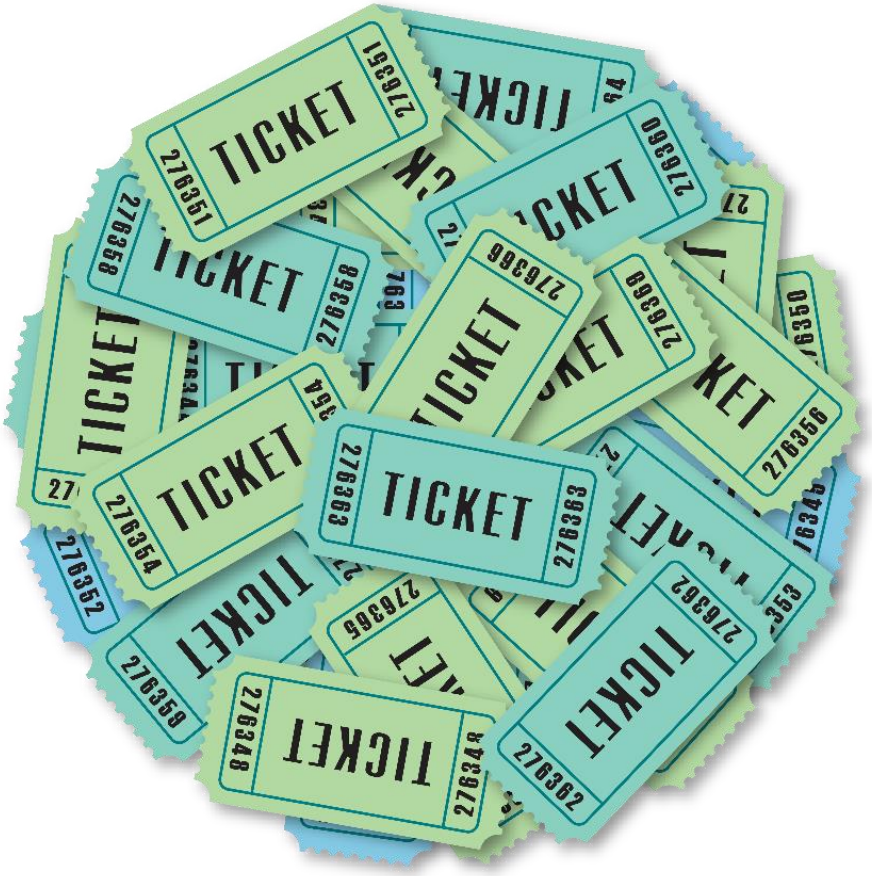
Deloitte.
Real Estate



OVG Manchester, Proposed New Arena

Response to Representations – Application Ref. 126431/FO/2020.

Volume 2: Appendices

29 July 2020

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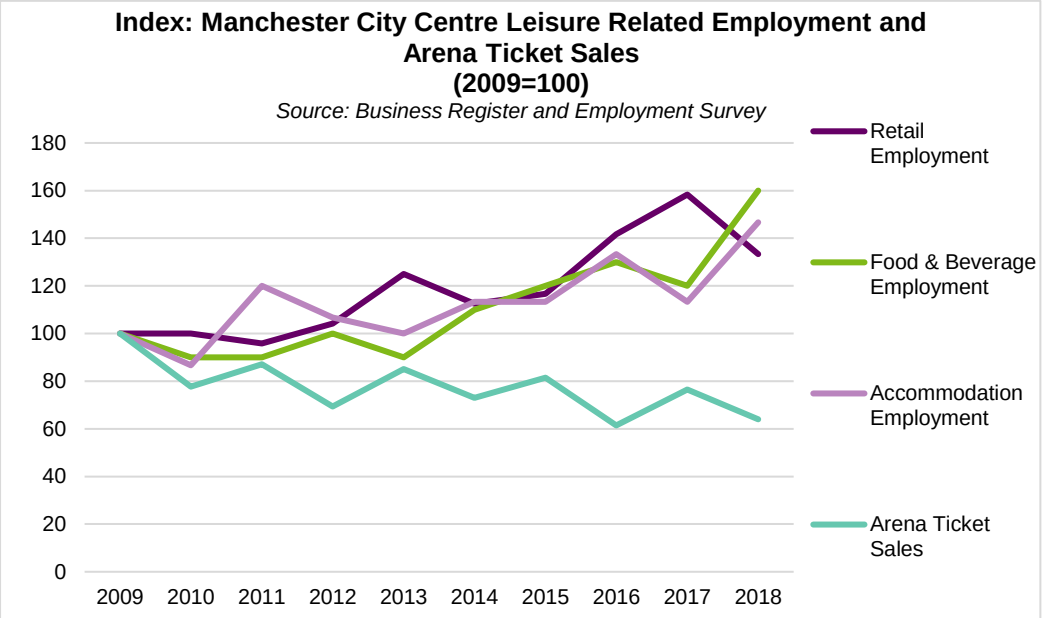
Appendix A: Manchester Arena and the City Centre Economy, ekosgen

Manchester Arena first passed the 1m ticket sales threshold in 2006, placing it within the top three Arenas globally. The Arena maintained its leading position for serval years, although the opening of the O2 in 2007 and the SSE Hydro in Glasgow in 2013 displaced Manchester from that global top 3.

Manchester Arena's peak year for ticket sales was in 2009. Since then, ticket sales numbers have averaged circa 1m per annum. The contribution of the Arena to the city centre economy has declined considerably over the past ten years as city centre leisure related employment has increased by circa 46% over a ten year period, driven by footfall from a wider range of sources, including the city cultural and visitor economy and new hotel investment, with the city now ranked as 3rd in the UK for foreign tourists.

Manchester Arena Ticket sales and City Centre Key Sector Leisure Economy										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Arena Ticket Sales	1.387	1.077	1.208	0.962	1.180	1.013	1.129	0.852	1.061	0.887
City Centre Employment										
Retail	12,000	12,000	11,500	12,500	15,000	13,500	14,000	17,000	19,000	16,000
Food & Beverage	10,000	9,000	9,000	10,000	9,000	11,000	12,000	13,000	12,000	16,000
Accommodation	3,750	3,250	4,500	4,000	3,750	4,250	4,250	5,000	4,250	5,500

As the diagram below sets out clearly, Manchester Arena has not been an economic driver of growth in the city centre economy over the last ten years.



In summary:

1. Manchester Arena has (notwithstanding annual fluctuations) effectively remained static for many years in terms of tickets sold;

2. At the same time, the wider employment in those sectors in the City Centre that are associated with a visitor economy has increased substantially;

3. Manchester Arena's contribution to activity in the City Centre has therefore reduced considerably; and

4. Only a second arena will add significantly to activity levels within the City Centre and increase the contribution that live entrainment will make to fulfilling Manchester's ambitions as a world class, destination City.

Appendix B: Robust Scenarios, ekosgen

Robust Scenarios Note, ekosgen

Scenario planning based on the most recent four year trend, projected forward for 15 -20 years, does not present a credible scenario or market forecast under any circumstances. It is noteworthy that UK population growth alone is estimated at 0.5% per annum for the UK, and 0.6% per annum.

The evidence based approach to scenario planning - looks at:

(a) short term trends

(b) long term trends:

(c) reliability of data and anomalies

(d) components of the market/trends, e) intelligence/foresight/research about trends and factors which will impact on trends,

(f) market signals and investment plans and then

(g) develop a number of scenarios.

Applying the 0.3% CAGR 2014-2018 to 2035 resulting in a scarcely credible 5% uplift over *fifteen* years, ignores the long term trends, a notable anomaly in the 2018 data, the complete absence of any consideration of positive trends, such as esports and team based arena sports, as well as the exceptionally strong market signals from 5 major investments, some of which SMG/AEG have supported and have a direct interest in.

The five investments – London, Manchester, Gateshead, Cardiff and the Birmingham Arena expansion are all backed by robust business cases. In the case of Gateshead and possibly Cardiff, Green Book complaint business cases are required to justify public sector investment. If a modest 5% uplift over *fifteen* years was credible there would be no commercial case for any investment of the Arena market.

PwC/ekosgen have produced a transparent set of scenarios, where the components of growth are clearly set out, and in a number of cases, using trends which are conservative and below some of the 2014-2018 trends.

Interpretation of the 2014-2018 data to conclude that growth has been comparatively flat and therefore could be used to project forward for 15 years is a result of a failure to review the trends for anomalies and to take account of other factors.

In December 2017 Peter Kay cancelled 49 Arenas 2019 events in five Arenas, 16 at the Manchester Arena. This would have been a record breaking tour, with a further 51 events planned for 2019.

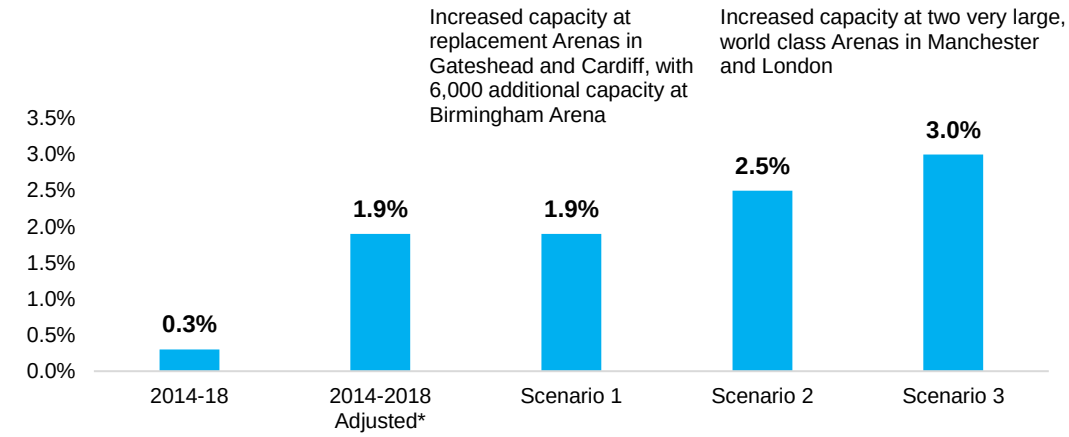
Peter Kay 2018 Arena Tour

Location	Arena	Year	Number of shows	Capacity	Potential Ticket Sales
Birmingham	Genting Arena	2018	10	16,000	160,000
Glasgow	SSE Hydro	2018	8	13,000	104,000
Manchester	*Manchester Arena*	*2018*	*16*	*21,000*	*336,000*
London	The 02	2018	9	20,000	180,000
Leeds	First Direct Arena	2018	8	13,500	108,000

In addition to the 2018 shows, Peter kay also cancelled 51 arena events planned for 2019.

Given the scale of the tour, this cancellation of this one tour depressed the 2014-2018 CAGR from 1.9% to 0.5%. CAGR. The former adjusted figure is more in line with longer term growth trends. When this adjustment is made, Scenario 1 becomes the more credible market continuation growth rate, without any adjustment for new trends and the introduction of five new/replacement arenas.

Large Arena Market UK CAGR Ticket Sales 2018-2030



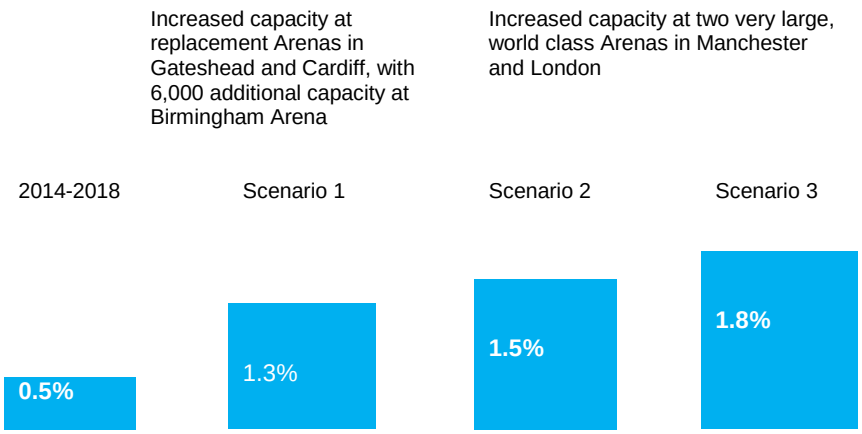
**Adjusted for 51 arena events booked in 2018 cancelled by Peter Kay*

Music

NAA figures relate to musicians and touring artists – with pop and rock being the biggest genres – in addition to orchestras, choirs and certain musical theatre events. There is cyclicality in arena concerts depending on which major tours/ performers are playing at arenas that year and which artists are playing at stadia/festivals.

Although the events and attendance growth rates are relatively low for this four year period, the live music sector has grown strongly over the longer term, suggesting this short term trend in arenas may reflect other factors such as the lack of new capacity being provided in the 2016-2018 period, and as such is not representative of the direction and scale of growth in the future.

Large Arena Market UK CAGR Ticket Sales Music 2018-2030



The Mintel UK Concerts and Festivals report shows a CAGR of 6.7% in the live music ticketing market between 2014 and 2018, which covers the wider live music industry including stadia and festivals. Drawing on their market database, and official sources (ONS, BoE), growth forecasts are estimated which include both ticketing and ancillary spend. Three growth scenarios for 2019-2024 are presented by Mintel, with the base case CAGR of 5.9%, slightly below their 2014-2018 CAGR of 6.5%, a minimum case of 3.4% and a best case of 8.2%.

The most recent Pollster review of the global market highlighted strong growth between 2015-2019, with ticket sales up by 14.9% (CAGR 2.7%) and revenues by 41%. *Average* audience sized increased from 11,007 in 2015 to 13,397 in 2019, as more and better venues influenced trends.

There are a number of new emerging markets, which will boost audience numbers at UK arena music and concert events. These are:

Arena Festivals: The success and growth of the festival market is well evidenced and has supported a new type of live music arena event: the arena festival. Examples include Bluesfest held at The O2 and Dublin's 3Arena as well as the Country to Country festival held at The O2, 3Arena and Glasgow's SSE Hydro.2

New Genres of Music such a K-Pop, as well as J-Pop, have become increasingly popular in the UK, with bands and artists such as BTS, Super Junior, G-Dragon, Blackpink, Monsta X and Got 7 performing at UK arenas over recent years.

Niche Music: There are opportunities from growing niche music types, for example SSE Arena Wembley's John Drury has said that some niche music types are "becoming more mainstream and much bigger in production values and audience size" referencing the broad Latin genre.

First Time Headliners: While there is a large pool of artists playing UK arenas who have toured for many year or decades, there continues to be first time headliners adding to the array of music events in UK arenas each year, for example in 2019: Khalid, on his first UK tour, played two nights at The O2 Arena, as well as playing at Glasgow's SSE Hydro, Arena Birmingham and First Direct Arena Leeds; Post Malone performed at Manchester Arena, The O2 London, Glasgow's SSE Hydro and Birmingham's Resorts World Arena on his first European tour; Travis Scott played at London's The O2; and the K-Pop girl group Blackpink played their first ever UK tour performing at Wembley SSE Arena and Manchester Arena. Artists such as Billie Eilish and Sam Fender amongst others have announced their first ever headliner UK arena Tours for 2020. The emerging markets will allow arenas to contribute to growth in the wider music market and avoid over-reliance on a limited number of headliners.

The introduction of new arenas is likely to help stimulate the music market, with new more flexible space able to accommodate larger audiences providing venues for more technical productions, as well as more welcome/circulation and food and beverage space. The music and concert category in the large arena market is likely to grow in terms of revenue, events and ticket sales over the next ten and twenty years. Arenas offer the scale and quality of facilities to give audiences a premium experience.

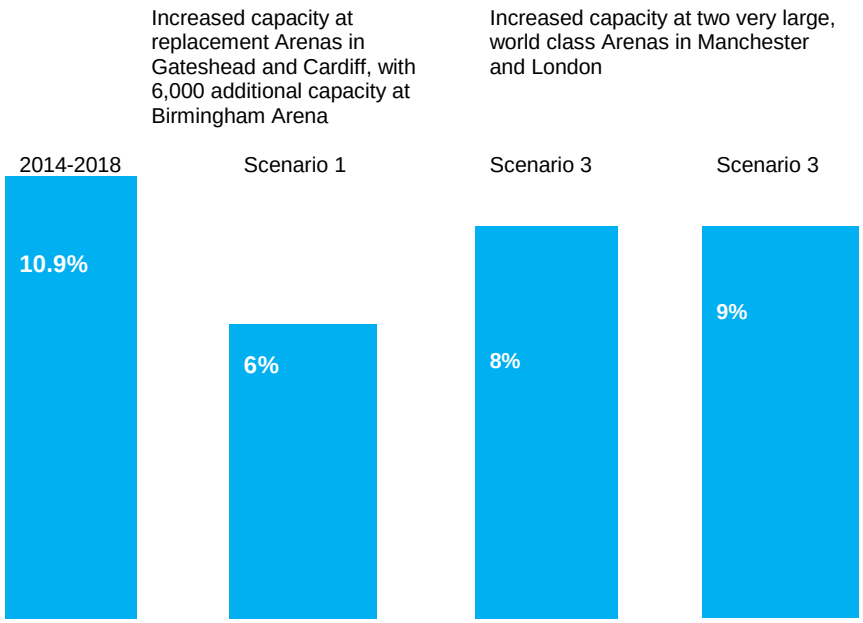
Sports

Sports events made up around 11% of UK arena ticket sales in 2018. Sports events had the strongest growth out of any of the events categories, driven by Boxing, Darts, and Other – which primarily consisted of MMA/UFC events.

Sports Market						
	2014	2015	2016	2017	2018	**CAGR**
Events	222	285	303	281	334	**10.8%**
Revenue ('000s)	£29,066	£37,573	£51,188	£45,959	£50,489	**15.0%**
Attendance ('000s)	910	1,120	1,234	1,227	1,372	**10.8%**
Source: NAA and PWC						

All three Sports Scenarios use growth rates which are lower than the 2014-2018 CAGR and in the case of Scenario 1 and 2, substantially lower, and all three Scenarios are conservative.

Large Arena Market UK CAGR Ticket Sales Sports Category 2018-2030



There are seven traditional sports which will help to drive arena growth ticket sales: ice hockey, tennis, darts, boxing, MMA, basketball and netball. All of the sports have ambitious growth plans, and a number have introduced new formats over the years to boost spectator numbers and attract TV coverage.

Ice Hockey	**Tennis**	**MMA**	**Netball**
Darts	**Boxing**	**Basketball**	

Esports is a key growth area for the arena market, with revenues and audiences in the UK continuing to grow as the market transitions towards online/mobile gaming. The Newzoo 2019 Global Esports Market Report, finds "*the global Esports audience will grow to 453.8 million worldwide in 2019, a year-on-year growth of +15.0%"*. Esports are often linked to particular games, such as League of Legends, Counter-Strike, Fortnite, and Dota 2 or platforms such as Twitch.

The PwC Entertainment and Media Outlook 2019-2023, reports revenue of £22m in 2018 for Esports, up from £4m in 2014, and sets outs projection for revenue to continue to grow at a CAGR of 20.1% between 2019 and 2023.

The introduction of new arenas is likely to help stimulate the sports market, with new more flexible space providing venues with more technical facilities, as well as more welcome/circulation and food and beverage space. The sports market is likely to grow strongly in terms of revenue, events and ticket sales over the next ten and twenty years, powered by a number of team/league sports and the fast growing Esports, with a combination of regular league fixtures boosted by one off events and championships.

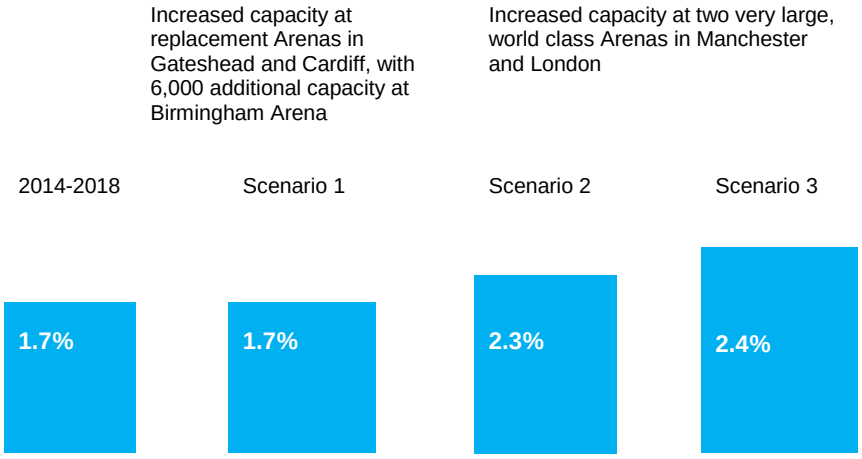
Family

Family events are often connected to successful TV programmes and movies from global brands such as Disney and Marvel. The category typically makes up make up around 25%-30% of all arena events, and includes major annual events such as Disney on Ice, Cirque du Soleil and Strictly Come Dancing, that regularly take up several nights at individual arenas. Children's events such as Walking with Dinosaurs, Jack and the Beanstalk and Paw Patrol were also key to driving growth in the number of events in 2018.

Family Market						
	2014	2015	2016	2017	2018	**CAGR**
Events	523	523	524	578	673	**6.5%**
Revenue ('000s)	£73,768	£79,151	£79,967	£73,562	£88,579	**4.7%**
Attendance ('000s)	2,038	2,133	2,080	1,883	2,177	**1.7%**
Source: NAA and PWC						

Popular entertainment and sports entertainment events like World's Strongest Man, WWE and Harlem Globetrotters also fall under this category and regularly tour UK arenas.

Large Arena Market UK CAGR Ticket Sales Family Category 2018-2030



The FlyDSA Arena Sheffield highlights the strength of the family category in the 2018 EAY referencing events such as:

- Dancing on Ice,
- Fast & Furious Live,
- Walking with Dinosaurs,
- Paw Patrol and
- Cirque de Soleil.

Manchester and London are well established arenas for the family market, reflecting their large catchment areas.

Building on huge success on TV, events such as Blue Planet II Live, Planet Earth II Live, Our Planet Live in Concert, Ru Pauls Drag Race and Mrs Brown Boys are also touring UK Arenas. The addition of these TV related events to arena programmes suggests a strong growth market exists.

There are a number of sources of regular family entertainment making use of large arenas, and these will be a continual source of repeat and new productions. These are BBC, Disney and Disney Marvel. In addition, Cirque de Soleil regularly updates its productions to continually tour in arenas in the UK. The introduction of new arenas is likely to help stimulate the family market, with new more flexible space providing venues for more technical productions, as well as more welcome/circulation and food and beverage space.

Other Market

Other key forms of content for arenas includes comedy – which makes up the majority of the *Other* category in the NAA data – as well as dance, awards and miscellaneous events such as motivational speakers and conventions. Although the smallest of the four market categories, the other market provides a substantial number of arena events and in peak years, in excess of 2m ticket sales.

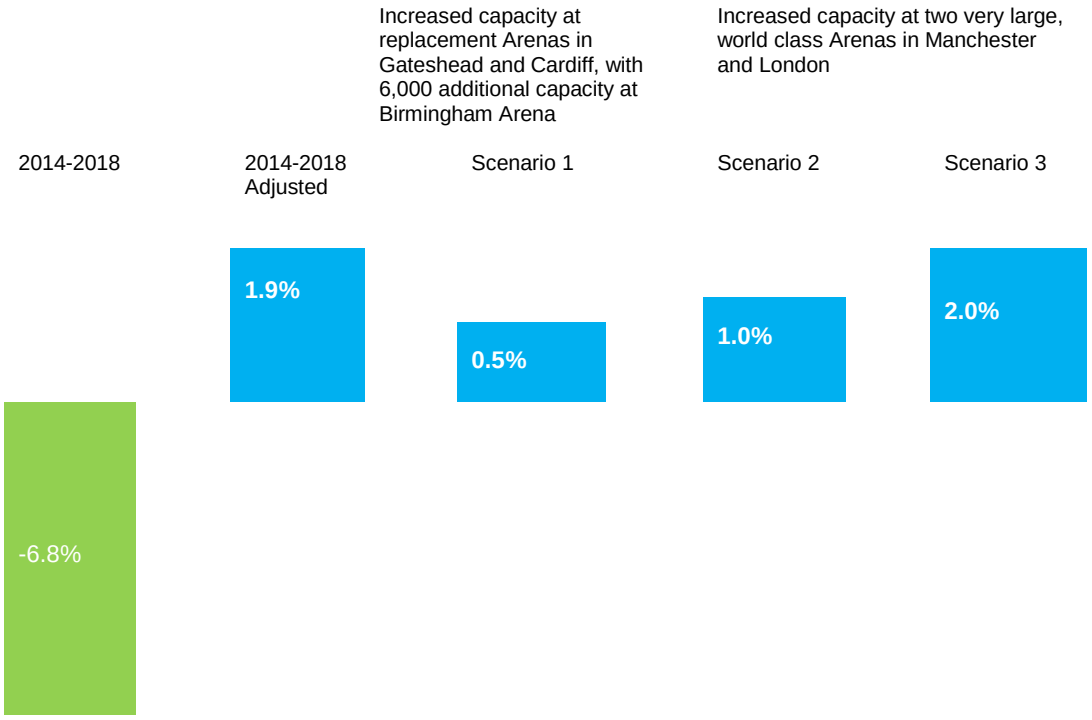
Other						
	2014	2015	2016	2017	2018	**CAGR**
Events	354	257	132	344	272	**-6.4%**
Revenue ('000s)	£79,065	£56,581	£24,979	£81,483	£67,093	**-4.0%**
Attendance ('000s)	2,381	1,707	713	2,395	1,793	**-6.8%**

Source: NAA and PWC

While the other category is an important source of events for UK arenas, there is more variability year to year in terms of events and ticket sales, although 2016 now looks like an outlier. Ticket sales are partly dependent upon the number of headline comedians with multi city/multi night performances. This affects the CAGR calculation, with the 2014-2018 figure of -6.8% in contrast to the 2014-2107 figure of +0.5% and a 2015-2018 figure of +0.2%.

In December 2017 Peter Kay cancelled 49 Arenas 2019 events in five Arenas, 16 at the Manchester Arena. This would have been a record breaking tour, with a further 51 events planned for 2019. The adjusted CAGR to take account of this event is set out in the diagram below.

Large Arena Market UK CAGR Ticket Sales Other Category 2018-2030



Adjusted for 51 Arena events booked for 2018 cancelled by Peter Kay

Other Scenarios 1 and 2 use a CAGR figure, which is considerably below the adjusted CAGR of 1.9%, and as such are conservative.

The 2019 European Arena Yearbook, highlights the trend for more private and corporate events for international companies have been held in arenas, as suggested by First Direct Arena who reported that *"Bigger companies and organisations are becoming increasingly aware of the ability to host large conferences, exhibitions and dinners in the arena environment"*. Other new forms of content, such as talk shows and live podcasts, have emerged, drawing in significant audiences. This has been seen with successful events such as Michelle Obama's tour and Peter Crouch's *Crouchfest*. YouTubers also provide great potential for future content. The General Manager of NEC Group, who operate both Birmingham arena's, is quoted in the 2018 EAY stating *"The YouTube 'live' market is definitely an area of growth, and will undoubtedly be a strong genre in the future"*.

All of the trends identified by PwC are reflected in the three growth scenarios which have been prepared by ekosgen:

Scenario 1 is a conservative estimate, based on key assumptions which are below some of the evidence provided by long term growth rates, but consistent with the adjusted 2014-2018 CAGR and the CAGR growth for event numbers, new arena development and forecast trends in the major market segments. While a lower growth rate may emerge for a few of the twenty years, it is unlikely to reflect the long term growth rate of the large arena market in the UK. The low growth rate of Scenario 1 would not be consistent with the research which has underpinned the investment decisions of four separate business cases for new arenas in London, Manchester, Cardiff or Bristol and Newcastle/Gateshead.

Scenario 2 is the most likely of the three scenarios, although there may be fluctuations in the growth pattern over the full twenty year period between 2020 and 2040. The growth rates are below the 2014-208 CAGR for sports and other categorise, but boosted by the new arena effect, although with four new arenas, two of which are large arenas in key markets, there is every prospect of new investment delivering a further step change in the large arena market.

Scenario 3 produces the highest growth rates and volumes of ticket forecasts. It does, however, depend upon the full new arena impact and sustained growth in a number of new markets, such as Esports, where the scale of future event activities are much less certain, and even with growth could merely replace the decline of some smaller sub sectors of the market.

Ticket Sales Growth Rates By Scenario and Market Category

	2018-2030 CAGR			**2031-2040 CAGR**		
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2	Scenario 3
Music	1.3%	1.5%	1.8%	1.2%	1.4%	1.5%
Family	1.7%	2.3%	2.4%	1.5%	2.1%	2.2%
Sport/Esport	6.0%	8.0%	9.0%	4.5%	6.0%	7.2%
Other	0.5%	1.0%	2.0%	0.5%	0.8%	1.7%
Total	**1.9%**	**2.5%**	**3.0%**	**1.8%**	**2.5%**	**3.1%**

The increase in tickets sales under the three growth scenarios are set out in the table below. On balance, while Scenario 3 is ambitious, a more prudent basis for investment planning would be provided by Scenario 2, incorporating the impact of new arenas, including two very large capacity arenas.

Scenarios Attendance Figures

	CAGR		2018	2030	2035	2040
	2018-2030	2031-2040*				
Scenario 1	1.9%	1.8%	12,684	15,902	17,354	19,021
Scenario 2	2.5%	2.5%	12,684	17,114	19,281	21,923
Scenario 3	3.0%	3.1%	12,684	18,121	20,969	24,595

Scenario 2 is the most likely outcome of the three scenarios and delivers a further step change in the large arena market, benefiting all of the UK arenas, in every region.

Appendix C: New Arena in Manchester – Assessment of Demand Report, Amion

AMION CONSULTING

OVG Europe Limited

New Arena in Manchester

Assessment of Demand Report

July 2020

FINAL REPORT

PRIVATE AND CONFIDENTIAL

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OVG Europe Limited

New Arena in Manchester

Assessment of Demand Report

July 2020

Reviewed and approved by: Signature(s):	G. P. Russell
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Job Title(s):	Chief Executive
Date:	July 2020

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1 Overview

OVG Europe Ltd. is planning a new 23,500-maximum capacity arena for Manchester on the Etihad Campus in the Eastlands area of the city, within close proximity to the Etihad Stadium. As part of the development work, OVG commissioned PwC to undertake an assessment of the potential for growth in the market for entertainment, music and sports events at large arenas in the UK. This work was particularly important in the Manchester context since there is already a large arena in the city, as well as large arenas in Liverpool and Leeds.

The PwC work concluded that:

- The **market has been growing** for live music and arenas with the latter supported by growth in sports and family events.
- The **emergence of new events** provides new options for arenas.
- There is evidence of **supply-led growth** – much of the growth in attendance is accounted for by new arenas.
- However, not all growth is in new arenas; many existing arenas have shown **like-for-like growth**.
- Evidence suggests that the **market will continue to grow**.
- Other **cities in the UK have more than one successful arena** (Birmingham and London).

Based on the preceding PwC market analysis, Ekosgen were then appointed to estimate the potential growth in the UK arena market over the next 20 years. Ekosgen developed three growth scenarios which forecast total UK attendance and factored four new arenas into the mix (Manchester, London, Cardiff and Gateshead[1]). These growth scenarios were built up using different forecasts for the different segments of the market (live music, sport, family and other) and concluded that total UK attendance could grow from 12.7m in 2018 to between 17.4m and 21.0m by 2035 depending on the scenario. The most likely scenario shows total attendance at UK arenas to be 19.3m by 2035. Ekosgen then modelled how this growth in aggregate demand might be distributed across UK arenas (existing and planned). **The most realistic scenario suggests that Manchester could absorb additional attendance of 1.27m per annum by 2035 with a new arena.**

AMION Consulting was then appointed to test whether the central growth forecast of 1.27m additional attendance could reasonably be supported by the market. Our methodology has focused on two key areas:

- a consumer survey with a representative sample of the population living within a 90-minute drive of the site of the proposed new arena; and
- market capacity/penetration analysis to ascertain whether the population size within the catchment can accommodate the forecast growth in attendance accounting for ONS population growth forecasts.

[1] The developments planned for Cardiff and Gateshead will replace existing smaller arenas.

In addition, our survey work explored the propensity of potential visitors to spend money in other venues outside of the new arena (including the city centre) before and after an event.

2 Opportunities for Market Growth and Development

OVG has consistently stated that it believes there is significant growth potential in the UK arena market over the next two decades and the work done by PwC and Ekosgen has confirmed this. OVG has also stated on many occasions that it believes that two arenas can co-exist in Manchester in the context of this growth. Therefore, for a new arena to enter the market in Manchester without displacing significant attendance from the existing arena, there are four possible market development opportunities.

- Appealing to **new or lapsed audiences** within the 90-minute catchment i.e. persuading people who are not currently attending arenas to visit (through new/different events and a high-quality standard of facilities and service).
- Encouraging **existing attendees** within the 90-minute catchment **to make more visits** to arenas (through new/different events and a high-quality standard of facilities and services).
- Capturing attendance **from people visiting other UK arenas** but living within the 90-minute catchment.
- Attracting **new audiences (including tourists) from outside of the 90-minute catchment** who do not currently attend arenas.

Since the survey work engaged with a representative sample of those living within a 90-minute drive time, our work has focused on testing the extent to which the first three of the four market opportunities outlined above can support the growth forecasts made by Ekosgen and particularly the central forecast of 1.27m additional attendance in Manchester by 2035.

In addition, it is important to consider the impact that population growth will have on demand. By 2035, the ONS forecasts that the UK population will have grown by 6.8% (compared to 2018) and by 8% locally within the 90-minute catchment. Even if none of the market development opportunities materialised, population growth alone would be expected to generate additional growth in arena attendance.

This report explores the potential for market **growth** and **development.** Analysis undertaken by Grant Thornton on behalf of the existing arena suggested that a 45% decline in the number of events at Manchester Arena would lead the existing venue to operate at break-even point. Whilst this clearly suggests some headroom in the operating model at the existing arena, our report identifies the ways in which Manchester can tap into **market growth and development** as opposed to simply displacing attendance from the existing arena.

3 Effects of Population Growth

Before taking advantage of any market development and growth opportunities (explored in Section 4), it should be acknowledged that long term population growth will naturally expand the available market and without any supply-side intervention (venues or events), arena attendance in any market should grow over the long term.

The ONS forecasts that the UK population will have grown by 6.8% by 2035 (compared to 2018). However, it should be recognized that different parts of the 90-minute catchment population will grow at different rates according to local circumstances over the next 20 years as opposed to a uniform 6.8% that reflects the national forecast. This variation of population growth between different local authorities has been factored into the market capacity modelling in Section 5 of this report and each local authority growth forecast is set out in Appendix B. The average growth rate across the local authorities within the catchment is forecast to be 8% between 2018 and 2035 which would see an additional 800,000 people living within the catchment.

The figure of 8% contrasts starkly with a statement made by the operators of the existing Manchester Arena (in its objections to the planning application) that attendance at UK arenas is likely to increase by just 5% by 2035. A 5% growth in attendance by 2035 would be equivalent to 0.23m additional arena visits (by the 90-minute catchment population). However, growth in the catchment population of 8% by 2035 (as indicated by ONS forecasts) could lead to additional annual attendance of 0.38m by those living within 90-minutes (assuming the same levels of propensity and frequency as those indicated in the consumer survey which follows).

The 5% growth rate suggested by the existing arena would rely on rather benign levels of activity amongst venue developers, operators, promoters, producers and artists and effectively represents decline when set against population growth forecasts.

However, it could be argued that much of the population growth that is forecast will be as a result of ageing and evidence from the consumer survey (outlined in Section 4) shows that both propensity and frequency declines amongst older age groups. It is therefore sensible to introduce a range to show the impact of lower levels of both propensity and frequency.

Table 3.1 models the additional annual attendance to arenas that would be made by those living within the 90-minute catchment assuming varying levels of propensity and frequency (where 26% and 1.8 are the levels demonstrated by the existing market and shown in the following section).

Table 3.1: Effects of population growth – scenarios				
Additional population within 90 minutes by 2035	0.80m	0.80m	0.80m	0.80m
Average propensity to visit arenas within any given year	20%	22%	24%	26%[2]
Average frequency rate	1.5	1.6	1.7	1.8[3]
Additional annual attendance at UK arenas from those living within a 90-minute drive of the new arena	0.24m	0.28m	0.33m	0.38m
Effective growth rate	5%	6%	7%	8%

Market development opportunity 1 – simple population growth

Simple population growth will expand the available market over time. Assuming that the population within 90 minutes of Manchester grows at 8% by 2035 (in line with local forecasts) could result in additional annual attendance for available arenas. This additional attendance could range from 0.24m to 0.38m per annum (across all venues).

[2] Current propensity as indicated in the Consumer Demand Survey (see Section 4).
[3] Current in-year frequency pattern as indicated in the Consumer Demand Survey (see Section 4).

4 Consumer Demand Survey

4.1 Overview

To assess whether the growth forecasts set out by Ekosgen can be supported by the market, a consumer survey was commissioned from The Audience Agency. The Audience Agency is an independent and specialist research agency working in live entertainment, theatre and culture. It has a major rolling contract with the Arts Council to undertake audience research with theatres and live venues and has offices in London and Manchester.

The survey was undertaken online during the last two weeks of June 2020 and reached a sample of 2,164 adults aged over 16 who live within a 90-minute drive of the site of the proposed new arena in Manchester. The sample of respondents was representative of age, gender, family life stage and employment.

Of the respondents, 53% lived within a 60-minute drive time of the site of the proposed new venue whilst 47% lived within a 60-90-minute drive time. The estimated population living within a 90-minute drive of the proposed new venue is 12.3m (including children) which represents around 18% of the entire UK population (see Table 4.1). All survey respondents were aged over 16 and as such, the market development and growth opportunities explored in this section largely draw on the adult population of 10.04m living within a 90-minute drive time. The image at Appendix A shows the reach of the 90-minute catchment from the new venue.

Table 4.1: Population in drive times

	0-60 minutes	60-90 minutes	0-90 minutes
Adult 15+ population estimate 2018	5,557,272	4,482,422	10,039,694
Number of households estimate 2018	2,897,593	2,326,206	5,223,799
Total population estimate 2018	6,829,660	5,426,041	12,255,701

4.2 Current attendance at UK arenas

4.2.1 Propensity and frequency

The survey respondents from within the 90-minute catchment were asked about their attendance at UK arenas within the 12 months before March 2020 and the five years before that:

- 26% of respondents had attended at least one event at any UK arena in the 12 months before March 2020 (margin of error +/- 2%).
- 58% of respondents had visited at least one event at least one arena in the last five years (margin of error +/- 2%).
- On average, those respondents who had attended arenas at any point in the last five years visited 1.8 events per annum.

Accounting for the margin of error (2%), the survey suggests that 2.4m adults from within the 90-minute catchment attend arena events each year in the UK. With an average frequency of 1.8 events per annum, the survey suggests that 4.3m visits are made to UK arenas each year by the population living within 90 minutes of the proposed new venue.

4.2.2 *Attendance at different arenas*

The survey tested attendance at all UK arenas, not just the existing Manchester Arena or the arenas within the catchment. As shown in Table 4.2, Manchester Arena is the most popular venue amongst those living within the 90-minute catchment with 28% of all visits. 17% of arena visits were made to Leeds, 13% to Liverpool and 11% to Sheffield. Crucially however, 32% of visits were made to arenas located outside of the 90-minute catchment which is equivalent to 1.39m visits per annum and 10% leaking to the two London arenas (equivalent to 0.47m visits per annum). Attendance over the five year period at the different arenas is shown in Appendix C.

