50.3%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	34	-	560	2105:1702	896+106	54.6 : 66.7%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	130	2015	2015	6.5%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	69	1965:1901	66+239	22.6 : 22.6%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	61	1814	270	22.6%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	34	-	611	1914	905	67.5%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	34	-	706	2085:1702	943+58	70.5 : 70.5%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	193	2015	2015	9.6%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	121	1945:1980	116+552	18.1 : 18.1%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	72	1795	582	12.4%
7/1		U	N/A	N/A	-		-	-	-	549	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%

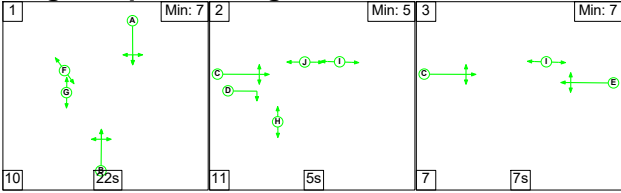
Full Input Data And Results

All Input Data and Results													
8/1		U	N/A	N/A	-		-	-	-	98	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	164	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	694	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	665	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	-	-	143	142	61	11.1	3.9	0.6	15.6	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	143	142	61	11.1	3.9	0.6	15.6	-	-	-	-
1/1	459	459	-	-	-	1.7	0.5	-	2.2	17.5	6.5	0.5	7.0
1/2+1/3	560	560	10	0	61	2.0	0.6	0.5	3.2	20.4	6.8	0.6	7.4
2/1	130	130	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/2+3/1	69	69	-	-	-	0.5	0.1	-	0.7	35.2	1.0	0.1	1.1
3/3	61	61	61	0	0	0.5	0.1	0.0	0.6	36.7	1.1	0.1	1.2
4/1	611	611	-	-	-	2.6	1.0	-	3.6	21.2	9.7	1.0	10.7
4/2+4/3	706	706	41	0	0	2.9	1.2	0.1	4.2	21.5	10.7	1.2	11.9
5/1	193	193	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
6/2+6/1	121	121	18	82	0	0.5	0.1	0.0	0.6	18.4	1.3	0.1	1.4
6/3	72	72	13	59	0	0.3	0.1	0.0	0.4	18.6	0.9	0.1	1.0
7/1	549	549	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	98	98	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	164	164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	694	694	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	665	665	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 27.6 Total Delay for Signalled Lanes (pcuHr): 15.50 Cycle Time (s): 74													
PRC Over All Lanes (%): 27.6 Total Delay Over All Lanes(pcuHr): 15.58													

Full Input Data And Results

Scenario 7: '2026 Base Weekday AM Peak' (FG7: '2026 Base Weekday AM Peak', Plan 1: 'Network Control Plan 1')

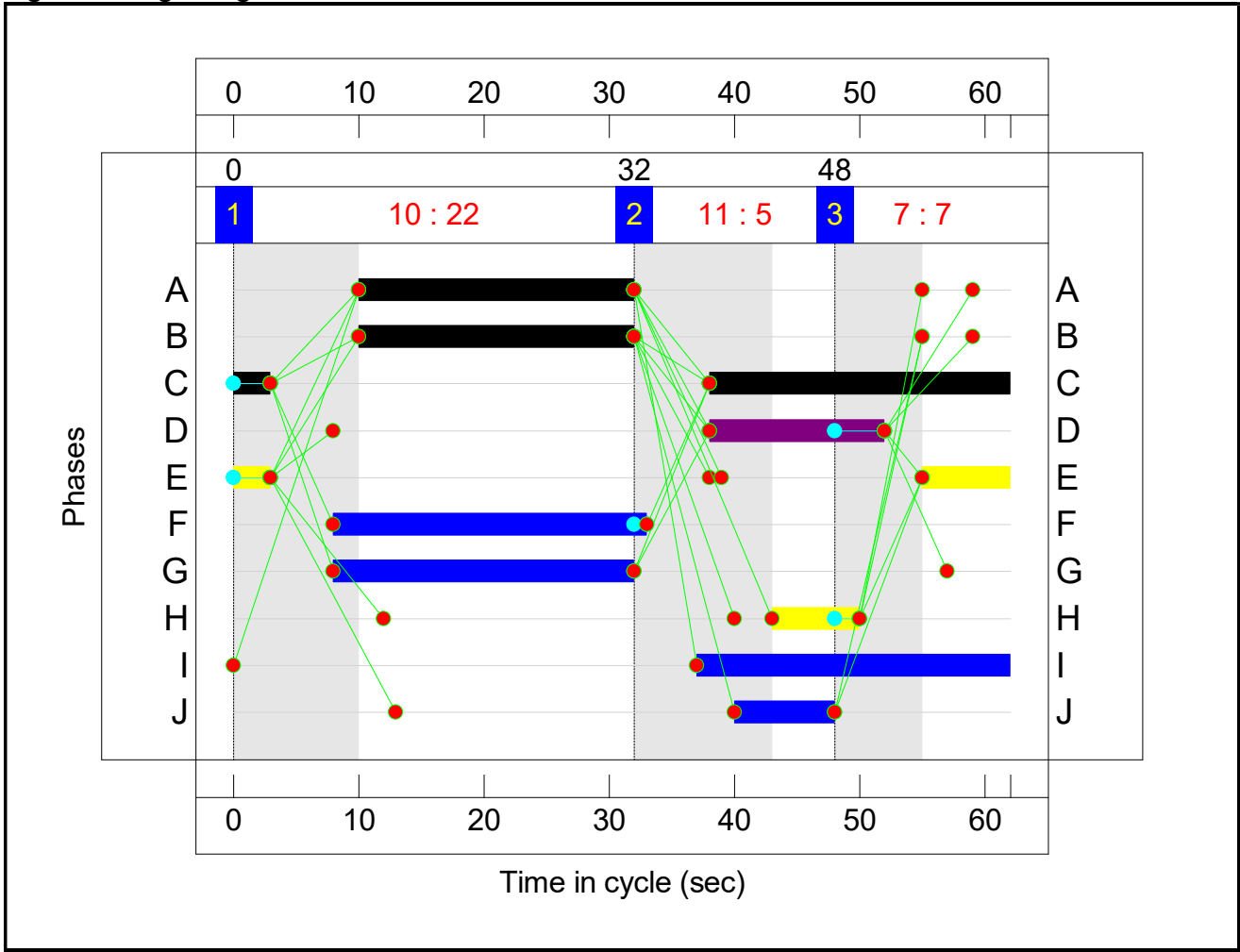
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	22	5	7
Change Point	0	32	48