Table 4.2: Arenas visited within the 12 months before March 2020 by population within 90 mins

		% of all visits made to arenas by the population within 90-minutes	Implied annual attendance from those living within 90 minutes
Manchester Arena	Located within the 90-minute catchment	28%	1.20m
First Direct Arena Leeds		17%	0.74m
M&S Bank Arena Liverpool		13%	0.56m
Fly DSA Arena, Sheffield		11%	0.46m
Resorts World Arena, Birmingham	Located outside of the 90-minute catchment	6%	0.28m
O2 Arena, London		6%	0.28m
Utilita Arena, Birmingham		4%	0.19m
Wembley Arena, London		4%	0.19m
Motorpoint Arena, Nottingham		2%	0.09m
Utilita Arena, Newcastle		2%	0.09m
SSE Hydro, Glasgow		2%	0.09m
Motorpoint Arena, Cardiff		2%	0.09m
SSE Arena, Belfast		2%	0.09m
Margin of error		*2%*	

Market development opportunity 2 – capture attendance from those who live within the catchment but visit arenas outside (particularly London)

Whilst the existing Manchester Arena is the most visited venue amongst those living within the 90-minute catchment, significant attendance is lost to venues outside of the catchment and particularly London. To a certain extent, the attendance at the Birmingham and Nottingham venues will be a product of proximity, for example those living in Staffordshire (which is in the 90-minute drive time) may be more inclined to visit Birmingham. However, the survey indicates that 0.47m visits were made to the London arenas by our 90-minute catchment population in the 12 months before March 2020 and a further 0.36m visits were made to Newcastle, Glasgow, Belfast and Cardiff. **Reversing some of this 'outward flow' could lead to additional attendance in Manchester.** Capturing say 50% of the visits currently made to London, Newcastle, Cardiff, Glasgow and Belfast would give additional attendance in Manchester of 0.42m and make a significant contribution to the Ekosgen central growth forecast of 1.27m.[4]

4.2.3 Age profile of attendance

The research demonstrates that different age groups have different patterns of attendance at UK arenas. Propensity and frequency are highest amongst younger age groups. 39% of those aged 16-34 and living within 90 minutes of the new venue had visited an arena in the 12 months before March 2020, compared to 28% of those aged 35-54 and only 14% of those aged over 55.

In terms of five-year attendance, 70% of those aged 16-34 had visited an arena within the last five years compared to 61% of those aged 35-54 and 43% of those aged over 55 (see Table 4.3).

Table 4.3: Visits to UK arenas by people living within a 90-minute catchment and by age

Total sample: 2,136	**Age 16-34 (662)**	**Age 35-54 (726)**	**Age 55+ (748)**
Visited an arena within the 12 months before March 2020	39%	28%	14%
Visited an arena within the last five years (includes those above)	70%	61%	43%

The younger age groups are also likely to be more *frequent* attendees than older age groups (as shown in Table 4.4). On average, those aged 16-34 attended 2.5 events per annum at arenas (equivalent to 12.5 events over a five-year period) compared to 1.5 events per annum for those aged 35-54 and 1.2 events per annum for those aged over 55.

[4] This would be a re-distribution of demand from venues outside of the catchment and London in particular rather than additional aggregate demand at the UK level as forecast by Ekosgen. This additional potential audience was not captured in the Ekosgen forecasts as it was not known at the time how many people within the 90-minute catchment were attending events at arenas outside of the catchment.

Table 4.4: Frequency of visits to UK arenas by people living within a 90-minute catchment and by age			
Those who have visited an arena within the last five years: 1,248	**Age 16-34 (479)**	**Age 35-54 (442)**	**Age 55+ (327)**
No. of events attended per annum	2.5	1.5	1.2
Or no. of events attended over 5 years	12.5	7.5	6

Having two arenas in Manchester would allow for a broader and more diverse range of event programming within the city which could work to increase demand from age groups that have not traditionally visited arenas.

4.3 Unlocking latent demand

The survey respondents (who all lived within a 90-minute drive time of the proposed new venue) were shown visuals of the new arena and given a description of the proposed offer. 62% of respondents indicated that they were 'very interested' or 'quite interested' in visiting a venue such as the OVG proposition.

Table 4.5: Interest in proposed new arena amongst the population living within 90 minutes	
Thinking broadly about the types of events that we have described in the survey, how interested would you be in attending a venue like this?	**Asked of total sample: 2,136**
Very interested	27%
Quite interested	35%
Neutral	19%
Not very interested	9%
Not at all interested	10%
Margin of error	*2%*

More detailed analysis of these levels of interest shows a significant level of interest amongst those who have not visited any arena in the last five years and suggests a significant amount of latent demand for a high-quality new arena with the capacity to attract world class events. This responds directly to the market opportunity outlined in Section 2 - appealing to **new or lapsed audiences** within the 90-minute catchment i.e. persuading people who are not currently attending arenas to visit (through new/different events and a high-quality standard of facilities and service).

42% of survey respondents from the 90-minute catchment **who had not visited any UK arena in the last five years** indicated that they were 'very interested' or 'quite interested' in visiting the new venue (see Table 4.6). This represents an **additional 1.77m people** living within the 90-minute catchment who may be in the market for a new venue.

Table 4.6: Interest in proposed new arena amongst those who have not visited an arena within the last five years living within 90 minutes		
Thinking broadly about the types of events that we have described in the survey, how interested would you be in attending a venue like this?	**Asked of those who had not attended an arena within the last five years: 888**	**Population within 90-minute drive who have not attended an arena within the last five years**
Very interested	13%	**548,167**
Quite interested	29%	**1,222,835**
Neutral	24%	1,012,001
Not very interested	14%	590,334
Not at all interested	20%	843,334
Margin of error	*3%*	

Based on the five-year propensity and frequency patterns observed in the survey responses, this potential additional audience of 1.77m people could generate additional annual attendance of 1.32m visits. However, this would only be the case if the frequency patterns of these new audiences mirrored those of existing audiences which is probably unlikely. For those new audiences that visit in any given year, it is assumed that they only visit once rather than 1.8 times as observed with existing audiences. This adjustment would suggest a potential additional annual attendance of 0.73m from those not currently in the market for arenas and living within a 90-minute drive time (see Table 4.7).

Table 4.7: Latent demand within 90-minute catchment	
Population within 90 minutes (adults 15+)	10.04m
% of population that has not attended an arena event within the last 5 years	42%
Population within 90 minutes not attending arenas	4.22m
% of non-attenders that would be very interested or quite interested in attending	42%
Potential additional market	1.77m
Potential additional annual attendance after applying five-year propensity pattern and allowing for less frequent attenance	0.73m
Latent demand amongst 90-minute catchment	**7%**

Market development opportunity 3 – appeal to those who do not currently attend any arenas but live within the 90-minute catchment

The research suggests that 42% of those who do not currently attend arena events and live within the 90-minute catchment would be 'very interested' or 'quite interested' in visiting the new arena in Manchester. The research suggests latent demand equivalent to 7% of the adult population per annum exists within the market and could drive **0.73m visits** to the new arena making a significant contribution to the central Ekosgen growth forecast of 1.27m.

4.4 Increased frequency from existing audiences

The analysis in Section 4.3 focuses on attracting audiences who do not currently attend arenas. This section considers whether those who currently *do* attend arena events might visit more frequently as a result of the OVG proposition in Manchester.

Whilst the survey stopped short of asking respondents how much **more** frequently they would attend events, it is clear that a majority of those who do currently visit arenas (and live within the 90-minute catchment) would increase their frequency of attendance by attending events at the new OVG arena in Manchester. 62% of those who have visited an arena within the last five years 'strongly agree' or 'agree' that they would be more likely to attend these types of events more frequently than they did before (see Table 4.8).

Table 4.8: Interest in attending more frequently amongst those who have attended arenas within the last five years and live within a 90-minute catchment

The new arena would be able to attract a wider range of world class events to the city. To what extent do you agree with the following statement - I would be likely to attend these types of events more frequently than I did before	**Asked of those who have attended arenas within the last five years: 1,248**
Strongly agree	22%
Agree	40%
Neither	26%
Disagree	8%
Strongly disagree	3%

Taking this 62% and applying it to the observed patterns and frequency of attendance amongst those who have visited UK arenas in the last five years would suggest that 1.49m people (from the 90 minute catchment) in any given year would increase the number of events that they attend (over five years). The current average frequency rate amongst those that do attend arena events is 1.8 times per annum (or 9 events over five years). Table 4.9 models the increased attendance that could be expected in any given year. If all respondents who indicated that they would attend more events attended just one additional event **every five years** (at the new arena) then we can expect additional attendance of 0.3m per annum. If, on the other hand, they attended one additional event **once every year**, then we can expect additional attendance of 1.49m per annum (at the new arena).

Table 4.9: Potential increased frequency amongst arena attendees within 90-minute catchment	
Population within 90 minutes (adults 15+)	10.04m
% of population that has attended an arena event within the last 5 years	58%
Population within 90 minutes attending arenas within the last 5 years	5.82m
Population attending arenas within any given year	2.41m
% of attendees that strongly agree or agree that they would attend more frequently	62%
Total additional attendance if people attend one extra event *every five years*	**0.30m**
Total additional attendance if people attend one extra event *every year*	**1.49m**

Market development opportunity 4 – encourage those who do visit arenas from within the catchment to increase their frequency of attendance as a result of the new arena

62% of those living within the catchment and already attending arenas stated that they would be likely to attend arena events more frequently than before as a result of a high quality, new arena attracting more world class events. This could contribute additional attendance of between 0.3m and 1.49m per annum for the new arena in Manchester. The mid-point within this range would deliver **additional attendance of 0.9m per annum** which would make a significant contribution to the central Ekosgen growth forecast of 1.27m.

4.5 Consumer expenditure pre/post event

In the same way that OVG have consistently argued that two venues can co-exist in the city on the back of market growth (explored above), they have also consistently stated that the impact of the additional attendance will be beneficial to the wider visitor economy including city centre businesses.

For those respondents (from within a 90-minute catchment) who had visited the existing Manchester Arena within the last five years (38%), questions were asked about staying overnight and spending patterns before and after the event. Similarly, those respondents who had shown interest in attending the new OVG arena were also asked about staying overnight and expenditure away from the venue (pre and post event).

30% of those showing interest in the new venue stated that they would probably stay overnight in Manchester despite living within the 90-minute catchment which is exactly in line with those staying overnight for existing Manchester Arena events.

70% of those showing interest in the new venue stated that they would spend money on food or drink **before** the event at a place *other than the venue* and **including the city centre** (78% of existing Manchester Arena visitors in the survey spent money before the event).

49% of those showing interest in the new venue stated that they would spend money on food or drink **after** the event at a place *other than the venue* and **including the city centre** (54% of existing Manchester Arena visitors in the survey spent money after the event).

Naturally, given the new arena's proposed location, the propensity of visitors to spend money on food and drink outside of the venue is slightly lower than that which is currently being seen amongst

existing Manchester Arena visitors. However, these propensity levels are still very strong and would represent a significant amount of additional trade for the city centre (see Table 4.10).

Table 4.10: Propensity to spend outside of the venue

When visiting the existing Manchester Arena in the last five years, have you on at least one occasion…	Sample: 708[5]	If you attended the new venue, how likely would you be to…	Sample: 1,267 (inc neutrals)
…stayed overnight?	30%	…stay overnight	30%
…spent money on food or drinks beforehand in the area at a place other than the venue?	78%	…spend money on food or drinks beforehand in the area (including the city centre) at a place other than the venue?	70%
…spent money on food or drinks afterwards in the area at a place other than the venue?	54%	…spend money on food or drinks afterwards in the area (including the city centre) at a place other than the venue?	49%

This evidence demonstrates the additionality that the new arena will have in terms of visitor expenditure in the city centre and elsewhere. This will bring a significant economic impact to the city centre which was quantified in the Ekosgen economic impact report that supports the OVG arena proposal. Meanwhile the ongoing attendance levels at the existing arena will continue to have a positive impact on city centre businesses.

4.6 Summary of survey results

The consumer demand survey undertaken by The Audience Agency demonstrates that Ekosgen's central growth forecast of additional annual attendance of 1.27m by 2035 can be more than supported through three market development opportunities:

- **Reducing leakage** to venues outside of the catchment could drive **c.0.42m visits per annum** to the new venue (assuming that 50% of the visits made to arenas in London, Glasgow, Newcastle, Belfast and Cardiff by people in the 90-minute catchment are captured).
- **Unlocking latent demand** (appealing to new/lapsed audiences within the catchment) could drive **c.0.73m visits per annum** to the new arena.
- **Increasing the frequency of visits** by those in the catchment who already attend arenas could drive **c.0.9m visits per annum** to the new arena (assuming average frequency increases from 9 visits every five years to 12).

All of the above identifies the market potential of 2.05m additional visits to the new OVG arena which is well above the 1.27m additional demand forecast by Ekosgen. In addition, the effects of population

[5] 33% of all respondents but slightly lower than the 38% who indicated that they had visited Manchester Arena within the last five years.

growth could add in additional attendance of between 0.24m and 0.38m (although this element would be shared across all venues not just the new venue).

In addition, the new venue also has the potential to attract new audiences, including tourists, from those living outside the 90-minute catchment who do not currently attend arenas.

The survey work identifies that there is considerable headroom in the Ekosgen forecast of 1.27m additional annual attendance by 2035 in Manchester and demonstrates that two arenas could co-exist in the city. This would protect the current levels of visitor expenditure in the city centre derived from visits to the existing arena but would also generate significant additional economic impact as the survey work demonstrated that respondents interested in the new venue would spend money in hotels, bars and restaurants pre and post event in proportions broadly similar to those seen with attendees of the existing Manchester Arena. This underpins the forecasts of economic impact made by Ekosgen for the project.

Table 4.11: summary of market development opportunities

Market development opportunity	Maximum additional audience	Adjusted additional audience	Note on adjustment
1. Population growth	0.38m	0.24m	Assumes lower propensity and frequency amongst ageing population
2. Reducing leakage to venues outside of the catchment	0.83m	0.42m	Assumes 50% are captured
3. Unlocking latent demand	1.32m	0.73m	Assumes lower frequency amongst new audiences
4. Increasing the frequency of visits	1.49m	0.90m	Assumes an extra three visits every five years
Total potential additional audience	**4.02m**	**2.29m**	
Ekosgen growth forecast	1.27m	1.27m	
Demand based headroom	**2.75m (217%)**	**1.02m (80%)**	

5 Market Capacity and Penetration Analysis

5.1 Introduction

The Audience Agency survey (referred to in Section 4) provides evidential insight into the pattern of arena attendance within drive-time catchments of the proposed OVG arena. The exercise reports that (i) 26% of the total catchment attended at least one arena event in the 12 months prior to March 2020, (ii) the actual number of attendances (accounting for multiple attenders) was 1.8 times higher than the number of individuals reporting in the survey, and (iii) the scale of potential latent demand in the wake of the new OVG arena is equivalent to 7% of the population catchment.

The purpose of this part of the report is to take a closer look at the sustainability of a dual arena environment with both the existing Manchester Arena and the proposed new OVG arena operating. This is an important consideration in that the prevalence profile reported by the Audience Agency defines a 'ceiling' estimate of potential arena attendance by residents in catchment areas. It does not automatically follow that all of these individuals will, or will be available to, attend arena events in Manchester given competing/alternative arena offers in other locations.

The objective of the analysis is to 'stress test' sustainability by determining a 'floor' estimate of arena market potential for Manchester using a 90-minute catchment. This is achieved by projecting dual arena activity, with associated attendance requirements, against constrained attendance prevalence profiles. The process is equivalent to assessing viability in the context of a 'worst-case' scenario where numbers available to attend two arenas in Manchester are significantly limited.

5.2 Dual arena activity profile

The basis of our activity profile lies in information provided from a range of sources, namely the Manchester Arena (Charles River Associates) response to the OVG planning application and the 2020 Ekosgen 'Arena Forecasting Report'.

- **Existing Manchester Arena** – Charles River Associates indicates existing ticket sales in the order of 1.2m per annum;
- **Ekosgen growth forecast** - the central Ekosgen growth forecasts (scenario 2) identify an additional 1.27m attendance by 2035 in Manchester.

On this basis, there is a requirement of 2.47m attendance for the operation of two arenas in Manchester.

Analysis undertaken by Grant Thornton on behalf of the existing arena suggested that a 45% decline in the number of events at Manchester Arena would lead the existing venue to operate at break-even point. However, our analysis demonstrates that there will be market capacity and growth potential without materially affecting the existing arena's attendance.

5.3 Prevalence profile

Our floor estimate of prevalence reflects a 'gravity-based' modelling exercise which involves calculating the distance of each local authority in the catchment, from every arena in the catchment (Liverpool, Leeds, Sheffield and Nottingham) as well as outlying arenas.

Catchments for each arena are overlaid to define the degree of 'overlap' with the likelihood of attendance at any given arena for overlap authorities determined via a distance decay function in which the negative effect of distance is exponentially penalised.

As such, the prevalence rate for attending a Manchester event from an overlap authority is adjusted downwards to reflect the proximity of such residents to other arenas. This is a strong constraining assumption and effectively represents a scenario where Liverpool, Leeds and Sheffield arenas provide an equivalent quality and volume of events to those in Manchester and particularly the new venue (which is highly unlikely). Combined with an assumption that prevalence for non-overlap authorities remains at the Audience Agency rate, this process provides a 'floor' estimate of overall catchment prevalence.

Three further adjustments are made to this floor estimate. We:

- allow for the multiple attendee patterns (frequency) identified in the Audience Agency survey (uplift by 1.8);
- reflect the level of latent demand (7%) also identified in the Audience Agency study;
- adjust for outward/inward flows from/to arena events in Manchester:
    - the Audience Agency survey reports that 32% of arena visits are to arenas outside the 90-minute catchment and we reduce overall catchment prevalence accordingly (an adjustment has been made in line with Market Development Opportunity 2 in Section 4.2.2 which captures 50% of this outward flow);
    - the UK Music 2019 Greater Manchester Music Review suggests that some 37% of attendees at music events live outside Greater Manchester while the 2017 UK Music Wish You Were Here report places the figure for the North West at 43%. We conservatively assume that 30% of arena events in Manchester are sourced from outside the catchment.

5.4 Market capacity outcomes

Assessment of market capacity brings together the activity and prevalence profiles. For consistency with the Ekosgen report our modelling uses the (2018 base) Office for National Statistics (ONS) projected 2035 population for catchment local authorities.

It is important to note that our analysis does not include projection demographics for Welsh local authorities as these have been withdrawn by the Welsh statistical authority to correct errors[6]. As such, our analysis marginally underestimates prevalence profiles.

[6] https://gov.wales/subnational-population-projections-further-analysis-2018-based

Table 5.1 provides the high-level outcomes of our analysis with columns of data reflecting unconstrained and constrained market capacity calculations. Taking each in turn:

- Unconstrained Capacity (ceiling capacity):
  - with a population base of 9.84m, prevalence rates of 27% for local authorities in the 60-minute catchment and 26% for the 60-90-minute catchment, the 90-minute prevalence population is defined as 2.60m persons;
  - adjusting for multiple attendance and latent demand raises the market capacity estimate to 5.37m;
  - taking net 'arena tourism' flows into account increases market capacity to 5.78m
  - contrasting capacity against ticket sales requirement (2.47m) defines significant 'headroom' for two arenas to operate in an unconstrained market.
- Constrained Capacity (floor capacity):
  - prevalence population in the constrained scenario is reduced by over 50% (2.60m to 1.2m), equivalent to a population prevalence of some 12%;
  - adjusting for multiple attendance and latent demand raises the market capacity estimate to 2.85m;
  - taking net 'arena tourism' flows into account increases market capacity to 3.26m
  - contrasting capacity against ticket sales requirement (2.47m) again defines ample 'headroom' for two arenas to operate in a very constrained market scenario (worst case).

The scale of the estimated headroom in these constrained circumstances is equivalent to:

- a multiple attendance rate of close to 0.4 rather than the 0.8 assumed; and
- a latent demand of 2% rather than the 7% assumed.

Table 5.1: Unconstrained and constrained market capacity assessment			
	Unconstrained (ceiling level)	**Constrained (floor level)**	**Constrained (floor level but with Manchester Arena expansion)**
Population Base (2035)	9.84m	9.84m	9.84m
Prevalence Population	2.60m	1.20m	1.20m
+ Multiple Attendees	2.08m	0.96m	0.96m
+ Net Arena Flows	0.41m	0.41m	0.46m
+ Latent Demand	0.69m	0.69m	0.69m
TOTAL AVAILABLE DEMAND	**5.78m**	**3.26m**	**3.31m**
Combined annual ticket sales required at the two arenas	**2.47m**	**2.47m**	**2.64m**
HEADROOM	**3.31m**	**0.79m**	**0.67m**

For the purposes of simulation we also model the announced proposal to increase the capacity of the existing Manchester Arena to 24,000 by uplifting average attendance by 14% (end column in Table 5.1). This raises the combined ticket sales requirement to 2.64m but constrained market capacity is assessed at 3.31m indicating headroom for two arenas to operate in a very constrained (worst case) market scenario once more.

Finally, we further review constrained outcomes allowing for the error margin reported in the Audience Agency forecasts and reduce prevalence rates for the catchment by 2% points. In these circumstances the total available demand is estimated to be 2.87m giving headroom of 0.4m over the required ticket sales of 2.47m for two arenas in what is again a very constrained (worst case) scenario.

Overall, the outcome of the analysis indicates that there exists positive headroom for two arenas to operate sustainably within the Manchester catchment even in (deliberately engineered) 'worst-case' stress test circumstances where over 50% of prevalence is removed from capacity, existing Manchester Arena capacity is increased and prevalence rates are lowered to compensate for the error margin in the Audience Agency survey.

This conclusion stands prior to consideration of the potential growth/UK market capture identified by the Ekosgen study and the likelihood of a new world-class venue reducing arena attendance by catchment residents in other parts of the UK and attracting arena attendance by non-catchment residents to Manchester.

5.5 Summary

The market capacity modelling aims to demonstrate the headroom available in the market by using:

a) a completely unconstrained scenario (ceiling level) which effectively assumes no other arenas in the 90-minute catchment; and

b) a very constrained scenario (floor level) which assumes that the arenas in Liverpool, Leeds and Sheffield put on a programme of events that is directly comparable with those of the existing Manchester Arena and the new OVG proposition and assumes (as a worst case scenario) that residents will essentially visit the arena closest to them.

Both scenarios include the market development opportunities which emerged from the consumer survey work and outlined in Section 4.

The ceiling level capacity in the unconstrained scenario demonstrates a significant potential market of 5.78m arena visits per annum made by the population living within 90-minutes of Manchester. Clearly, some of this demand will be absorbed by arenas in Liverpool, Leeds and Sheffield and those outside of the catchment.

On the other hand (and at the other extreme), the floor level capacity in the constrained scenario effectively assumes that arena visitors simply attend the arena that is closest to them which would actually require a comparable programme at each venue and is therefore unrealistic but designed to be a worst case. In this scenario, the total available demand in Manchester would be 3.26m per annum which is some 0.79m above the requirement of 2.47m (1.2m at the existing Manchester Arena and 1.27m Ekosgen growth forecast).

6 Conclusions

AMION Consulting was appointed to test whether the central growth forecast of 1.27m additional attendance in Manchester by 2035 could reasonably be supported by the market. Our methodology has focused on two key areas:

- a **consumer survey** with a representative sample of the population living within a 90-minute drive of the proposed new arena; and
- **market capacity/penetration analysis** to ascertain whether the population within the catchment can accommodate the forecast growth in attendance.

The survey work demonstrates that Ekosgen's central growth forecast of an additional 1.27m annual attendance by 2035 can be more than supported through three market development opportunities:

1. **Reducing leakage** to venues outside of the catchment could drive **c.0.42m visits per annum** to the new venue (assuming that 50% of the visits made to arenas in London, Glasgow, Newcastle, Belfast and Cardiff by people in the 90-minute catchment are captured).
2. **Unlocking latent demand** (appealing to new/lapsed audiences within the catchment) could drive **c.0.73m visits per annum** to the new arena.
3. **Increasing the frequency of visits** by those in the catchment who already attend arenas could drive **c.0.9m visits per annum** to the new arena (assuming average frequency increases from 9 visits every five years to 11.5).

All of the above identifies the market potential of 2.05m additional visits to the new OVG arena which is well above the 1.27m additional demand forecast by Ekosgen.

In addition, this report highlights that simple population growth will naturally expand the available market and as a result, attendance at arenas is likely to increase without any supply side interventions or market development. By 2035, the local population is set to grow by 8% which contrasts sharply with the forecast made by the existing Manchester Arena that attendance at UK arenas is likely to increase by just 5% by 2035 which would effectively represent decline in the market. The effects of population growth could add in additional attendance of between 0.24m and 0.38m (although this particular element would be shared across all venues not just the new venue).

In addition, the new venue also has the potential to attract new audiences, including tourists, from outside the 90-minute catchment who do not currently attend arenas.

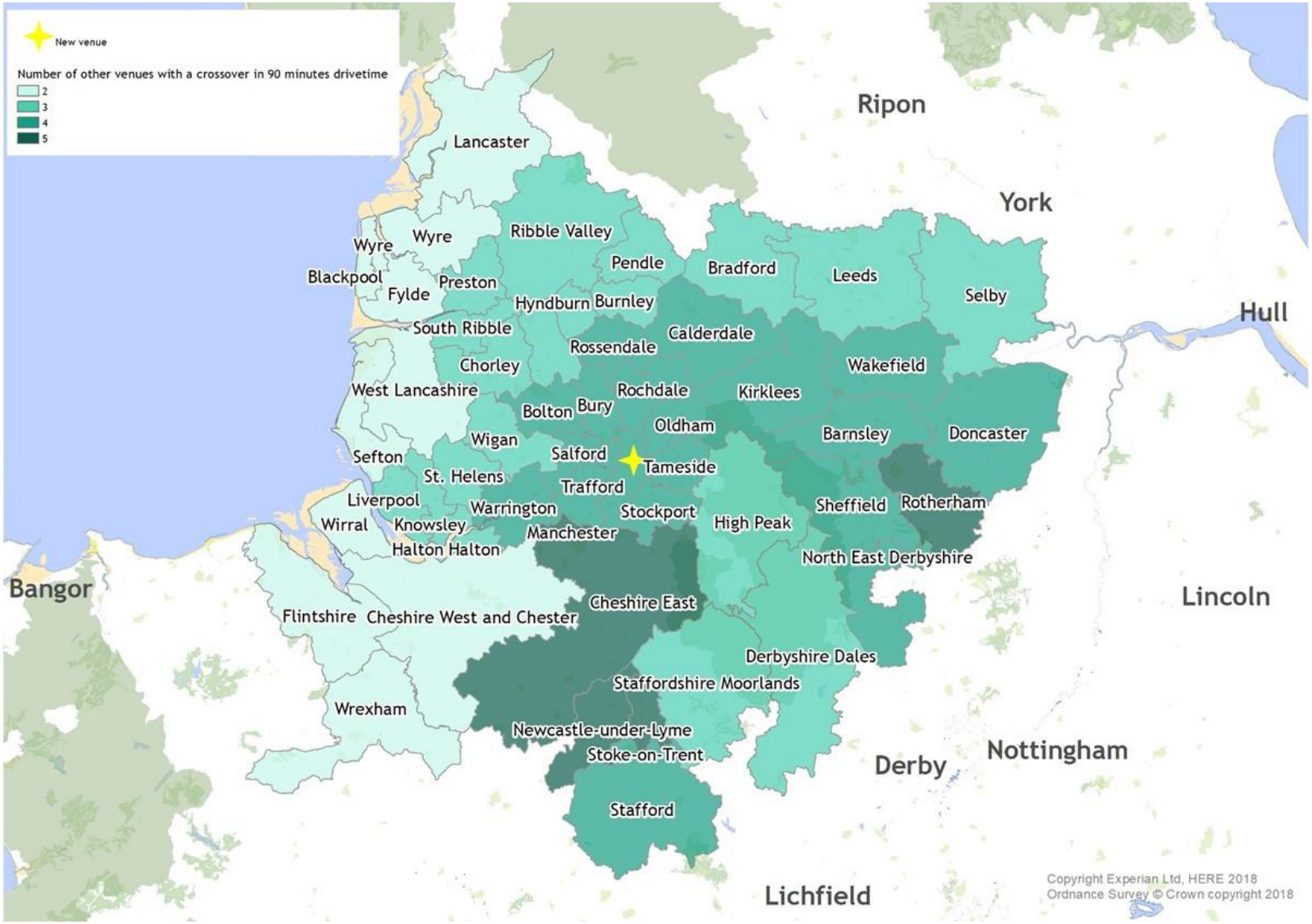
The survey work identifies that there is considerable headroom in the Ekosgen forecast of 1.27m and demonstrates that two arenas could co-exist in the city. This would protect the significant levels of visitor expenditure in the city centre that are currently derived from visits to the existing arena and generate significant additional economic impact from visitors to the new arena. The survey work demonstrated that respondents interested in the new venue would spend money in hotels, bars and restaurants in proportions broadly similar to attendees of the existing Manchester Arena which reinforces the forecasts of economic impact made by Ekosgen for the project.

Detailed market capacity modelling and penetration analysis confirms that positive headroom exists for two arenas to operate sustainably within the Manchester catchment even when a very constrained (floor level) scenario is constructed which assumes that the arenas in Liverpool, Leeds

and Sheffield put on a programme of events that is directly comparable with those of the existing Manchester Arena and the new OVG proposition and then assumes (as a worst case scenario) that residents will essentially visit the arena closest to them. Under this worst-case scenario, the total available demand in Manchester would be 3.26m per annum which is some 0.79m above the requirement of 2.47m (1.2m at the existing Manchester Arena and 1.27m Ekosgen growth forecast).

Appendix A

90-minute drive time catchment area with local authorities highlighted



Appendix B

Estimated growth in population between 2018 and 2035 at local authorities within the catchment (ONS)

Table B1: ONS population growth estimates by each local authority within the catchment (exc. Wales)[7]					
Local authority	**Population growth forecast 2018-2035**	**Local authority**	**Population growth forecast 2018-2035**	**Local authority**	**Population growth forecast 2018-2035**
Wakefield	16%	Doncaster	8%	Burnley	6%
Salford	16%	Lancaster	8%	Preston	6%
Chorley	15%	Cheshire East	8%	Pendle	5%
Selby	14%	Knowsley	8%	Sefton	5%
Fylde	14%	Tameside	8%	Derbyshire Dales	5%
Rochdale	12%	Rotherham	8%	Warrington	5%
Stafford	12%	Bury	7%	Bolton	5%
Cheshire West/Chester	12%	Stockport	7%	Hyndburn	4%
Ribble Valley	11%	Halton	7%	Calderdale	4%
Barnsley	11%	Bradford	7%	Wirral	4%
Rossendale	11%	Wigan	7%	South Ribble	4%
Oldham	10%	St Helens	7%	West Lancashire	3%
Liverpool	10%	Stoke on Trent	7%	Blackburn with Darwen	3%
Sheffield	10%	High Peak	6%	Staffordshire Moorlands	2%
Manchester	9%	Leeds	6%	Blackpool	1%
Trafford	9%	North East Derbyshire	6%		
Newcastle under Lyme	9%	Kirklees	6%		

[7] It is important to note that our analysis does not include projection demographics for Welsh local authorities as these have been withdrawn by the Welsh statistical authority to correct errors.

Appendix C

Taken from consumer demand survey undertaken by The Audience Agency

Table C1: Arenas visited within the last five years by the population living with the 0-60 minute and 60-90 minute drive times.			
		% of respondents who had visited this arena within the last five years 0-60 minute drive time	**% of respondents who had visited this arena within the last five years 60-90 minute drive time**
Manchester Arena	Located within the 90-minute catchment	46%	30%
First Direct Arena Leeds		14%	24%
M&S Bank Arena Liverpool		23%	14%
Fly DSA Arena, Sheffield		7%	19%
Resorts World Arena, Birmingham	Located outside of the 90-minute catchment	11%	11%
O2 Arena, London		13%	12%
Utilita Arena, Birmingham		7%	7%
Wembley Arena, London		12%	9%
Motorpoint Arena, Nottingham		4%	6%
Utilita Arena, Newcastle		5%	4%
SSE Hydro, Glasgow		6%	5%
Motorpoint Arena, Cardiff		3%	3%
SSE Arena, Belfast		4%	2%

Appendix D: City Centre Benefits, ekosgen

Context

OVG Manchester Ltd. is planning a new 23,500-maximum capacity arena for Manchester on the Etihad Campus in the Eastlands area of the city. As part of the development work, OVG Manchester commissioned PwC to undertake an assessment of the potential for growth in the market for entertainment, music and sports events at large arenas in the UK. Ekosgen were subsequently appointed to estimate the potential growth in the UK arena market over the next 20 years, based on three growth scenarios which forecast total UK attendance, including four new arenas into the mix (Manchester, London, Cardiff and Gateshead[1]).

AMION Consulting was then appointed to test whether the central growth forecast of 1.27m additional attendance could reasonably be supported by the market. The methodology focused on two key areas: a consumer survey with a representative sample of the population living within a 90-minute drive of the site of the proposed new arena; and market capacity/penetration analysis to ascertain whether the population size within the catchment can accommodate the forecast growth in attendance accounting for ONS population growth forecasts.

In addition, consumer survey work explored the propensity of potential visitors to spend money in other venues outside of the new arena (including the city centre) before and after an event. The survey was commissioned from The Audience Agency, an independent and specialist research agency working in live entertainment, theatre and culture. It has a major rolling contract with the Arts Council to undertake audience research with theatres and live venues and has offices in London and Manchester.

The survey was undertaken online during the last two weeks of July 2020 and reached a sample of 2,164 adults aged over 16 who live within a 90-minute drive of the site of the proposed new arena in Manchester. The sample of respondents was representative of age, gender, family life stage and employment.

The survey reported that:

1. 30% of those showing interest in the new venue stated that they would probably stay overnight in Manchester despite living within the 90-minute catchment which is exactly in line with those staying overnight for existing Manchester Arena events.
2. 70% of those showing interest in the new venue stated that they would spend money on food or drink **before** the event at a place *other than the venue* and **including the city centre** (78% of existing Manchester Arena visitors in the survey spent money before the event).
3. 49% of those showing interest in the new venue stated that they would spend money on food or drink **after** the event at a place *other than the venue* and **including the city centre** (54% of existing Manchester Arena visitors in the survey spent money after the event).

While the propensity of visitors to spend money on food and drink outside of the venue is slightly lower than that reported for the existing Manchester Arena visitors, these propensity levels are very strong and would represent a significant amount of additional trade for the city centre.

[1] The developments planned for Cardiff and Gateshead will replace existing smaller arenas.

The market evidence underpinned by the Amion report highlights how a second arena will drive additional visits in a 90 minute catchment in a growing UK market. This new market intelligence has been used to assess the benefits to the city centre from two Manchester arenas.

With ticket sales of 2.3 tickets in a single year, based on current attendances and the central growth scenario, the two Manchester arenas will support:

1. Almost £57m of food and beverage expenditure, including a significant expenditure within the venues, matched by expenditure in the city centre.
2. 186,000 overnight visitors staying with friends and relatives and 558,000 overnight visitors staying in paid accommodation, generating 838,000 bednights for hotels and serviced accommodation (85% of which will be provided by city centre operators).

The scale and distribution of visitor expenditure is set out below.

Audience Expenditure: Two Arenas and Growth Scenario 2

	Arenas	City Centre	Elsewhere	Total
F&B	£25.54m	£25.16m	£6.28m	£56.98m
Retail	£4.82m[1]	£28.33m	£3.14m	£36.29m
Accommodation		£35.61m	£6.29m	£41.90m
Transport[2]	-	£6.09m	£24.39m	£30.48m
Total	**£30.36m**	**£95.19m**	**£40.10m**	**£165.65m**

[1] Specialist retail, including merchandise linked to performers.

[2] Including expenditure on trains, coaches and Metrolink

OVG Manchester's industry insights suggest that only 25% of average F&B spend at their venue is related to ticketed people who arrive at an arena more than 30 minutes before the event starts. This spend, estimated at circa £3m, could be regarded as displaced from the city centre.

The overall impact of the proposed new arena on the city centre economy is considerable, reflecting the lack of hotels, serviced accommodation, and independent bars restaurants and cafes at the campus venue i.e. the Manchester visitor economy ecosystem is in the city centre and city centre fringe.

In effect, the move to a two arena model and the central growth scenario will double the economic benefits to city centre businesses from the large arena market. The scale of city centre benefits are considerable, estimated at almost £95m, with a major boost to the hotel sector and food and beverage businesses.

The Audience Agency research, which shows that 70% of those showing interest in the proposed new arena stated that they would spend money on food or drink *before* the event at a place *other than the venue, and* 49% of those showing interest in the new arena stated that they would spend money on food or drink *after* the event at a place *other than the venue,* provides further evidence that substantial expenditure will take place in the city centre.

In simple terms, only a small proportion of Arena benefits are generated within the two arenas (irrespective of location), with the major beneficiary of a second Arena at the Etihad Campus will be city centre businesses in food and beverage, retail, hotels and serviced accommodation.

In effect, the two Manchester arenas will generate a similar distribution of benefits, with venue food and beverage and specialist retail expenditure outweighed several times over by significant benefits for city centre businesses in food and beverage, retail, hotels and serviced accommodation.

Appendix E: List of Music Acts only playing London, 2014-2018; Sports and other Events not playing Manchester

	2018			2017			2016			2015			2014	
O2	BluesFest	3	O2	Barry Manilow	3	O2	Marc Anthony	1	O2	Capital FM Jingle Bell Ball	2	O2	Monty Python Live (Mostly)	2
O2	The Muppets	2	O2	BluesFest	3	O2	BluesFest/Bad Company	1	O2	Risky Business	1	O2	Country 2 Country Festival (London)	2
O2	BTS	2	O2	Capital FM Jingle Bell Ball	2	O2	BluesFest/Maxwell/Mary J. Blige	1	O2	Country 2 Country Festival (London)	1	O2	BRIT Awards	1
O2	Capital FM Jingle Bell Ball	2	O2	Alt-J	1	O2	BluesFest/Van Morrison	1	O2	Dave Matthews Band	1	O2	Taylor Swift	1
O2	Pearl Jam	2	O2	Foo Fighters	1	O2	Capital FM Jingle Bell Ball	1	O2	Deep Purple	1	O2	Capital FM Jingle Bell Ball	1
O2	Counting Crows/Alison Krauss	1	O2	Future	1	O2	Channel 4 Comedy Gala	1	O2	Russell Peters	1	O2	Slam! The Tour	1
O2	Country 2 Country Festival (London)	1	O2	Boy Better Know	1	O2	Stone Free Festival	1	O2	Ennio Morricone	1	O2	Channel 4 Comedy Gala	1
O2	Ennio Morricone	1	O2	Hola London!	1	O2	Country 2 Country Festival (London)	1	O2	Channel 4 Comedy Gala	1	O2	The National	1
O2	BRIT Awards	1	O2	Bros	1	O2	Orquesta Buena Vista Social Club/Omara Portuondo	1	O2	Hillsong Church	1	O2	Eason Chan	1
O2	Carlos Vives	1	O2	Rod Stewart	1	O2	Ennio Morricone	1	O2	A.R. Rahman	1	O2	Ennio Morricone	1
O2	A-ha	1	O2	Sonu Nigam	1	O2	Red Bull Culture Clash	1	O2	Kisstory	1	O2	Morrissey	1
O2	Stone Free Festival/Scorpions	1	O2	John Mayer	1	O2	Hillsong Church	1	O2	Roxette	1	O2	Hillsong Church	1
O2	Michael Bublé	1	O2	Stone Free Festival	1	O2	Rudimental	1	O2	Bollywood Showdown/Atif Aslam	1	O2	Hillsong United	1
O2	Afrorepublik	1	O2	Above & Beyond	1	O2	Amy Schumer	1	O2	Ryan Leslie	1	O2	Basement Jaxx	1
O2	Quincy Jones	1	O2	Country 2 Country Festival (London)	1	O2	Young Voice Gala Concert Supporting Nordoff-Robbins	1	O2	Santana	1	O2	Star Vijay Nite	1
O2	Shakira	1							O2	The Dalai Lama	1	O2	John Mayer	1
O2	Soft Cell	1	Wembley	Jay Chou	1	Wembley	The Who	1	O2	Tom Jones/Van Morrison	1	O2	The International Spirit Of Women Awards	1
O2	Stone Free Festival	1	Wembley	A.R. Rahman	1				O2	Wear The Rose Live/Take That	1	O2	Bollywood Showstoppers	1
O2	Chance The Rapper	1							O2	Nitro Circus Live	1			
O2	Childish Gambino	1										Wembley	Kevin Hart	1
O2	The War On Drugs	1							Wembley	OneRepublic	2	Wembley	Lenny Kravitz	1
O2	Trevor Noah	1							Wembley	Sonu Nigam	1	Wembley	Mayday (Taiwan)	1
O2	Mayday (Taiwan)	1							Wembley	All Time Low	1	Wembley	Bring Me The Horizon	1
O2	Kygo	1							Wembley	Above & Beyond	1			
O2	Andrea Bocelli	1												
Wembley	George Ezra	1												
Wembley	Rita Ora	1												
Wembley	Daddy Yankee	1												
Wembley	Ellie Goulding	1												
Wembley	Rod Stewart	1												

OVG Manchester – list of events not playing in Manchester:

- ATP World Tennis Tour Finals
- Netball Super League Finals
- Basketball Final 4
- The O2 Arena in London was to host a US college basketball game between Michigan and Kentucky on December 2020.
- November 2018 Naismith Memorial Basketball Hall of Fame Belfast Classic at Belfast's SSE Arena
- NBA – NBA Global Games (regular season games) held at The O2 in 2018 and 2019 - and were never held in Manchester. The only NBA game (was pre-season) played in Manchester was 2013
- Brit Awards
- Sports Personality Awards
- National Television Awards
- E Sports World Championships – League of Legends, Fortnite, FIFA, COD,
- World Gymnastics Championships
- Euroleague final 4
- UFC World Title Fights
- Franchise teams in sports
- MTV Europe Awards - has recently been held in London SSE Wembley 2017, SSE Hydro Glasgow 2014, Belfast Odyssey Arena 2011, Echo Arena Liverpool 2007.
- Athletics - the 17th IAAF World Indoor Championships which was held from 1 to 4 March 2018 at Arena Birmingham
- Taylor Swift 2015 arena tour played London The O2 and Glasgow SSE Hydro - did not play Manchester
- Country 2 Country, played London The O2 2013 to (present) and Glasgow Armadillo or SSE Hydro (2016-present)

BBC Sports Personality is an interesting case study:

- The 2012 ceremony took place at ExCeL London
- 2013 was held at the First Direct Arena in Leeds
- 2014, the ceremony was held in Scotland at The SSE Hydro in Glasgow
- 2015, the ceremony was held in Northern Ireland at the SSE Arena in Belfast
- Birmingham and Liverpool in 2016 and 2017 respectively
- 2018 ceremony in Birmingham at Resorts World Arena
- 2019 in Aberdeen at P&J Arena
- 2020 planned for Aberdeen at P&J Arena

Appendix F: Live Nation Entertainment Reports First Quarter 2020 Results

LIVE NATION ENTERTAINMENT REPORTS FIRST QUARTER 2020 RESULTS

Highlights

- **Over 90% of Fans Opting to Keep Tickets for Shows Over Refunds**
- **91% of Global Live Music Goers Say They Want to Return to Concerts**
- **$600 Million Cost Reduction Program Target in 2020**
- **$1.0 Billion Cash Management Program Target in 2020**

LOS ANGELES – May 7, 2020 – Live Nation Entertainment, Inc. (NYSE: LYV) today released financial results for the quarter ended March 31, 2020.

At the beginning of the year, we were on track for tremendous growth across all our businesses with both fan demand and artist touring increasing on a global basis. However, in mid-March we came to a halt and we have held no concerts in almost two months. Despite these challenging times, we continue to have full confidence in the long-term supply and demand dynamics of the live concerts industry, Live Nation's leadership position and our business model's ability to successfully deliver profitable growth and shareholder value.

Ensuring Health & Safety

Our top priority is to ensure the health and safety of our employees, fans and artists. Like most of the world, we have been working remotely since mid-March and we will return to work only after there is clear consensus that it is safe to do so, and then in appropriate numbers with expanded cleaning and social distancing protocols. Similarly, we recognize the experience at our venues will change when concerts start back up, and we are working with medical experts and public health officials on procedures to keep people safe while enjoying our shows.

When we asked over eight thousand fans across North America about their requirements for returning to shows, they had two clear priorities – with 85% of fans stating they want increased cleaning and sanitizing of the venues and ready access to hand sanitizing stations, while no other actions received more than 40% support. In addition, we expect to have additional safety protocols in place, potentially including reduced capacity, touchless concessions and creative ways to apply our digital ticketing technology.

Planning For Reopening

Our next priority is planning for the reopening of concerts when the time is right. First and foremost, we will let the facts and science tell us when we should start putting on concerts again. We are working with the government at the federal and state levels in the U.S. and across all countries, building plans that fit within reopening phases for each specific market. In the meantime, we have fortified our balance sheet to have the resources to ramp up quickly when the time is right.

We know from fans that demand will be there when the shows return. Globally, over 90% of fans are holding on to their tickets for rescheduled shows where refunds are available, which is the clearest demonstration of pent up demand that will enable us to quickly start concerts back up. Reinforcing this, in a global survey of ten thousand live music goers, over 90% indicate they will be back to concerts once possible to do so. Looking further out, given that 80% of shows have been rescheduled rather than canceled, and as we noted almost all fans are holding on to their tickets, we believe 2021 can return to show volume and fan attendance at levels consistent with what we've seen in recent years.

Well Positioned to Lead Live Industry

As we plan the resumption of concerts, we are also seeing a number of innovations within our company as artists look to stay connected to fans. Almost a million fans have come to our Live From Home site to find virtual tours and acoustic performances from home. We've seen millions of fans in over a hundred different countries join Insomniac's Virtual Rave-A-Thons, while drive-in concerts are finding a new purpose as socially distanced concert halls.

Throughout all this, we remain motivated by the long-term potential of global live events. It is in our DNA to gather, socialize and celebrate and, as we provide reassurances on health and safety at the venues, we expect our business to build back. Live Nation is best positioned in the live ecosystem to play the long game, capture new opportunities and continue leading the industry into the future.



Michael Rapino
President and Chief Executive Officer
Live Nation Entertainment, Inc.

The company will webcast a teleconference today at 2:00 p.m. Pacific Time to discuss its financial performance, operational matters and potentially other material developments. Interested parties should visit the “News / Events” section of the company’s website at investors.livenationentertainment.com to listen to the webcast. Supplemental statistical and financial information to be provided on the call, if any, will be posted to the “Financial Info” section of the website. A replay of the webcast will also be available on the Live Nation website.

Notice Regarding Financial Statements

The company has provided certain financial statements at the end of this press release for reference. These financial statements should be read in conjunction with the full financial statements, and the notes thereto, set forth in the company’s Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission today and available on the SEC’s website at sec.gov.

About Live Nation Entertainment:

Live Nation Entertainment, Inc. (NYSE: LYV) is the world’s leading live entertainment company comprised of global market leaders: Ticketmaster, Live Nation Concerts, and Live Nation Media & Sponsorship. For additional information, visit investors.livenationentertainment.com.

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FINANCIAL HIGHLIGHTS – 1st QUARTER

(unaudited; $ in millions)

	Q1 2020 Reported	Q1 2019 Reported	Growth	Q1 2020 Constant Currency	Growth at Constant Currency
Revenue					
Concerts	$ 993.4	$ 1,318.1	(25%)	$ 1,006.0	(24%)
Ticketing	284.3	337.6	(16%)	285.5	(15%)
Sponsorship & Advertising	90.3	75.1	20%	91.5	22%
Other and Eliminations	(2.3)	(3.0)	23%	(2.3)	23%
	$ 1,365.7	$ 1,727.8	(21%)	$ 1,380.7	(20%)
Operating Income (Loss)					
Concerts	$ (161.1)	$ (59.1)	*	$ (162.6)	*
Ticketing	(15.9)	42.6	*	(16.6)	*
Sponsorship & Advertising	38.2	32.2	19%	39.0	21%
Other and Eliminations	(1.5)	(0.1)	*	(1.5)	*
Corporate	(32.4)	(39.4)	18%	(32.4)	18%
	$ (172.7)	$ (23.8)	*	$ (174.1)	*
Adjusted Operating Income (Loss)					
Concerts	$ (88.1)	$ 5.4	*	$ (89.1)	*
Ticketing	44.9	100.4	(55%)	44.6	(56%)
Sponsorship & Advertising	46.6	39.9	17%	47.4	19%
Other and Eliminations	(2.8)	(1.5)	(87%)	(2.8)	(87%)
Corporate	(21.1)	(28.8)	27%	(21.1)	27%
	$ (20.5)	$ 115.4	*	$ (21.0)	*

**percentages are not meaningful*

- As of March 31, 2020, total cash and cash equivalents were $3.3 billion, which includes $842 million in ticketing client cash and $817 million in free cash.
- Event-related deferred revenue was $2.0 billion as of March 31, 2020, compared to $1.8 billion as of March 31, 2019.
- For the year ended March 31, 2020, net cash provided by operating activities was $632 million and free cash flow — adjusted was $(115) million.
- We currently expect capital expenditures for the full year to be approximately $200 million.

KEY OPERATING METRICS

	Q1 2020	Q1 2019
	(in thousands except estimated events)	
Concerts [1]		
Events:		
North America	4,790	5,675
International	2,277	2,532
Total estimated events	7,067	8,207
Fans:		
North America	5,773	8,965
International	4,640	5,957
Total estimated fans	10,413	14,922
Ticketing [2]		
Fee-bearing tickets	36,209	50,026
Non-fee-bearing tickets	55,260	67,115
Total estimated tickets	91,469	117,141

(1) Events generally represent a single performance by an artist. Fans generally represent the number of people who attend an event. Festivals are counted as one event in the quarter in which the festival begins, but the number of fans is based on the days the fans were present at the festival and thus can be reported across multiple quarters. Events and fan attendance metrics are estimated each quarter.

(2) The fee-bearing tickets estimated above include primary and secondary tickets that are sold using our Ticketmaster systems or that we issue through affiliates. This metric includes primary tickets sold during the year regardless of event timing, except for our own events where our concert promoters control ticketing which are reported when the events occur. The non-fee-bearing tickets estimated above include primary tickets sold using our Ticketmaster systems, through season seat packages and our venue clients' box offices, along with tickets sold on our "do it yourself" platform. These ticketing metrics are net of any refunds that occurred in the period and any cancellations during the period and up to the time of reporting of our financial statements.

Reconciliation of Certain Non-GAAP Measures to Their Most Directly Comparable GAAP Measures (Unaudited)

Reconciliation of Free Cash Flow — Adjusted to Net Cash Provided by (Used in) Operating Activities

($ in millions)	Q1 2020	Q1 2019
Net cash provided by operating activities	**$ 631.7**	**$ 469.1**
Less: Changes in operating assets and liabilities (working capital)	(701.4)	(391.8)
Free cash flow from earnings	$ (69.7)	$ 77.3
Less: Maintenance capital expenditures	(30.4)	(24.5)
Distributions to noncontrolling interests	(15.1)	(49.9)
Free cash flow — adjusted	**$ (115.2)**	**$ 2.9**
Net cash used in investing activities	**$ (122.4)**	**$ (84.9)**
Net cash provided by (used in) financing activities	**$ 382.4**	**$ (71.5)**

Reconciliation of Free Cash to Cash and Cash Equivalents

($ in millions)	March 31, 2020
Cash and cash equivalents	$ 3,269.9
Client cash	(841.5)
Deferred revenue — event-related	(1,960.7)
Accrued artist fees	(51.6)
Collections on behalf of others	(46.2)
Prepaid expenses — event-related	447.4
Free cash	$ 817.3

Forward-Looking Statements, Non-GAAP Financial Measures and Reconciliations:

Certain statements in this press release constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, but are not limited to, statements regarding the company's cost and cash savings program; the long-term economics of the live concerts industry and the ability of the company's business model to deliver profitable growth and shareholder value; the timeline for recommencing concerts and the cleaning, distancing and safety protocol that will be in place; the speed with which the company will be able to resume operations; fan demand when concerts resume; show volume and fan attendance for 2021; the company's future leadership position within the industry; and the company's anticipated capital expenditures for the year. Live Nation wishes to caution you that there are some known and unknown factors that could cause actual results to differ materially from any future results, performance or achievements expressed or implied by such forward-looking statements, including but not limited to operational challenges in achieving strategic objectives and executing on the company's plans, the risk that the company's markets do not evolve as anticipated, the potential impact of any economic slowdown and operational challenges associated with selling tickets and staging events.

Live Nation refers you to the documents it files from time to time with the U.S. Securities and Exchange Commission, or SEC, specifically the section titled "Item 1A. Risk Factors" of the company's most recent Annual Report filed on Form 10-K, and Quarterly Reports on Form 10-Q and its Current Reports on Form 8-K, which contain and identify other important factors that could cause actual results to differ materially from those contained in the company's projections or forward-looking statements. You are cautioned not to place undue reliance on these forward-looking statements which speak only as of the date on which they are made. All subsequent written and oral forward-looking statements by or concerning Live Nation are expressly qualified in their entirety by the cautionary statements above. Live Nation does not undertake any obligation to publicly update or revise any forward-looking statements because of new information, future events or otherwise.

This press release contains certain non-GAAP financial measures as defined by SEC Regulation G. A reconciliation of each such measure to its most directly comparable GAAP financial measure, together with an explanation of why management believes that these non-GAAP financial measures provide useful information to investors, is provided herein.

Adjusted Operating Income (Loss), or AOI, is a non-GAAP financial measure that we define as operating income (loss) before certain stock-based compensation expense, loss (gain) on disposal of operating assets, depreciation and amortization (including goodwill impairment), amortization of non-recoupable ticketing contract advances and acquisition expenses (including transaction costs, changes in the fair value of accrued acquisition-related contingent consideration obligations, and acquisition-related severance and compensation). We use AOI to evaluate the performance of our operating segments. We believe that information about AOI assists investors by allowing them to evaluate changes in the operating results of our portfolio of businesses separate from non-operational factors that affect net income (loss), thus providing insights into both operations and the other factors that affect reported results. AOI is not calculated or presented in accordance with GAAP. A limitation of the use of AOI as a performance measure is that it does not reflect the periodic costs of certain amortizing assets used in generating revenue in our business. Accordingly, AOI should be considered in addition to, and not as a substitute for, operating income (loss), net income (loss), and other measures of financial performance reported in accordance with GAAP. Furthermore, this measure may vary among other companies; thus, AOI as presented herein may not be comparable to similarly titled measures of other companies.

Constant Currency is a non-GAAP financial measure. We calculate currency impacts as the difference between current period activity translated using the current period's currency exchange rates and the comparable prior period's currency exchange rates. We present constant currency information to provide a framework for assessing how our underlying businesses performed excluding the effect of foreign currency rate fluctuations.

Free Cash Flow — Adjusted, or FCF, is a non-GAAP financial measure that we define as net cash provided by (used in) operating activities less changes in operating assets and liabilities, less maintenance capital expenditures, less distributions to noncontrolling interest partners. We use FCF among other measures, to evaluate the ability of operations to generate cash that is available for purposes other than maintenance capital expenditures. We believe that information about FCF provides investors with an important perspective on the cash available to service debt, make acquisitions, and for revenue generating capital expenditures. FCF is not calculated or presented in accordance with GAAP. A limitation of the use of FCF as a performance measure is that it does not necessarily represent funds available for operations and is not necessarily a measure of our ability to fund our cash needs. Accordingly, FCF should be considered in addition to, and not as a substitute for, net cash provided by (used in) operating activities and other measures of financial performance reported in accordance with GAAP. Furthermore, this measure may vary among other companies; thus, FCF as presented herein may not be comparable to similarly titled measures of other companies.

Free Cash is a non-GAAP financial measure that we define as cash and cash equivalents less ticketing-related client funds, less event-related deferred revenue, less accrued expenses due to artists and cash collected on behalf of others, plus event-related prepaids. We use free cash as a proxy for how much cash we have available to, among other things, optionally repay debt balances, make acquisitions and fund revenue generating capital expenditures. Free cash is not calculated or presented in accordance with GAAP. A limitation of the use of free cash as a performance measure is that it does not necessarily represent funds available from operations and it is not necessarily a measure of our ability to fund our cash needs. Accordingly, free cash should be considered in addition to, and not as a substitute for, cash and cash equivalents and other measures of financial performance reported in accordance with GAAP. Furthermore, this measure may vary among other companies; thus, free cash as presented herein may not be comparable to similarly titled measures of other companies.

Reconciliations of Certain Non-GAAP Measures to Their Most Directly Comparable GAAP Measures (Unaudited)

Reconciliation of Adjusted Operating Income (Loss) to Operating Income (Loss)

($ in millions)	Operating income (loss)	Stock-based compensation expense	Loss (gain) on disposal of operating assets	Depreciation and amortization	Amortization of non-recoupable ticketing contract advances	Acquisition expenses	Adjusted operating income (loss) reported	Foreign exchange impact	Adjusted operating income (loss) constant currency
	Three Months Ended March 31, 2020								
Concerts	$ (161.1)	$ 2.4	$ 0.1	$ 72.2	$ —	$ (1.7)	$ (88.1)	$ (1.0)	$ (89.1)
Ticketing	(15.9)	1.7	—	38.2	20.2	0.7	44.9	(0.3)	44.6
Sponsorship & Advertising	38.2	0.9	—	7.5	—	—	46.6	0.8	47.4
Other & Eliminations	(1.5)	—	—	0.1	(1.4)	—	(2.8)	—	(2.8)
Corporate	(32.4)	6.8	—	4.1	—	0.4	(21.1)	—	(21.1)
Total Live Nation	$ (172.7)	$ 11.8	$ 0.1	$ 122.1	$ 18.8	$ (0.6)	$ (20.5)	$ (0.5)	$ (21.0)
	Three Months Ended March 31, 2019								
Concerts	$ (59.1)	$ 3.5	$ (0.1)	$ 51.3	$ —	$ 9.8	$ 5.4	$ —	$ 5.4
Ticketing	42.6	1.5	—	37.4	18.7	0.2	100.4	—	100.4
Sponsorship & Advertising	32.2	0.6	—	7.1	—	—	39.9	—	39.9
Other & Eliminations	(0.1)	—	—	0.1	(1.5)	—	(1.5)	—	(1.5)
Corporate	(39.4)	7.6	—	3.0	—	—	(28.8)	—	(28.8)
Total Live Nation	$ (23.8)	$ 13.2	$ (0.1)	$ 98.9	$ 17.2	$ 10.0	$ 115.4	$ —	$ 115.4

LIVE NATION ENTERTAINMENT, INC.
CONSOLIDATED BALANCE SHEETS
(unaudited)

	March 31, 2020	December 31, 2019
	(in thousands)	
ASSETS		
Current assets		
Cash and cash equivalents	$ 3,269,863	$ 2,470,362
Accounts receivable, less allowance of $51,555 and $50,516 respectively	759,432	994,606
Prepaid expenses	736,369	667,044
Restricted cash	11,848	3,880
Other current assets	73,513	57,007
Total current assets	4,851,025	4,192,899
Property, plant and equipment, net	1,128,169	1,117,932
Operating lease assets	1,405,018	1,402,019
Intangible assets		
Definite-lived intangible assets, net	905,904	870,141
Indefinite-lived intangible assets	368,773	368,954
Goodwill	1,999,979	1,998,498
Long-term advances	749,602	593,699
Other long-term assets	452,974	431,473
Total assets	$ 11,861,444	$ 10,975,615
LIABILITIES AND EQUITY		
Current liabilities		
Accounts payable, client accounts	$ 907,555	$ 1,005,888
Accounts payable	87,840	100,237
Accrued expenses	1,229,321	1,391,486
Deferred revenue	2,273,494	1,391,032
Current portion of long-term debt, net	36,036	37,795
Current portion of operating lease liabilities	121,983	121,950
Other current liabilities	73,827	59,211
Total current liabilities	4,730,056	4,107,599
Long-term debt, net	3,651,019	3,271,262
Long-term operating lease liabilities	1,380,192	1,374,481
Long-term deferred income taxes	178,535	178,173
Other long-term liabilities	247,204	130,648
Commitments and contingent liabilities		
Redeemable noncontrolling interests	443,606	449,498
Stockholders' equity		
Common stock	2,118	2,113
Additional paid-in capital	2,260,509	2,245,619
Accumulated deficit	(1,137,082)	(949,334)
Cost of shares held in treasury	(6,865)	(6,865)
Accumulated other comprehensive loss	(259,326)	(145,713)
Total Live Nation stockholders' equity	859,354	1,145,820
Noncontrolling interests	371,478	318,134
Total equity	1,230,832	1,463,954
Total liabilities and equity	$ 11,861,444	$ 10,975,615

LIVE NATION ENTERTAINMENT, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited)

	Three Months Ended March 31,	
	2020	2019
	(in thousands, except share and per share data)	
Revenue	$ 1,365,693	$ 1,727,828
Operating expenses:		
Direct operating expenses	873,820	1,151,604
Selling, general and administrative expenses	514,021	464,866
Depreciation and amortization	122,080	98,912
Loss (gain) on disposal of operating assets	130	(147)
Corporate expenses	28,312	36,456
Operating loss	(172,670)	(23,863)
Interest expense	43,999	36,515
Interest income	(4,473)	(2,548)
Equity in earnings of nonconsolidated affiliates	(2,572)	(3,144)
Other expense (income), net	4,628	(3,403)
Loss before income taxes	(214,252)	(51,283)
Income tax expense (benefit)	(3,330)	3,958
Net loss	(210,922)	(55,241)
Net loss attributable to noncontrolling interests	(26,138)	(2,797)
Net loss attributable to common stockholders of Live Nation	$ (184,784)	$ (52,444)
Basic and diluted net loss per common share available to common stockholders of Live Nation	$ (0.94)	$ (0.31)
Weighted average common shares outstanding:		
Basic and diluted	211,048,294	208,908,323

Reconciliation to net loss available to common stockholders of Live Nation:		
Net loss attributable to common stockholders of Live Nation	$ (184,784)	$ (52,444)
Accretion of redeemable noncontrolling interests	(14,540)	(12,312)
Net loss available to common stockholders of Live Nation - basic and diluted	$ (199,324)	$ (64,756)

LIVE NATION ENTERTAINMENT, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited)

	Three Months Ended March 31,	
	2020	**2019**
	(in thousands)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss	$ (210,922)	$ (55,241)
Reconciling items:		
Depreciation	57,844	51,672
Amortization	64,236	47,240
Amortization of non-recoupable ticketing contract advances	18,811	17,237
Non-cash compensation expense	11,732	13,205
Other, net	(11,376)	3,150
Changes in operating assets and liabilities, net of effects of acquisitions and dispositions:		
Decrease (increase) in accounts receivable	227,913	(90,637)
Increase in prepaid expenses and other assets	(207,157)	(312,032)
Decrease in accounts payable, accrued expenses and other liabilities	(316,204)	(44,915)
Increase in deferred revenue	996,798	839,371
Net cash provided by operating activities	631,675	469,050
CASH FLOWS FROM INVESTING ACTIVITIES		
Advances of notes receivable	(10,688)	(4,037)
Collections of notes receivable	10,218	1,078
Purchases of property, plant and equipment	(84,563)	(57,136)
Cash paid for acquisitions, net of cash acquired	(32,508)	(9,882)
Other, net	(4,830)	(14,893)
Net cash used in investing activities	(122,371)	(84,870)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from long-term debt, net of debt issuance costs	419,418	557
Payments on long-term debt	(6,032)	(13,573)
Distributions to noncontrolling interests	(15,114)	(49,884)
Purchases and sales of noncontrolling interests, net	(14,030)	(1,463)
Other, net	(1,820)	(7,128)
Net cash provided by (used in) financing activities	382,422	(71,491)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(84,257)	(6,700)
Net increase in cash, cash equivalents and restricted cash	807,469	305,989
Cash, cash equivalents and restricted cash at beginning of period	2,474,242	2,378,203
Cash, cash equivalents and restricted cash at end of period	$ 3,281,711	$ 2,684,192

Appendix G: Live Nation + Ticketmaster Covid-19 Impact from Live Music Fans, 7 May 2020

AMONG LIVE MUSIC GOERS, WHEN EVENT RESTRICTIONS ARE LIFTED...

LIVE MUSIC GOERS' RETURN TO LIVE MUSIC

#1

LIVE MUSIC WILL BE THE MOST LIKELY ATTENDED TYPE OF EVENT (91%), OUTRANKING MOVIES (87%), THEATER (78%), AND SPORTS (75%)

89%

OF GEN X WILL BE LIKELY TO ATTEND LIVE MUSIC EVENTS (92% GEN Y/MILLENNIALS)

CURRENT TICKET HOLDERS' RETURN TO LIVE MUSIC & TIMING

91%

OF LIVE MUSIC TICKET HOLDERS STILL PLAN ON ATTENDING THEIR SHOW

79%

OF ACTIVE FANS EXPECT TO BE BACK AT LIVE MUSIC EVENTS WITHIN 4 MONTHS

VENUE CHANGES

86%

OF ACTIVE FANS DESIRE INCREASED CLEANLINESS AND SANITATION AT VENUES

85%

OF ACTIVE FANS DESIRE HAND SANITIZING STATIONS AT VENUES

LIVESTREAM BEHAVIORS

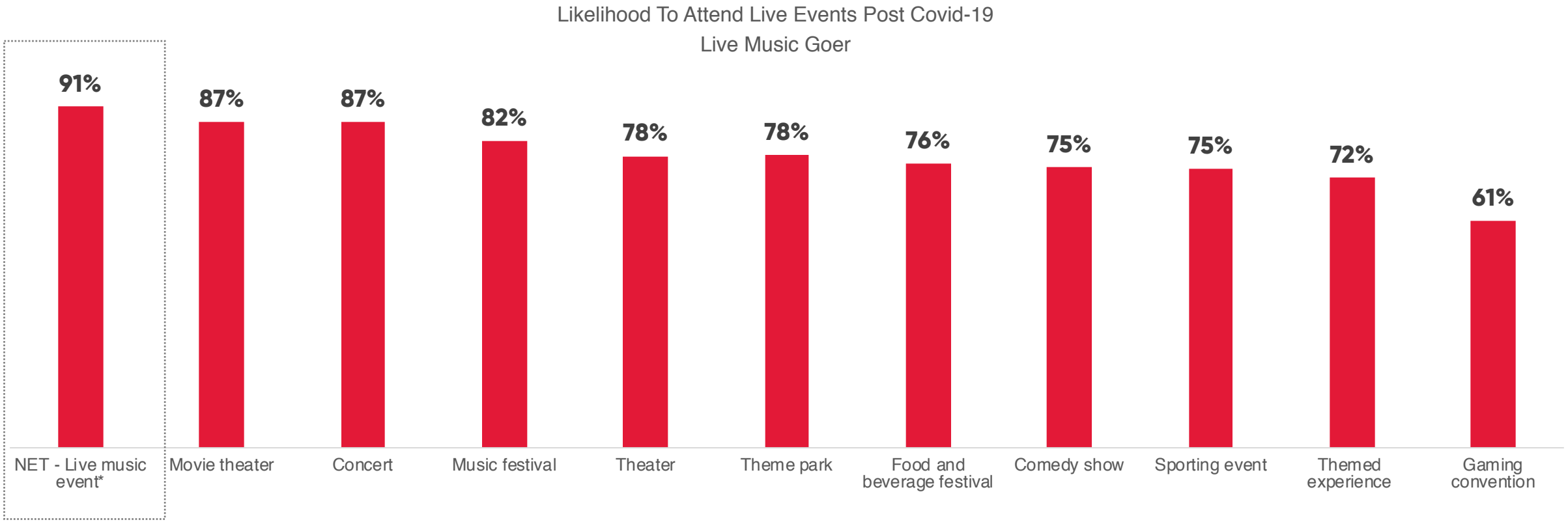
72%

OF LIVESTREAM VIEWERS SAY WATCHING DIGITALLY MAKES THEM MORE EXCITED TO ATTEND LIVE MUSIC EVENTS

85%

OF LIVESTREAM VIEWERS SAY LIVESTREAMS OR VIDEOS CAN'T REPLACE THE LIVE MUSIC EXPERIENCE

LIVE MUSIC AND MOVIE GOERS MOST LIKELY TO RETURN

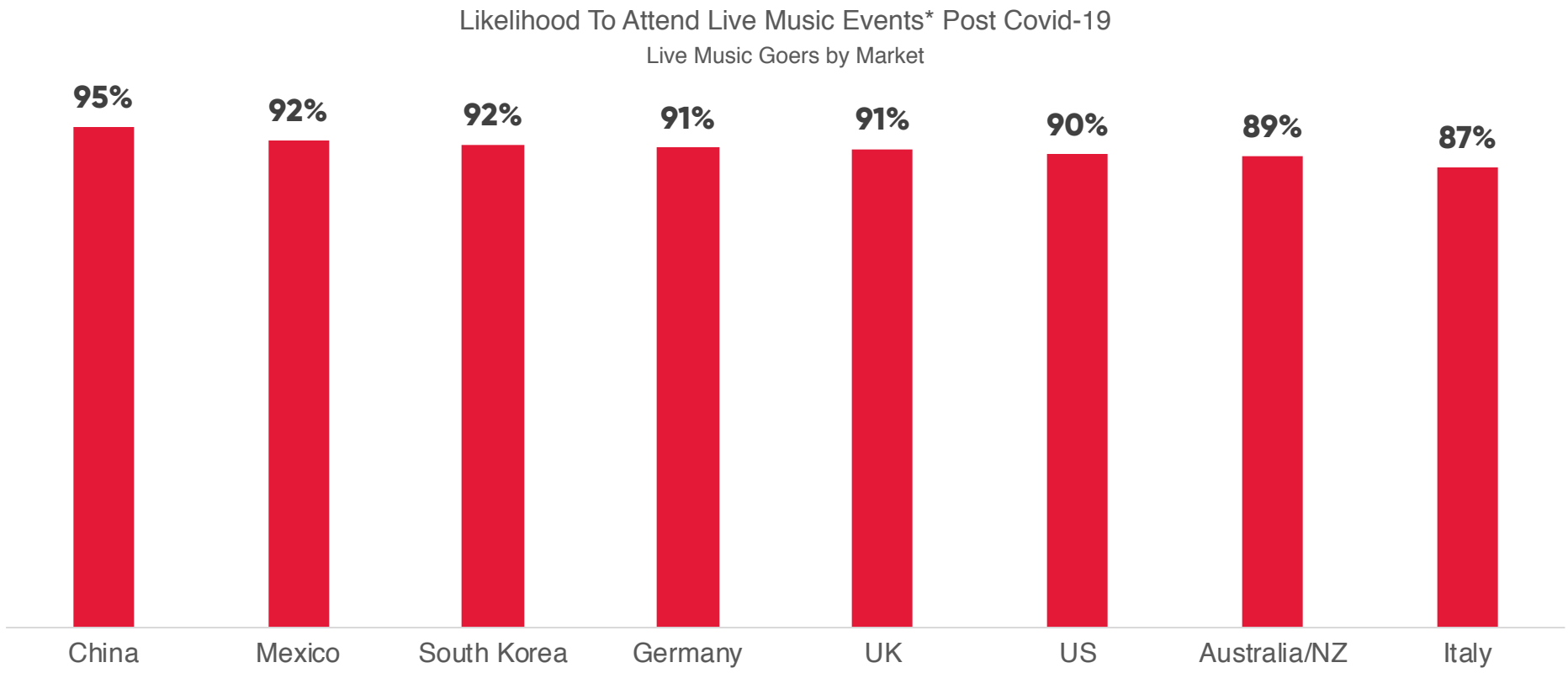


2020 Live Nation Global Impact of COVID-19 on Live Events Benchmark Study

**NET – Live Music Event refers to audience likely to attend either concerts OR music festivals when officials deem it safe to do so*

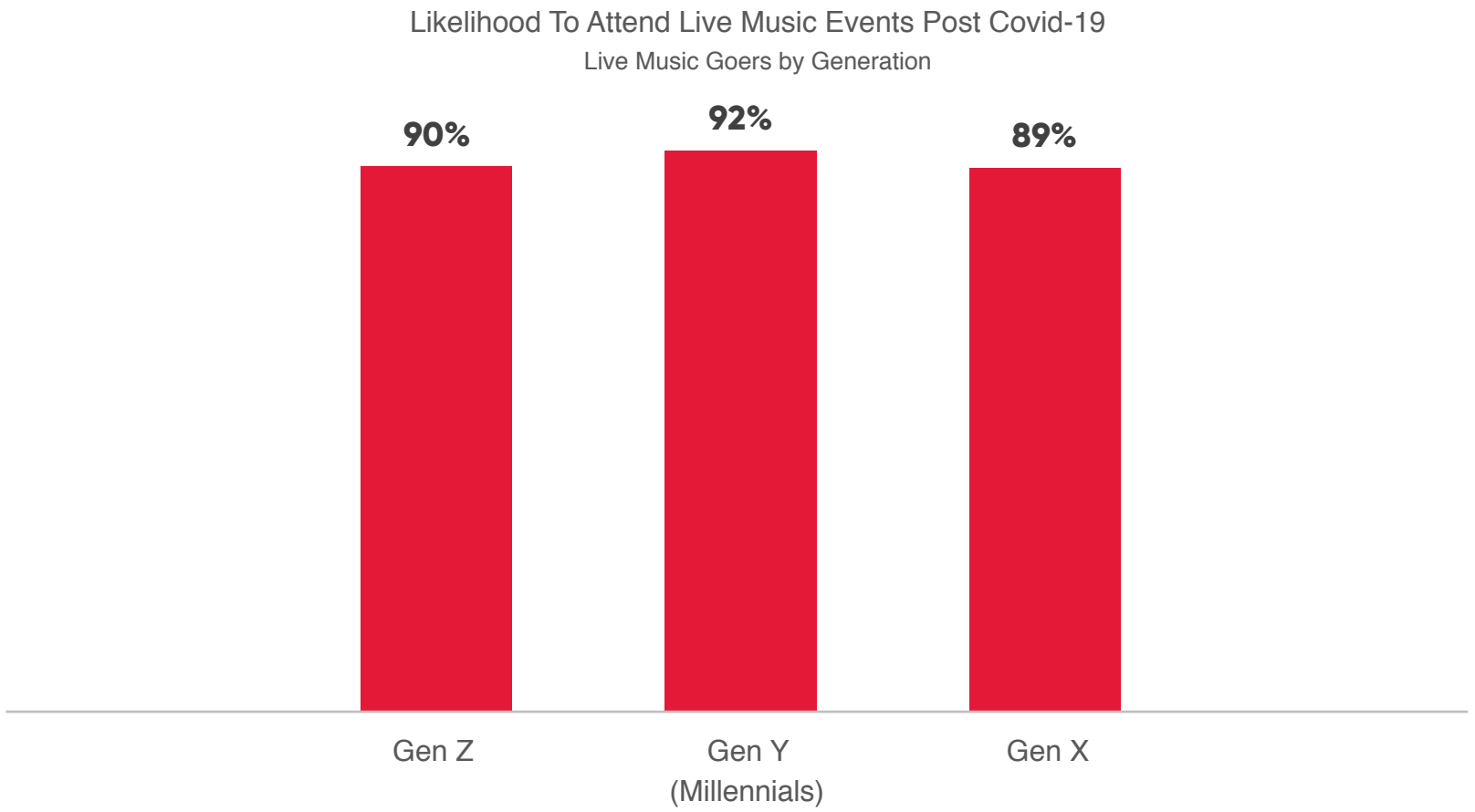
C1. Think about AFTER the COVID-19 pandemic, once government/health officials deem it safe to return to public gatherings. How likely or unlikely are you to attend each of the following types of paid live events/experiences after it is deemed safe to return? Base: Live Music Goer (n=5,404).