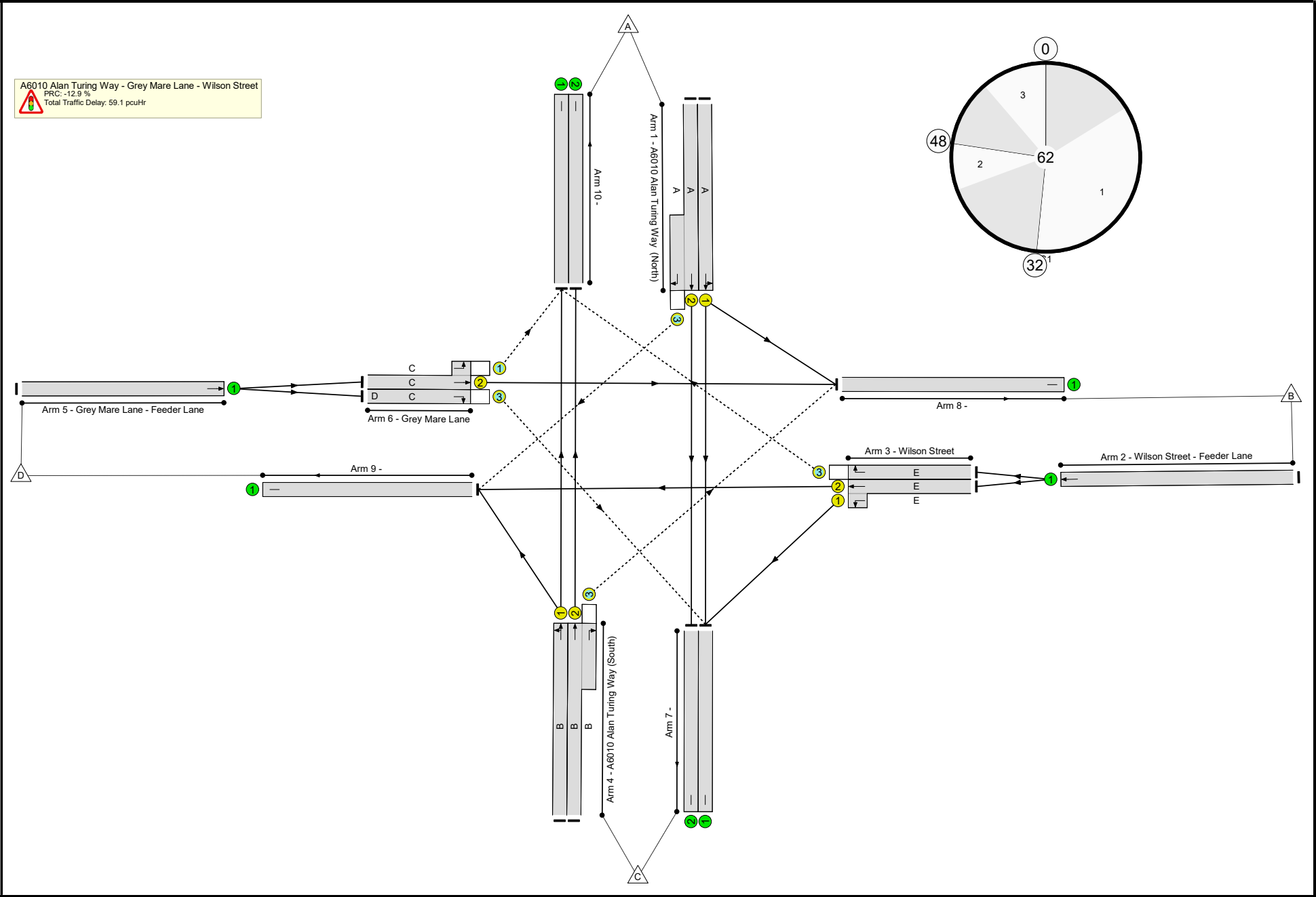
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	101.6%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	101.6%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	22	-	684	1918	712	96.1%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	22	-	766	2105:1702	751+40	96.8 : 96.8%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	429	2015	2015	21.3%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	322	1965:1901	84+283	87.7 : 87.7%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	107	1814	319	33.6%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	22	-	688	1920	712	96.6%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	22	-	807	2085:1702	712+116	96.7 : 101.6%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	154	2015	2015	7.6%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	114	1945:1980	300+534	13.7 : 13.7%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	40	1795	550	7.3%
7/1		U	N/A	N/A	-		-	-	-	888	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	727	Inf	Inf	0.0%

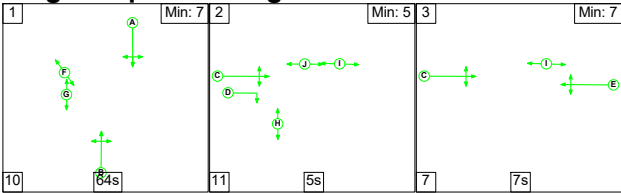
Full Input Data And Results

All Input Data and Results													
8/1		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	184	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	797	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	689	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	-	-	131	89	155	18.7	39.6	0.8	59.1	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	131	89	155	18.7	39.6	0.8	59.1	-	-	-	-
1/1	684	684	-	-	-	3.6	7.9	-	11.5	60.6	11.4	7.9	19.3
1/2+1/3	766	766	0	0	39	4.0	8.9	0.2	13.1	61.5	12.3	8.9	21.2
2/1	429	429	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/2+3/1	322	322	-	-	-	2.2	3.1	-	5.3	59.5	4.8	3.1	7.9
3/3	107	107	107	0	0	0.7	0.3	0.0	0.9	31.2	1.6	0.3	1.9
4/1	688	688	-	-	-	3.7	8.4	-	12.0	63.0	11.5	8.4	19.9
4/2+4/3	807	805	0	0	116	4.1	10.8	0.6	15.5	69.2	12.3	10.8	23.0
5/1	154	154	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/2+6/1	114	114	15	58	0	0.3	0.1	0.0	0.4	12.3	0.7	0.1	0.8
6/3	40	40	8	32	0	0.1	0.0	0.0	0.2	14.2	0.4	0.0	0.4
7/1	888	888	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	727	727	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	184	184	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	797	797	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -12.9 Total Delay for Signalled Lanes (pcuHr): 58.94 Cycle Time (s): 62 PRC Over All Lanes (%): -12.9 Total Delay Over All Lanes(pcuHr): 59.12													

Full Input Data And Results

Scenario 8: '2026 Base Weekday PM Peak' (FG8: '2026 Base Weekday PM Peak', Plan 1: 'Network Control Plan 1')

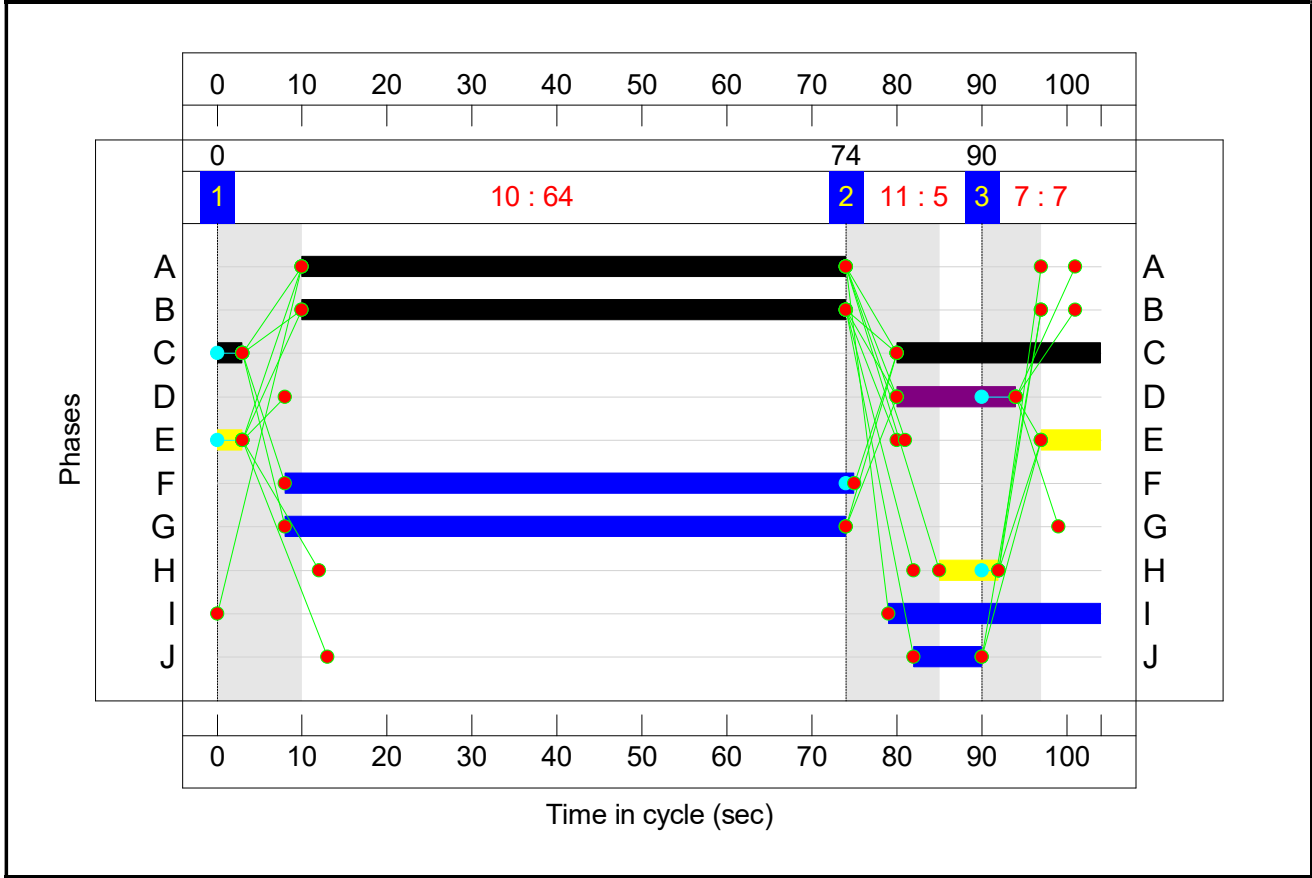
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	64	5	7
Change Point	0	74	90

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

The diagram illustrates a roundabout with 10 arms, each with specific lane configurations and traffic flow. A circular flow diagram in the top right shows the sequence of arms: 0, 3, 104, 1, 74, 90. A traffic sign in the top left indicates a roundabout with a total traffic delay of 21.6 pcu/hr.

Roundabout Arms and Lane Configurations:

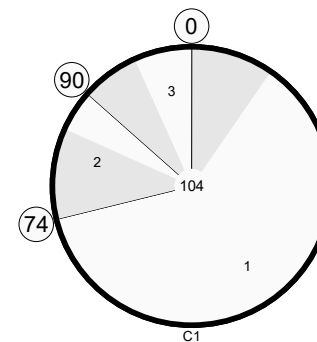
- Arm 1 - A6010 Alan Turing Way (North):** 3 lanes (A, A, A), 1 lane (A), 1 lane (A).
- Arm 2 - Wilson Street - Feeder Lane:** 1 lane (E).
- Arm 3 - Wilson Street:** 3 lanes (E, E, E), 1 lane (E).
- Arm 4 - A6010 Alan Turing Way (South):** 3 lanes (B, B, B), 1 lane (B), 1 lane (B).
- Arm 5 - Grey Mare Lane - Feeder Lane:** 1 lane (D).
- Arm 6 - Grey Mare Lane:** 3 lanes (C, C, C), 1 lane (C), 1 lane (C).
- Arm 7 - :** 3 lanes (B, B, B), 1 lane (B), 1 lane (B).
- Arm 8 - :** 1 lane (E).
- Arm 9 - :** 1 lane (D).
- Arm 10 - :** 3 lanes (A, A, A), 1 lane (A), 1 lane (A).

Flow Diagram:

The flow diagram shows the sequence of arms: 0, 3, 104, 1, 74, 90. The flow is clockwise, starting from Arm 0 and ending at Arm 104.

Traffic Sign:

A6010 Alan Turing Way - Grey Mare Lane - Wilson Street
PRC: 2.8 %
Total Traffic Delay: 21.6 pcu/hr



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	87.6%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	87.6%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	64	-	516	1918	1199	43.0%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	64	-	607	2105:1702	1222+69	46.2 : 60.7%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	187	2015	2015	9.3%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	126	1965:1901	26+181	60.6 : 60.6%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	61	1814	187	32.6%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	64	-	930	1935	1209	76.9%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	64	-	1042	2085:1702	1105+190	79.3 : 87.6%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	181	2015	2015	9.0%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	159	1945:1980	253+298	28.9 : 28.9%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	22	1795	345	6.4%
7/1		U	N/A	N/A	-		-	-	-	585	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	565	Inf	Inf	0.0%

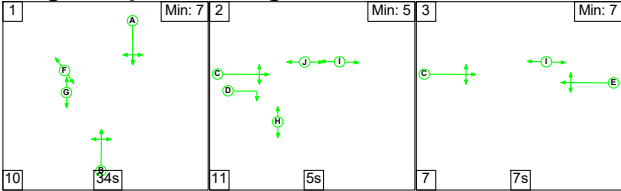
Full Input Data And Results

All Input Data and Results													
8/1		U	N/A	N/A	-		-	-	-	302	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	96	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1039	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	876	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	-	-	200	95	83	14.3	5.8	1.5	21.6	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	200	95	83	14.3	5.8	1.5	21.6	-	-	-	-
1/1	516	516	-	-	-	1.4	0.4	-	1.8	12.6	7.6	0.4	8.0
1/2+1/3	607	607	0	0	42	1.7	0.4	0.5	2.6	15.6	8.5	0.4	8.9
2/1	187	187	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
3/2+3/1	126	126	-	-	-	1.5	0.8	-	2.3	65.8	3.2	0.8	3.9
3/3	61	61	61	0	0	0.7	0.2	0.0	1.0	57.8	1.6	0.2	1.9
4/1	930	930	-	-	-	3.6	1.6	-	5.3	20.4	19.4	1.6	21.0
4/2+4/3	1042	1042	125	0	41	3.8	2.0	1.0	6.8	23.6	20.1	2.0	22.1
5/1	181	181	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/2+6/1	159	159	11	75	0	1.3	0.2	0.0	1.5	33.6	1.9	0.2	2.1
6/3	22	22	3	19	0	0.2	0.0	0.0	0.2	34.0	0.5	0.0	0.5
7/1	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	565	565	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	96	96	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1039	1039	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	876	876	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 2.8 Total Delay for Signalled Lanes (pcuHr): 21.54 Cycle Time (s): 104 PRC Over All Lanes (%): 2.8 Total Delay Over All Lanes(pcuHr): 21.64													

Full Input Data And Results

Scenario 9: '2026 Base Saturday Peak' (FG9: '2026 Base Saturday Peak', Plan 1: 'Network Control Plan 1')