91% OF LIVE MUSIC GOERS AROUND THE WORLD ARE CONFIDENT IN THEIR RETURN



2020 Live Nation Global Impact of COVID-19 on Live Events Benchmark Study
**NET – Live Music Event refers to audience likely to attend either concerts OR music festivals when officials deem it safe to do so*
C1. Think about AFTER the COVID-19 pandemic, once government/health officials deem it safe to return to public gatherings. How likely or unlikely are you to attend each of the following types of paid live events/experiences after it is deemed safe to return? Base: Live Music Goer (n=5,404)

FANS OF ALL AGES ARE ANTICIPATING A RETURN TO LIVE MUSIC

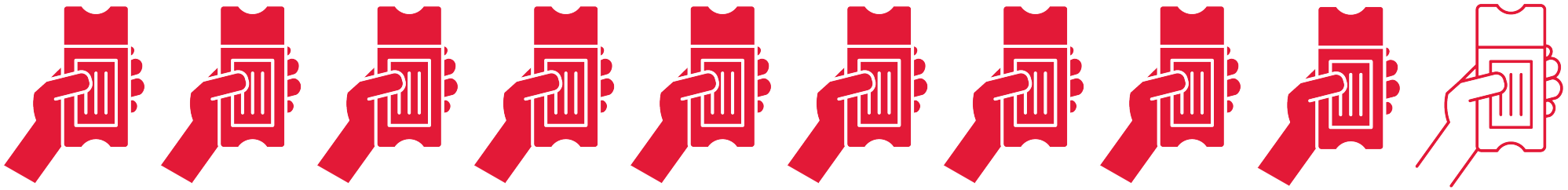


2020 Live Nation Global Impact of COVID-19 on Live Events Benchmark Study
**NET – Live Music Event refers to audience likely to attend either concerts OR music festivals when officials deem it safe to do so*
C1. Think about AFTER the COVID-19 pandemic, once government/health officials deem it safe to return to public gatherings. How likely or unlikely are you to attend each of the following types of paid live events/experiences after it is deemed safe to return? Base: Live Music Goer (n=5,404)

9 OF 10 TICKET HOLDERS STILL PLAN ON ATTENDING THEIR SHOW

Likelihood To Attend Live Music Events Post Covid-19

Current Live Music Ticket Holders

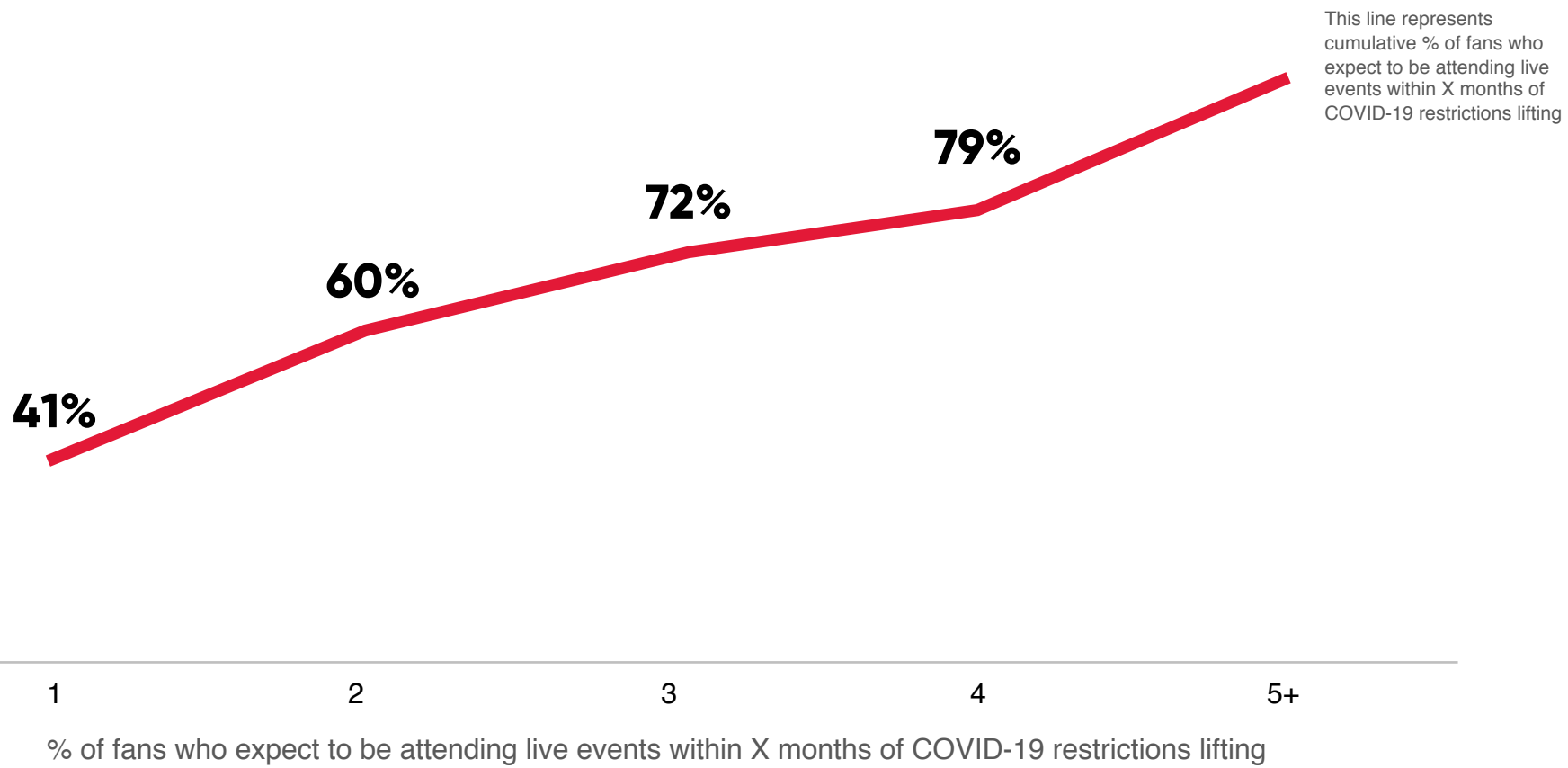


91%

2020 Live Nation Global Impact of COVID-19 on Live Events Benchmark Study

QC11. How likely are you to attend this event when it is held assuming the government/health officials deem it is safe to return to public gatherings?
Base: Total Current Ticket Holders Globally = 2,731

79% OF ACTIVE FANS EXPECT TO BE BACK AT LIVE MUSIC EVENTS WITHIN FOUR MONTHS OF COVID-19 RESTRICTIONS LIFTING

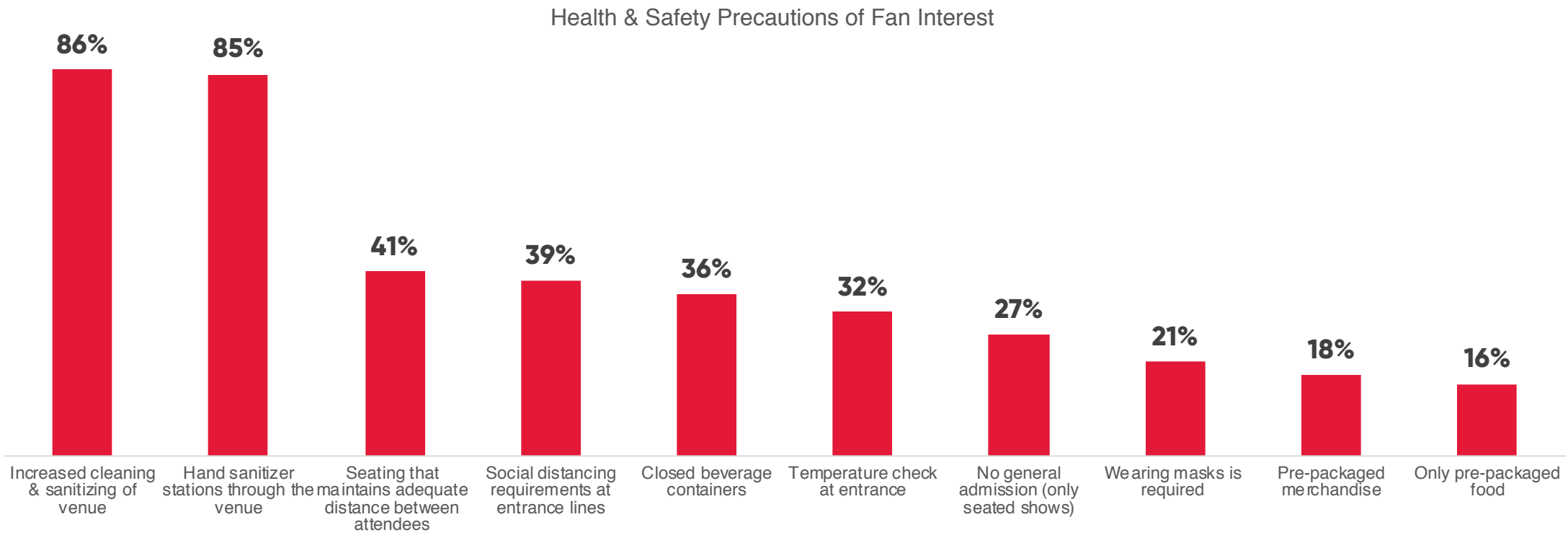


2020 Ticketmaster US Impact of COVID-19 on Live Events (Active Fan) Benchmark Study

Q. Based on your best guess, when do you think COVID-19 stay-at-home restrictions will no longer be necessary in the US? Base: Active Live Fan (n=6,968)

Q. While we understand that rescheduling an event is uncertain at this time, when will you feel most comfortable in attending events? Base: Active Live Fan (n=6,968)

INCREASED CLEANING OF VENUE AND PROVIDING HAND SANITIZER ARE PRECAUTIONS FANS DESIRE MOST



2020 Ticketmaster US Impact of COVID-19 on Live Events (Active Fan) Benchmark Study

Q: What health and safety precautions will you need to see at events in the future? (Please select all that apply), Base: Active Live Fan (n=6,968)

LIVESTREAMS HELP BUT DON'T REPLACE LIVE MUSIC EVENTS

81%

MISS THE EXCITEMENT OF **PLANNING A LIVE MUSIC EVENT**

72%

OF LIVESTREAM VIEWERS SAY **WATCHING DIGITALLY MAKES THEM MORE EXCITED TO ATTEND** LIVE MUSIC EVENTS

85%

OF LIVESTREAM VIEWERS SAY **LIVESTREAMS OR VIDEOS CAN'T REPLACE THE LIVE EXPERIENCE**

2020 Live Nation Global Impact of COVID-19 on Live Events Benchmark Study

QE2. For each of the following statements about music below, please select to what extent you agree or disagree in relation to your experience with the COVID-19 pandemic. Please select one best option per row.
Base: Live Music Goers: 5,404, Live Music Goer Livestream Viewers: 1,716

APPENDIX

GLOBAL GEN POP/LIVE MUSIC GOER STUDY

BENCHMARK / 49 QUESTION SURVEY
- 24-28 Apr: N=9,885 (COMPLETE)
- +/- 1%, with a 95% confidence interval
- Data has been weighted to adjust for country-specific gender and age

TRACKING / 21 QUESTION SURVEY (to be fielded)

KEY AUDIENCES

Live Music Goer



Live Music Ticketholder



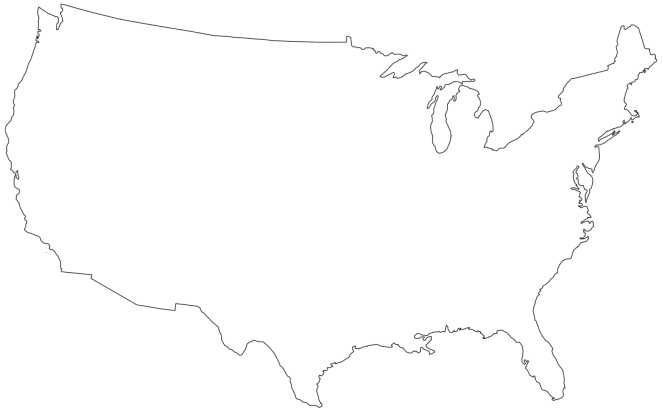
DEMOGRAPHICS/PSYCHOGRAPHICS
- Age & Generations: 16-50 YO's (Gen X: 41-50, Millennials: 26-40, Gen Z: 16-25)
- Gender: F/M
- Live Event Attendance:
  - Casual Fan: 1-2 paid concerts and/or 1 paid festival P12M
  - Avid Fan: 3+ paid concerts and/or 2+ paid festivals P12M
- Health Impact of Personal Network of COVID-19
- Financial Impact of COVID-19



8 KEY MARKETS

United States: n=1,358
Italy: n=1,196
South Korea: n= 1,382
United Kingdom: n=1,262
Germany: n=1,177
China: n=1,112
Mexico: n=1,131
Australia/New Zealand: n=1,267

US TICKETMASTER ACTIVE FAN STUDY



BENCHMARK / 67 QUESTION SURVEY

- 10-20 Apr: N=8,037 (COMPLETE)
- +/- 2%, with a 95% confidence interval
- Data has been weighted to adjust for gender, age, and region

TRACKING / 36 QUESTION SURVEY (to be fielded)

KEY AUDIENCES

Active Fan



DEMOGRAPHICS/PSYCHOGRAPHICS

- Age: 18-70 YO's
- Gender: F/M
- Live Event Attendance:
  - Have purchased tickets to a live event through Ticketmaster P12M
  - Event Category: concerts, festivals, sports, arts & theater, family
- Region/DMA within US

Appendix H: Music Business Worldwide Survey

82% OF FESTIVAL-GOERS 'FEEL CONFIDENT' TO RETURN TO LIVE EVENTS AFTER COVID-19 LOCKDOWN IS LIFTED (REPORT)

449
SHARES

(/REGION/FR) (/REGION/DE) (/REGION/NL) (/REGION/GB) MAY 27, 2020

BY MURRAY STASSEN (HTTPS://WWW.MUSICBUSINESSWORLDWIDE.COM/AUTHOR/MS



After weeks of debate about what post-quarantine live music will look like (https://www.musicbusinessworldwide.com/its-going-to-be-a-long-road-for-everybody-to-start-seeing-recovery-in-the-live-music-industry/) and if fans will even be comfortable attending shows once lockdowns are lifted, today, we have some positive news for the live music industry:

Around 82% of music fans "would feel confident" attending a festival within one to six months after the COVID-19 lockdown ends.

Furthermore, within that group, 66% would feel confident enough to attend within one to three months, while 30% would happily do so immediately after lockdown is lifted.

That's according to a report published by UK-born festival ticket and travel booking platform Festicket, which surveyed over **110,000** festival-goers from countries such as the UK, France, Germany and the Netherlands.

Day festivals topped the list of events respondents indicated that they are happy to return to first once lockdown is lifted but around 70% said they'd also happily go to a weekend festival.

Meanwhile, 59.5% of people said they would feel confident attending music events in their own country and globally in 2021.



(https://www.musicbusinessworldwide.com/82-of-festival-goers-feel-confident-to-return-to-live-events-after-covid-19-lockdown-is-lifted-report/screenshot-2020-05-27-at-15-58-01/)

Additionally, 75% of festival-goers are confident that 2021's season will be unaffected and that they'd feel confident booking tickets for 2021 events within the next two months.

Similarly, festival-goers believe they'll still spend big on their future festival trips, with 34% saying they'll spend between €250-€500, while another 24% said they'll spend more than €500.

The survey also found that festival-goers expect live events to introduce safety measures such as hand sanitizing stations, operating at a reduced capacity, and offering free cancellation on tickets.

Over 82% of festival-goers said that free cancellation would be a key consideration when booking future events.

> **"DESPITE ALL THE CURRENT UNCERTAINTY, IT'S REASSURING TO SEE A HIGH PERCENTAGE OF FESTIVAL-GOERS HAVE A POSITIVE OUTLOOK FOR THE LIVE EVENTS INDUSTRY."**
>
> **LUIS SOUSA, FESTICKET**

Festicket Marketing Director Luis Sousa, said: "Despite all the current uncertainty, it's reassuring to see a high percentage of festival-goers have a positive outlook for the live events industry, backed up by over 75% saying they'd feel comfortable booking events for 2021.

"Unsurprisingly, we are of course entering the beginning of a 'new normal' for events where festival-goers – in the short term at least – will expect promoters and venues to adapt their offering to ease anxieties.

"We've already seen this in some venues that have begun opening their doors again, with measures such as reduced capacity and compulsory table service being part of the deal of reopening."

Last February, Festicket secured funding (https://www.musicbusinessworldwide.com/festicket-secures-4-6m-funding-from-edge-investments/) of $4.6 million from Edge Investments, which followed the $10.5m series D funding round (https://www.musicbusinessworldwide.com/festicket-raises-10-5m-in-series-d-funding-round/) it closed in 2018, led by transatlantic venture capital firm Beringea.

Picture credit: Hanny Naibaho

NEWS (/CATEGORY/NEWS/) FRANCE (/REGION/FR/) GERMANY (/REGION/DE/) NETHERLANDS (/REGION/NL/)
UNITED KINGDOM (/REGION/GB/) LIVE MUSIC (/TAG/LIVE-MUSIC/)

RELATED POSTS

Appendix I: IQ Magazine Interview with Melvin Benn, Festival Republic (accessed 17 July 2020)

FEATURE

MELVIN BENN: 'I'M VERY OPTIMISTIC ABOUT 2021'

After staging digital editions of Download and Wireless this summer, the FR chief says he expects European festivals to be "back in full force" next year

By IQ on 16 Jul 2020



image © Marc Sethi/Festival Republic

Amid a challenging summer 2020, Festival Republic is feeling "incredibly optimistic" about next year's European festival season, managing director Melvin Benn has said.

Speaking to *IQ*, Benn says Festival Republic (FR) – whose **festival portfolio** includes the UK's Download, Wireless and Reading/Leeds Festivals, Germany's Lollapalooza Berlin and the Republic of Ireland's Electric Picnic – is working

to the assumption that its open-air events will "be back in full force next summer", most likely after the release of a vaccine against Covid-19.

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With UK scientists now **said to be 80% sure** a vaccine will be ready by September, Benn *(pictured)* says festivalgoers being immunised against the coronavirus is currently FR's "plan A" for 2021, with some sort of test-and-trace system also a possibility should the vaccine not be ready in time.

"I take great confidence in the fact that test and trace is a plan B for me," he explains. "I don't think we could have imagined the unity the scientific community has showed in working together to find a vaccine against this disease."

Underscoring his optimism that a vaccine for Covid-19 is close, Benn adds: "If you look back at all the incredible inventions and creations – aeroplanes, cars, medicines; everything we take for granted in our normal lives – and then you think that, cumulatively, there are more scientists alive and working now than ever existed before… Are we going to solve this? Of course we are!"

"I'M ALREADY GETTING COMPANIES CONTACTING ME AND OFFERING TESTS"

IQ caught up with Benn the week after **Wireless Connect**, one of two virtual festivals the Festival Republic team has staged this summer (three if you include parent company Live Nation UK's Isle of Wight Festival) in lieu of the physical events.

"The learnings" from all three, says Benn, are "immense", and allowed FR to "discover what people respond to" in a digital event.

"**Download TV** was very much more a linear TV broadcast, just using YouTube rather than a terrestrial channel, and we learnt a huge amount," he continues. "It was really the first time we'd done an as-live broadcast like that.

"With MelodyVR [for Wireless Connect], that was even more complicated, as we did a 360° virtual-reality broadcast, with artists going into a studios in London and the US. Whereas people were performing in their kitchens for Download…" (The **virtual Isle of Wight Festival**, meanwhile, was a simpler affair, broadcasting past performances on Sky television.)

While Benn says the definition of a successful year for him is having "fans in a field", he says the FR team has done "extraordinary things with the three outings we've had so far". "I hope we can build on that in future," he adds.

By charging for online events, *IQ* wonders? Benn is tight-lipped, though he concedes that, "as an add-on, [virtual festivals] have potential". "There's a lot of discussion going round, but it's really too early to say," he continues. "What we do know is that there's an appetite for live – in all its forms – that can't be replaced."

"WE'RE FEELING VERY OPTIMISTIC ABOUT NEXT YEAR. I THINK THE PENT-UP DEMAND IS ABSOLUTELY THERE"

On that topic, Benn notes that of the three 2021 festivals Live Nation/Festival Republic has on sale – IoW, Download and Creamfields – all are "selling really well, so we're feeling very optimistic about next year. I think the pent-up demand is absolutely there."

Even in the event of a vaccine not being available by next summer, Benn is adamant that FR, and the wider UK/European festival market, is "in a really good position".

"I'm already getting companies contacting me and offering tests that are incredibly reliable, and can be done in a short amount of time," he explains. "At the moment [in July] they're too expensive – but given that they didn't even exist in March, I assure you that by the time April or May comes around next year, there'll be a testing company on every street corner and it will be relatively inexpensive."

As for how fans might respond to mandatory testing, which has **mooted as a requirement for entering festivals** in the absence of a vaccine, Benn adds: "I'm very optimistic about human beings. We're incredibly versatile creatures and we'll change and do what we need to do in order to participate in the things we enjoy.

"So if that's the only way, so be it. You can't beat the experience of a festival."

Isle of Wight Festival, **Download** and **Creamfields** 2021 are on sale now.

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Appendix J: Deep Dive: 09 Hospitality, Tourism and Sport, GMCA and New Economy (September 2016)

Deep Dive: 09 Hospitality, Tourism and Sport

Date September 2016

GMCA

new economy

FINAL REPORT

GMCA

new economy

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Executive Summary

Context

- The Hospitality, Tourism and Sport sector is broad, encompassing hotels, restaurants, bars, conference and exhibition centres, libraries, museums, entertainment activities, travel agency services, gambling and betting, sports, amusement and recreation. The sector serves both a visitor market, incorporating both international and domestic business and leisure visitors, as well as a local market of residents who enjoy the leisure activities and attractions that Greater Manchester (GM) has to offer.
- Manchester is England's most visited destination by overseas visitors after London and it ranks third among UK cities for hotels, with an annual average occupancy rate of 80%. GM has the largest museum sector and the highest concentration of producing theatres outside London, and continues to build on its international reputation for sporting events and live music. GM has a strong conference and business events sector, which is currently worth £823m. Manchester Central, along with other conference venues, has boosted GM's appeal for both business and leisure tourism.
- While the visitor economy is more concentrated in the regional centre, GM has a significant Hospitality sector which provides employment opportunities across the conurbation, and fulfils an important role in creating an attractive place to live and work. Additionally, the sector provides an important part of the supply chain in other sectors, such as retail and transport, which benefit from rising visitor spend.
- Over the past ten years GM has seen significant growth in the Hospitality, Tourism and Sport sector, so that it now provides 99,100 jobs, 8.2% of total employment. Food and beverage service activities, makes up 60% of employment in the sector (60,100 jobs) followed by employment within the sports activities, amusement and recreation activities (14,900 jobs) and the accommodation subsector (12,200 people).
- The Hospitality, Tourism and Sport sector generates a core Gross Value Added (GVA) of £2.1bn. This is modest given the size of the employment base, though this is reflected in low wages in many parts of the industry. GVA per person employed is low relative to other sectors at £21,000, although it is marginally higher than the UK average for the sector.

The Growth Opportunity

- A growing population, increasing employment and rising household incomes are expected to result in increased expenditure in the conurbation's leisure economy. Employment in Hospitality, Tourism and Sport is expected to increase markedly in the next twenty years.
- The baseline forecast for GM suggests a net increase of 20,300 employees from 2015 to 2035. The central Accelerated Growth Scenario (AGS-2015) developed for GM suggests the number of net new jobs could be as high as 25,600, and forecasts GVA growth of 2.6%pa which could contribute to additional GVA of £1.7bn in GM's economy by 2035.

- GM's growing hotel and serviced accommodation base is particularly dependent on the visitor economy, and typically benefits from business visitors from Monday to Thursday, and leisure visitors during both the week and weekend, including significant demand from visitors to football matches. Rising numbers of international visitors, in particular from China and Asia, will continue to present further opportunities for growth and rising demand for new accommodation.
- Shifting consumer behaviours, such as older people spending more time travelling, and individuals looking for new experiences, will open up further opportunities for many cities, including those away from more traditional tourist hot-spots. New media platforms, travel comparator sites and promotional opportunities through social media will also allow companies in the conurbation to more effectively market their services and attractions nationally and internationally to a range of new visitors at much lower cost.
- The business and conference market, which is already an important component of the tourism sector in the conurbation, is forecast to grow considerably. However, this market will become more competitive in the UK as new purpose built conference centres come on to the market, many of these supported by the public sector.
- Improved connectivity by road, rail and air will continue to make it easier for visitors to undertake day trips and short stay breaks, while new long haul connections to Africa, Asia and China will increase business and leisure visitors from many countries.
- The developments at Manchester Airport are a key opportunity for the sector in terms of the Airport being a northern gateway to the conurbation for international visitors.

Key Challenges

- With rising global competition for both business and leisure visitors, the key challenges for GM are: to continue to strengthen the overall visitor offer including continuing to develop the depth and variety of the cultural offer; to persuade people to visit locations across the conurbation; to spend more; and to stay longer by changing a typical one-to-two day stay to a three-to-four day stay, or longer.
- The conurbation has already benefited from significant investment in its leading cultural assets over a number of years and Factory Manchester adds another major venue of national and international significance. However, there is a major challenge over the next 20 years to continue to secure new investment in the light of increasing competition from other cities, and a tendency for major cultural investment to be focused on London.
- Major events, promotional and subvention budgets have been used to attract visitors, business and leisure to the conurbation. Many cities, often capital cities, receive substantial Government support to attract international conferences. It will be a challenge for GM to compete effectively and provide the level of promotion and subvention support to match the budgets available to many capital cities.
- While GM is well known for sport and live music, there is a further challenge in broadening visitors' perceptions in areas such as heritage and outdoor activities – where attractions

are less well known. New developments, such as the RHS Fifth Garden, will help open up new opportunities to raise GM's profile.

- A final challenge is attracting people to work and remain in the industry. The sector suffers from high levels of staff turnover, and an ageing workforce poses risks to people leaving due to retirement. Increasingly, employers are recruiting internationally for experienced staff and this may not be sustainable in the long term. Potential labour shortages could also be exacerbated by rising demand for ICT skills across the industry, putting pressure on HR budgets that are already stretched through the large amount of money already spent by the sector on the induction and training of new staff.

Spatial Considerations

- The high concentration of businesses and employment in Manchester city centre, Salford Quays and Media City, and Trafford correlates with the significance of visitor activity and attractions present in these districts and this trend is expected to continue, in particular within the accommodation subsector. This is already evidenced by a number of new confirmed hotel openings from 2015/16 onwards, new cultural attractions, and GM's restaurant offer continuing to go from strength to strength. However, rising disposable incomes, and forecast levels of growth in GM's economy, means there will continue to be significant additional Hospitality, Tourism and Sport employment opportunities across the conurbation. Here, GM's town centres are key employment sites. They remain a priority for districts and have an important role in place-making, providing vital functions for local communities in terms of employment and retail and also more broadly as a focus for social activity/leisure and for services. Collectively marketing the unique features of each town centre will attract both visitors and local residents to them.

1 Introduction

1.1 This report is one of a series of sector 'Deep Dive' reports. It was commissioned by the Greater Manchester Combined Authority (GMCA) as part of Greater Manchester's economic evidence base, and in particular, to inform the development of the Greater Manchester Spatial Framework (GMSF). The report is part of a wide ranging analysis of the economic issues and opportunities across GM. The evidence is at a greater degree of granularity than has ever been done before for any industry sector in GM.

1.2 The deep dive research comprises the following reports:

- **Part 1: Research summary:** Providing an overview of the key issues affecting productivity and participation in GM, including demographic structures and labour market profiles. It also includes an assessment of the key factors that are expected to drive economic change in the global, UK and GM economies in the coming decades. It summarises the key findings from each of the sector chapters
- **Part 2: Sector deep dive reports:** Covering the following key sectors: Manufacturing; Business, Finance and Professional Services; Digital & Creative; Health/Social Care and Health Innovation; Low Carbon and Environmental Goods and Services; Logistics; Retail and Wholesale Distribution; Hospitality, Tourism and Sport; and Construction.

1.3 For each sector, the analysis covers:

- Current make-up of the sector, covering the size, scale and relative importance to GM and geographic footprint, not constrained to administrative boundaries[1];
- Recent growth rates and growth potential (using forecasts by Oxford Economics);
- The location of critical assets and institutions across GM;
- Market opportunities and threats for the sector, including long-term trends which will shape the future scale, needs and location of the sector; and
- Spatial implications of accelerated levels of growth in the sector.

1.4 The Deep Dive research has been produced by New Economy, with Deloitte supporting at the scoping stage and Ekosgen reviewing the outputs and providing independent quality assurance. The work has been developed drawing on input from both the public and the private sectors. Workshops have been held with Chief Executives and local authority officers in each GM district to check and challenge the evidence presented; to assess how it fits with local plans and to draw out the GM wide implications of the research. Consultation has also been undertaken with experts from a wide range of public and private partners including the Manchester Growth Company, GM's universities, TfGM, GM Chamber, pro-Manchester, Manchester Airport, NHS North West and LEP and Business Leadership Council members to provide further input and challenge to the evidence presented. The work also draws upon and feeds into the findings of the Northern Powerhouse Independent Economic Review.

[1] The data provided in the sector deep dive series of reports is used to support the understanding of the major trends within the sector and to set the context of the sector against the wider economy and UK.

2 Definitions

2.1 The Hospitality, Tourism and Sport sector definition has been developed using the SIC codes below. The sector is broad, encompassing hotels, restaurants and bars, conference and exhibition centres, libraries, museums, entertainment, travel agency services, and gambling and betting activities. It also includes sports activities and amusement and recreation activities.[2]

2.2 While often grouped together as a single industry, the Hospitality, Tourism and Sport industries should be viewed as individual, though overlapping subsectors.

2.3 The Hospitality subsector covers "the provision of accommodation, meals and drinks in venues outside of the home. These services are provided to both UK residents and overseas visitors."

2.4 The Tourism industry can be defined as "the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and purposes other than being employed in the place visited"[3].

2.5 The Sport subsector covers all sports activities, venues and leisure recreation activities.

2.6 The official list of SIC codes and accompanying descriptions is below:

SIC Code(s)	Description
55	Accommodation
56	Food and beverage service activities
79	Travel agency, tour operator and other reservation service and related activities
91	Libraries, archives, museums and other cultural activities
92	Gambling and betting activities
93	Sports activities and amusement and recreation activities

[2] Some conferencing activities fall under real estate activities and this overlap means that not all of this activity is captured by the SIC codes listed

[3] United Nations, cited in Oxford Economics 2015, The economic contribution of the UK Hospitality industry

3 Significance

3.1 The Hospitality, Tourism and Sport sector is one of the UK's key sectors. The sector is a major employer supporting 2.7m jobs in the UK.[4] Deloitte suggests that for every £1 of GVA generated in Hospitality and Tourism, supply-chain and knock-on spend factors mean that a further £1.80 is also produced for the UK economy.[5] At a GM level, the sector is significant, employing 99,100 people and generating GVA of £2.1bn in 2013.

3.2 The sector serves both a visitor market (incorporating both business and leisure visitors) and a local market (residents who enjoy the leisure activities and attractions that the conurbation has to offer). As well as attracting visitors to the conurbation, the sector has a significant role to play in attracting people to live in the area, particularly high value-added consumers.

3.3 While it is difficult to quantify the size of domestic population spend in the Hospitality, Tourism and Sport sector, it is estimated that households in GM spend £145m per week on recreation and leisure activities.[6] This demonstrates the significant contribution the domestic population makes to the sector in GM. GM's population is forecast to grow further over the coming years and this will contribute to the growth of the sector.

3.4 GM's Hospitality, Tourism and Sport sector is also particularly boosted by activity in the visitor economy, which has grown significantly in recent years. In 2005 the GM visitor economy generated £4.6bn by 2014 this had risen to £7.5bn.[7,8]

3.5 Manchester is the third most visited city in the UK by international visitors, behind London and Edinburgh. There were 994,000 international visitors to Manchester in 2014 and 1.15m to GM. While this is significantly less than London (17.4m) and lower than Edinburgh (1.6m) it is higher than Birmingham (944,000) and Glasgow (624,000), growing by 21% since 2005.[9]

3.6 Manchester attracts the second highest number of staying visits in England from Great British residents with a yearly average of 2.7m visitors from 2012 to 2014, and 3.7m visiting GM as a whole.[10]

3.7 GM has an annual average hotel occupancy rate of 80%, the same as that for the city of Manchester. Occupancy rates are the highest since records began (2000)[11] and the supply of bedrooms is set to continue to grow. The 8,600 available rooms in the city

[4] ONS (2013): Business Register and Employment Survey

[5] Deloitte (2013): Tourism: Jobs and Growth. The Economic Contribution of the Tourism Economy in the UK

[6] Data from the ONS on family spending shows that the average UK household spends £124 per week on recreation and leisure related activities. Applying the £124 average to the 1.17m households in GM (and 25%-50% leakage to reflect that not all of this spend will occur in GM) then it is estimated that households in GM spend £145m per week on recreation and leisure activities.

[7] STEAM (2014): The Scarborough Tourism Economic Activity Monitor for 2005 and 2014

[8] Visitor spend and impact are different to GVA. Figures for spend also include retail and transport

[9] ONS (2014): International Passenger Survey for 2014 supported by VisitBritain

[10] VisitEngland (2014): Great Britain Tourism Survey

[11] 2010-2015; STR Global Ltd; August 2003-2009; LJ Forecaster;
2000-August 2003; Marketing Manchester

centre, extending to a total of 21,200 in GM are expected to exceed 10,300 for the city centre and 24,500 for GM by the end of 2018.[12,13]

3.8 Several hotels and serviced apartments have publicly confirmed they will enter the market from 2016, including Holiday Inn Manchester City Centre, easyHotel Manchester, Crowne Plaza Hotel-Alliance MBS, and Holiday Inn Express in both Stockport and Wigan.

3.9 The number of staying visits (including visiting friends and relatives) to GM has increased by 14% since 2005, from 9.2m in 2005 to 10.5m in 2014, which has been supported by stays in paid-for accommodation that has seen a 17% increase during the same period. Research suggests that if each domestic staying visit generated an extra night's stay then the additional expenditure could be worth an additional £312m to GM's economy each year.[14]

3.10 In terms of the leisure offer, which serves both the visitor and local market, GM boasts one of the largest museum sectors and the highest concentration of producing theatres outside London. GM also has an international reputation for music, with a range of independent music venues and the Manchester Arena, which hosts a range of music and sporting events. Manchester also has two globally-recognised football clubs in Manchester United and Manchester City, and numerous other football league clubs.

3.11 Events such as the Manchester International Festival and facilities such as Manchester Central (Convention Centre), as well as assets such as Trafford Quays Leisure Village, have boosted GM's appeal for both business and leisure tourism, while completed developments and refurbishments such as HOME, the Whitworth Art Gallery and Central Library, and the planned cultural hub of The Factory will further enhance the area's public profile.

3.12 Alongside key visitor attractions in the centre of Manchester, including The Museum of Science and Industry, Manchester Art Gallery and the National Football Museum, other significant visitor attractions across GM include: The Lowry (Salford), Sea Life Centre and Legoland (Trafford), the Bolton Museum Aquarium and Archive, East Lancs Railway and Bury Transport Museum. A full list of GM's top ten visitor attractions is shown below:

[12] This includes those with named operators and there is expected to be additional rooms from the regenerated sites where operators were not confirmed at the time of publication
[13] Source: Unpublished Data compiled by Marketing Manchester
[14] Great Britain Tourism Survey, VisitEngland and International Passenger Survey, VisitBritain

Figure 1: Top visitor attractions in GM in 2014

Attraction	District	Admittance	Visitors 2014
The Lowry	Salford	Free	866,773
Museum of Science and Industry	Manchester	Free*	678,867
Manchester Art Gallery	Manchester	Free	531,904
National Football Museum	Manchester	Free*	466,788
Manchester Museum	Manchester	Free	426,517
IWM North	Trafford	Free	409,746
Runway Visitor Park	Manchester	Free*	368,300
The Corrie Tour	Manchester	Paid Entry	363,687
Bolton Museum, Aquarium & Archive	Bolton	Free	361,909
Manchester United Museum & Tour Centre	Trafford	Paid Entry	356,476

Source: Data compiled by Marketing Manchester using use Visit England's definition of a visitor attraction; "A permanently established place of interest that can be natural or man-made and of cultural, historical or educational significance, providing entertainment, amusement or adventure for visitors, as well as local residents". Where an attraction could be considered as a multi-purpose venue, they are eligible in the Greater Manchester listing if they are recognised by VAQAS (VisitEngland's Visitor Accreditation Quality Assurance Scheme). There are other Hospitality, Tourism and Sport assets not listed but which are detailed in Section 6 of this report.

3.13 GM is also home to over 500 sq miles of countryside, and benefits from a unique location bordering the Peak District. Rural assets, which are largely utilized by local residents, include: Smithills Hall, Healey Dell Nature Reserve and Rivington Pike (Bolton), Holcombe/Peel Tower/Ramsbottom (Bury), Heaton Park (Manchester), Saddleworth Moor and Dovestones (Oldham), Littleborough (Rochdale), Lyme Park (Stockport), Dunham Massey (Trafford), Haigh Country Park, and Pennington Flash (Wigan). Rural tourism also makes an important contribution to GM's economy and was estimated to be worth more than £120m to the conurbation in 2008.[15]

3.14 GM has strengths in hosting conference and business events, currently estimated to be worth over £823m, up from £573m in 2009[16]. Investments such as the £30m refurbishment of Manchester Central, and other venues such as Manchester Conference Centre, and academic and sporting conference facilities, have supported the city to grow its conference business base, becoming a leading choice for hosting international conferences such as the European Science Open Forum 2016.

3.15 Sport is a significant element of GM's Hospitality, Tourism and Sport sector. It is estimated football alone contributes £330m per annum to GM's economy and supports 5,000 full time equivalent jobs.[17] Since hosting the Commonwealth Games in 2002 the city-region has continued to strengthen its identity through sport, including hosting Olympic football matches in 2012.

3.16 The continued success and profile of Manchester United and Manchester City in the Premier and Champions leagues; the hosting of Rugby League events such as Rugby League World Cup final and the Super League Grand Final and the success of Wigan, Leigh and Salford Rugby League teams; the opening of the National Football Museum in 2012; the Ashes returning to Emirates Old Trafford in 2013; and a regular programme

[15] Manchester Enterprises (2008): GM Rural Baseline Study
[16] Marketing Manchester (2014): Conference Value and Volume Study
[17] Cambridge Econometrics (2013): Analysing the value of football to GM

of high profile sporting events such as NBA Basketball and the Great City Games all reinforce GM's reputation for hosting international sports events. Facilities such as the National Cycling Centre at Manchester Velodrome, the Manchester Aquatics Centre and regional gymnastics and tennis centres also attract visitors to GM.

3.17 Manchester Airport, the UK's third largest airport (over 23m passengers), behind London Heathrow (73m passengers) and London Gatwick (38m passengers), is critical to the growth of the Hospitality, Tourism and Sport sector in GM. It provides access to new markets alongside increasing numbers of routes to both mature and developing markets.

3.18 In addition, Manchester Airport recently unveiled a ten-year transformation plan, which sets out how £1bn of investment will transform the Airport by expanding Terminal 2 and improving Terminal 3. Two runways operate at Manchester Airport, and whereas the major London airports are reporting being close to capacity on the number of airline services they can operate, at Manchester there is a significant level of increased capacity available, offering the opportunity to maximise its potential.

4 Business and Employment

Hospitality, Tourism and Sport

4.1 In 2013, GM's Hospitality, Tourism and Sport sector generated £2.1bn GVA, almost 38% of the North West total (£5.6bn) and 3.4% of the sector's GVA output in the UK.

Figure 2: Hospitality, Tourism and Sport key sector statistics [18]

Hospitality, Tourism & Sport (All Subsectors):		GVA	Employment	Businesses
GM	Level 2013 (businesses 2014)	£2.1bn	99,100	8,150
	Change (% per annum, 2010 to 2013/14)	-0.9%	0.1%	0.8%
GB/ UK	Level 2013 (businesses 2014)	£58bn	2,693,000	226,390
	Change (% per annum, 2010 to 2013/14)	2.4%	2.1%	0.3%

Source: GM Forecasting Model, Inter-departmental Business Register and Business Register & Employment Survey. Latest data 2013 for employment and GVA, and 2014 for businesses

Figure 3: GVA per person employed in Hospitality, Tourism and Sport, 2013

	GM	UK
Sport	£19,000	£20,100
Tourism and culture	£21,400	£22,600
TOTAL HOSPITALITY	**£21,000**	**£22,200**

Source: GMFM. Please note employment figures in GMFM may differ from Business Register & Employment Survey figures used elsewhere in this report

Figure 4: Hospitality, Tourism and Sport, key metrics

	Businesses		Employment		Comment
	2014	Change 2010-2014	2013	Change 2010-2013	
Total	**8,150**	**255**	**99,100**	**+300**	-

Source: Inter-Departmental Business Register, and ONS Business Register & Employment Survey

Figure 5: Hospitality, Tourism and Sport employment by business size-band, 2014

Employees	Business Size Band by number of employees: Micro (0 to 9)	Small (10 to 49)	Medium (50 to 249)	Large (250+)	Comments
Accommodation	38.8%	35.8%	23.9%	1.5%	Larger proportion of SME businesses than average for the sector.
Food and beverage service activities	71.6%	26.0%	2.3%	0.2%	In line with the sector average, predominantly micro and small businesses.
Travel agency, tour operator and other reservation service and related activities	81.3%	13.8%	5.0%	0.0%	Majority of businesses are micro, below average proportion of SMEs but above average proportion medium-sized.
Libraries, archives, museums and other cultural activities	75.9%	20.7%	3.4%	0.0%	Three quarters of sector micro, below average proportion of SME/Large firms.
Gambling and betting activities	91.8%	6.4%	1.8%	0.0%	Very high proportion of micro businesses.
Sports activities and amusement and recreation activities	67.4%	27.5%	4.6%	0.5%	Below average proportion of micro businesses, higher proportions of SMEs, medium and large employers.
TOTAL	**71.6%**	**24.5%**	**3.7%**	**0.2%**	**Micro sized firms make up the majority of the sector, along with a smaller % of SMEs.**

Source: Inter-Departmental Business Register (Data may not sum due to rounding)

[18] Latest data 2013 for employment and GVA, and 2014 for the number of businesses

4.2 Total GVA from the sector in GM has remained static since 2010, compared to a rise, on average, across the UK which grew by 2.4%pa over the same period. Productivity in GM stands at £21,000 per employee, 5.7% behind the UK average of £22,200.

4.3 There are 8,150 Hospitality, Tourism and Sport sector businesses in GM, comprising 33.3% of the North West total in the sector and accounting for 3.5% of the UK total.[19] Of the 8,150 Hospitality, Tourism and Sport businesses in GM, 5,100 (71.6%) are microbusinesses employing fewer than ten people, and a further 1,700 (24.5%) have between 10 and 49 employees.

4.4 The sector's location quotient – a measure of employment concentration within the local economy compared with the national average – suggests Hospitality, Tourism and Sport sector employment is, overall, slightly lower than the national average. However, data for subsectors highlights that GM has a higher concentration than the national average in Travel Agency, Tour Operator and Other Reservation Services and Related Activities (1.28).

4.5 The location quotients for the accommodation (0.67), and libraries, archives museums and other cultural activities subsectors (0.67) suggest that despite GM's strength in these subsectors there is still considerable scope for expanding employment in parts of the sector.

Figure 6: Location Quotient of Hospitality and Tourism

SIC	Description	LQ	Employment
55	Accommodation	0.67	12,200
56	Food and beverage service activities	0.91	60,100
79	Travel agency, tour operator and other reservation services	1.28	5,200
91	Libraries, archives, museums and other cultural activities	0.67	1,800
92	Gambling and betting activities	1.11	4,800
93	Sports activities and amusement and recreation activities	0.82	14,900
All	**All areas**	**0.86**	**99,000**

Source: Business Register & Employment Survey (Data may not sum sue to rounding)

[19] ONS Business Register & Employment Survey

Figure 7: Hospitality, Tourism and Sport Business Units – Level in 2014

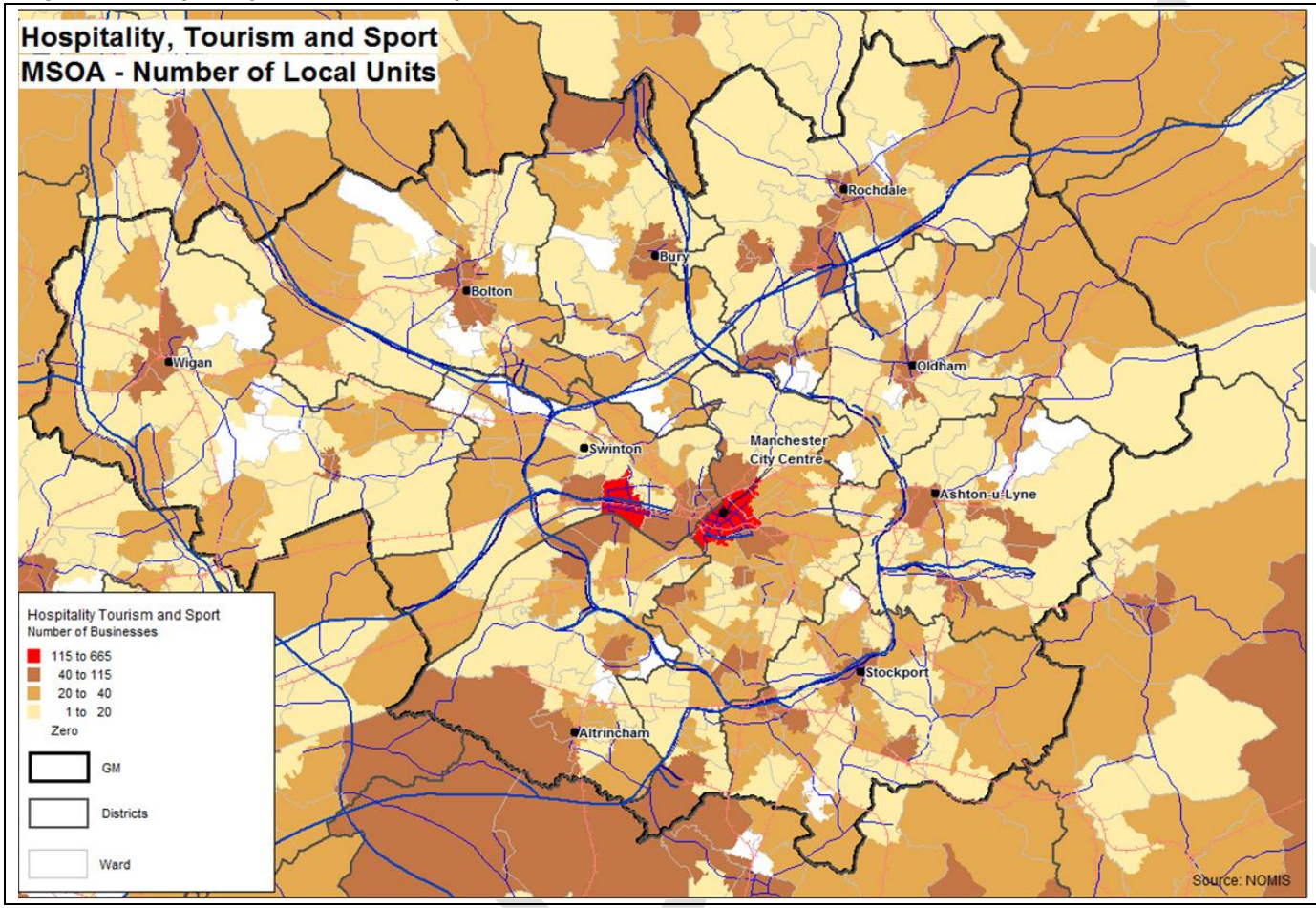
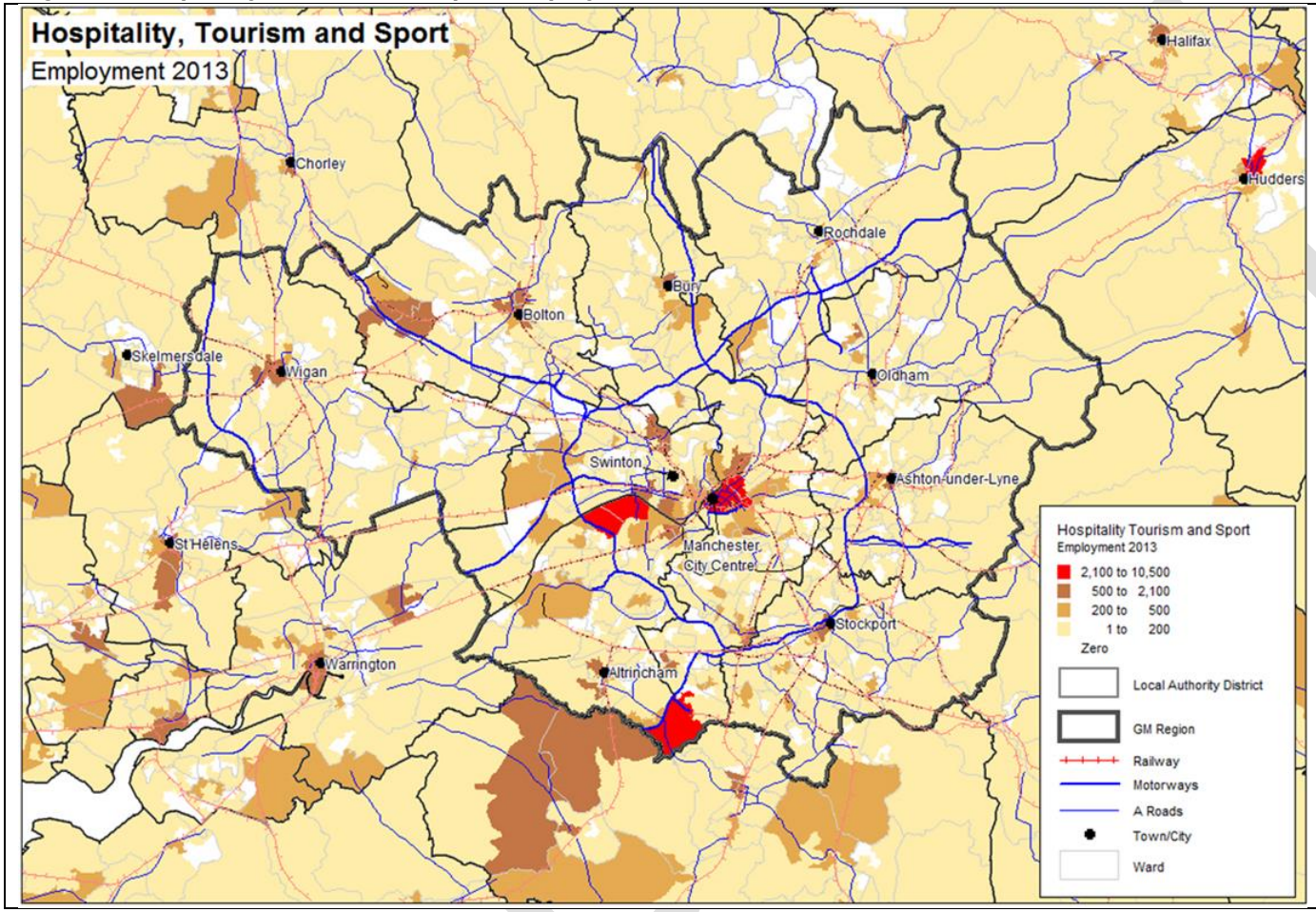


Figure 7 shows the total number of Hospitality, Tourism and Sports business units in GM in 2014. This highlights two significant concentrations of businesses in the city centre and at Salford Quays and Trafford Park. In addition, there are a high number of businesses found in and around GM's town centres, and the airport.

Source: Inter-Departmental Business Register

Figure 8: Hospitality, Tourism and Sport Employment in 2013



Source: ONS Business Register & Employment Survey

Figure 8 shows there are clusters of employment in Manchester city centre, where there is a significant proportion working within hotels, conference and meeting facilities, performance venues, food and drink outlets and many visitor attractions

There are clusters of employment in Salford Quays, Trafford and at Manchester Airport, and a number of employment hotspots within Manchester but outside of the city centre, such as Sport City and the Etihad (City of Manchester) Stadium in the Clayton area of East Manchester.

In Trafford, Hospitality, Tourism and Sport employment is concentrated in key assets such as the Trafford Quays Leisure Village which includes Intu Trafford Centre (and the two visitor attractions operated by Merlin Entertainments, Chill Factore and Aerial Extreme).

The Quays is also a significant area of employment and includes The Lowry and BBC Tours (Salford) as well as the Imperial War Museum North and Manchester United Football Club (Trafford), with Emirates Old Trafford Cricket Ground also close by.

Local town centres are also highlighted as smaller clusters of hospitality employment across all GM.

4.6 Figure 9 shows a quarter (25.1%) of all businesses in GM are located within Manchester. Stockport is the second largest district in terms of the number of businesses, with 10.5% of the GM total (855 businesses). There is also a similarly large share of firms in Wigan, 9.9% (810 businesses) of the GM total.

4.7 Figure 9 also shows the number of businesses grew faster in GM (3%) than the national average (1%), but was some way behind the growth in number of businesses in London (9.8%) between 2010 and 2014. Salford saw a 33% increase in business numbers during this period. Manchester saw significant growth over the three years (9.7%). However, the number of businesses in the sector fell in all other GM districts, with the exception of Wigan where business numbers remained static.

Figure 9: Number of businesses in Hospitality and Tourism and Sport, 2010 to 2014

	Business Numbers			Change 2010 to 2014	
	2010	2014	2014 (%)	No.	%
Bolton	710	695	8.5%	-15	-2.1%
Bury	535	540	6.6%	5	0.9%
Manchester	1,865	2,045	25.1%	180	9.7%
Oldham	625	580	7.1%	-45	-7.2%
Rochdale	570	550	6.7%	-20	-3.5%
Salford	575	765	9.4%	190	33.0%
Stockport	865	855	10.5%	-10	-1.2%
Tameside	590	580	7.1%	-10	-1.7%
Trafford	750	735	9.0%	-15	-2.0%
Wigan	810	810	9.9%	0	0.0%
Greater Manchester	**7,895**	**8,150**	**100.0%**	**255**	**3.2%**
North West	23,735	23,510	-	-225	-0.9%
London	33,130	36,365	-	3,235	9.8%
Great Britain	224,110	226,390	-	2,280	1.0%

Source: Inter-Departmental Business Register (Data may not sum sue to rounding and note caution in interpreting change figures as data is for a short time period)

4.8 In contrast to growth in the number of businesses, Figure 10 shows between 2010 and 2013, employment growth was slower in the Hospitality and Tourism and Sport sector (0.3%pa) compared with the national average (6.6%), London in particular, saw strong growth of 14% over this period.

4.9 Within GM growth in employment was seen in four of the ten districts over this period. Employment growth was strongest in Manchester (4,900 more employees), whereas significant falls were seen in Salford, Rochdale and Wigan. The fall of almost 4,000 in Salford was linked to two major business closures in the district. Despite this, Salford still employs over 8,000 in the sector.

Figure 10: Employment in Hospitality and Tourism and Sport, 2010 to 2013

	Employment			Change 2010 to 2013		Proportion of district Employment (2013)
	2010	2013	2013(%)	No.	%	
Bolton	8,000	8,000	8.1%	0	0.0%	7.5%
Bury	5,100	5,300	5.3%	200	3.9%	8.0%
Manchester	30,500	35,400	35.7%	4,900	16.1%	10.4%
Oldham	5,500	5,200	5.2%	-300	-5.5%	6.8%
Rochdale	5,100	4,400	4.4%	-700	-13.7%	6.3%
Salford	12,200	8,300	8.4%	-3,900	-32.0%	6.8%
Stockport	8,500	8,800	8.9%	300	3.5%	7.2%
Tameside	5,000	4,700	4.7%	-300	-6.0%	7.0%
Trafford	9,600	10,300	10.4%	700	7.3%	7.5%
Wigan	9,200	8,700	8.8%	-500	-5.4%	8.7%
Greater Manchester	**98,800**	**99,100**	**100.0%**	**300**	**0.3%**	**8.2%**
North West	276,600	283,200	-	6,600	2.4%	9.1%
London	413,500	471,500	-	58,000	14.0%	10.0%
Great Britain	2,527,200	2,693,000	-	165,800	6.6%	9.5%

Source: ONS Business Register & Employment Survey (Data may not sum sue to rounding and note caution in interpreting change figures as data is for a short time period)

4.10 The following provides further analysis of business and employment by subsector.[20]

4.11 **Accommodation:** There were 330 Accommodation businesses (hotels, bed & breakfasts etc) in GM in 2014, comprising 17% of the North West total. 12,200 people were employed within the Accommodation subsector in GM in 2013, comprising 27% of the North West total. At a UK level hotels represent over one fifth of the hospitality sector.

4.12 **Food and beverage service activities:** There were 5,625 Food and Beverage Service firms in GM in 2014, making it by far the largest subsector in the Hospitality, Tourism and Sport sector, accounting for 69.7% of businesses in the sector overall. There were 60,100 people employed within the subsector in GM in 2013, meaning this is also the largest subsector in employment terms, providing 61% of total employment in the Hospitality, Tourism and Sport sector. It also provides over a third (36.7%) of the subsector's employment in the North West and 3.8% nationally. At a UK level the food and beverage sector contributes over three quarters of the revenue in the hospitality sector and employs 80% of the employees.[21] The sector will be boosted significantly from local population and local workforce spend.

4.13 **Travel agency, tour operator and other reservation service and related activities:** There were 400 Travel Agency, Tour Operator and Other Reservation Service businesses in GM in 2014, comprising 39% of the North West total. There were 5,200 people employed within the subsector in GM in 2013, comprising 46% of the North West total.

[20] In accordance with ONS reporting lines, employment data has been rounded to the nearest hundred.

[21] Ernst and Young (2013) The Hospitality Sector In Europe

4.14 **Libraries, archives, museums and other cultural activities:** There were 150 libraries, archives, museums and other cultural activity businesses in GM in 2014, 29% of the North West total. There were 1,800 people employed within the subsector in GM in 2013, comprising 25% of the North West total.

4.15 **Gambling and betting activities:** There were 555 Gambling and Betting businesses in GM in 2014, accounting for 38% of the North West total. There were 4,800 people employed within the subsector in GM in 2013, 38% of the North West total.

4.16 **Sports activities and amusement and recreation activities:** There were 1,090 Sports Activities and Amusement and Recreation Activities in GM in 2014, making it the second largest subsector in the Hospitality, Tourism and Sport sector, accounting for 13% of businesses in the sector overall. There were 14,900 people employed within the subsector in GM, which accounts for 13.4% of total employment in the Hospitality, Tourism and Sport sector, making it the second largest sector in employment terms. The subsector comprises over a third of the North West's employment in the sector.

5 Skills

5.1 The average productivity level in GM's Hospitality, Tourism and Sport sector is below the UK average. The ability to succeed in continuously driving improvement in productivity is highly dependent on access to a skilled workforce. However, the sector faces several challenges to addressing recruitment and skills difficulties, set out in the section below.

5.2 The following analysis shows the current qualification profile for the resident Hospitality, Tourism and Sport workforce based on survey data for the North West of England and UK. Survey data on specific sectors, jobs and qualifications is not accurate for smaller areas. Skills forecasts produced by Oxford Economics also provide an indication of the qualification levels that the sector will need over the next 20 years.

Current trends

Figure 11: Highest level of qualification held by people working in Hospitality and Tourism, 2015

	NW	UK
Level 4+	19.3%	26.0%
Level 3	22.1%	20.6%
Trade Apprenticeships	3.3%	2.2%
Level 2	26.7%	21.7%
Below Level 2	12.2%	12.2%
Other Qualifications	6.8%	9.1%
No Qualifications	9.6%	8.3%

Source: Quarterly Labour Force Survey, January - March 2015. (Data may not sum sue to rounding)

5.3 Figure 11 shows the qualification profile in the North West differs significantly from that of the UK average in two areas. GM has a much higher proportion of employees holding Level 2 qualifications (entry level requirement), however it falls nearly 7% behind the UK average in term of those holding Level 4 level qualifications. The gap equates to over 12,000 more graduate level jobs in the North West, and proportionately, 4,000 of these relate to GM.

5.4 New Economy has undertaken analysis of the supply and demand relationship for hospitality, tourism and sport related apprenticeships. Apprenticeships at advanced level in hospitality (270) are low compared with sector growth and there is room for expansion. This is also true of apprenticeships at advanced level in hospitality and catering. The number of sport-related advanced apprenticeships (125) appears reasonable in comparison to job opportunities and in travel and tourism, advanced apprenticeships numbered just 11, suggesting that there is scope for growth.

Future trends

5.5 Skills forecasts from Oxford Economics have identified expansion demand (in terms of new jobs which will be created over the next two decades) and replacement demand (measuring workforce churn). Under the central Accelerated Growth

Scenario, the number of net new jobs that will be created in GM in the sector is estimated at 21,600 over the next two decades;[22] and a further 13,000 per annum are estimated to leave the sector each year due to retirement and occupational change who will need to be replaced. As Figure 12 shows many of these roles will be at entry level occupations and half of the jobs will be up to Level 2 in 2035.

Figure 12: Qualification breakdown in the Hospitality, Tourism, Sport sector, 2035

Qualification level	Proportion of sector
NVQ 4+	22%
NVQ 3	24%
NVQ 2	17%
NVQ 1	8%
Other	13%
No Qualifications	16%

Source: Oxford Economics (Data may not sum sue to rounding)

Skills challenges

Figure 13: Skills Challenges in the Hospitality, Tourism and Sport Sector

Challenge	Explanation
Vacancies, recruitment difficulties, and training costs	• High turnover of staff results in large number of vacancies and high recruitment costs. • Sector spends a large amount of money on training new staff but less than whole economy average when all occupations are considered.
Workforce skills gaps	• A high number of workers have skills gaps. Reflecting the high turnover of staff, this is mainly due to workers being new to a role. • Skills gaps are most common in elementary occupations.
Casual work and zero hours contracts	• Risk that casual workers are not given long-term training opportunities, beyond induction and health and safety training.
University Provision	• Industry-led courses will help to upskill residents enabling them to take advantage of opportunities in the sector .

5.6 **Vacancies, recruitment difficulties, and training costs:** The Hospitality, Tourism and Sport sector has a high staff turnover in both the UK and GM. The vacancy rate in the UK currently stands at 32 vacancies per 1,000 employees, as opposed to 23 vacancies per 1,000 employees across the economy as a whole.[23]

5.7 Due to the frequent intake of new staff, the Hospitality, Tourism and Sports sector spends a significant amount on training new staff. This is reflected in the high proportion of entry-level employees receiving induction and health and safety training compared with the average across all sectors.

5.8 **Workforce skills gaps:** Research by People 1st suggests the sector experiences more acute skills gaps in the existing workforce, compared with the average for other sectors.

[22] Growth forecasts are based on the GM Forecasting Model, detailed later in this report

[23] UK Commission for Employment and Skills (2012): Sector Skills Insights: Tourism

In part this is driven by higher level of staff turnover and new entrants. Over half (56%) of skills gaps reported related to entry and elementary occupations, in particular a requirement to improve customer handling skills.

5.9 **Casual work and zero hours contracts:** According to the Office for National Statistics, 45% of employers use zero hour contracts and casual work in the Hospitality and Tourism sector, far more than any other industrial sector.[24] While this provides opportunities for employment in the sector for casual workers, it can also prove a barrier to employees attaining longer-term training opportunities, which will also prove a challenge to training skill levels and productivity.

5.10 **University provision:** It is vital local residents have the necessary qualifications and skills to take advantage of opportunities in the sector. Several of GM's universities offer courses that are directly relevant to the sector and that have been designed in conjunction with industry bodies to ensure they reflect the needs of the sector. Examples include but are not limited to: Manchester Metropolitan University Department of Food and Tourism Management, which offers a range of courses from foundation year through undergraduate and post graduate courses in Hospitality, Tourism and Events as well as doctoral study opportunities and The Business School at the University of Salford which also offers an undergraduate course in Business and Tourism Management (BSc Hons).

[24] ONS, April 2014, Analysis of Employee Contracts that do not Guarantee a minimum number of hours

6 Key Assets

6.1 The following section highlights the key assets in relation to the Hospitality, Tourism and Sport sector. Assets have been identified based on their role in supporting jobs and/or GVA growth for GM now and in the future. It is not intended to be definitive and it excludes details of the many sector development organisations and professional support networks that exist across GM which also have a key role to play in supporting growth and attracting investment as well as assets serving a more local market including GM's town centres, local cinemas, parks and retail. This section should be read in conjunction with the Retail chapter, which highlights assets that are relevant to but do not directly relate to the sector focus in this section. In summary, the list of assets detailed in this section includes the following:

- **Sport**
  - Manchester City Football Club and Etihad Stadium Tour
  - Emirates Old Trafford Cricket Ground and Old Trafford
  - Manchester United Football Club and Stadium Tour
  - Etihad Campus/Sport City
  - National Speedway Stadium
  - Football stadiums at Wigan, Bolton, Rochdale, and Oldham
  - Rugby League at Wigan and Salford
  - National Football Museum (see Culture below)
- **Leisure**
  - Trafford Quays Leisure Village The Quays (Salford)
- **Entertainment and Theatres**
  - Manchester Arena
  - HOME
  - The Lowry
  - Bridgewater Hall
  - Royal Exchange Theatre
  - Manchester Opera House
  - The Palace Theatre
- **Business, Exhibitions and Conferences**
  - Manchester Central
  - EventCity
- **Culture (see theatres above)**
  - Manchester Art Gallery
  - Whitworth Art Gallery
  - Museum of Science and Industry
  - Manchester Museum

- IWM North
- National Football Museum
- Bolton Museum, Aquarium and Archive
- The Factory
- RHS Fifth Garden
- Rural offer

Sport

6.2 **Sport City:** Sport City contains the City of Manchester Stadium, which is home to Manchester City Football Club. The site also features the National Squash Centre, the 6,500 seat Manchester Regional Arena, English Institute of Sport, Manchester Velodrome and the Tennis Centre as well as a state-of-the-art gymnasium. Sport City's facilities for elite and professional athletes as well as developing a community programme. It holds over 400 events each year and receives over 4.5m visits annually.

6.3 **Manchester City Football Club and Etihad Stadium Tour:** The City of Manchester Stadium (Etihad) is home of Manchester City Football Club. Seating capacity has recently been increased to 55,000.

6.4 **Emirates Old Trafford Cricket Ground:** The stadium's capacity is 22,000 for Test matches, for which temporary stands are erected, and 15,000 for other matches. The ground is used heavily throughout the summer as the base of Lancashire County Cricket Club. The ground is occasionally used as a venue for large-scale concerts, with a maximum capacity of 50,000.

6.5 **Manchester United Football Club and Stadium Tour (Old Trafford):** With a capacity of 76,000, Old Trafford's most recent expansion, which took place between July 2005 and May 2006, saw an increase of around 8,000 seats with the addition of second tiers to the north west and north east quadrants of the ground.

6.6 **National Speedway Stadium:** The National Speedway Stadium will be the focal point for national and international speedway events with a 6,000 capacity venue, a 1,800 seat grandstand and state-of-the-art acoustic barrier that will encompass the track.

6.7 **Football stadiums at Bolton, Oldham, Rochdale and Wigan:** As well as hosting two of the world's largest football clubs, GM is home to a number of other established clubs including Bolton Wanderers based at the Macron Stadium, Wigan Athletic based at DW Stadium, Bury FC, Oldham Athletic and Rochdale AFC.

6.8 **Rugby League at Leigh, Salford and Wigan:** GM is home to three rugby league teams: Leigh Centurians, Salford Red Devils and Wigan Warriors. GM has also recently played host to a number of rugby league events such as the Rugby League World Cup final and the Super League Grand Final.

Leisure

6.9 **Trafford Quays Leisure Village:** Trafford Quays Leisure Village is home to a wide variety of leisure activities in one place including: Chill Factore - one of the world's largest ski-centres, Powerleague Soccerdome – the largest five-a-side football centre in the world, an indoor sky-diving centre, Legoland Discovery Centre, Aerial extreme, a golf driving centre, and and a leisure centre. It is situated adjacent to the retail/leisure offer at the Trafford Centre.

6.10 **The Quays:** The Quays is GM's waterfront and home to a variety of leisure activities including: Imperial War Museum North The Lowry, BBC Tours, restaurants, bars and retail.

Entertainment and Theatres

6.11 **The Bridgewater Hall:** The Bridgewater Hall is Manchester's international concert venue. The Hall hosts over 250 performances a year including classical music, rock, pop, jazz, world music. The Hall is home to three resident orchestras: the Hallé, the BBC Philharmonic and Manchester Camerata. The Hall also programmes its own classical music season, the International Concert Series.

6.12 **The Lowry:** The Lowry entertainment and arts centre houses two main theatres and studio space for performing arts (1,730, 466 and 180 seats respectively) presenting a full range of drama, opera, ballet, dance, musicals, children's shows, popular music, jazz, folk and comedy. It also has gallery spaces (1,610 sq m), showing the works of LS Lowry alongside contemporary exhibitions.

6.13 **Manchester Arena:** The arena has a 21,000-person capacity and hosts a range of large musical and sporting events. The arena was a key part of Manchester's bids to host the Olympic Games in 1996 and 2000 and was eventually used for the 2002 Commonwealth Games.

6.14 **Royal Exchange Theatre:** The theatre has capacity to seat an audience of up to 700 on three levels. The Royal Exchange gives an average of 350 performances a year of nine professional theatre productions. It commissions new works that have had a national impact and enhance Manchester's role as a creative centre.

6.15 **Manchester Opera House:** The Opera House dates from 1920 and has hosted numerous theatre productions including the 1958 European premiere of West Side Story and the British regional premiere of Andrew Lloyd Webber's musical The Phantom of the Opera. The world premiere of Ghost the Musical was held at the theatre from March to May 2011 before it transferred to London's West End.

6.16 **The Palace Theatre:** The Palace Theatre dates from 1891 and is one of the main theatres in Manchester. With a 1,955-person capacity, it hosts major touring musicals often with major celebrities and performances of opera and ballet along with various other comedy acts and one night concerts.

6.17 **HOME:** Formed by the merger of the Cornerhouse and the Library Theatre Company, HOME includes a 450-seat theatre, a 150-seat flexible theatre space, a 500 sq m gallery space, five cinema screens, digital production and broadcast facilities, a bar, café bar and cinema bar, plus a bookshop.

6.18 In addition, there are a number of other theatres that serve an important local and regional market including the **Contact Theatre** in Manchester, **Octagon Theatre** in Bolton, **Oldham Coliseum Theatre, Dancehouse** in Manchester, **The Met** in Bury and the **Garrick Theatres** in Trafford and Stockport and agreed plans for a new **Heritage and Arts Centre** for Oldham

6.19 **Hotel and restaurant offer:** Manchester has a substantial and growing hotel stock, with five star hotels such as The Lowry, the Radisson Blu Edwardian and The Midland Hotel. The city has also improved its restaurant offer in recent years, with The French and Manchester House boosting the fine dining restaurant offer.

Business, Exhibitions and Conferences

6.20 **Manchester Central:** Manchester Central has over 23,000 sq m of flexible space and can hold over 10,000 delegates. Alongside major trade shows and concerts, Manchester Central has also hosted political party conferences.

6.21 **EventCity:** EventCity is located in Trafford Park with 28,000 sq m of floorspace. It host high profile events including the Ideal Home Show and X Factor auditions.

Culture

6.22 **Manchester Art Gallery:** Manchester Art Gallery houses many works of local and international significance and has a collection of more than 25,000 objects. There is a diverse programme of changing exhibitions, ranging from historic to cutting edge contemporary art, photography, design, decorative art and family friendly exhibitions.

6.23 **Whitworth Art Gallery:** The Whitworth Art Gallery is an art museum containing about 55,000 items in its collection and dates from 1889. In 2015 the gallery was awarded the Art Fund Prize for Museum of the Year and also won Visit England's Large Visitor Attraction of the Year gold award.

6.24 **Museum of Science and Industry (MOSI):** MOSI is located in Castlefield on the historic site of the world's oldest surviving passenger railway station. Housed in five listed building the museum is now part of the Science Museum Group.

6.25 **Manchester Museum:** Manchester Museum has 15 galleries featuring collections from across the world that explore the natural world and different cultures. The Museum is owned by the University of Manchester, with the collections and staff supporting research and teaching. It is also part of the Real World Science Programme, a collaborative partnership between the Natural History Museum national and seven regional museums.

6.26 **Imperial War Museum North:** The Imperial War Museum North (IWM North) is one of five Imperial War Museums. Opening in 2002, it is housed in an iconic building designed

by architect Daniel Libeskinds. Since opening the museum has won more than 25 awards and held more than 40 special exhibitions

6.27 **People's History Museum.:** The People's History Museum (PHM) exhibits political material spanning working people's demand for a better world to organisations that represented them. The Museum closed in 2007 and re-opened in 2010, the culmination of a £12.5m redevelopment project.

6.28 **National Football Museum:** The National Football Museum moved to the Urbis building in 2011 and opened in July 2012 and consists of over 140,000 items, including the FIFA collection.

6.29 **Bolton Museum:** Bolton Museum dates from 1939. Owned by Bolton Metropolitan Borough Council, the collections include natural history, archaeology, art, local history and one of Britain's oldest public aquariums.

6.30 **The Factory:** The Factory Manchester will be located at the heart of a new creative village, St John's, in the city centre on the former Granada Studios site. It is due to open in 2019. It will comprise a large scale producing theatre space with seating provision and a large space for immersive, flexible use, with the capacity for these elements to be used together, or separately, with full acoustic separation.

6.31 **RHS Fifth Garden:** The RHS Fifth Garden will create a new destination garden located on a 63 hectare site at Worsley New Hall in Salford. This will include the restoration of the four hectare walled kitchen garden and also include a new schools learning centre. The fifth garden will be named RHS Garden Bridgewater and is planned to open in 2019.

6.32 **Rural offer:** GM is home to over 500 sq miles of countryside and has a number of rural assets which are largely utilized by local residents, including: Smithills Hall (Bolton), Holcombe/Peel Tower/ Ramsbottom (Bury), Heaton Park (Manchester), Saddleworth Moor and Dovestones Reservoir (Oldham), Healey Dell Nature Reserve and Littleborough (Rochdale), Lyme Park (Stockport), Dunham Massey (Trafford), and Haigh Country Park and Pennington Flash (Wigan). GM also benefits from bordering the Peak District National Park and assets in Lancashire including Rivington Pike.

7 Growth Potential

Forecasts for growth

7.1 A number of economic scenarios have been developed to assess the growth potential of the sector in GM over the next twenty years. The baseline forecast for GM sets out the likely growth pattern based on a continuation of past trends and is derived from the Greater Manchester Forecasting Model (GMFM).[25] It is a 'policy neutral' forecast as it assumes that policy will be as effective in the future as it has been in the past. The latest GMFM baseline (GMFM 2015) is more pessimistic than the previous iteration of GMFM, reflecting a weaker UK growth profile even before the result of the EU referendum. It sees GM grow at a faster rate than the NW economy at 2.3% year on year, which is in line with the UK average.

7.2 To inform the development of the GMSF, an updated Accelerated Growth Scenario (AGS-2015) has been developed based upon improved sector growth performance alongside higher population growth. This scenario is predicated upon GM playing a leading role in the development of the Northern Powerhouse and achieving the ambitions laid out by the UK Government within its NW Long Term Economic Plan.[26]

7.3 Employment in the Hospitality, Tourism and Sport sector has increased by 34,300 jobs in the last two decades and the sector has seen a significant increase in GVA output. Forecasts suggest that both employment and GVA in the sector will continue to rise.

7.4 The baseline forecast for GM suggests a net increase of 20,300 employees from 2015 to 2035. However, the central Accelerated Growth Scenario (AGS-2015) for GM suggests that the number of net new jobs could be as high as 25,600 and forecasts GVA growth of 2.6%pa which could contribute to additional GVA of £1.7bn in GM's economy by 2035.

Figure 14: Hospitality, Tourism and Sport - Baseline and Accelerated Growth Forecast

All Sector	Net increase 1995 to 2015		GMFM Baseline 2015 to 2035		AGS-2015 2015 to 2035	
	Difference	% CAGR	Difference	% CAGR	Difference	% CAGR
Jobs	34,300	1.7	20,300	0.8	25,600	1.0
GVA	£1.1bn	2.9	£1.5bn	2.9	£1.7bn	2.6

Source: Oxford Economics & New Economy.

[25] Oxford Economics

[26] UK Government (2015): Long Term Economic Plan for the North West

Opportunities

7.5 GM's Hospitality, Tourism and Sport sector is a key employer and generator of economic impact to the local economy, and at a wider UK level, and also has a much broader economic impact given its value in both attracting visitors and people to live in the area.

7.6 As with other sectors, growth comes from an increase in demand. Demand is boosted by increased appeal from existing customers, as well as an increase in visitors from both existing and new markets. However, some of the most significant opportunities are likely to result from population growth. A potential boost to visits to the area, as well as increased demand generated from the business community, also present opportunities for the sector and support business levels from local markets.

7.7 A number of specific opportunities for the sector are set out below.

Figure 15: Key opportunities for growth

Opportunity	Activity
Encouraging people to stay for longer, and growing the number of staying visits	• The further growth of Manchester Airport as a gateway. • Building profile both nationally and locally of GM's visitor offer.
Leveraging the impact of GM's nationally significant assets to ensure all parts of GM benefit from visitor spend	• Improving links between /flow between visitor attractions across GM. • Improving infrastructure to enable easy movement within the conurbation.
Hosting more major international events	• Building profile both nationally and locally of GM's visitor offer. • Attracting international events to the city region
Supporting a local food and drink offer	• Significant population growth will contribute to increased demand for local food and drink offer • Increasing awareness of current offer
Increasing cultural related tourism through the development of new international attractions	• Maximising benefit from investments such as: o The Factory and RHS Fifth Garden. o Developing other stand out attractions for visitors to the north of England.
Continue to improve transportation within GM	• Developing the smart ticketing system for GM. • Maximising opportunities through developments at Manchester Airport, including the expansion of Terminal 2 and enhancements to Terminal 3.
Maximising the benefits of an ageing population	• Developing GM's offer so that it is attractive to the older generation.
Maximising the opportunities created by changing internet shopping patterns	• Increasing awareness of growth opportunities from online trade. • Maximising links to key digital technology sectors in GM.

7.8 **Growing the visitor base:** GM holds a strong position within the UK for international visits and has benefited from significant growth over the past decade. However, it is competing in a marketplace with other major national, European and international cities, some of which are also raising their profile and receiving investment.

7.9 Manchester Airport, HS2 and rail development programmes from other major UK airports offer significant opportunities to increase the volume of international visitors to GM. Manchester Airport in particular can be a catalyst for potential growth and increase the number of inbound visits to GM while also providing a gateway service for those wishing to visit GM as part of a wider stay in the UK. This is relevant to both existing markets and emerging markets with the development of new routes.

7.10 Encouraging people to extend their stay could also bring significant economic benefit to GM. Data show that, on average, a day visitor will spend £35 in the destination on shopping, transport, food/drink, entertainment; and a staying visitor spends £52.[27]

7.11 **Growing the number of staying visits:** The number of staying visits (including visiting friends and relatives) to GM has increased by 14% since 2005 (from 9.2m in 2005 to 10.5m in 2014), which has been supported by stays in paid-for accommodation, which saw a 17% increase during the same period. Data show that if each domestic staying visit generated an extra night's stay the additional expenditure could be worth £312m to GM's economy. If each international staying visit generated an extra night's stay this could add a further £72m.[28]

7.12 Other assets such as the strong student base, population base and forecast levels of population growth, and football brands (sport is a key differentiator for the city) also play an important part in growing demand for Hospitality, Tourism and Sport business.

7.13 **Leveraging the benefit of GM's nationally significant assets to ensure all parts of the conurbation are able to benefit from visitor spend:** GM has a number of nationally significant assets and is renowned for its strengths in sport, culture, music/entertainment and leisure. These will attract visitors which can then be encouraged to visit other attractions across GM, as well as growing overnight stays.

7.14 Linked to this there is also a key role for GM's town centres which provide vital functions for local communities in terms of employment and retail, and also more broadly as a focus for social activity/leisure and for services.

7.15 **Hosting more major international events:** Enhancing Manchester's ability to attract larger events will increase its competitiveness with other national, European and global destinations and at the same time provide a multiplier impact for local accommodation, restaurants, bars, transport and local shops.

7.16 Manchester is an internationally recognised events destination. The successful hosting of the Commonwealth Games in 2002 created a reputation for being able to host a range of sporting events in world class facilities, as well as hosting major international conferences and events such as the European Science Open Forum 2016, and the Labour and Conservative Party Conferences. Between 2009 and 2013 the economic impact of international association business in GM rose from 4% of the sector to 12%.[29]

[27] The GM Leisure Visits Survey, Marketing Manchester 2014 Note- staying visitor spend detailed excludes the cost of accommodation.
[28] New Economy analysis using Great Britain Tourism Survey, Visit England and International Passenger Survey.ONS supported by VisitBritain
[29] Conference Value & Volume, Marketing Manchester, 2009 and 2013 data

Manchester also has a strong cultural and festival calendar, which includes the Manchester International Festival.

7.17 **Supporting a local food and drink offer:** The food and drink sector is a key employer across all GM, providing a significant number of part-time and flexible working options. Population growth means that there will be increased demand for the local food and drink offer. While Manchester doesn't have a Michelin Star restaurant, it does have a range of high-end eating establishments, both independently and within hotels.

7.18 GM has benefitted from major restaurant operators moving into town centres, particularly the regional centre which has seen global brands move into Deansgate, Corn Exchange, Spinningfields and King Street. The Northern Quarter and Oxford Road have also seen growth in new independents and smaller chain companies. The Manchester Christmas Markets drive significant footfall into the city centre.

7.19 **Increasing cultural related tourism and developing stand out visitor attractions:** GM boasts one of the largest museum sectors and the highest concentration of producing theatres outside London. Recent years have seen investment injected into GM's cultural offer including, in 2014, the re-developed Central Library and former home of Elizabeth Gaskell (£50m and £2.5m respectively), and the building of HOME and the redevelopment of the Whitworth Art Gallery in 2015, (£25m and £15m respectively). This has increased the quality and appeal of the combined cultural offer within GM.

7.20 GM has a strong set of attractions but there are opportunities for further growth. Due to open in 2019, The Factory Manchester is a new cultural hub that will support the north of England's cultural offer, diversify its cultural infrastructure and bring an enhanced level of content to the conurbation. The RHS Fifth Garden in Salford will also be a significant opportunity for the hospitality and tourism sector in GM. It is the RHS largest investment, creating up to 600 jobs and £24m GVA when complete in 2019.

7.21 **Continue to improve transportation within GM:** While half of all visitors entered GM through public transport, a quarter then use public transport for visits to other parts of GM (26%).[30] Opportunities exist to develop smart ticketing, similar to London's Oyster Card evidenced by the 52% of staying visitors that said such a system would encourage them to use public transport to extend their visits around GM. The development of Manchester Airport, including the expansion of Terminal 2 to become the Airport's primary terminal and enhancements to Terminal 3, and the development of High Speed 2 will also support further growth in the sectors.