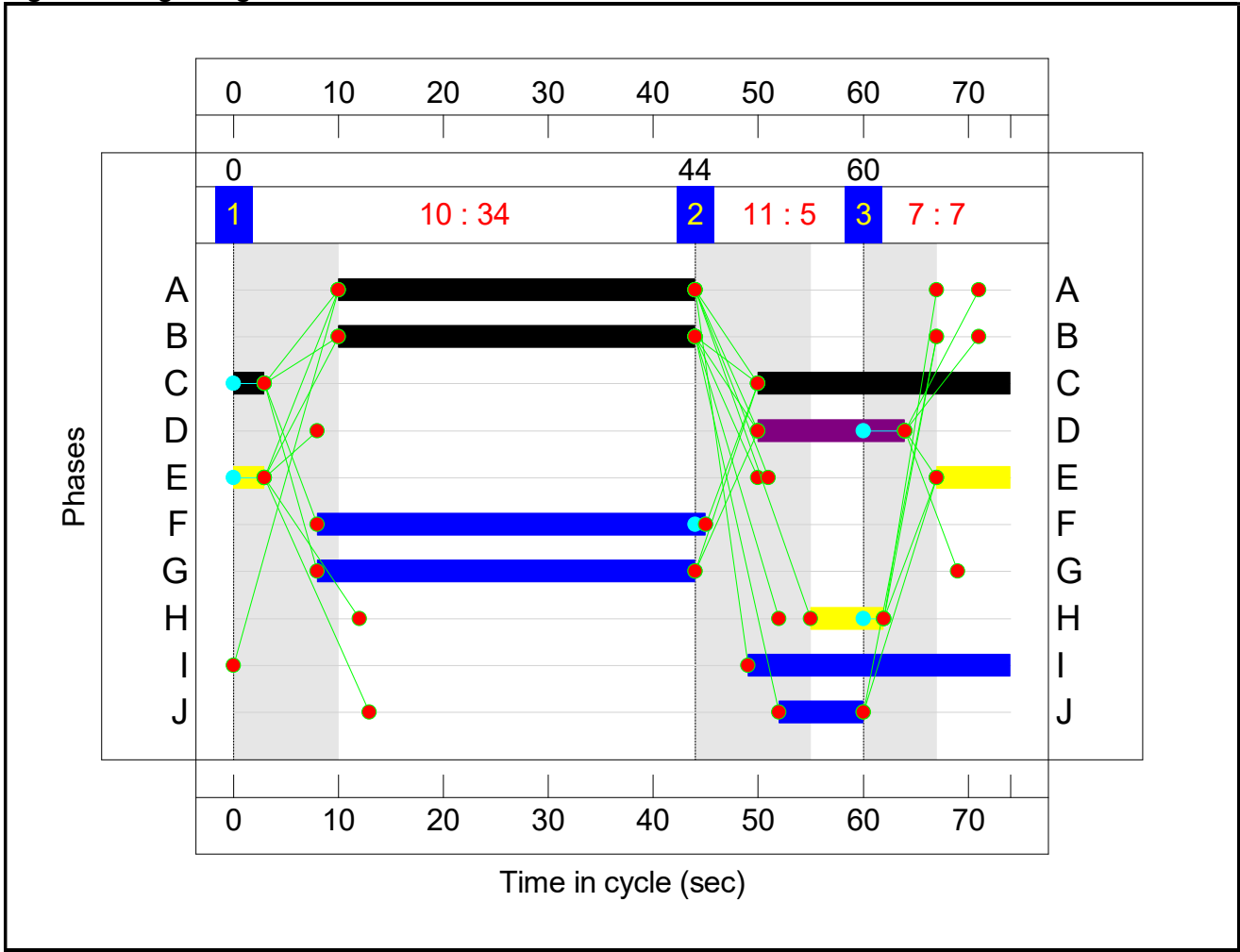
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	34	5	7
Change Point	0	44	60

Signal Timings Diagram



Full Input Data And Results

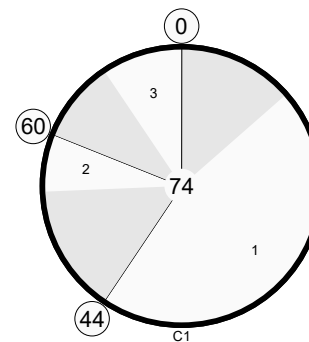
Network Layout Diagram

The diagram illustrates a roundabout with 10 arms, each with a specific lane configuration and traffic flow. The arms are labeled as follows:

- Arm 1 - A6010 Alan Turing Way (North):** 3 lanes (A, A, A), flow North.
- Arm 2 - Wilson Street - Feeder Lane:** 1 lane, flow South.
- Arm 3 - Wilson Street:** 3 lanes (E, E, E), flow South.
- Arm 4 - A6010 Alan Turing Way (South):** 3 lanes (B, B, B), flow South.
- Arm 5 - Grey Mare Lane - Feeder Lane:** 1 lane, flow North.
- Arm 6 - Grey Mare Lane:** 3 lanes (C, C, C), flow North.
- Arm 7 - :** 3 lanes (B, B, B), flow North.
- Arm 8 - :** 1 lane, flow North.
- Arm 9 - :** 1 lane, flow South.
- Arm 10 - :** 2 lanes (A, A), flow North.

A circular flow diagram in the top right corner shows the distribution of traffic flows across the arms, with a total of 74 units. The flows are: 0 (Arm 1), 3 (Arm 2), 2 (Arm 3), 44 (Arm 4), 1 (Arm 5), 2 (Arm 6), 3 (Arm 7), 1 (Arm 8), 1 (Arm 9), and 1 (Arm 10).

A traffic sign in the top left corner indicates a roundabout with a yield sign, a speed limit of 25.1 mph, and a total traffic delay of 15.8 pcu/hr.



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	72.0%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	72.0%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	34	-	483	1927	911	53.0%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	34	-	575	2105:1702	934+74	57.1 : 57.1%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	139	2015	2015	6.9%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	74	1965:1901	66+239	24.2 : 24.2%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	65	1814	269	24.1%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	34	-	634	1935	915	69.3%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	34	-	721	2085:1702	941+61	72.0 : 72.0%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	115	2015	2015	5.7%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	95	1945:1980	154+512	14.3 : 14.3%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	20	1795	582	3.4%
7/1		U	N/A	N/A	-		-	-	-	522	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	533	Inf	Inf	0.0%

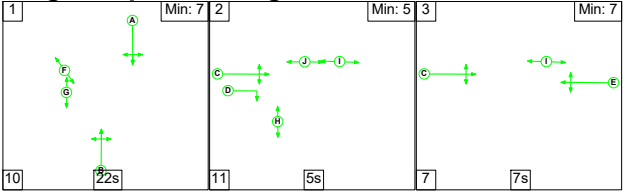
Full Input Data And Results

Input Data and Results													
8/1		U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	745	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	677	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	-	-	127	77	40	11.3	4.1	0.4	15.8	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	127	77	40	11.3	4.1	0.4	15.8	-	-	-	-
1/1	483	483	-	-	-	1.8	0.6	-	2.4	17.9	7.0	0.6	7.5
1/2+1/3	575	575	2	0	40	2.2	0.7	0.3	3.1	19.7	7.7	0.7	8.4
2/1	139	139	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/2+3/1	74	74	-	-	-	0.6	0.2	-	0.7	35.3	1.0	0.2	1.2
3/3	65	65	65	0	0	0.5	0.2	0.0	0.7	36.9	1.2	0.2	1.3
4/1	634	634	-	-	-	2.7	1.1	-	3.8	21.6	10.2	1.1	11.3
4/2+4/3	721	721	44	0	0	3.0	1.3	0.1	4.4	22.0	11.2	1.3	12.4
5/1	115	115	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
6/2+6/1	95	95	13	60	0	0.4	0.1	0.0	0.5	18.1	1.0	0.1	1.0
6/3	20	20	4	16	0	0.1	0.0	0.0	0.1	17.9	0.3	0.0	0.3
7/1	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	533	533	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	745	745	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 25.1 Total Delay for Signalled Lanes (pcuHr): 15.73 Cycle Time (s): 74													
PRC Over All Lanes (%): 25.1 Total Delay Over All Lanes(pcuHr): 15.80													