7.22 **Maximise the benefits of an ageing population:** The UK has an ageing population and the demographic profile of consumers (current and new) is changing. Within GM, the 60 to 64-year-old age group has grown by 30,000 to 150,000 over the last decade;[31] and the number of over 65s is expected to increase by 44% by 2028.[32] All destinations will need to adapt to new ways of engaging their markets with relevant products to

[30] GM Leisure Visitor Survey 2014, Marketing Manchester supported by Heart of Manchester B.I.D., TfGM and Virgin Trains
[31] Census 2011
[32] GM Forecasting Model

maintain or increase visitor levels. Evidence shows that the spend of older age groups is much higher than that of younger groups.[33] In the North of England alone there are 4m 50-74 year olds with aggregate annual discretionary purchasing power of £1.5bn.[34]

7.23 **Maximise the opportunities created by changing internet shopping patterns:** The market for 'last-minute' holidays has increased in recent years. Technology has enabled quicker processing which means people are now less likely to have the certainty to book holiday months in advance.[35] This presents an opportunity for new entrants to the market to capitalise on new shopping patterns but it will also be a challenge to existing businesses to meet changing demand.

Threats

7.24 The key threats to GM's Hospitality, Tourism and Sport sector are summarised below, along with activities that will help to mitigate each threat.

Figure 16: Key threats

Threat	Activity
Competition from other UK and European locations	• Continued investment and improvement of product. • Identification of 'game changer'. • Identify new ways of securing investment in attractions and facilities • Marketing and PR campaigns.
Addressing the skills and productivity challenge	• Support and training / upskilling of workers.
National considerations, including: Cost of Air Passenger Duty, the cost and ease of obtaining UK visas, and realising the potential of HS2	• Working with UK government to minimise impact of national changes • Realise benefits of HS2 for visitor economy.

7.25 **Competition from other UK and European locations:** GM has been successful in growing its Hospitality, Tourism and Sport sector in recent years. However, there is a danger that if it doesn't continue to invest in this sector, then it could lose market share. At a UK level, other cities are developing their visitor economy, including Belfast, Cardiff, Edinburgh, Glasgow, Leeds and Liverpool. Improving the quality of the offer (product and service) and public realm are important factors to support growth.

7.26 While there are a number of notable planned investments in this sector, including The Factory and RHS Fifth Garden in Salford, there are no other major international attractions in the development pipeline. Many of the conurbation's visitor attractions have been the result of public sector-led investment, and cuts to local and national budgets could impact on GM's ability to improve its tourism offer.

7.27 **Upskilling workers within the industry will improve the sectors productivity:** The sector needs to continue to invest in workforce development. This will, in part, help

[33] Barclays (2014): An Ageing Population, the untapped potential for hospitality and leisure businesses
[34] Age Friendly Manchester (2015): Getting Down to Business, The Economic Opportunities of ageing for GM
[35] People 1st (2013): State of the National Report 2013

address the gap in productivity between firms in GM and the UK. Management and leadership skills have been recognised as a key challenge to growth.[36]

7.28 The sector also experiences high levels of turnover, requiring significant levels of spending on induction and meeting basic statutory requirements. Training budgets are also likely to be under further pressure following the introduction of the National Living Wage from April 2016.[37]

7.29 **Other national considerations:** There are several ongoing issues at a national level that will continue to impact on tourism in GM such as high levels of Air Passenger Duty (APD), the high cost and complex application processes of UK visas, and higher levels of VAT than other European countries. GM also needs to ensure that the full impacts of transport investment, such as HS2, bring additional economic benefit to the sector.

[36] People 1st (2013) State of the National Report 2013

[37] Resolution Foundation (2015): Taking up The Floor – Exploring the impact of the National Living Wage

8 Spatial Considerations

8.1 Alongside the regional centres of Manchester, Salford and Trafford (where employment and the number of businesses in the sector has grown significantly in the last five years), the Hospitality, Tourism and Sport sector remains clustered in town centres, and less urbanised areas just outside GM such as South Lancashire, Macclesfield, Congleton, High Peak and Vale Royal. Growth in the sector is likely to be concentrated in these existing key areas. Given the importance of the sector to serving the needs of the local domestic population, growth will also be located in areas where there is population growth to serve these new consumers.

8.2 The high concentration of businesses and employment in Manchester, Salford and Trafford correlates with the significance of the visitor economy activity present in these districts and this trend is expected to continue with continued growth in the accommodation subsector, as evidenced by a number of new confirmed hotel openings from 2015,[38] new cultural attractions such as The Factory and GM's restaurant offer strengthening.

8.3 In addition to these areas, GM's town centres are also key employment sites. They remain a priority for districts and have an important role in place-making, providing vital functions for local communities in terms of employment and retail and also more broadly as a focus for social activity/leisure and for services.

8.4 The changing role of town centres (reflecting the shift from retail to other activities) means there is a key role for GM's town centres to develop their own distinctive GM wide role and leisure offer, through better integration of local/ community activity with more recognised district attractions. Collectively marketing the unique features of each town centre will attract both visitors and local residents to each and every one of them.

8.5 The sector is reliant on good infrastructure and transport links, which local residents, the workforce and visitors all use to move around the conurbation. Discussions with stakeholders has revealed a need to improve sign-posting of key attractions, particularly to other parts of the conurbation. Infrastructure is also critical to spread the benefits of the visitor economy to a wider area within GM.

8.6 Going forward, it will also be important for the sector to exploit other developments including:

- Maximising leverage through the expansion of Metrolink and the opportunities that smart ticketing will provide to help encourage dispersal around the conurbation; and
- Taking advantage of the digital infrastructure developments already taking place to improve the visitor experience

8.7 The developments at Manchester Airport are a key opportunity for the sector in terms of the Airport being a gateway to the conurbation for international visitors.

[38] Source: Unpublished Data compiled by Marketing Manchester

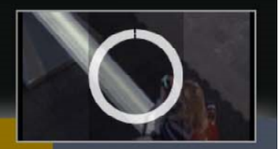
Appendix K: Manchester Arena Redevelopment Concept Images, Manchester Evening News Article (accessed March 2020)

A g initial artist impressions point to an enhanced customer experience as the Arena marks its 25th anniversary year



UP NEXT:

These light-up musical seesaws are coming to Salford Quays



A g initial artist impressions point to an enhanced customer experience as the Arena marks its 25th anniversary year



1:18



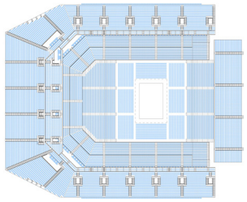
Appendix L: OVG Manchester Auditorium Event Modes, Populous

ARCHITECTURE

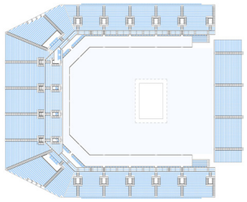
Auditorium Event Modes

The OVG Manchester Venue seating hall has been designed for maximum flexibility to allow for all popular configurations to suit the needs of artists' creative shows and the touring event community.

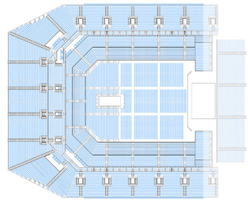
The lower bowl and event floor can be adapted by use of retractable and relocatable seating units and loose seating into different modes described in the adjacent concert mode diagrams. The upper tier can be screened by the use of drapes hung from the all roof rigging grid .



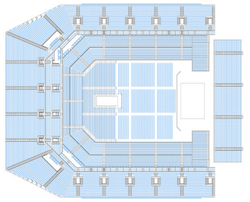
Centre Stage Seated



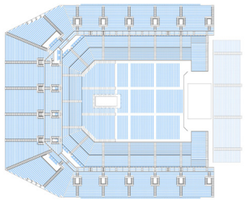
Centre Stage Standing



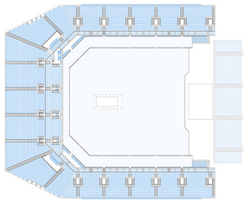
End Stage Concert 180°



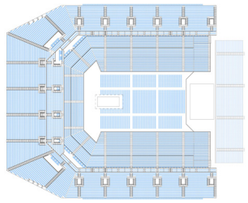
End Stage Concert 360°



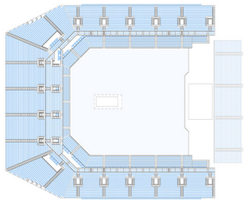
End Stage All Seated



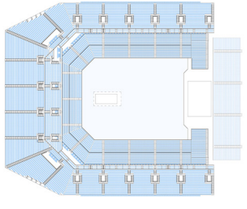
End Stage Full Standing



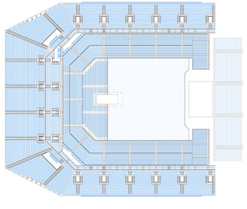
End Stage Part Seated



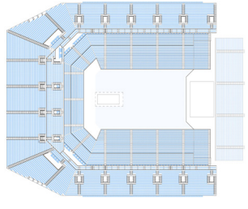
End Stage Part Standing



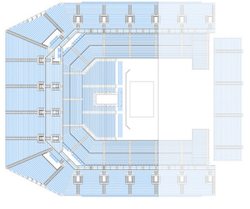
End Stage Part Standing v2



End Stage Part Standing v3



End Stage Part Standing v4

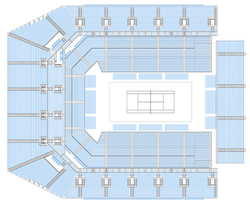


End Stage Short Hall

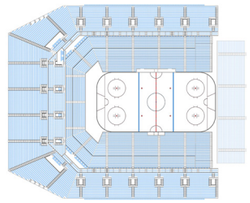
ARCHITECTURE

Auditorium Event Modes

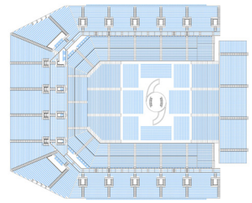
To ensure full event flexibility, the compact music venue auditorium design has also been tested against likely sport, family entertainment and banquet or awards ceremony type event configurations, as shown in the adjacent diagrams.



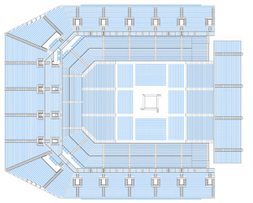
Tennis



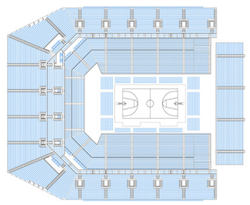
Ice Hockey



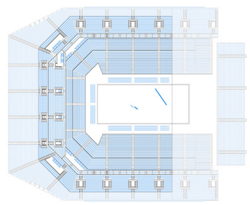
Esports



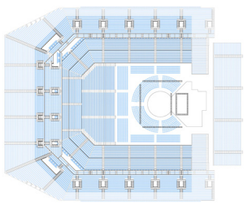
Boxing/ MMA



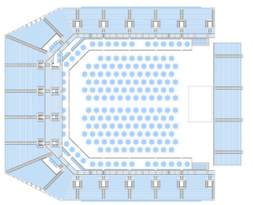
Basketball



Disney on Ice



Cirque du Soleil



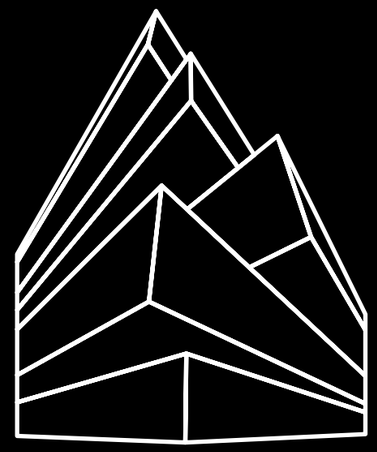
Banquet

Appendix M: OVG Manchester Planning Response – Arena Floorspace Analysis, Populous

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PLANNING RESPONSE

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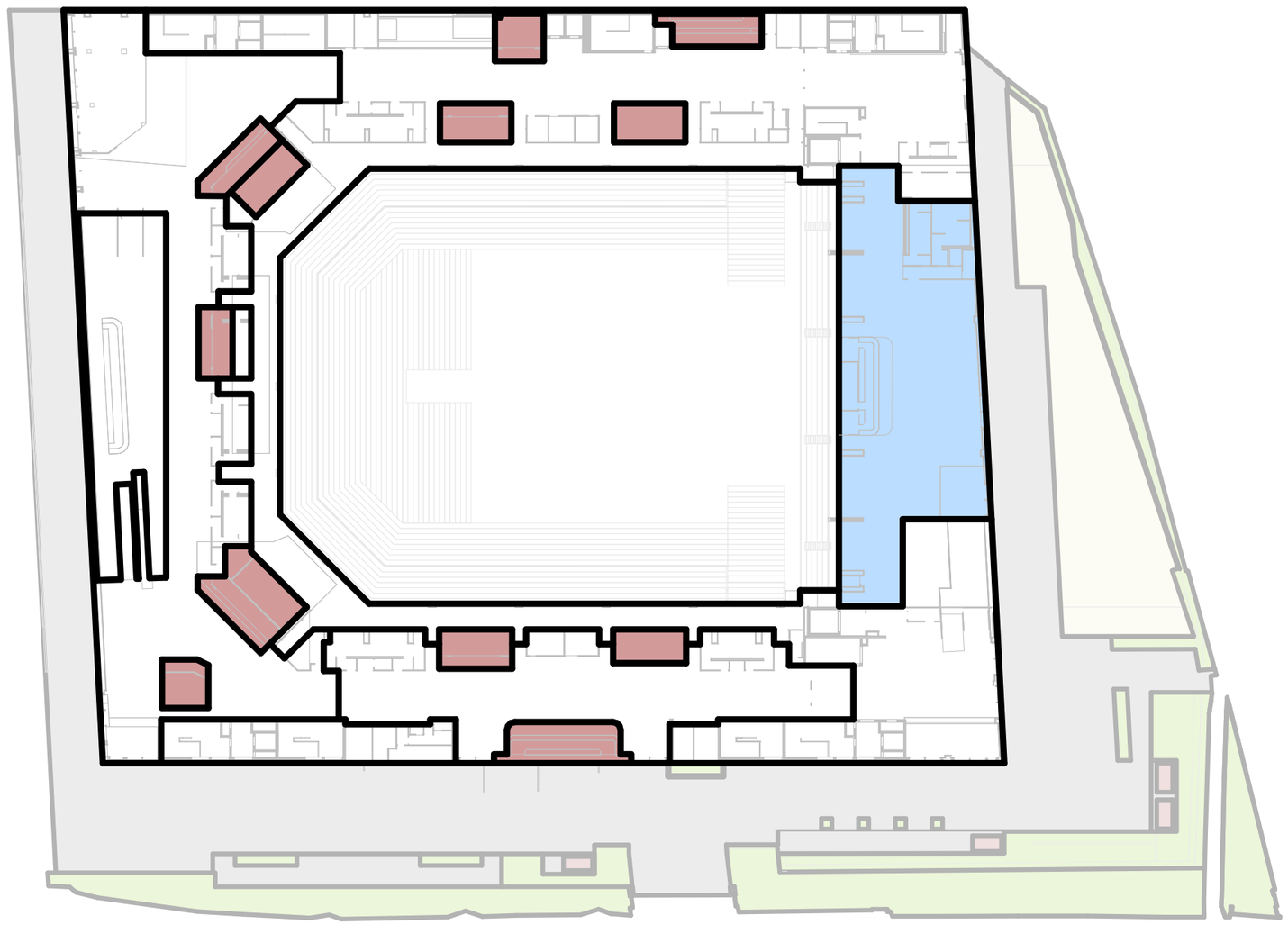
POPULOUS

GROUND LEVEL PLAN



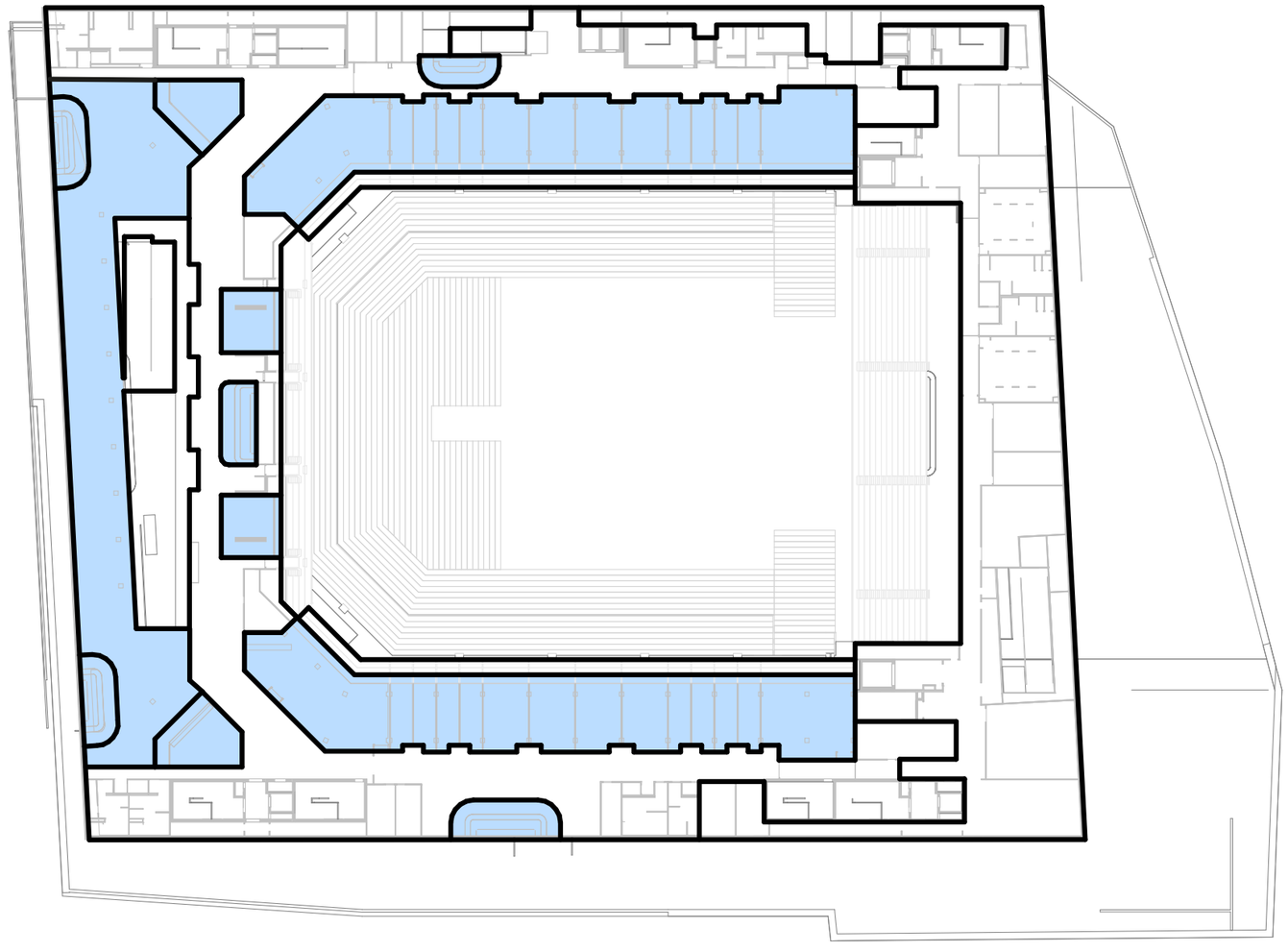
Facilities:	Area m²:
Food & Beverage	647
Hospitality	684
Total	**1,331 m²**

LEVEL 01 PLAN



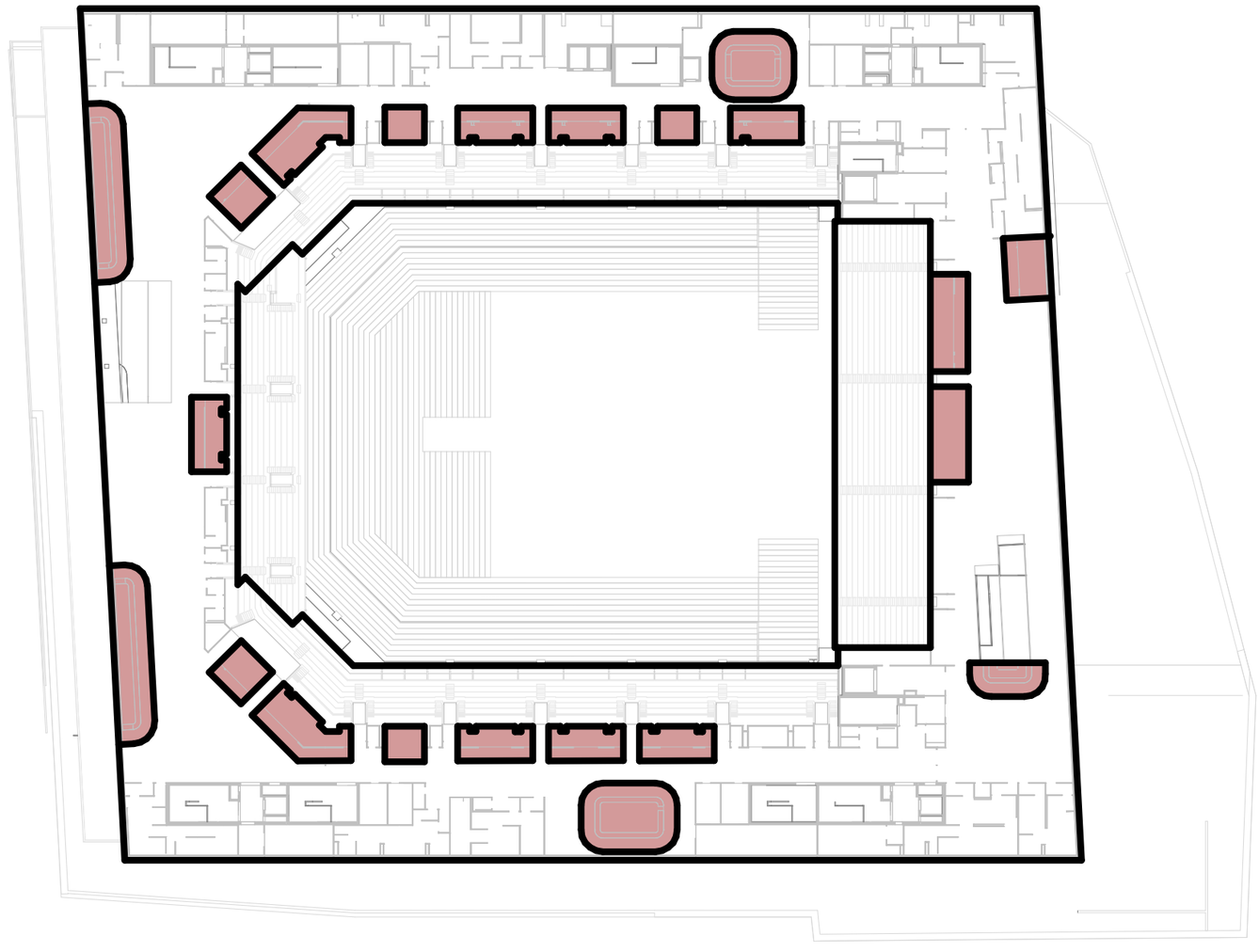
Facilities:	Area m²:
Food & Beverage	895
Hospitality	1,235
Total	**2,130 m²**

LEVEL 02 PLAN



Facilities:	Area m²:
Hospitality	3,267
Total	**3,267 m²**

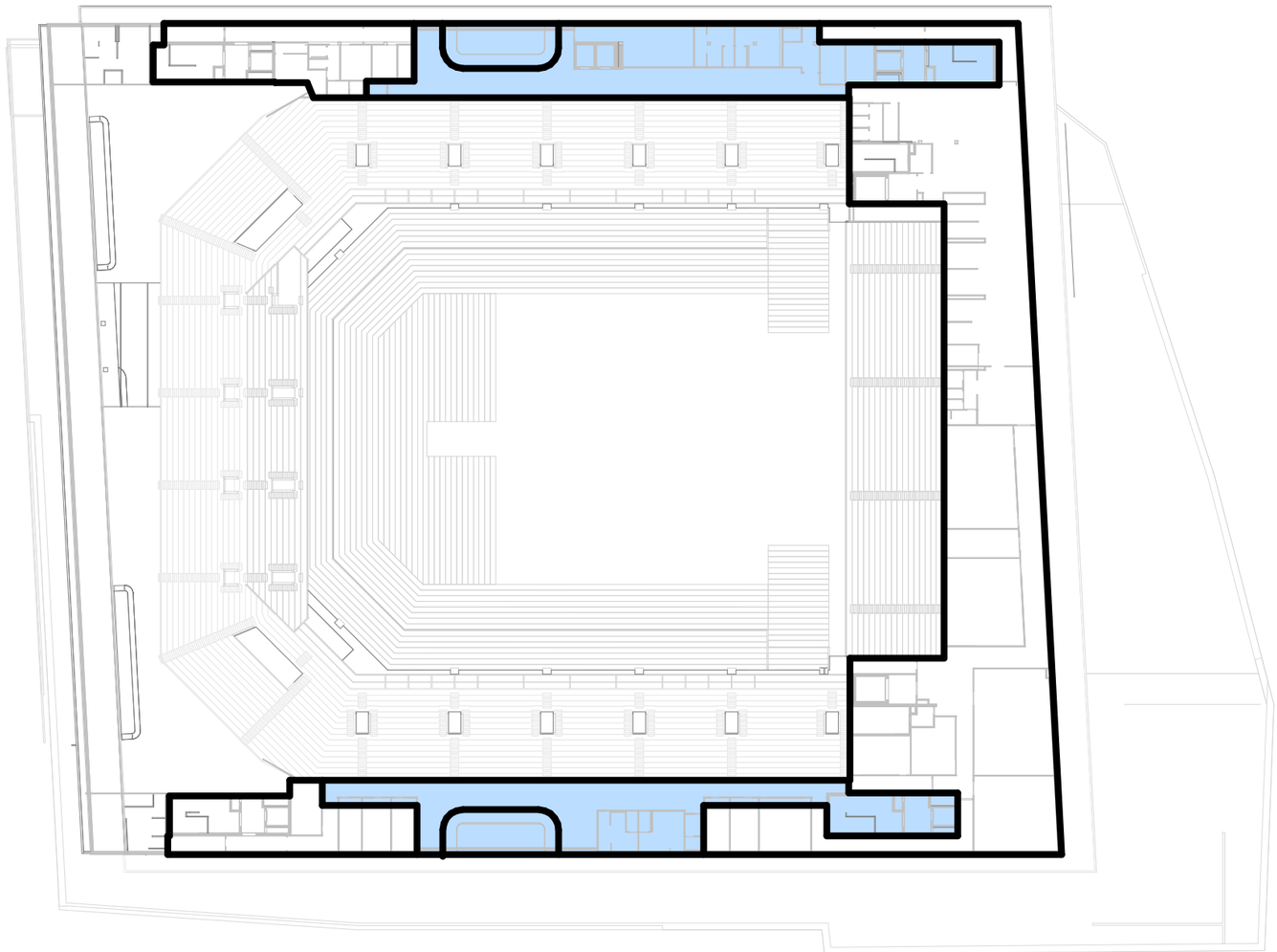
LEVEL 03 PLAN



Facilities:	Area m²:
Food & Beverage	1490
Total	**1,490 m²**

POPULOUS

LEVEL 04 PLAN



Facilities:	Area m²:
Hospitality	1,466
Total	**1,466 m²**

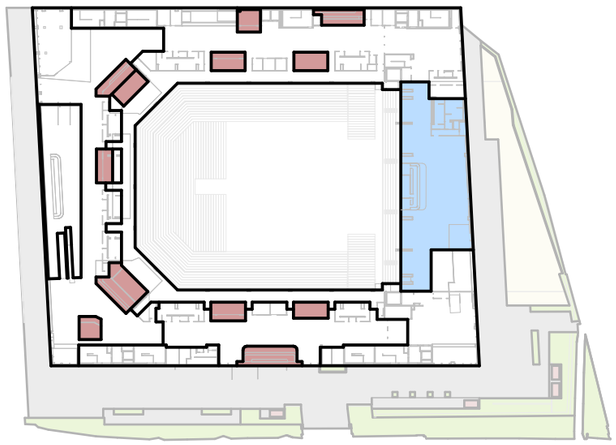
POPULOUS

SUMMARY



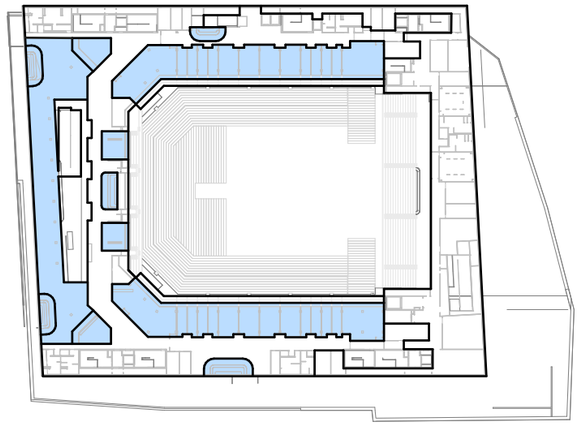
GROUND FLOOR

	Food & Beverage	647 m²
	Hospitality	684 m²
	Total	**1,331 m²**



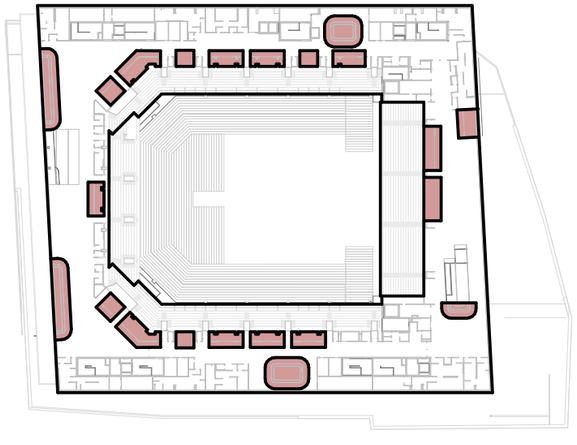
LEVEL 01

	Food & Beverage	895 m²
	Hospitality	1,235 m²
	Total	**2,130 m²**



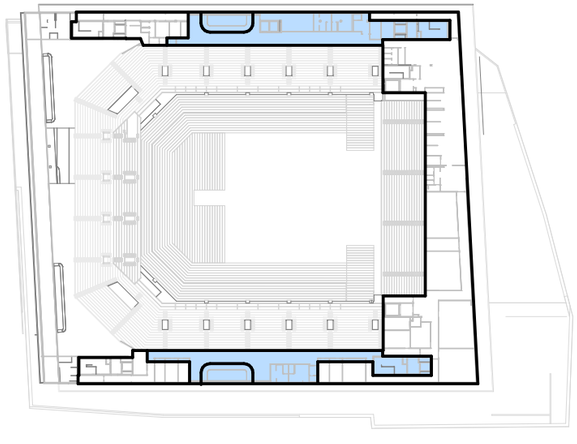
LEVEL 02

	Hospitality	3,267 m²
	Total	**3,267 m²**



LEVEL 03

	Food & Beverage	1,490 m²
	Total	**1,490 m²**



LEVEL 04

	Hospitality	1,466 m²
	Total	**1,466 m²**

GRAND TOTAL

	Food & Beverage	3,032 m²
	Hospitality	6.652 m²
	Total	**9,684 m²**

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Appendix N: OVG Canalside Kiosk Images, Populous


CANAL SIDE
CANALSIDE
CANALSIDE
COFFEE
113

INTERIOR DESIGN

L01 CANALSIDE

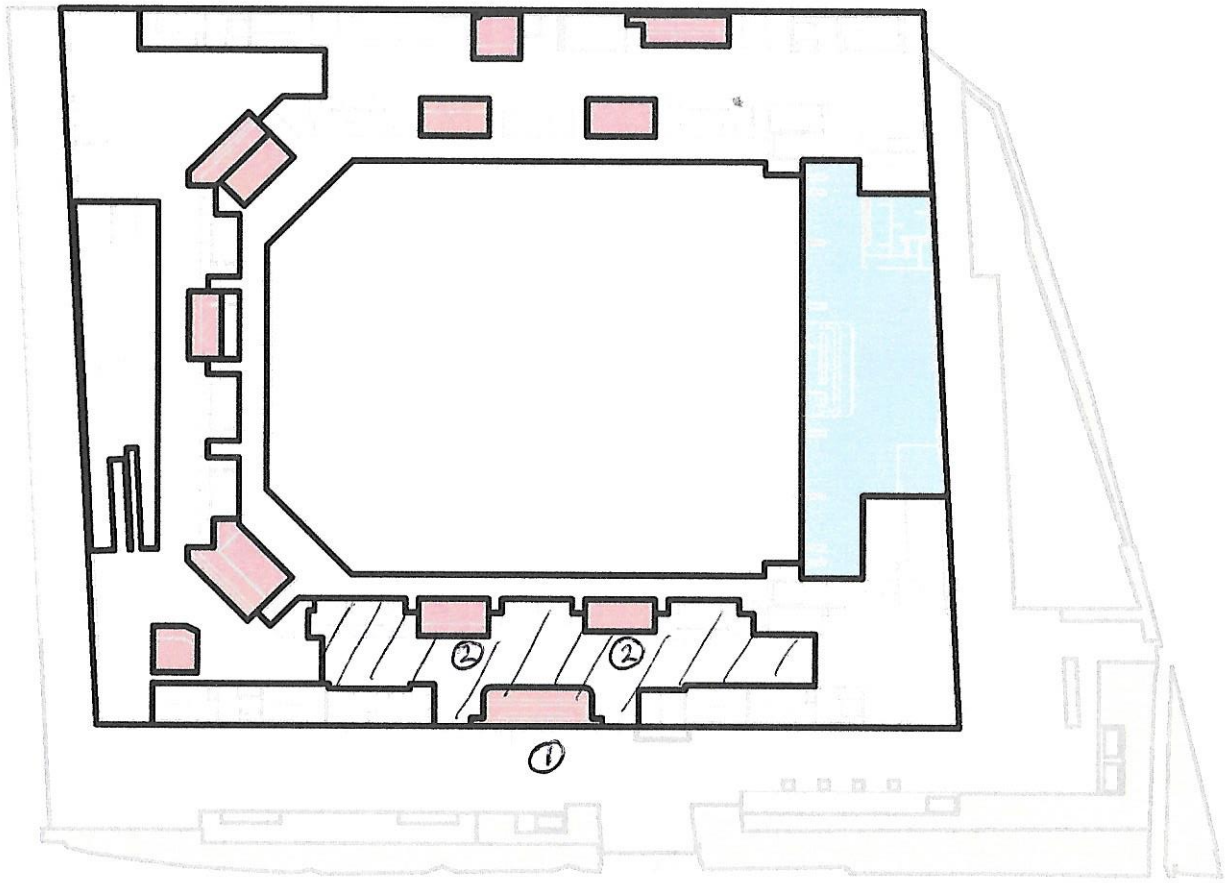
Non Event Day



LEVEL 01 PLAN

① Bar/kiosk - can open up canalside or arena side

② Grab 'n' go style self service market kiosks



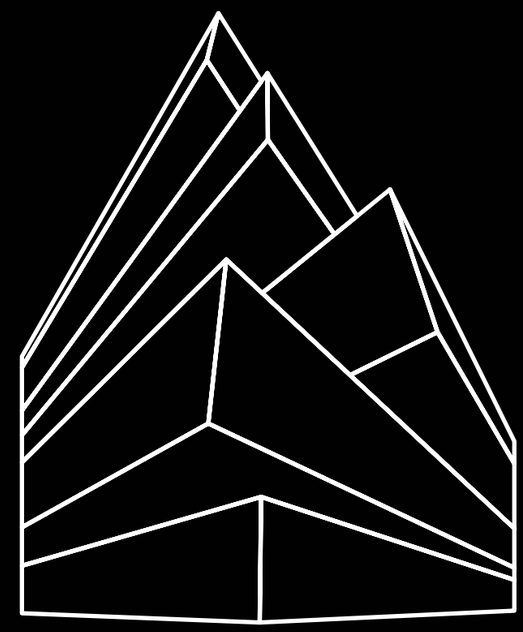
Facilities:	Area m²:
Food & Beverage	895
Hospitality	1,235
Total	**2,130 m²**

Appendix O: Ancillary Facilities' Plan, Populous

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ANCILLARY FACILITIES

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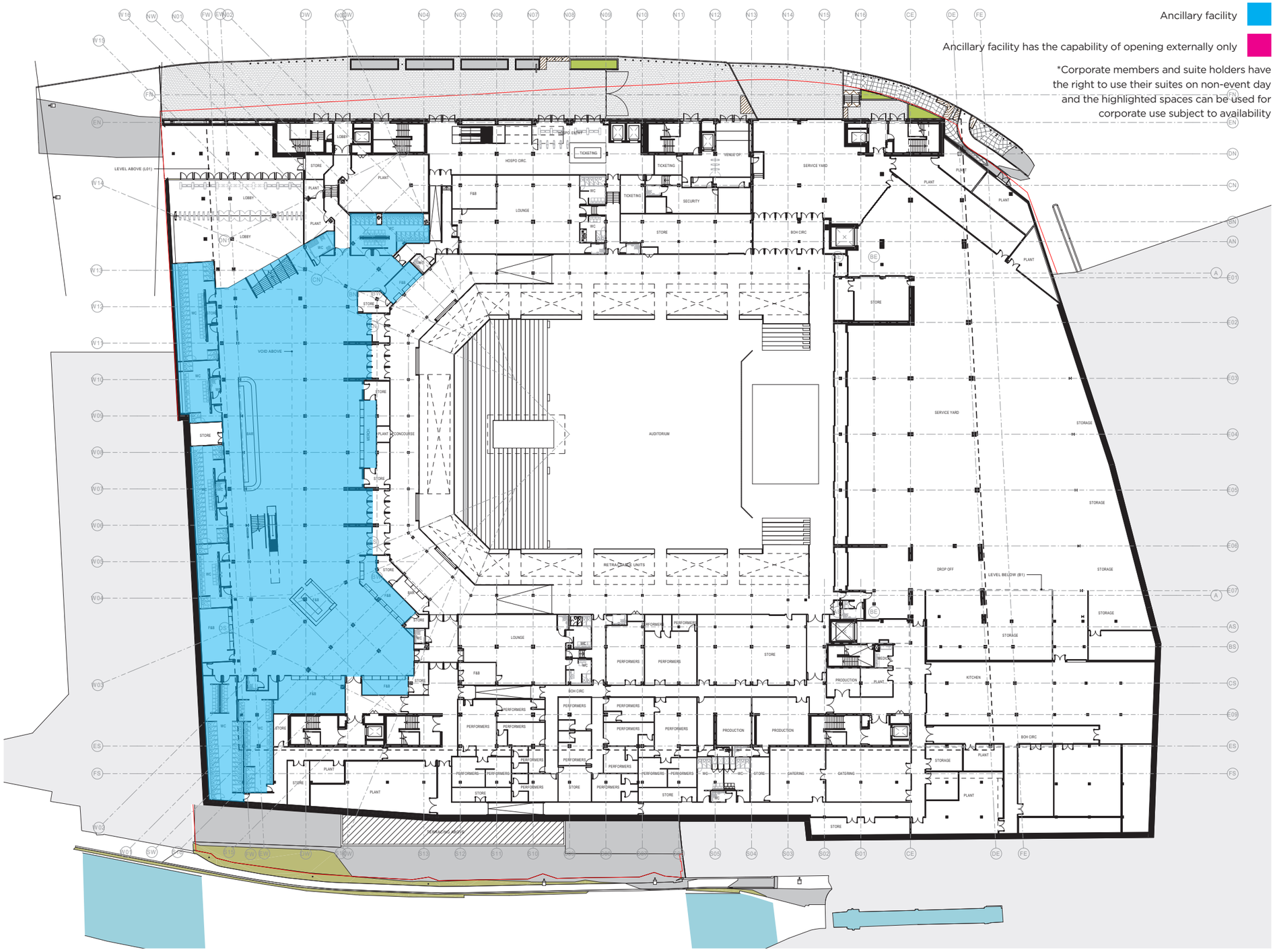


OVG MANCHESTER

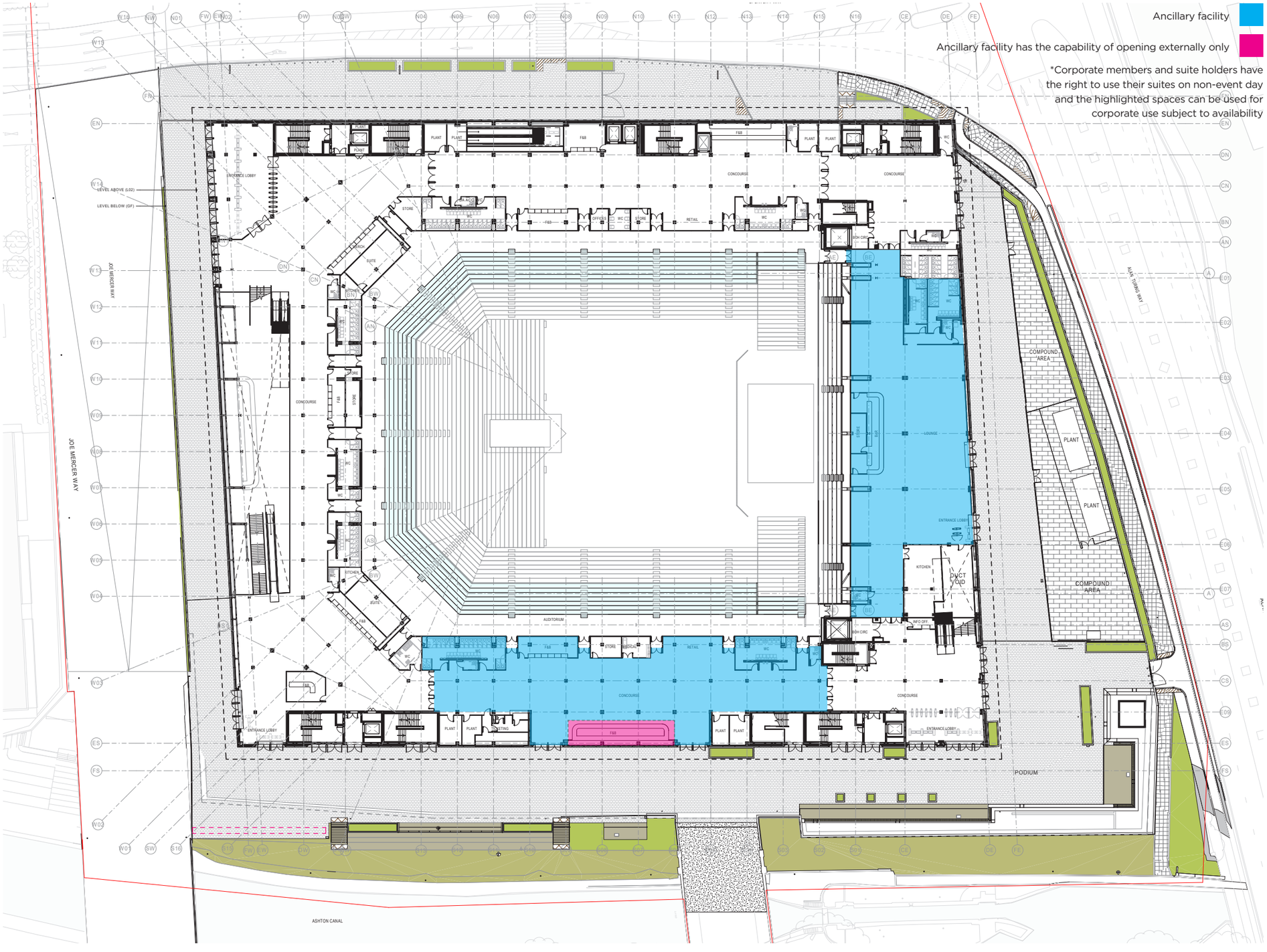
28.07.2020

POPULOUS®

Level 00 - Ancillary Facilities - Base Atrium



Level 01 - Ancillary Facilities - Backstage Club + Canalside



Appendix P: Arup and Buro Happold response to summarised transport assessment review by Manchester Arena

Trip Generation

Spectator Arrival Profiles:

What evidence has been used to support and justify the arrival and departure profiles presented in the Transport Assessment?

Site specific data is held for the Etihad Stadium for both football matches and concerts and provides an extremely robust and specific source of data upon which to forecast visitor arrival and departure profiles for events. This data has been supplemented with survey data as described and submitted in the Transport Assessment.
Members of the Applicant's team have extensive experience operating major arenas in the UK.

Spectator Mode Split

The mode share analysis for spectators presented in the TA states that data has been taken for equivalent arenas within the UK to validate modal splits; however, the TA makes no effort to validate the final mode share against that derived for other arenas and uses values recorded at the Etihad Stadium instead. It is considered that travel characteristics for a match day event and arena event could be significantly different given that attendees at football matches are more regular travellers to the location and there are multiple supporters clubs travel groups and car sharing initiatives running between fellow supporters.

There are a number of variables that can affect how people travel to and from a destination. The site-specific transport accessibility of a location is a critical factor. As such, the benefit of having observed site specific data for the Etihad Stadium for both football matches and concerts provides an extremely robust and specific source of data upon which to forecast mode share compared to the use of theoretical comparisons to other sites in different locations.

There are also a number of reasons why one could argue that car use would be higher for a football match than an arena event such as:

- People may be more likely to attend a football match alone than a concert
- People attending an arena event may be doing so as a one-off and are less likely to have ingrained behaviours/knowledge of how/where they can park – their travel behaviour may therefore be more easily influenced than regular football supporters. The arena operator has committed to active communication to reinforce sustainable transport choices.
- People may be more likely to treat an arena event as a night out and therefore choose not to drive so they can drink at the event
- People attending an arena event may be more likely to be doing so as part of a city break/overnight stay and therefore may be based in the city centre without access to a car

Mode splits which were available from other venues were compared with those from the Etihad Stadium. It was concluded that variations with mode split at other arenas reflected site specific transport availability (as would be expected). The Etihad Stadium mode share data was therefore validated for use in this assessment, resulting in an assessment which is far more robust than would have been possible by simply comparing with other distant venues.

It is not explained how the match day data presented at Appendix H of the TA has been validated with "preferred transport option" mode share data derived from 2019 concerts at the Etihad Stadium. It is unclear where, or if, this preferred transport option mode share data has been presented in the TA.

The mode split data from travel surveys undertaken on matchdays at the Etihad Stadium in 2017 were compared with the results of surveys undertaken for concert events at the Etihad in 2019. The mode split data from both sets of events were found to be comparable and therefore the mode split analysis presented in the TA is considered to be robust.

It is of concern that the modal splits defined in the TA have been determined on the assumption that the mitigation measures will be successful prior to any due testing or consideration.

It is entirely appropriate to 'build-in' mitigation of the anticipated impacts of a development as part of scheme development and design.

The restriction of on-site parking and proposed expansion of the Resident Parking Scheme (supported by the communication and information strategy), means the Applicant will be able to effectively control the number of vehicles seeking to access the area surrounding the Campus on event days for parking.

It is also relevant that the development and operation of the Etihad Stadium since 2002 has provided the Campus with significant knowledge of what does and doesn't work in terms of mitigation for major events.

Notwithstanding this, the TA uses the 'baseline' mode splits (based on the existing situation) as the basis for its assessment, rather than using the future estimations of mode-share once the expanded CPZ has been implemented.

Comparisons have been made with London venues for information, but these have not directly informed the assessment.

Spectator Car Occupancy

The TA assumes a car occupancy value of 2.4 however this value is an output of multiple supporters clubs travel clubs and car sharing initiatives running between fellow supporters. There is no evidence presented that this will be the same for an arena event.

It is recognised that there will be differences between the demographics and travel characteristics of football supporters and arena attendees. Indeed, even for the arena the demographics of attendees will vary depending upon the event. However, as noted above the value of site-specific data for the Etihad Stadium (including concerts) is significant compared to theoretical comparisons to other venues in different locations with different transport accessibility and networks. As such, the Etihad Stadium data is considered to be an appropriate comparator for the proposed arena.

The car occupancy value is consistent with data from other major event destinations.

The car occupancy rate used in the OVG Arena TA has been benchmarked against the Etihad Stadium as well as against those rates surveyed at other UK concert venues and used for other TA's, which have subsequently been approved by the relevant highway authorities and are therefore considered robust. The TA for Bristol Arena states that, "Given the nature of the

Arena proposals, coupled with the 'social' aspect of the destination, groups of people are more likely to travel together to/from the venue. For car travel, an average car occupancy rate of 2.7 has been accepted for the Leeds Arena TA, and this has been derived from surveys undertaken at the MEN Arena car park". The Leeds TA also states that this has been validated against other Arena venues, including the NEC in Birmingham and the Liverpool Echo Arena. The MSG Sphere TA states that, "It should be noted that unless stated otherwise the car occupancy is assumed to be 2.8…" " This is based on the occupancies observed for concerts at the London Stadium (obtained from E20 LLP)." The TA for the new Tottenham Hotspur Stadium describes an occupancy factor of 2.4 for a range of event types (including concerts). On the basis of this evidence we believe that an occupancy of 2.4 assumed for OVG Manchester is robust.

Event Staff Modal Split

For the event staff model split please explain how this has been derived given that, of the 769 arena staff for a standard arena event, up to 73% or 559 members of staff will finish their duties after the public transport network has already stepped down. This would mean that for nearly 3/4 of the workforce the only viable option is to travel by car.

Public transport services from the Etihad Campus (in all directions for buses) typically run until after 23:30 during the week and on Saturdays. The TA notes in Table 6.4 that almost half of event-day staff would leave before 23:00 on days when there is an evening event. Public transport services would still be available therefore for these staff.

For those staff who are unable to use public transport there will be alternatives to car travel. It is expected that a high proportion of the staff will be locally employed – the applicant has made this commitment to the local community. For locally employed staff walking or cycling would be possible modes of transport. For longer journeys taxis would be an option. Shuttle buses, implemented as part of the transport response for a particular event, would also be available for use by staff.

However, some staff may choose to drive. This is no different from any other employment generating site. Staff would not have access to parking on the site and would be prevented from parking within the vicinity of the site by the Resident Parking Scheme. These car-based staff trips have been included within the assessment, despite the fact that on-site provision would not be made for staff. The assessment is therefore considered to be robust.

Sensitivity Testing

It is argued that sensitivity testing should be undertaken given capacity constraints in both public transport and highways networks and given the questions raised in connection with the arrival profiles and model splits

The scope of the assessment was agreed with TfGM and MCC prior to commencement of the assessment and submission of the planning application and to date there has been no request from either highway/transport authority for sensitivity testing. Furthermore, as the assessments adopt a worst-case approach in terms of scenarios tested and modal split adopted which have been demonstrated to be robust, it is not considered that further sensitivity testing is required. Importantly, the worst-case impact scenario which has been assessed is an event at the Arena coinciding with an event at the Stadium; even though this would only occur on limited occasions.

The proposed mitigation measures would reduce the impact on the highway network but increase trips on the public transport network; this has already been addressed in the TA. The highway impact assessment uses the baseline mode split before mitigation and the public transport impact assessment uses the mode split after mitigation is applied. This approach is robust and has been taken to ensure that the worst case has been assessed for all modes and therefore additional sensitivity tests are not considered appropriate.

Sustainable Public Transport and Active Travel Modes

It is noted that the expansion of the Etihad Stadium and the creation of the MCFC football Academy relied on the construction of the Metrolink line to Ashton and the enhanced public transport capacity this introduced. There is no similar step change approach being proposed to mass transportation provision as part of this planning application.

The transformation of the Etihad Campus and surrounding area since 2002 has been enabled by significant investment in transport infrastructure. This has been an essential component of the success of the area. This investment includes the extension of Metrolink to Ashton-under-Lyne, the provision of extensive on-site transport facilities to support access to the Campus via a range of transport modes and off-site highway works. This investment was intended not just to enable access to and from the Stadium, but to support the longer-term delivery of the Etihad Campus as a major leisure destination for the City Region and the associated regeneration of the surrounding areas.

At present, the benefits enabled by this transport infrastructure are only fully realised for a few hours on the limited number of days per year on which there is a match or other major event at the Stadium. At other times, this infrastructure is underutilised and has significant capacity.

The overarching transport strategy for the future development of the Campus, including the proposed arena, is to make better use of the existing transport infrastructure on a more frequent basis. This is a fundamental principle upon which the sustainable transport strategy for the Campus is based.

This approach is fully supported by the Greater Manchester Transport Strategy 2040 produced by TfGM. With regards to new developments, this strategy recommends that they should:

- Make the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes;
- Be designed to encourage active travel;
- Maximise opportunities to provide additional public transport
- Reduce the need to travel by car, and the distance travelled; and
- Maximise accessibility by sustainable modes.

As noted above, part of the overall strategy for new development at the Campus is to seek to make better use of the existing transport infrastructure that has been delivered over recent years. This particularly includes maximising the use of public transport infrastructure such as the Metrolink, bus and coach infrastructure both on and off-site. However, it is equally applicable to on-site car parking, as demonstrated in the commitment not to increase parking capacity on-site but rather to support shared-use of the extensive existing parking supply. The primary focus for any additional investment in transport infrastructure to serve the site should be on sustainable travel modes. Accordingly, one of the key areas of mitigation proposed as part of the proposed arena is encouraging active travel. This would be delivered through physical improvements and management enhancements to the well-established and well-used walking routes between the city centre and the Etihad Campus: notably the Ashton New Road, City Link and Ashton Canal Towpath routes. Specific details of these improvements would be agreed with MCC as part of any consent. 240 additional cycle parking spaces will be provided to supplement the existing spaces at the Campus to

encourage cycling. Improvements will also be made within the Campus to assist with the movement of pedestrians and the relief of congestion before and after events to reduce potential for conflicts between vehicles and pedestrians.

Opportunities to provide additional public transport capacity have been explored with TfGM to understand the potential for enhanced service operations before and after arena events at the Campus. Based on these discussions TfGM has confirmed that they would consider operating enhanced Metrolink services before and after an Arena event as they do for stadium events. Through discussions with TfGM it has been established that there are no technical reasons why enhanced services could not be operated for arena events, subject to demonstration that there is sufficient passenger demand and the availability of trams. The potential to provide a shuttle bus service for events at the arena, similar to that provided for Stadium events, has also been explored with TfGM. It is considered that there would be potential interest from bus operators in providing such a service. The Applicant has committed to work with TfGM to plan and promote enhanced Metrolink services and shuttle bus services between the venue and the City centre.

The proposed development does not seek to provide additional on-site car parking and no off-site highway capacity interventions are proposed other than measures to help manage traffic flow onto and off the site. A commitment has been made by the Applicant to support the delivery of amendments to the resident parking scheme surrounding the Campus, such that it is able to operate on all days and across an expanded geographic area. Through these measures, supported by a comprehensive communication and engagement strategy to influence travel behaviours, the proposed development would discourage car trips and promote sustainable travel, helping to reduce the car mode share of visitors.

It is therefore concluded that the Etihad Campus is fundamentally a sustainable transport location that is well served by both Metrolink and frequent bus services. It already operates as such, with thousands of visitors regularly accessing the Stadium on foot and by public transport on matchdays and for other events. The sustainability of the location will be further enhanced through the comprehensive package of mitigation proposed by the Applicant.

Bus Services / Shuttle Bus

For both arena event only days, and, arena event with football match day examples, there is no assessment of the bus network's ability to handle the required uplift in demand. Instead the TA compares the arena on a non-match day scenario with the current Etihad Stadium match day scenario and concludes the bus impact from demand generated by the arena on a non-match day would not be greater than the current impact by the existing stadium. This is misleading when looking at the impacts brought by the proposed development, as the baseline scenario to be compared should be a non-match day without the Arena built.

The bus network is currently a function of the need within the area. A new arena in the area, with regular events and regular customer demand would change the demand for bus services in the area.

During the peak hour arrival period prior to an arena event, the maximum forecast number of additional bus passengers due to the proposed arena is 301. There are 12 bus services per hour per direction during this hour (i.e. 24 services in total). Based on discussions with TfGM, it is understood that Stagecoach also currently operate 'enhanced services' prior to football matches and other major events at the Etihad Campus on a commercial basis. This

effectively increases bus frequencies along the existing Manchester to Ashton-under-Lyne 216 route for a period on these days. As a result, it is estimated that there could be in the order of 30 buses per hour stopping adjacent to the Campus at this time. Additional bus services also stop more remotely on other radial corridors within walking distance of the Campus such as Hyde Road, Ashton Old Road and Oldham Road.

As a result, in the peak arrival hour before an event, the additional passenger loading per bus due to the arena is likely to be less than 10 passengers per bus on average. This is unlikely to result in any significant capacity issues on services on the bus network.

The forecast number of additional bus passengers per hour following an arena event is higher at 756 passengers. To accommodate this additional demand, a shuttle bus service similar to that operated on matchdays is proposed. The operation of such a service would mean that the impact on existing scheduled bus service capacity would be negligible.

No information is provided in relation to shuttlebuses. How many shuttlebuses will be provided and what will be the frequencies and destinations? Will there be shuttlebuses for every arena event? Will the park-and-ride service be activated and if so where and from to which locations? It is claimed that a minor adjustment to the current bus operation would not provide a feasible transport option noting that the current bus shuttle bus service is provided on a commercial basis by Stagecoach.

In discussions with TfGM, the potential to provide a shuttle bus service for events at the Arena similar to that operated on Stadium event days has been explored. It is considered that there would be potential interest from bus operators in providing such a service, subject to their operational experience demonstrating that there is the demand to make it commercially viable. It is considered that the City Centre is the most appropriate destination for these services, with Piccadilly Gardens offering a central point to serve multiple City Centre transport interchanges, hotels and other destinations.

To be effective, an Arena shuttle bus service would need to be well managed and signposted to ensure that visitors are aware where to board and are confident that the service will transport them to their destination. The existing facility on Ashton New Road has been developed over time and is now well-established, working effectively for Stadium events with significantly more attendees than an arena event. For Arena-only events the existing facility on Ashton New Road is therefore likely to be able to fulfil the requirements.

On the limited occasions when there is an event at the Arena at the same time as the Stadium, the events would be managed as far as is practical to try to avoid the events starting/finishing simultaneously. It is expected that for the significant majority of the limited number of co-incident events there would be a stagger of at least approximately 45mins-1 hour between the finish time of events. This would allow the same bus infrastructure, including the waiting/queuing facility on Ashton New Road, to be used for both events and, depending upon the stagger between events, may provide sufficient time for buses to make two journeys each.

There may be very rare occasions when the stagger between events is reduced due to unexpected delays to the start or end of an event. The operational plan for coincident events would include details of how such rare events would be managed. This could include the use of an alternative waiting/boarding area for an arena event, or off-site stacking of buses. In practical terms, more people may choose to walk to the city centre rather than waiting for a shuttle bus.

As with the existing Stadium shuttle bus service, the number of buses to be provided for each event would be established through ongoing engagement with bus operators based on anticipated attendance numbers and experience gathered from previous events.

The TA concluded that spare capacity, sufficient to accommodate further parking demand, exists at the various existing park and ride facilities accessible from the Campus. These park and ride options will be promoted as part of the mitigation strategy for the proposed arena.

Metrolink

The TA does not properly analyse the impact on the Metrolink network and user experience of frequent commuters especially given the anticipated number of events. Similarly there is no assessment of the Metrolink lines ability to handle the required uplift in the Etihad Stadium and arena events concurrently (it is noted in the OVG report that there could be 10-15 arena events per year that could coincide with matches at the Etihad Stadium)..

No consideration has been given to power unit limitations which will come into play with considering the maximum number of trams that can be operated on the network.

The maximum hourly network capacity of Metrolink in each direction is 4,000 passengers per hour (based on 10 double units per hour) – the maximum technical capacity of the network, if sufficient trams are available, is therefore 8,000 passengers per hour. Whilst it is acknowledged that services to/from the city centre would be more attractive to visitors than those to/from Ashton-under-Lyne, the additional capacity that the line to Ashton-under-Lyne provides is an important consideration, especially given that there are park and ride facilities on this section of the line.

When there is an arena only event, the peak forecast hourly demand as set out in the TA is 1,288 in the arrival period and 3,250 in the departure period. It is considered that these flows could be accommodated by an enhanced Metrolink service within the limitations outlined above (i.e. maximum of 10 trams per hour per direction), even when the additional existing background Metrolink usage is considered.

On the limited occasions when there are events at both the stadium and the arena with similar start/end times it is anticipated that there would be periods where the demand for Metrolink services would exceed the available capacity for short periods. In particular, this would be anticipated in the hour prior to the start of a stadium event. This could lead to crowded tram services and queuing at Metrolink stops. Such occurrences are not uncommon currently when there are large events at the Etihad Stadium or Old Trafford.

There are a number of measures proposed that could help to mitigate these short-term peaks. Firstly, as set out in the TA, event start and end times would be staggered as much as possible in order to spread the peak demand. Visitors would also receive communications that trams are expected to be extremely busy (more so than usual) and to travel early if possible, potentially using the proposed on-site food and drink provision as an incentive. Prior to the events, enhanced Metrolink service levels above that currently operated on a matchday (i.e. operating all units as doubles) could provide additional capacity. An alternative means of increasing public transport capacity would be to operate a pre-event bus shuttle service. However, it would still be anticipated that trams would be extremely busy for these short periods on these limited occurrences and this would need to be effectively managed, as currently takes place on matchdays.

Evidence of matchday queues for Metrolink indicates that demand for services following an event has a much higher peak than the arrival period. This results in queuing but dissipates relatively quickly following a match. As such, staggering the end time of events would be effective in helping to manage demand for Metrolink services. The Etihad Campus stop has extensive queue management infrastructure and stewarding which will help to ensure passenger safety prior to boarding a tram. On matchdays, adjacent Metrolink stops are closed following events for safety reasons, this measure would continue to apply on coincident events. It may be that on the limited occasions that there are coincident events a number of attendees may choose to use an alternative means of transport (i.e. walking, bus or taxi) rather than wait for a tram. Provision of information on likely queue times would help people to make an informed choice on this.

Rail

No reliance can be given on Ashbury's station for additional rail-based trips due to its operational constraints.

No reliance is placed on Ashbury's station and it is not anticipated that this station would play a material role in transporting people to or from the arena. The limitations of this station, which are acknowledged, are therefore not relevant. The rail trips referred to in the TA are not anticipated to board or alight at Ashbury's, but mainly elsewhere within the city centre rail network (e.g. Manchester Piccadilly).

Walking

The proposed arena is not highly accessible on foot from the city centre due to the quality of the pedestrian experience and distances involved (more than 30 minutes' walk from Piccadilly Station and 45 minutes' walk to Victoria Station. Accessibility by foot is further diminished in inclement weather and in the dark

Evidence and surveys of stadium events demonstrates that large numbers of people are willing and able to walk between the Campus and the city centre in all conditions. It is acknowledged that there are points on these routes that could be improved and it is for this reason that substantive mitigation and enhancements to this route are proposed.

We are aware that walking and cycling are becoming a much more important consideration in all new developments within the City. We believe that the identified (and already well-used) routes are well placed to link into future routes brought forward and improved through other East Manchester development, supporting the drive for better connected places to live and work, with appropriate amenities and high quality public realm.

The TA does not mention how sufficient capacity would be divided for those with mobility impairments particularly on football and arena nights.

It is recognised that not everyone would be willing or able to walk into the city centre. There are, however, a range of alternative options available including public transport, taxis and pick-up/drop-off. There will also be blue badge parking provided on the site, with parking for these users prioritised on the limited number of occasions when there are coincident events and the arena parking allocation is restricted.

The walking route proposals do not appear to substantially improve the position above the stadium expansion approval from 2013. The measures are not explicitly indicated in any way and do not go as far as the proposals within the Etihad expansion mitigation package, particularly those around the Pollard Street tram stop which remains under-developed.

The Applicant has committed to provide a range of physical enhancements along three key pedestrian routes between the development and the city centre. These improvements include physical measures to address specific issues identified with the existing routes such as infrastructure interventions, improved signage and information, maintenance and landscaping works. It is anticipated that the details of the improvement scheme would be submitted to MCC for approval as part of a condition associated with any consent.

It is noted that before reaching Citylink, visitors need to pass through the Holt Town tram stop surrounded by narrow streets with very limited footway width. As the tram stops usage increases on football match, or arena event days, increased number of passenger ingress and egress at the tram stop and Taxi/Uber pick up to and around the station already causes disruption to the surrounding pedestrian flow and encourages drivers to cut through residential side streets, which makes the route unsafe for pedestrians and vehicles alike.

It should be noted that for the significant majority of arena events, the number of attendees would be considerably lower than is currently experienced on a regular basis for Stadium events. On coincident event days, the staggering of events would mean that the use of the walking routes would be extended over a longer time period rather than necessarily increasing the peak number of people using the routes at a particular time.

Matchday survey data indicates limited use of Holt Town tram stop prior to Stadium events, with most passengers egressing at the main Etihad Campus stop. The Holt Town stop is temporarily closed immediately after a stadium event for a period of approximately an hour, meaning that there is no passenger activity at the stop at this time.

Taxi/Uber

It is considered that conflicts with pedestrians and background traffic will arise as a consequence of a taxi rank located at the southern end of Rowsley Street which is 60m in length and provides space for up to 10 taxis.

Managing vehicles that pick-up and drop-off at the Campus for arena event and days where there are coincident events on at the Campus will be a key part of the Operational Plan. This will consider pick-up and drop-off by black cabs, private hire taxis including Uber vehicles and by private individuals.

Subject to agreement with MCC and other stakeholders, it is proposed to extend the existing taxi rank along the full length of Rowsley Street and onto Philips Park Road. To improve the use of the bays and reduce potential for vehicle/pedestrian conflict, temporary traffic management measures could be implemented via a temporary traffic regulation order, to provide a one-way route along Rowsley Street and Philips Park Road. This would improve the efficiency of the pick-up and drop off operation, resulting in an ‘airport-style’ operation managed by traffic marshals. It would also work in conjunction with the temporary closure of Ashton New Road for major event days.

Figure 8.1 in the TA illustrates such a pick-up and drop off option. In this configuration space could be provided for approximately 70 vehicles in a managed ranking facility along the kerbside.

This proposed taxi ranking provision on Rowsley Street and Philips Park Road represents a substantive improvement on the existing provision. As noted previously, direct conflicts with stadium events would be very infrequent and on those limited occasions when there are two

events on the same day, the start and end times of events would be staggered as far as is practical such that the peak arrivals and departures between venues do not directly overlap. It is therefore likely that the taxi rank would serve stadium and arena at different times.

It is not within the control of the Applicant to prevent taxis or private hire vehicles from waiting in other locations, however the improved formal provision alongside improved signage and promotion would represent an improvement to the current situation and may discourage taxis from waiting in other locations.

Travel Demand Management and Mode Shift

Travel Demand Management

The primary focus in terms of proposed mitigation within the application is travel demand management to attempt to influence travel behaviours. To support this approach, the application proposes to fund additional Variable Messages Signs (VMS) in the vicinity and en-route to the venue. VMS is not a suitable platform to provide advanced messages to spectators relating to transport for the simple reason that they are already en-route. It is noted that the OVG TA highlights a reduction in available car parking spaces to 500, on combined arena and stadium event days; however, there is no proposed solution as to how this demand is reconciled.

This comment misunderstands the proposed role of VMS in the communication strategy for the arena. The primary means of travel demand management for arena spectators would be delivered through the electronic relationship that is established with OVG once an event ticket is purchased, a number of months prior to an event.

Communications would be targeted at event attendees, starting from the point of ticket-purchase to influence travel behaviour towards specific modes depending upon the specific event and the individual needs and circumstances of the visitor. Pre-booked parking for the event would not be released until shortly before the event takes place. In the meantime, alternative sustainable transport options would be actively promoted to ticket holders.

Re-Mode

The mode splits projected in the event management plan are considered to be unattainable. This is due to the physical limitations of the public transport network itself in terms of capacity and direct connectivity as well as competing demands on capacity further constraining the public transport offer. The following further points are made in this regard:

- ***The total maximum hourly capacity of all public transport options combined is less than 9,500 when taking into consideration all possible service enhancements. This would mean the best case scenario is wait times in excess of two hours for public transport post event finish. It is anticipated that peak ingress will be between 17:30 and 18:30 and peak egress is likely to occur from 22:30 to 23:30 for the majority of arena event dates. This is the last hour of timetabled public transport services from Sunday to Thursday with capacity reducing sharply beyond this time.***
- ***Bus service options are impacted by both the event and park commuter traffic combining meaning that trip times more closely aligned to walking times.***
- ***Public transport capacity is further constrained by taking into consideration background transport demand and patronage associated with coincident event activity such as Etihad Stadium football match, other events on the campus, engineering works on track possessions on the train and tram lines, other events across Greater Manchester.***
- ***On those occasions where an arena events directly conflicts with and Etihad Stadium event, it is estimated that will be no available public transport or car parking passes within the system. This will mean that the only feasible alternative is for visitors to travel into Manchester City Centre and make the connection to the venue on foot. This will place a significant strain on available walking routes via Ashton New Road and the Ashton Canal towpath, with projections likely to mean in excess of 20,000 people need to use this option. This outcome would ultimately mean that road-based transport is***

undermined with spectators encroaching into the carriageway and would impact on the throughput of the Metrolink service with tram line crossing at Holt Town compromised for extended periods.

- ***The EMP suggests that Park-and-Ride options will provide a realistic option for alternative methods of travel; however, total car parking capacity is limited and on weekdays the associated car parks remain full until approximately 18:00 utilised by commuters travelling towards Manchester City Centre.***
- ***The proposed mode split suggests that in the region of 1,457 spectators are expected to travel by coach; this equates to around 29 coaches an average. Facilitating on-site car parking for this demand is not accounted for in the car parking figures and is likely to mean a further loss of around 200-250 car parking spaces.***

As noted previously, direct conflicts with stadium events would be very infrequent and on those limited occasions when there are two events on the same day, the start and end times of events would be staggered as far as is practical such that the peak arrivals and departures between venues do not directly overlap.

On matchdays, there is limited spare capacity within the public transport system in the period immediately prior to the match, though there is more capacity available during earlier periods. On the limited number of occasions that a Stadium match/event would be coincident with an event at the proposed Arena, it is recognised that there would be a requirement for additional transport interventions. As such, a 'special event operational plan' is proposed. As part of this special event operational plan additional public transport capacity could be delivered at least on a temporary basis through enhanced Metrolink services and shuttle buses. It is therefore disputed that there would be 'no available public transport capacity' in such circumstances, particularly considering the anticipated arrival period of arena spectators for an evening event would start from 17:30.

It is acknowledged, however, that walking between the Campus and the city centre would be a preferred option for many arena visitors, particularly after an event when it may be considered preferable/quicker than waiting for public transport services. Indeed, walking between these two locations will be actively encouraged through the proposed mitigation and communication strategy. The forecast number of people walking is forecast to be much lower than stated above, however, as noted in the TA.

Fundamentally, it is considered appropriate and desirable to encourage significant use of the walking routes between the city centre and the Campus. There is significant potential to enhance the user experience of these existing pedestrian routes through the mitigation proposed.

The proposed strategy has been developed in consultation with TfGM who have not raised any concerns regarding the impact of additional pedestrian movements on the operation of public transport services. The current post-match traffic management strategy also recognises the need to prioritise the safe departure of large volumes of pedestrians from the area over short-term delays to the traffic network.

The statement regarding evening public transport availability is equally true of any evening leisure venue within the city. It is expected that arena attendees would take this into account when planning their journey to/from the arena and make their plans in accordance with this. It should also be noted that approximately half of arena events are expected to take place on Fridays and Saturdays when public transport services operate later into the night.

Shuttle bus services would be timed to coordinate with the end of the event and are not constrained by service timetables. As the site is within walking distance of the city centre, this would remain a viable option for those willing and able to do so.

There are actually three Park and Ride options linked directly to the venue, the two mentioned plus Ladywell (where there are 450 spaces), although requiring an interchange. Other Park and Ride facilities are located across the Metrolink network, providing in total over 2,300 further spaces.

On weekdays, the fact that the Ashton Moss and Ashton West car parks begin to empty as commuters return from the city centre means that their capacity will become available for evening use by arena spectators. This is borne out by survey data of these car parks on non-matchdays. This survey data also indicates that these car parks are not fully utilised on matchdays.

The provision of 3,000 arena car parking spaces on a non-matchday has been calculated with consideration already given to the space required for on-site coach parking facilities (i.e. the 3,000 parking spaces are net of any coach facilities).

It does not necessarily follow that if 29 coaches are expected that they would all need to park on-site for the duration of the event. They could pick up/drop off and park remotely. It is also unclear how the estimate of 200-250 spaces has been arrived at in the comment, but we can confirm that at least 150 marked car parking spaces have been saved for coach parking in all of the parking arrangements described in the TA (i.e. in addition to the 3000 spaces allocated to arena car parking above for instance).

Re-time

No tangible proposal is provided within the planning application to explain how visitors could be encouraged to re-time the arrival or departure from events to mitigate demands on the network. It is expected that any potential solution of this kind would require an event footprint to support in excess of 10,000 people. It is also noted that visitors are unlikely to have the same flexibility in terms of times of travel during weekday events compared with weekend events and the impact and success of associated messages is likely to vary between events based on predominant visitor age category etc.

The focus for retiming of trips is primarily on arrivals to the venue. There will be significant opportunity for proposed activation and entertainment activities on the site to achieve this. The retiming is especially important for coincident events. An additional incentive on these limited occasions will be to avoid congestion and have a more comfortable journey to the venue to take advantage of the on-site facilities pre-event.

Re-route

Options to re-route are limited with alternative corridors similarly susceptible to congestion at expected peak times. Road users will typically access events either via the Inner Relief Route, M60 with the primary junction for event traffic being junction 23 (also noting that attempts have been made for match day concerts match days and concerts at the Etihad Stadium to split M60 traffic across Junction 22, 23 and 24 with limited success), and associated radial route.

Throughout the extensive stakeholder engagement with the planning and highway authorities both pre and post application, there has been no requirement to assess the impact of the Arena on the M60.

It is worth noting that cars travelling from outside the M60 are more likely to be travelling further and allowing more time for the journey, potentially arriving early to enjoy a day in Manchester and therefore not coinciding with peak flows around the Campus. After an arena event, it is likely that these same people will be navigating the M60 later at night, when the motorway has plenty of capacity.

It is also noted that to date no queries or objections have been received from Highways England.

Site Accessibility

Public Transport Accessibility

On the basis of TRACC software, an assessment of the relative accessibility of the existing and proposed arena by public transport has been undertaken and this shows that the large majority - 1.85 million of the Greater Manchester population - is with a 45 minute public transport journey of the existing arena whereas just over half that figure at 961,000 is within the public transport accessibility for the proposed arena. At 60 minutes travel time, the Manchester Arena is within reach of 3.23 million people whereas the figure for the proposed arena is 1.86 million. At 90 minutes, the existing arena is accessible to circa 6.5 million people whereas the proposed arena is at 4.16m.

It is not disputed that the existing arena is well served by public transport. However, it does not follow from this fact that the Eastlands site is unsuitable for an arena. The Etihad Campus is already one of the most accessible locations within Greater Manchester outside of the city centre, served directly by frequent Metrolink and bus services and with significant space on-site to safely accommodate the movement of large volumes of people and vehicles.

It is worth remembering that, whereas the existing arena is used to receiving crowds of approximately15,000 people for an event, the Etihad Campus is used to receiving crowds of over 55,000 people for a Stadium event. The Campus also regularly hosts events across more than one venue on the same day.

The Greater Manchester Transport Strategy recognises the growing regional centre of Manchester, including the Etihad Campus, as a major driver for economic growth and identifies leisure, retail and tourism as being critical to the future economic success of Greater Manchester.

Improved connectivity between the City Centre and the Etihad Campus is identified as a focus area within the Strategy. The relative proximity of the Etihad Campus to the City Centre is identified as a particular opportunity to promote higher levels of walking and cycling, through investment in pedestrian and cycle networks supported by comprehensive and consistent on-street and digital wayfinding infrastructure. Potential improvements to rapid transit to the Etihad Campus are also identified.

The future development of the Etihad Campus is supported by a comprehensive strategy to manage the movement of people and goods to, from and through the area. Delivered and managed effectively, this would support the sustainable future development of the Etihad Campus in line with a range of Greater Manchester and MCC strategies and policies including the Eastlands Regeneration Framework, the Greater Manchester Transport Strategy 2040 and the MCC Core Strategy.

Pedestrian Accessibility

The crowd flow scenarios examined do not sufficiently test the capacity of the pedestrian network in and around the proposed arena - both in the range of scenarios examined, the assumed availability of routes and variation in pedestrian performance/behaviour that might occur within the scenario (and the subsequent sensitivity of the results to minor changes in this behaviour). They do not adequately address whether the pedestrian network produces expected levels of comfort and safety given the scenario conditions that it might face.

Analysis reveals that high levels of pedestrian crowding and congestion will be expected on Joe Mercer Way and the access to the Etihad Campus Metrolink Station, particularly when there are combined events at the arena and the stadium or when ingress for an evening event at the arena coincides with egress from an afternoon match at the stadium. The following key points are noted from the combined arena and match the evening analysis:

- ***Queues of up to 1200 people with full width of Joe Mercer Way in use rising to 2500 people should 10% of the width not be used. There is potential for high levels of congestion at this location which may result in spectators not being able to circulate northbound/southbound and/or impeding egress from the OVG arena***
- ***The congestion on Joe Mercer Way is reflected in the crowd flow modelling presented in the Design and Access Statement but the information provided does not show the impact further south on Joe Mercer Way or advise if significant management may be necessary to address resultant safety risks.***
- ***The Etihad Campus Metrolink Station will experience queues of 6,800 people (with the existing six minutes service) with maximum individual delays of 110 minutes, due to levels of spectator demand travelling westbound (City Centre). The delays experienced may encourage people to walk to the City Centre.***
- ***Assuming TfGM were to provide a 12 minute service at the Etihad Campus Metrolink station after an OVG Arena only event, queues of 3,200 people can be expected with maximum individual delays of 100 minutes. If TfGM were to provide a 6-minute service, queues of 1,100 persons can be expected with maximum individual delays of 45 minutes.***
- ***There is limited information provided in any of the planning application documents on the details of the emergency evacuation of the OVG arena and how the proposed design and operation will accommodate a maximum capacity event simultaneously evacuating.***

The issues set out above show the assessment of crowd movement undertaken as part of planning application has not considered in full the impact of the additional pedestrian demand generated by the proposed arena on the Etihad Campus, the transport opportunities serving the site and the wider area.

As part of the design work for the Arena, crowd assessment work has been undertaken throughout RIBA stages 2 to 4.

This assessment is based upon a detailed analysis of scenarios by Buro Happold alongside OVG, to ensure that crowd modelling and analysis has been undertaken on the worst-case scenarios.

Furthermore, the crowd modelling work undertaken to date has been testing worst-case assumptions for spectator ingress and egress to ensure that the design is providing suitable robustness in terms of satisfying Planning and Building Regulations. Where required operational or management interventions have been identified and discussed with OVG and key stakeholders.

Prior to opening and as part of its licensing obligations, OVG will develop operational and management strategies which will align with the recommendations of the modelling work undertaken and assess individual scenarios on an event by event basis. Ensuring that appropriate management can be provided to ensure a smooth flow in and out of the Arena and in the surrounding public realm (as well as internal to the building) will be a critical

component in attaining licensing approval to operate the building. The design has also been subject to independent review by City Football Group as operators of a neighbouring venue, who have employed an industry expert to review and feed into the crowd modelling process.