Full Input Data And Results

Scenario 10: '2026 Base + Dev Weekday AM Peak' (FG10: '2026 Base + Dev Weekday AM Peak', Plan 1: 'Network Control Plan 1')

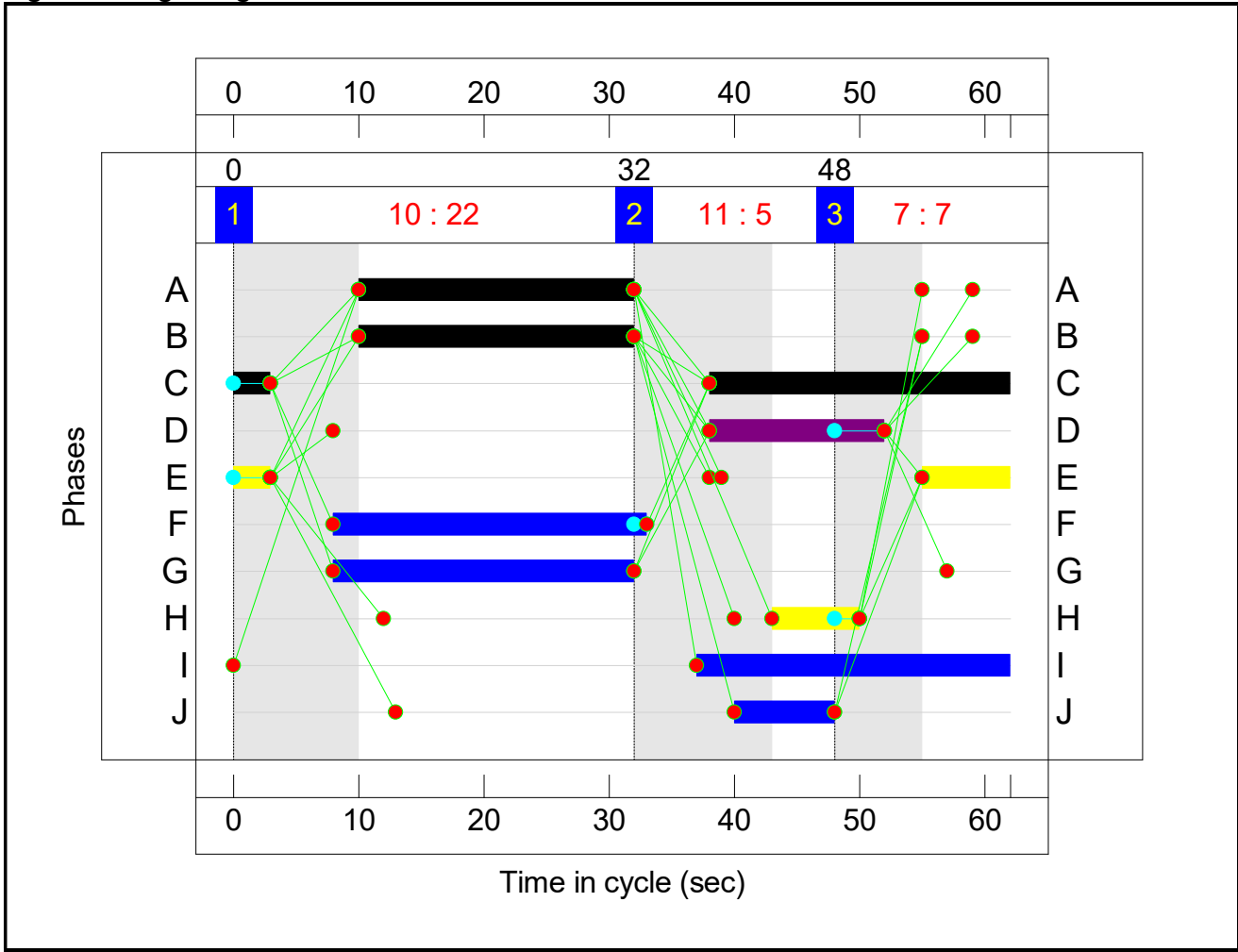
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	22	5	7
Change Point	0	32	48

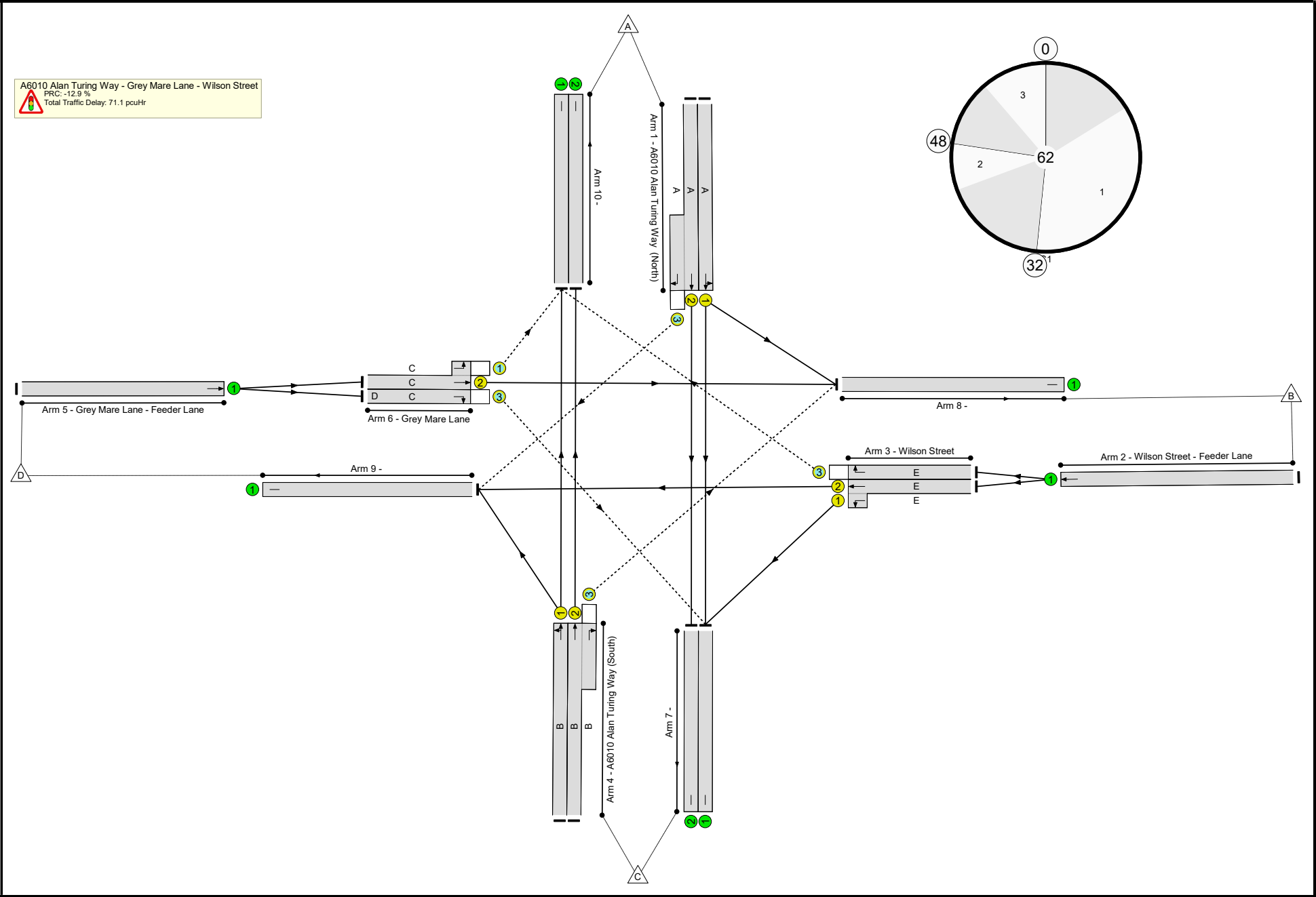
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	101.6%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	101.6%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	22	-	689	1918	712	96.8%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	22	-	787	2105:1702	739+67	97.6 : 97.6%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	429	2015	2015	21.3%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	322	1965:1901	84+283	87.7 : 87.7%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	107	1814	319	33.6%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	22	-	705	1906	707	99.7%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	22	-	835	2085:1702	714+116	100.4 : 101.6%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	154	2015	2015	7.6%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	114	1945:1980	300+534	13.7 : 13.7%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	40	1795	550	7.3%
7/1		U	N/A	N/A	-		-	-	-	893	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	722	Inf	Inf	0.0%

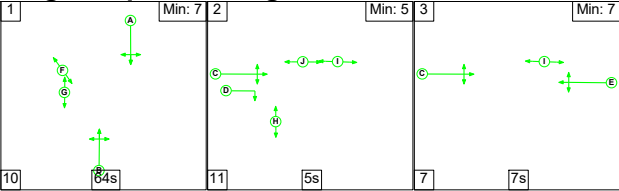
Full Input Data And Results

8/1		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	255	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	769	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	717	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	-	-	131	89	181	19.3	50.8	1.0	71.1	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	131	89	181	19.3	50.8	1.0	71.1	-	-	-	-
1/1	689	689	-	-	-	3.7	8.7	-	12.3	64.3	11.5	8.7	20.1
1/2+1/3	787	787	0	0	65	4.1	10.1	0.3	14.5	66.3	12.6	10.1	22.7
2/1	429	429	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/2+3/1	322	322	-	-	-	2.2	3.1	-	5.3	59.5	4.8	3.1	7.9
3/3	107	107	107	0	0	0.7	0.3	0.0	0.9	31.2	1.6	0.3	1.9
4/1	705	705	-	-	-	3.8	12.8	-	16.6	84.7	11.9	12.8	24.7
4/2+4/3	835	830	0	0	116	4.5	15.6	0.6	20.7	89.4	13.3	15.6	28.9
5/1	154	154	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/2+6/1	114	114	15	58	0	0.3	0.1	0.0	0.4	12.3	0.7	0.1	0.8
6/3	40	40	8	32	0	0.1	0.0	0.0	0.2	14.2	0.4	0.0	0.4
7/1	893	893	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	769	769	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	714	714	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -12.9 Total Delay for Signalled Lanes (pcuHr): 70.92 Cycle Time (s): 62 PRC Over All Lanes (%): -12.9 Total Delay Over All Lanes(pcuHr): 71.09													

Full Input Data And Results

Scenario 11: '2026 Base + Dev Weekday PM Peak' (FG11: '2026 Base + Dev Weekday PM Peak', Plan 1: 'Network Control Plan 1')

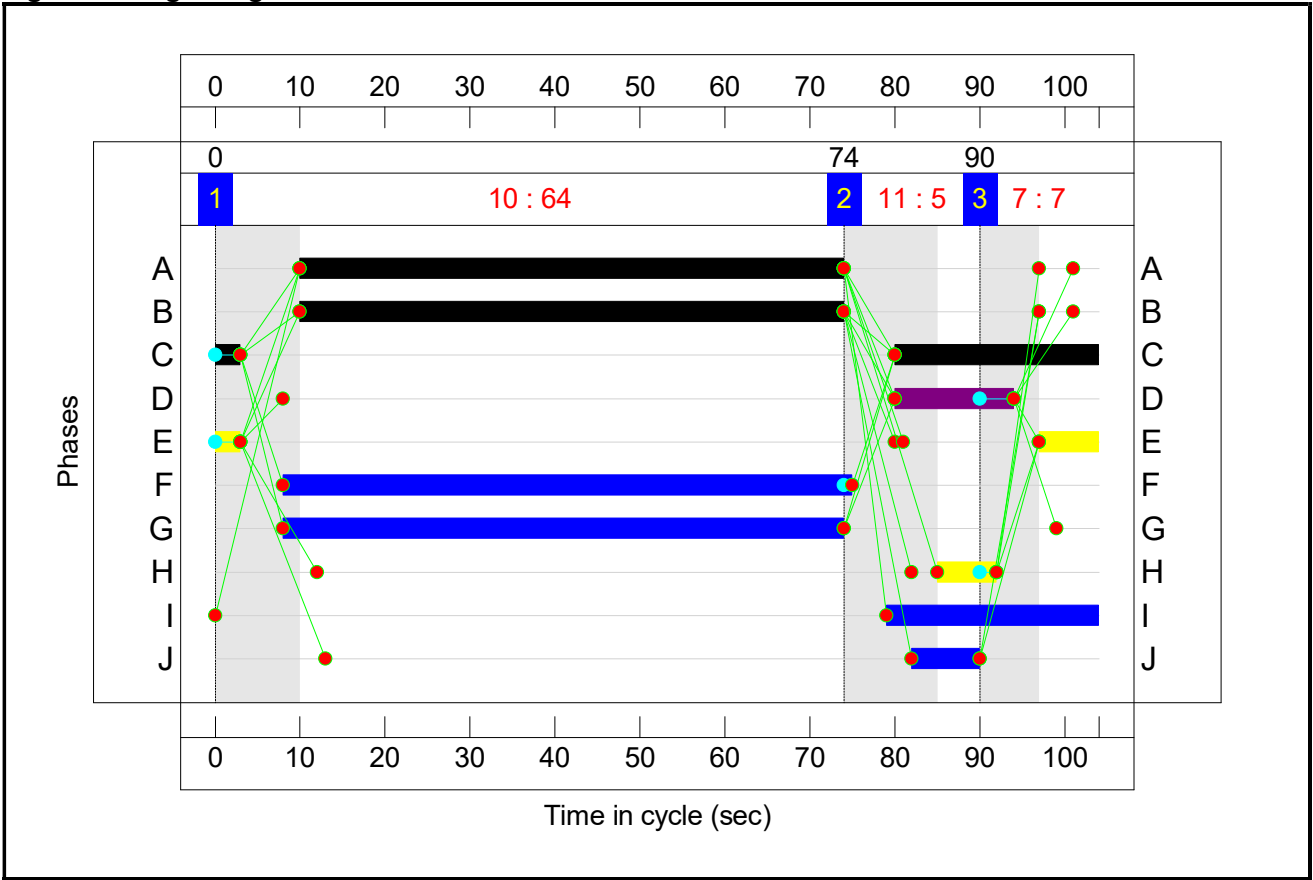
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	64	5	7
Change Point	0	74	90

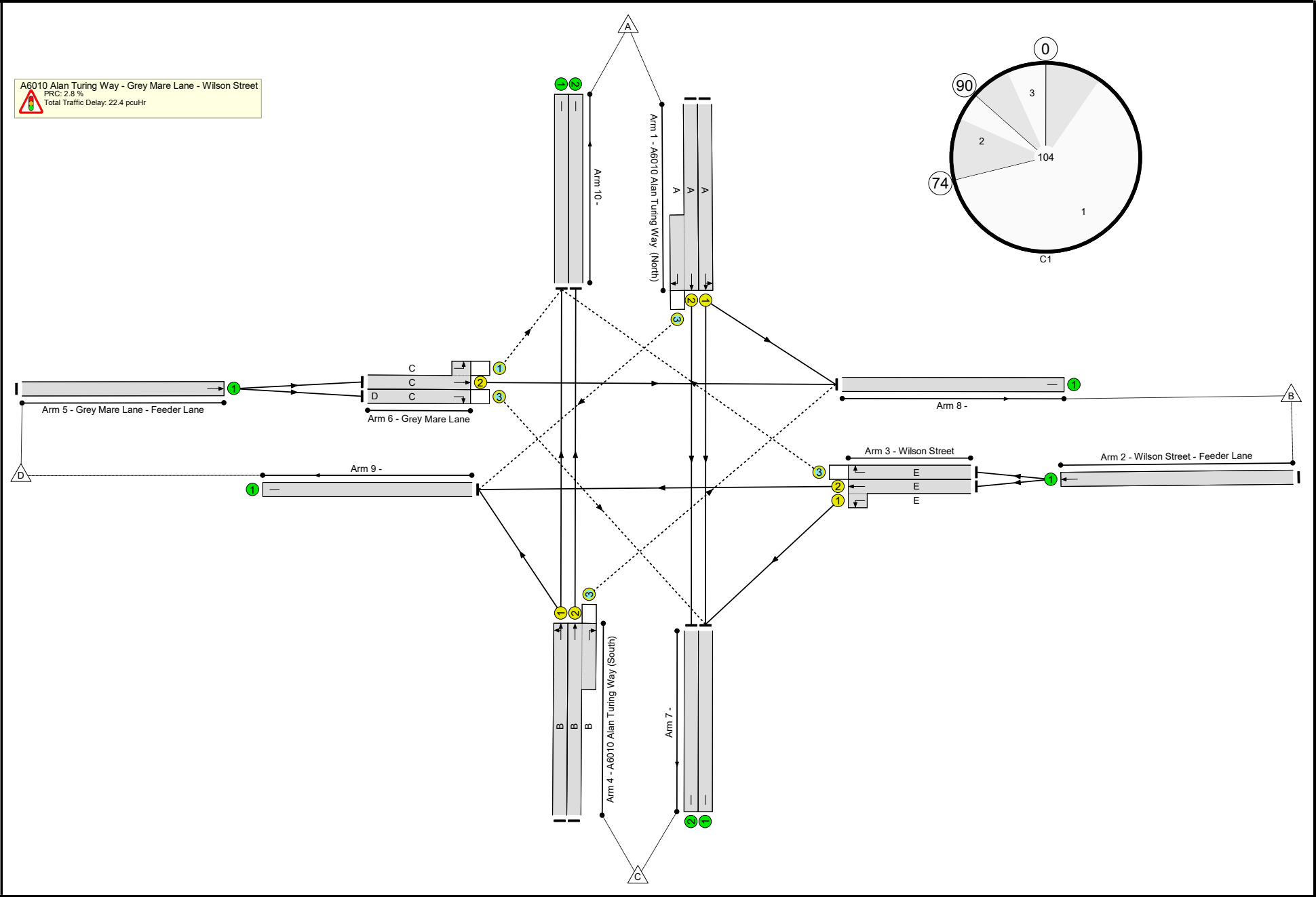
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	87.6%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	87.6%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	64	-	516	1918	1199	43.0%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	64	-	607	2105:1702	1222+69	46.2 : 60.7%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	187	2015	2015	9.3%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	126	1965:1901	26+181	60.6 : 60.6%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	61	1814	187	32.6%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	64	-	930	1935	1209	76.9%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	64	-	1042	2085:1702	1105+190	79.3 : 87.6%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	251	2015	2015	12.5%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	185	1945:1980	203+311	36.0 : 36.0%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	66	1795	345	19.1%
7/1		U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	565	Inf	Inf	0.0%

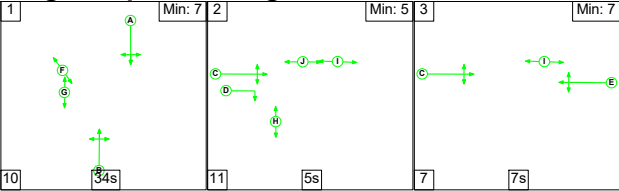
Full Input Data And Results

8/1		U	N/A	N/A	-		-	-	-	302	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	96	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1065	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	876	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	-	-	209	156	83	14.9	6.0	1.5	22.4	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	209	156	83	14.9	6.0	1.5	22.4	-	-	-	-
1/1	516	516	-	-	-	1.4	0.4	-	1.8	12.6	7.6	0.4	8.0
1/2+1/3	607	607	0	0	42	1.7	0.4	0.5	2.6	15.6	8.5	0.4	8.9
2/1	187	187	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
3/2+3/1	126	126	-	-	-	1.5	0.8	-	2.3	65.8	3.2	0.8	3.9
3/3	61	61	61	0	0	0.7	0.2	0.0	1.0	57.8	1.6	0.2	1.9
4/1	930	930	-	-	-	3.6	1.6	-	5.3	20.4	19.4	1.6	21.0
4/2+4/3	1042	1042	125	0	41	3.8	2.0	1.0	6.8	23.6	20.1	2.0	22.1
5/1	251	251	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
6/2+6/1	185	185	14	98	0	1.5	0.3	0.0	1.8	35.0	2.9	0.3	3.1
6/3	66	66	8	58	0	0.5	0.1	0.0	0.7	35.6	1.4	0.1	1.5
7/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	565	565	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	96	96	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1065	1065	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	876	876	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 2.8 Total Delay for Signalled Lanes (pcuHr): 22.30 Cycle Time (s): 104 PRC Over All Lanes (%): 2.8 Total Delay Over All Lanes(pcuHr): 22.42													

Full Input Data And Results

Scenario 12: '2026 Base + Dev Saturday Peak' (FG12: '2026 Base + Dev Saturday Peak', Plan 1: 'Network Control Plan 1')

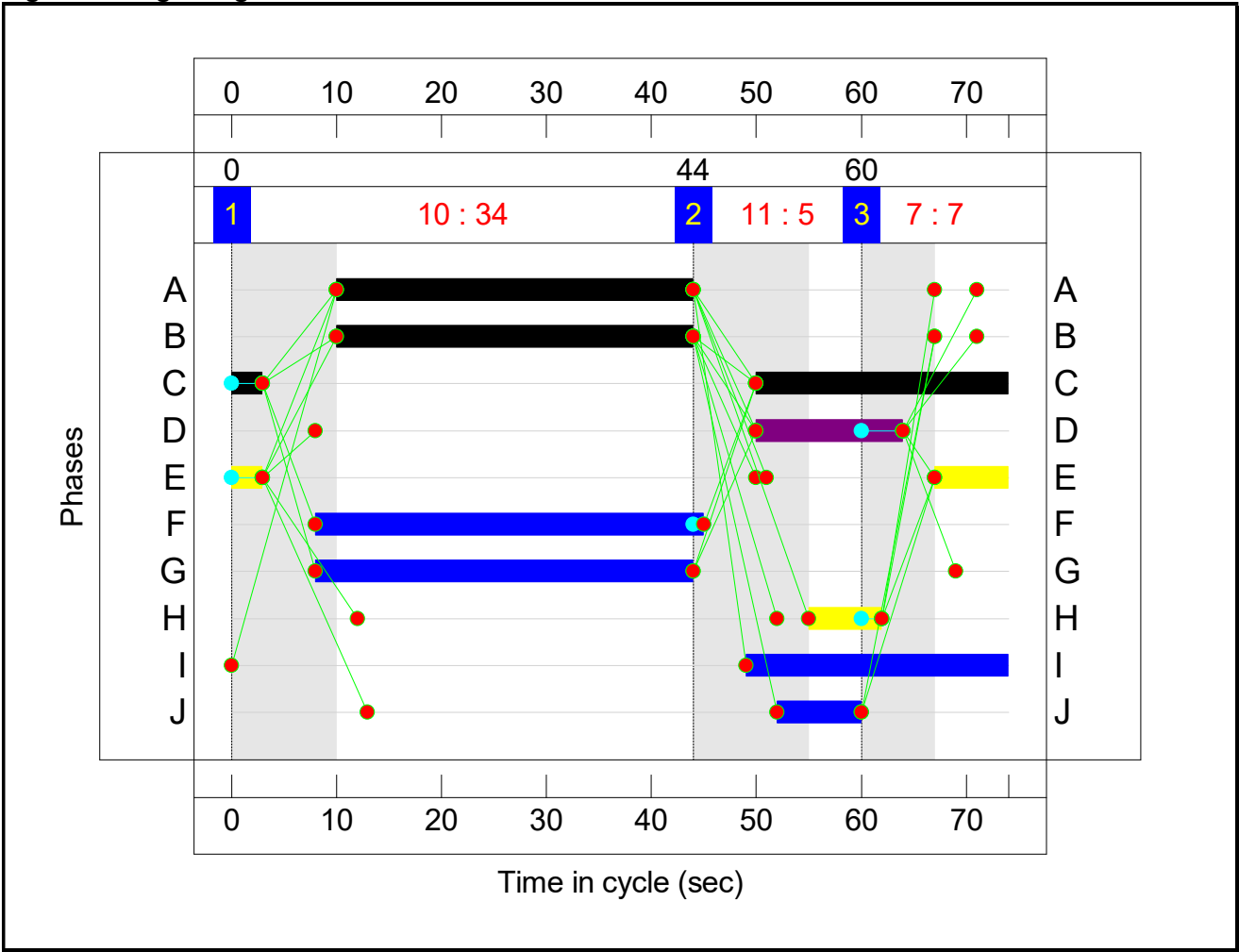
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	34	5	7
Change Point	0	44	60

Signal Timings Diagram



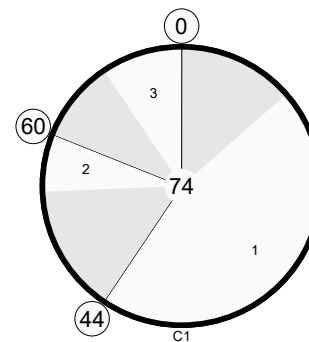
Full Input Data And Results

Network Layout Diagram

The diagram illustrates a roundabout with 10 arms, each with specific lane configurations and traffic flow directions. The arms are labeled as follows:

- Arm 1 - A6010 Alan Turing Way (North):** 3 lanes (A, A, A), flow North.
- Arm 2 - Wilson Street - Feeder Lane:** 1 lane, flow South.
- Arm 3 - Wilson Street:** 3 lanes (E, E, E), flow South.
- Arm 4 - A6010 Alan Turing Way (South):** 3 lanes (B, B, B), flow South.
- Arm 5 - Grey Mare Lane - Feeder Lane:** 1 lane, flow North.
- Arm 6 - Grey Mare Lane:** 3 lanes (C, C, D), flow North.
- Arm 7 - :** 3 lanes (B, B, B), flow North.
- Arm 8 - :** 1 lane, flow North.
- Arm 9 - :** 1 lane, flow South.
- Arm 10 - :** 2 lanes (A, A), flow North.

A circular diagram in the top right corner shows the distribution of traffic flow across the arms, with numbers 0, 1, 2, 3, 44, 60, and 74. The total traffic delay is 17.5 pcu/hr.



Full Input Data And Results

Full Input Data And Results

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)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	76.1%
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	N/A	-	-		-	-	-	-	-	-	76.1%
1/1	A6010 Alan Turing Way (North) Ahead Left	U	N/A	N/A	A		1	34	-	495	1927	911	54.3%
1/2+1/3	A6010 Alan Turing Way (North) Ahead Right	U+O	N/A	N/A	A		1	34	-	595	2105:1702	897+97	58.1 : 76.1%
2/1	Wilson Street - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	139	2015	2015	6.9%
3/2+3/1	Wilson Street Left Ahead	U	N/A	N/A	E		1	10	-	74	1965:1901	66+239	24.2 : 24.2%
3/3	Wilson Street Right	O	N/A	N/A	E		1	10	-	65	1814	269	24.1%
4/1	A6010 Alan Turing Way (South) Left Ahead	U	N/A	N/A	B		1	34	-	656	1916	906	72.4%
4/2+4/3	A6010 Alan Turing Way (South) Right Ahead	U+O	N/A	N/A	B		1	34	-	752	2085:1702	943+59	75.1 : 75.1%
5/1	Grey Mare Lane - Feeder Lane Ahead	U	N/A	N/A	-		-	-	-	201	2015	2015	10.0%
6/2+6/1	Grey Mare Lane Ahead Left	U+O	N/A	N/A	C		1	27	-	127	1945:1980	111+530	19.8 : 19.8%
6/3	Grey Mare Lane Right	O	N/A	N/A	C	D	1	27	14	74	1795	582	12.7%
7/1		U	N/A	N/A	-		-	-	-	588	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	521	Inf	Inf	0.0%

Full Input Data And Results

Input Data and Results													
8/1		U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	170	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	746	Inf	Inf	0.0%
10/2		U	N/A	N/A	-		-	-	-	708	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	-	-	140	148	74	12.1	4.7	0.7	17.5	-	-	-	-
A6010 Alan Turing Way - Grey Mare Lane - Wilson Street	-	-	140	148	74	12.1	4.7	0.7	17.5	-	-	-	-
1/1	495	495	-	-	-	1.9	0.6	-	2.5	18.1	7.2	0.6	7.7
1/2+1/3	595	595	0	0	74	2.2	0.7	0.6	3.5	21.3	7.4	0.7	8.1
2/1	139	139	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/2+3/1	74	74	-	-	-	0.6	0.2	-	0.7	35.3	1.0	0.2	1.2
3/3	65	65	65	0	0	0.5	0.2	0.0	0.7	36.9	1.2	0.2	1.3
4/1	656	656	-	-	-	2.8	1.3	-	4.1	22.8	10.8	1.3	12.0
4/2+4/3	752	752	44	0	0	3.2	1.5	0.1	4.8	23.1	11.9	1.5	13.4
5/1	201	201	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
6/2+6/1	127	127	18	87	0	0.5	0.1	0.0	0.7	18.6	1.4	0.1	1.5
6/3	74	74	13	61	0	0.3	0.1	0.0	0.4	18.6	1.0	0.1	1.0
7/1	588	588	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	521	521	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	170	170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	746	746	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	708	708	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalised Lanes (%): 18.3 Total Delay for Signalised Lanes (pcuHr): 17.42 Cycle Time (s): 74													
PRC Over All Lanes (%): 18.3 Total Delay Over All Lanes(pcuHr): 17.51													

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