As part of the crowd modelling assessment, a study has been undertaken to look at pedestrian flows around the public realm including Joe Mercer Way, as well as proposed queue levels at the Metrolink stop. This work has been undertaken alongside City Football Group to ensure that any impacts on the Etihad stadium and surrounding area are reasonable. The work at the Metrolink stop has concluded appropriate areas for a worst-case maximum queue to be managed, and further detail on the specifics of this management system will be developed in prior to opening, as OVG produce their management documentation on an event by event basis.

Wider Assessment of Transport Impacts

The assessment of arena traffic on the highway network is based on travel survey data collected from the 3 Spice Girls concerts at the Etihad Stadium in 2019, and, the TA derives the postcode trips origin of the post OVG arena visitors based solely on the Spice Girls data. It then estimates the percentage of total car trips travelling from North South East and West of the development site and their parking destination.

For a development requiring detailed consideration of its impact, the analysis applied is crude. The deduction of visitors origin using only the ticket data from a single pop group does not seem to be inclusive, as various music genres can attract different demographics.

The total ticket sales analysed for two weekly concerts is around 1,200 representing a sample size which in this case is relatively small when compared with the capacity of the concert. Thus, the results may not be wholly representative

The link flow is estimated by assigning trips to the highway network based on the links most likely to be used for the journeys, derived by Google maps journey planning tool. The percentage uplift flows have been quantified using manual assignment which is basic and does not account for redistributive effects.

This approach can only give a general image but fails to reflect the likely detailed impact. The manual assignment method fails to account for the drivers behaviour and impacts of user equilibrium on the network, which should be an important attribute in this case when vehicle flow is expected to be high and a large proportion of visitors could be new to the Manchester Road network.

A detailed traffic model covering the wider highway network and drivers behaviour should be used to assess the capacity of links to truly determine the impact of developments.

It must be stressed that the Spice Girls concert data was used only for trip distribution and not for generating mode split, which is more relevant to demographics. It is considered that the Spice Girls' home postcode data provides a reasonable proxy to assess trip distribution. The travel survey data used for distribution purposes in the TA has been further validated against travel survey data collected on behalf Manchester City F.C. during Muse, Metallica and Taylor Swift concerts at the Etihad Stadium on the following occasions:

- Saturday 8 June 2019 – Muse;
- Tuesday 18 June 2019 – Metallica;
- Friday 8 June 2018 – Taylor Swift; and
- Saturday 9 June 2018 – Taylor Swift.

The distribution of home postcodes on weekdays and weekends between the event are similar overall. The (few) differences in the catchments for Muse and Metallica and Taylor Swift are likely related to the wider geographical spread of Spice Girls' concerts at other venues across the UK compared with the other bands that attracted a higher proportion from further afield. However, it is noted that once the trips are distributed onto the highway network within the M60, which is the area being assessed, the difference in trip origins of spectators going to these events would likely make very little difference in terms of trip loadings on individual corridors. This analysis further ratifies the robustness of using data from the Spice Girls' concerts in the assessments made in the TA and TAA.

It is also noted that using a concert mode split from the Stadium - a venue on the doorstep of the Arena is significantly more robust that relying on data sets from TRICS / other arena

venues, where transport accessibility, location and sociodemographic variances would make mode split comparisons far less reliable compared with the methodology followed for the OVG Arena.

Regarding traffic impacts, the TA presents the results in the form of expected traffic generated by the arena on the identified links. Apart from the anticipated increased traffic flow, it fails to reflect how that will influence the surrounding road network performance.

It is expected that the proposed arena will give rise to a certain degree of congestion and increase in delay on the highway network, both of which, however, are not quantified in the TA. Strategic impact on the M60 is not covered at all.

The above points is particularly important on match days, when the north-east quadrant of the M60 and the IRR both reach saturation. This is a major impact on journey times for the wider network and background traffic.

The TA demonstrates the additional traffic flow on Mancunian Way during various peak periods, but again it does not quantify the impact with reference to congestion levels. The link flow increase resulting from Arena traffic during departure peak may not bring serious impacts on the network, but the increase during network peak and arrival peak period should not be ignored.

The TA does not analyse the impact of additional flow on the typical baseline road network. It has failed to examine the influence to frequent commuters and the neighbouring communities, particularly when the anticipated increasing vehicle flow could happen up to 3 times per week

It has been agreed with TfGM and MCC that the TA should focus on assessing the worst case when an evening concert at the arena coincides with a football match at the stadium on a weekday evening. The baseline traffic flows used for the assessment capture the evening peak (commuter) period and therefore assess the impact on the travelling public at this time. It has been shown that this scenario does not happen up to 3 times a week, and even if it did it, the frequency of occurrence would not be a matter for the TA to assess. Notwithstanding, the impacts of events at the Arena occurring multiple times a year is considered in the ES.

Throughout the extensive stakeholder engagement with the planning and highway authorities both pre and post application, there has been no requirement to assess the impact of the Arena on the M60.

It is also noted that to date no queries or objections have been received from Highways England.

In terms of other coincident events that may be taking place across the city, the TA has limited consideration about potential conflicts and mitigation measures. It placed much reliance on the TfGM red/amber/yellow/green analysis and assumes impact on the network can be minimised.

More emphasis should be placed on wider event planning and coordination, especially when there are several popular music venues presented across the city including the Manchester Arena with a capacity of 21,000, Victoria Warehouse and O2 Apollo. This places further responsibility onto TfGM for delivery of a coordinated plan and the identification of an increased number of event clashes across the calendar year.

The Campus has well established procedures and processes in place to successfully plan, manage and operate events and activities at multiple venues within the Etihad Campus. By doing so, it operates as a collective destination rather than as individual components or uses. This has been successfully delivered for many years through close co-ordination and co-operation between a range of stakeholders including the football club, MCC, and TfGM. The Applicant has committed to be part of this process in the future.

It is also noted that, in addition to events at the Etihad Campus, other large events could also be taking place at other locations across Manchester (and Greater Manchester) that could have cumulative transport impacts, particularly within Manchester City Centre and on the Strategic Road Network. These events could include major sporting events, music concerts, and other public events.

At a city-wide scale, the impacts of the additional development proposed at the Etihad Campus would be relatively small in scale compared to other major events, particularly at locations remote from the Etihad Campus itself, such as the City Centre and M60.

When there is no event at the Stadium, the proposed Arena would attract less than half the number of people that typically attend a Stadium event due to the relative capacity of the proposed Arena. As such, the city-wide traffic impacts of the Arena would be significantly lower in scale than those currently accommodated by the existing transport networks on a regular basis during Stadium event days.

Notwithstanding the low frequency of coincident events at the Etihad Campus, the potential impact of such occurrences has been considered and discussed with wider stakeholders. It is considered that if these were to happen, it would be unlikely to have an unacceptable impact on the wider City Centre and transport networks.

In terms of other events that may be taking place across the city, due to existing restrictions, a football match at the Etihad Stadium would not coincide with either a football match at Old Trafford or a match at FC United. Other major events take place at other locations such as Heaton Park. This includes the annual Park Life festival and other music events. These events have always historically taken place during summer months (i.e. June/July). As such they would not coincide with a football match at the Etihad Stadium and would therefore not coincide with a ‘coincident event’ at the Etihad Campus.

Other events taking place across the city, such as those at the Victoria Warehouse, O2 Apollo and other venues are much smaller in terms of capacity and are unlikely to have significant city-wide impacts.

Impact: Local / Communities

Local Communities

The OVG TA does not analyse the negative impact on the local community brought by the arena development especially when the forecast maximum number of events is 180 per year.

It is recognised that large events at the Campus need to be effectively managed to protect the amenity of local residents, particularly relating to on-street parking. It is for this reason that a resident parking scheme operates on Stadium match/event days. The proposed development is anticipated to increase the frequency of events at the Etihad Campus. As such, it is anticipated that, once the arena is operational, the Resident Parking Scheme would need to change to operate seven days a week, bringing it in line with other resident parking schemes that are operated across the city. These other schemes typically operate on all days and allow only permit holders to park within designated times.

A commitment has been made by the Applicant to support MCC in the delivery of amendments to the resident parking scheme surrounding the Campus, such that it is able to operate on all days and across an expanded geographic area. The actual details of any changes to the existing Resident Parking Scheme would be determined following consultation with local Members and residents.

An expanded geographic area for the Resident Parking Scheme has been proposed, equating to an approximate 20-minute walking distance from a central point within the Etihad Campus. This would deliver a complete zone surrounding the Etihad Campus that non-permit holders know they cannot park within. This would provide a coherent scheme that would eliminate any gaps or inconsistencies that may exist within the current scheme and would provide a strong message to deter non-permit holders from attempting to find on-street parking close to the Campus.

As the current Resident Parking Scheme is considered sufficient (in planning terms) to mitigate the impacts of Stadium event parking, and as the Arena would attract much smaller numbers of people compared to the Stadium, it is considered that the proposed scheme (with its expanded geographical coverage) would be more than sufficient to mitigate the impacts of arena event parking.

On matchdays when there is no event at the arena, the expanded geographical area would provide greater protection to residential amenity than the current scheme.

It is proposed that the resident parking scheme would operate on all days, even when there is no event at either the Stadium or the arena. Residents within the proposed boundary of the scheme would therefore benefit from protection of amenity throughout the year and not just when major events are taking place (as is currently the case).

Improvements that are proposed on the key routes: notably on the Ashton New Road, City Link and Ashton Canal Towpath routes would be permanent enhancements to walking infrastructure. These would provide a benefit to local residents to enhance the accessibility of walking within the community and to and from the city centre.

The overall supply of parking on the site would not be increased. Proposed changes to vehicle access and egress to the site for arena events could help to improve the traffic flow of vehicles within the immediate vicinity of the site. There is the potential for the football club

to adopt similar measures for Stadium events should they wish, which could also enhance resident amenity on matchdays.

It is therefore concluded that the amenity of local residents will be protected at all times and actually improved on days when there are no arena events (including matchdays) through enhanced control regimes. Enhancements to walking routes would provide a permanent benefit to local communities.

Operational Analysis

Operational analysis in the form of LinSig junction assessments have been undertaken for 6 key signalised junctions. The analysis is presented for arena events and arena plus match day event scenarios. The results provided in the main body of the TA are for the maximum capital DoS value only, and there is no presentation of arm by arm data or queue lengths. The reader of the TA is forced to read through multiple pages of LinSig outputs to derive any comparative data. It is considered that presenting a single DOS value with no queue information does not provide an adequate summary of the analysis.

Buro Happold wrote to MCC with further clarification on these points 30 June 2020:

The LINSIG modelling was undertaken by CFG's consultant's Arup, who have provided a summary of the methodology they used for the modelling and this shows how on-site conditions have been replicated as far as possible. This methodology was included in Appendix B of the 30 June 2020 letter. It should be noted that in establishing the base models for the signalised junctions, the signal specifications were obtained from TfGM for each junction (included in Appendix B of 30 June 2020 letter for reference).

Notwithstanding, it is recognised that on the occasion of major events occurring at the campus, there is inevitably going to be more traffic with the chance of additional delays. The applicant has therefore committed to delivering a significant package of transport mitigation measures. These measures are aimed at promoting sustainable travel and reducing the car mode share of visitors. In particular, there is a firm commitment to delivering physical amendments to the Resident Parking Scheme surrounding the Etihad Campus and driving a shift towards sustainable modes of transport. The proposed mitigation measures are deemed an appropriate response to the impact of major events at the OVG Arena on the Etihad Campus.

Although the TA main report presents the overall junction results per each scenario, the full LINSIG modelling outputs per road and per overall junction are included in Appendix C of the TA. The delays and queues at each arm of the assessed junctions during the assessed time periods are also included in Appendix C of the TA. Queue length surveys have been undertaken during the assessed periods at the six assessed junctions and the results were included in Appendix D of the 30 June 2020 letter for reference.

The TA tables showing the overall modelling outputs are presented in a way that comparisons can be drawn between each assessed scenario on each junction. A naming convention has been assigned to accommodate them in the report more efficiently. However, for additional clarity, Buro Happold recreated these tables for the purposes of the 30 June 2020 letter, showing the full details of each assessed scenario on each junction and provided them within Appendix C of the 30 June 2020 letter.

The traffic increases during each assessed future scenario were shown in Appendix A of the 30 June 2020 letter. These traffic diagrams are based on Manual Classified Counts, which are considered to be more robust and appropriate than ATC surveys. The detailed information provided within Appendix A of the 30 June 2020 letter will assist in the auditing of the LINSIG models.

Journey Time Analysis

With regard to journey time analysis, it is noted that delays across the conurbation are complex and usually understood through the application of a validated, variable demand model. Reassignment of traffic as a result of the delay will create differences across the routes, including those not identified within the Bluetooth dataset provided by TfGM. The data is useful as a comparison of existing delay but is questionable when deployed as a forecasting tool.

Notwithstanding, the results in the TA Addendum do highlight increases of 3.5 minutes on both routes 2 and 3. These are afforded no explanation in the TA Addendum other than to state this arena traffic widely distributed onto the network.

The TAA responds to a request from MCC that the impact of traffic generated by coincident events at the Arena and Stadium be considered in terms of changes in journey time on specific route corridors across the City. The methodology used to do this was subsequently agreed with TfGM and the findings reported in the TAA.

Air Quality

The analysis of the development addition to the MCC total citywide carbon budget excludes any additional emissions from transport, so entirely misses the substantial additional emissions attributable to additional private car trips people would make to attend events at the arena

The additional car trips will result in an estimated 16,865 to 25,357 tonnes of CO2e emissions per year based on a range of 120-180 events per year. This calculation is based on average car GHG emissions per kilometre of 0.1771 kgCO2 w/km from Department of Business Energy and Industrial Strategy data for 2019

The Manchester zero carbon framework (2020 to 2038) draft makes the statement that 'new buildings need to generate zero missions', and it is clear from the analysis presented that the OVG arena would not comply with this requirement and runs entirely contrary to Manchester's commitment to achieving net carbon zero by 2038.

With reference to the Sustainability Statement submitted as part of the planning application, Manchester's commitment to achieving net zero carbon by 2038 is fully acknowledged and a route map to achieving this is outlined.

Whilst the Draft Manchester Zero Carbon Framework 2020-2038 makes the following statement, it is in the context of areas for action, recognising collective regional action across all industries is needed for a paradigm shift to make net zero carbon a reality:
"New buildings need to generate zero emissions when occupied and have significantly less emissions embodied in their materials and the construction phase"

OVG Arena takes full responsibility for reducing the operational and embodied carbon where practical using best readily available technology to deliver the stringent technical requirements of an arena. Through the Climate Change Chapter in the Environmental

Statement, a whole life carbon assessment has been undertaken to be fully transparent of impacts and encourage more industry reporting and discussion for the paradigm shift.

Proposals within our route map include:

1. 34% improvement on Part L 2013, bettering the minimum 6% in current policy and other known planning applications for comparable developments. This is predominantly delivered through a high-performance building envelope and energy efficient building services strategy.

2. PVs have been maximised on the roof and supports innovation by adopting emerging thin film PV technology which is lightweight (resulting in embodied carbon savings) and is fully recyclable at the end of its life.

3. ASHP proposed for heating and catering equipment will be fully electric. The near full electrification of the building to benefit from decarbonisation of the National Grid, helping the building trend towards zero carbon by 2038. The only gas in the building is for hot water, which was shown to be more carbon efficient at the time of design but this is subject to ongoing review to ensure it is phased out at the appropriate time to achieve zero carbon by 2038.

4. Commitment to Post Occupancy Evaluation to ensure continuous monitoring and improvement of energy consumption and associated carbon emissions. This process is already in place on other buildings on the Etihad Campus so knowledge sharing for an integrated approach to carbon reduction can maximise the reduction opportunities.

5. Commitment to support any future offset schemes implemented by Manchester City Council to achieve net zero carbon in operation by 2038.

Logistics Movement

There is no consideration in the TA of increased logistic movements caused by the production and delivery vehicles associated with a proposed arena in the surrounding area. Significant numbers of movements will occur between 0400 and 0600 according to the proposed schedule for arena events At the very least an Event Management Plan should seek to limit any community impact associated with this.

The roads likely to be used by such vehicles to access the Campus are major A-roads that already carry significant numbers of HGVs daily, including early hours of the morning. There are other uses in the area, such as the Asda superstore, which are likely to have similar types of deliveries overnight. There are limited residential properties immediately adjacent to the proposed site, and the closest properties are separated from the site by a dual carriageway. in the hours above.

As stated in the TA, during the period 04.00 – 06.00, when background traffic is low, we could expect up to 26 HGV's (event trucks and tour buses) arriving at the venue. This equates to up to 13 HGV's per hour, which is considered to have a negligible impact on local residential communities from a transport and noise perspective.

It should be noted that the arena service yard will be wholly enclosed, minimising any potential noise impact from vehicles manoeuvring. As such, it is not anticipated that there would be a significant issue caused by these deliveries.

Local Highway Amendments Safety Commentary

A Series of drawings have been produced within the OVG TA to illustrate proposed changes to access points to Alan Turing Way from the Campus car parks.

The permanent changes to the highway and temporary overlay use of these areas has been developed in liaison with MCC Highways and TfGM. The arrangements have been subject to a formal, independent Road Safety Audit.
Northern Car Park Access, General Arrangement, BRA-BHE-XX-XX-DR-C-0213

With regard to the northern car park access the northern access is left turn in/out only and this means all drivers using the northern access will be heading north on Alan Turing Way and will have passed the southern access. They are therefore likely to turn at the first junction and not proceed to the northern access.

Car parking is on a pre-booked basis only. Visitors will be advised in advance which junction entry to use to enter the car parks, depending on the direction of their arrival. The junctions will be marshalled to direct visitors to the correct locations.

The proposed internal signing would appear to suggest that vehicles can turn right onto Alan Turing Way from the northern access, however all vehicles must turn left. It also suggests that it is a two lane exit when a single lane is shown on the drawings. Users are likely to use the exit with the smallest queue and may therefore use the northern access even though they wish to travel south. This is likely to result in weaving movements following the end of the coned area and motorists may undertake inappropriate turning (Briscoe Lane) or elsewhere. The temporary arrangement will need to be clearly signed from the access road and from the car parks.

No right turn will be available to vehicles exiting via the northern junction. Two exit lanes will be provided for car park H, which diverge at the north-western corner of car park G. Vehicles wishing to travel south are expected to use one lane and be directed through car park G using signs and lane closures. Vehicles wishing to travel north are anticipated to use the other lane and continue to the Northern Access. This is clearly shown on drawing BRA-BHE-XX-XX-DR-C-0235. The route will be actively marshalled to ensure compliance. Traffic management is proposed at the Alan Turing Way/Briscoe Lane junction to only allow vehicles to enter the near side lane of Alan Turing Way and continue north at the junction, this prevents vehicles weaving to turn right or do a U-turn.

With regard to the northern car park temporary egress, the temporary layout is understood to be in operation on arena event days only. Match days will remain as the permanent layout. However, it is not clear how this will be managed on the combined match and event days. Adequate warning of the temporary layout and nearside lane closure on Alan Turing Way will be required, otherwise this could lead to late line changes and sideswipe collisions.

Northern Car Park Access, Temporary Egress, BRA-BHE-XX-XX-DR-C-0235
The matchday site access arrangement will be used on combined match and event days. The number of parking spaces available for the arena is reduced to c500 spaces on a match day.

Adequate warning of the lane closure on Alan Turing way will be provided, in agreement with MCC Highways.

How the existing markings on event days will be managed is unclear, as these could be contradictory to requirements, signs will need to be covered, and developed strategy in place for managing the changes. Red servicing is shown on the plan however it is not clear whether this is indicative of the coned off area or will be implemented as a contrasting material.

The signage strategy is to be agreed with MCC Highways. It is anticipated that all required signage will be permanently installed with fold down/coverable faces to allow the correct signage to be shown for the correct event scenario.

The temporary layout signs show the northern access as 'Arena service entry only'. This would appear to result in no left turn access for vehicles accessing the car park during arena events.

The "service vehicle only" road markings relate to the service vehicle slip road only. A left turn into car park G is available to users by following the main access road as far as the lane closure. Again, the area will be marshalled to direct traffic correctly.

With regard to Sportcity Way, the sign for motorists approaching the southern access from Alan Turing Way suggests the left turn is for VIP drop-off only, whereas signing on the access road and on the northern arm indicates all car parks. At the southern access car parks, H and J are signed (indicating vehicles must turn right) but there is no signing for car parks J and K from this direction. There is no indication of access to car park I.

Sport City Way Public Realm, General Arrangement, BRA-BHE-XX-XX-DR-C-0210
Vehicles approaching the site from the north are expected to use the southern access via Sport City Way, while vehicles approaching from the south are anticipated to use the new Northern Access. This is because the northern access is left-in left-out, so it can only be accessed from the south.
The signage strategy for arrivals is shown on drawing BRA-BHE-XX-XX-DR-C-0295. All car parks are signed for southbound arrivals from Alan Turing Way. It is noted that car parks J and K are not signed once vehicles enter the campus, as these car parks are most easily accessed from the Northern Access. Hence pre-booked users of these car parks will be advised, in advance, to arrive from the south and use the northern access. Should they use the Alan Turing Way access by mistake, they will be directed through Car Park H by the on-site marshals. Car park I is not proposed for public use on an event day, hence it is not signed.

Users parking for the arena will have to pre-book car parking tickets. Those attending for football matches currently pay on entry. It is not known how the proposed arrangements will cater for both users. There appears to be only two sites for ticket validation which each have 600 vehicles/hour capacity. This is unlikely to accommodate all traffic, particularly if these are the only two ways into the car parks and given an event could be on the at the same time as a football match, queueing could be extensive.

The southern car park access is to be widened for two entry lanes entry and exit lane. Queueing to exit the site is likely to extend back into the car park, which is what happens following a football match with vehicles unable to move. Following a match, queueing also occurs for some time on Alan Turing Way, this will be even worse if an event finishes at

similar time to a football match. Congestion and difficulty parking may also occur if one event is starting as another one finishes, particularly as vehicles are queueing to leave the site, hindering access for those arriving. The proposed layout shows limited carriageway for vehicles to queue at the signals which is likely to extend back into the car park. Most vehicles are likely to be turning right (left turning vehicles are more likely to use the northern access).

The purpose of the red surfacing is unclear. The exit from the southern access is two lanes with the offside lane marked as ahead, however this leads into a set of cones, where the road reduces to a single lane.

The arrival profile of vehicles for an arena event has been assessed and discussed in sections 5.3.6 to 5.3.8 of the TA. The capacity of the inflow lanes is in excess of the worst-case arrival rate. There is currently a single point of entry for car park users on a match day, hence a lower ingress capacity than proposed with the two points of entry. No significant queuing is observed during matchday arrivals; any small queues are contained within Sport City Way. The number of car parking spaces is finite and will be shared between the arena and the stadium on combined match and event days. Ingress and egress flows will therefore not be greater on combined event days, since there will no more parking provision at these times. The rates are likely to be lower as the start and end times of the arena event and match will be staggered.

The widening of the southern car park access is to allow a tidal flow arrangement. Two lanes in are provided for ingress (see drawing BRA-BHE-XX-XX-DR-C-0295) and three lanes out are provided for egress (see drawing BRA-BHE-XX-XX-DR-C-0295). The egress capacity of the car park and approach the Alan Turing Way junction is therefore maximised.
There is no red hatch denoted on drawing BRA-BHE-XX-XX-DR-C-0210. We assume this refers to red hatch shown on the various temporary traffic management plans. The red hatch on the drawings is to denote clearly on the drawing the extent of the highway that will be coned off and inaccessible to traffic. This is not proposed as a physical measure.

Accident Data Analysis

Accident information is limited to the identification of clusters and the types of accidents involved. What is missing is assessment of when the accident occurred and whether there was an underlying pattern to the timings. For example, Ashton New Road/ Alan Turing Way; pedestrians running and walking into the carriageway is noted as a causal factor. What is not clear is whether this was due to crowded conditions or footways or whether these data correspond with match days at the Etihad Stadium.

This is also the case for the Alan Turing Way /Briscoe Lane junction, which suggests 'failure to look when turning' amongst other driver errors are causal factors. Whether the risk is heightened at this junction due to additional turning traffic from the Etihad Campus car park is not discussed.

Accidents on the junctions with Great Ancoats Street (Inner Relief Route) are identified, it is accepted that the traffic volumes are the movements of pedestrians outside of events at the Etihad are significant. However, there is no analysis of the data to identify whether match day pedestrian numbers have increased these figures.

Accident clusters, anecdotally, are commonly located at or around junctions. However, there appear to be several accidents recorded on the Aston New Road link back towards Holt Town. There has been no discussion of these incidents within the OVG TA to indicate whether this is influenced by events at the Etihad Campus.

The overall summary of accidents and safety is limited. A review of the detailed data provided should focus on operations at the Etihad Campus. This would then identify whether the expansion of facilities to include an arena, directly affect the accident statistics on the surrounding highway network.

The TA scope and methodology was agreed with MCC and TfGM, including that for assessing accidents. The agreed methodology was to assess accident records within a zone boundary around the campus using a 2km walking radius, as this is considered to reflect the area that currently experiences most matchday parking impacts.

The review of accident data for this area determined that the number of accidents occurring and across the last five-year period is not significant and the majority were classified as "slight" and no fatal accidents occurred. The accidents have been attributed to road user behavioural factors rather than any inherent issues with the local highway network. On the basis of the above, it is not considered that any further assessment of accidents is required, and this appears consistent with MCC and TfGM's views as they have not identified an issue with the assessment.

Car Parking

The combined match day plus arena event worst-case reduces parking availability further to 500 spaces allocated to the public within the campus car parks. Parking external to the site will also be in direct competition with match day parking. There is virtually no assessment of the excess parking available around the site within the OVG TA. This would suggest reliance on a regulated offsite parking for which assumptions on numbers and availability has not been quantified. This will ultimately place additional pressure and burden on both the key route network and the communities which lie beyond the extent of the CPZ, such as Newton Heath, Monsall, Miles Platting, Ancoats, Openshaw and Clayton, where excess car parking demand is likely to manifest.

There is currently capacity for approximately 4,200 on-site parking spaces within the Etihad Campus (excluding those spaces dedicated to the Manchester Tennis and Football Centre and the Manchester Regional Arena). This capacity is split across a number of car parks within the Etihad Campus, including cleared sites earmarked for future development

On days when there is no event at the Stadium, this parking provision is more than sufficient to meet the day-to-day requirements of the Etihad Campus, including for events at the non-stadium venues within the Etihad Campus. On Stadium event days, based upon data for the 2018/2019 football season, the average demand for parking on-site was just under 3,000 spaces with a maximum use of just over 3,500 spaces. The proposed reduction to 3,700 spaces would therefore have no impact upon existing matchday activities at the Stadium.

As further uses are developed on the Etihad Campus, this may indeed affect parking capacity, where these uses are constructed on sites that are earmarked for future development but currently used for parking. However, no such changes are proposed as part of this application and this issue is therefore not relevant. In order to ensure that future development does not reduce the retained parking provision below an acceptable operational level, any spaces lost may be reprovided if demand at the time requires it.

As explained elsewhere in this response, the provision of 3,000 spaces is net and would not be reduced due to either coach or PUDO provisions. Arena staff parking would not be provided on-site on event days.

The residents parking scheme, which would operate on all days, would prevent vehicles from parking in the area immediately surrounding the Etihad Campus. It is anticipated that the residents parking scheme would prevent these vehicles from parking within an approximate 20-minute walking distance from the site. On a matchday, it is considered that the existing informal off-site spaces surrounding the Etihad Campus would already effectively be fully utilised and would not be available to accommodate additional demand. There would therefore be no reason for these vehicles to enter the area surrounding the Etihad Campus.

Park and walk solutions outside of the immediate Stadium vicinity would therefore be utilised. As noted elsewhere in the objection, many visitors to the arena will be first time visitors, many of whom will not be familiar with the area. For such visitors, the relative security and simplicity of using city centre parking would make this a more attractive option than parking in more remote communities within east Manchester, a significant walking distance from the arena. This would be reinforced by pre-event messaging provided by the operator.

Large amounts of commercial parking facilities are located within Manchester City Centre, which is within a walkable distance of the Etihad Campus. A significant proportion of these

spaces would become available prior to the arrival of Campus event visitors (i.e. as city commuters depart). Park and walk from the City Centre is therefore considered to be a viable option, particularly when supported by proposals to significantly enhance walking routes between the City Centre and the proposed arena and active messaging by the operator.

In particular, there is a significant existing parking stock within the eastern part of the City Centre. The existing City Centre off-street parking stock largely serves commuter parking, which, at the time of an evening event, would have departed to a significant extent. There is therefore potential for existing off-street parking stock within the City Centre to serve the Etihad Campus on the limited number of occasions that there is both a match and an arena event occurring simultaneously.

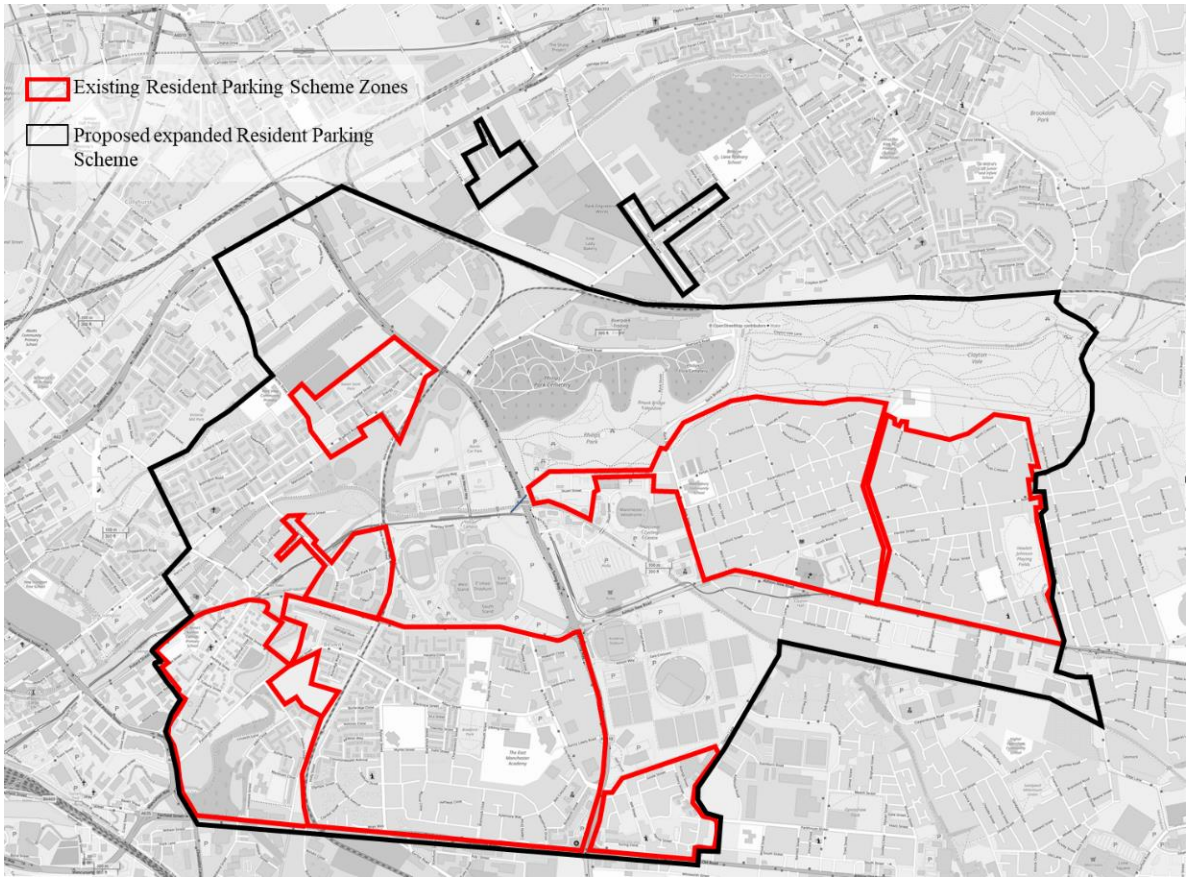
The extent of the proposed CPZ plan in the OVG plan mirrors those included as a mitigation Scheme 1 within the 2013 Etihad expansion planning application.

To date, the Etihad expansion CPZ extension has not been implemented. However the mitigation for the proposed arena does not offer anything beyond what has already been subject to planning agreements with the Manchester City Council. It is therefore incorrect to identify this as a new substantive mitigation measure, as it merely offering something which another development is already committed to providing in order to mitigate its associated adverse affects.

The plan below demonstrates the extent of the existing Resident Parking Scheme (red) overlaid with the proposed extended area (black). It is clear from this plan that the proposed area is significantly larger than that which is currently in place.

It should also be noted that although the Clayton zone expansion of the scheme associated with the stadium expansion is committed, it has not yet been delivered and therefore does not provide any benefit to residents. Delivery of this committed expansion as part of the arena application is therefore considered to represent a material improvement on the existing situation.

In addition to the significant geographical expansion, the scheme would change from an event-day only scheme to one that applies on all days. Again, this is a material change from existing and committed enhancements to the scheme.



Given the overall shortfall in public transport capacity to meet any additional demand, heavy onus is placed on walking options in particular. For context, it is expected that up to 25,000 people (on arena and stadium event days) will need to walk to access available transport options, both in terms of public transport and car parking. This is expected to place significant additional pressure on the highway network, and create unacceptable additional risks both in terms of spectator safety and issues relating to crime and public order.

It is acknowledged that walking between the Campus and the city centre would be a preferred option for many arena visitors, particularly after an event when it may be considered preferable/quicker than waiting for public transport services. Indeed, walking between these two locations will be actively encouraged through the proposed mitigation and communication strategy. The forecast number of people walking is forecast to be much lower than stated above, however, as noted in the TA.

Fundamentally, it is considered appropriate and desirable to encourage significant use of the walking routes between the city centre and the Campus. There is significant potential to enhance the user experience of these existing pedestrian routes through the mitigation proposed.

The proposed strategy has been developed in consultation with TfGM who have not raised any concerns regarding the impact of additional pedestrian movements on the operation of public transport services. The current post-match traffic management strategy also recognises the need to prioritise the safe departure of large volumes of pedestrians from the area over short-term delays to the traffic network.

Rail and walk from Piccadilly assumes good mobility and light/weather conditions. It is a lengthy and unattractive walk once outside the city centre, which is not considered or accounted for in the TA. The walking route mitigation proposals do not substantially improve the position above the Etihad Campus expansion approval. The very limited mitigation measures proposed are meagre and will be ineffective.

Evidence and surveys of stadium events demonstrates that large numbers of people are willing and able to walk between the Campus and the city centre in all conditions. It is acknowledged that there are points on these routes that could be improved and it is for this reason that substantive mitigation and enhancements to this route are proposed.

Proposals for Ashton New Road are primarily aesthetic enhancements, which can help promote a route. Much of this should already be carried out through routine maintenance. However, expansion of footway and improvements to pinch points are limited to an existing issue at the railway bridge, with little descriptive detail. The volume of people expected to walk back to the city centre, particularly during combined event days, is very large. Spillage into the highway and obstructions will be common unless further permanent enhancements are introduced which contravenes the National Planning Policy Framework at point109.

For City Link, there is very little drawing detail related to the proposals, signage details or livery. Hard infrastructure improvements are not suggested for footways or pinch points. Routes around Holt Town and Pollard Street tram stops are problematic during match days, footway and footpath improvements should be assessed and reviewed and added to the package as a minimum.

Regarding the Aston Canal Towpath, this route passes through canal tunnels with known antisocial behaviour problems, including drug taking. For significant crowd movements, the route is wholly inappropriate for use due to lack of footpath width and no barrier protection from the canal. The bike ramp is noted as an enhancement, otherwise mitigation amounts to routine maintenance. No drawings are submitted demonstrating thought or design behind mitigation works.

The Applicant has committed to provide a range of physical enhancements along three key pedestrian routes between the development and the city centre. These improvements include physical measures to address specific issues identified with the existing routes such as infrastructure interventions, improved signage and information, maintenance and landscaping works. It is anticipated that the details of the improvement scheme would be submitted to MCC for approval as part of a condition associated with any consent.
It should be noted that for the significant majority of arena events, the number of attendees would be considerably lower than is currently experienced on a regular basis for Stadium events. On co-incident event days, the staggering of events would mean that the use of the walking routes would be extended over a longer time period rather than necessarily increasing the peak number of people using the routes at a particular time.

With regard to Campus Access Amendments, amendments to junction access points are limited. There is real reliance on temporary arrangements at the southern access point, which will have implications on temporary traffic management and differs from match day arrangements. This has safety implications for general traffic on Alan Turing Way and those familiar with the standard parking access for the stadium.

There is currently capacity for approximately 4,200 on-site parking spaces within the Etihad Campus. On Stadium event days, based upon data for the 2018/2019 football season, the average demand for parking on-site was just under 3,000 spaces with a maximum use of just over 3,500 spaces. The proposed development would see the capacity reduced to 3,700 parking spaces. On that basis, it is entirely appropriate for any amendments to junction access points to be limited as the site would be accommodating similar numbers of vehicles.

As noted elsewhere, the demographics of an arena event would be potentially different from that of football matches. Therefore any risk associated with people being familiar with one set of arrangements being confused by alternative arrangements is considered to be low. Notwithstanding this, well designed traffic management and signage would effectively manage any such risks. It should also be noted that the football club has previously trialled alternative car park and traffic management arrangements periodically since the opening of the stadium. These have enabled improvements to the management of traffic flow over time. The proposed arrangements therefore represent part of this continuous evolution of the management of on-site car parking.

With regard to operational transport interventions and in relation to the arena framework travel plan, it is noted with regard to spectators, that pre-and post event catering offers are suggested within the EMP/travel plan to flatten arrival and departure profile. Two factors will mean this is unlikely to happen:

- ***Admission gates open at 1830. Clearly this means there is little point arriving prior to this.***
- ***Public transport services stand down at 2330 - an attempt to delay departure would mean remaining spectators are unable to access public transport options.***

General Admission at 18.30 has been assumed to show how peak arrival periods can be practically managed. Clearly, if opening certain ancillary areas earlier than this would assist with operational plans for a particular event then this would be worked into the Operations Plan for that day. The electronic messaging established between venue and visitor through the ticket sale allows full communication with visitors, explaining arrangements for a particular day, well in advance of them leaving home to attend the event.

Public transport services from the Etihad Campus typically run until after 23:30 during the week and on Saturdays. A more gradual departure of people from the venue onto walking routes and into taxis and private cars will also help to flatten any impacts associated with those modes.

With regard to the travel plan, the following points have been noted:

- ***The display of season-ticket information on the travel plan noticeboard has not been mentioned. This measure secures the success of travel plan noticeboard proposals in staff common rooms and it is considered that the long-standing success and staff public transport usage will be compromised without this measure***
- ***Whilst it is noted that the applicant will prepare a travel information pack for employees highlighting the objectives and philosophy of the travel plan - which will include promotional information in relation to cycling and walking, as well as details relating to public transport and local car share schemes - it is considered that reference should be made to this measure being continually implemented for new employees if the site were operational.***

- ***It is considered that participating in European mobility week would work well with site-specific targeted events such as walk/cycle to work.***
- ***It is considered that there should be a commitment to the creation of a bicycle user group rather than simply an investigation.***
- ***A 'Bike Buddy' programme for first time cycle commuters could be tied in with the bicycle user group.***
- ***Reference should be made to a borrower brolly scheme for staff use during periods of inclement weather.***
- ***Bus taster tickets should be referenced in the travel plan.***
- ***It is noted that no formal car sharing scheme is proposed to be established albeit the TPC will encourage employees to join the car sharing scheme, such as CareShareGM which will be promoted to minimise SOV car trips and car sharing will also be promoted through website information given to event attendees.***

A Travel Plan is a long-term management strategy, which encourages sustainable travel for new and existing developments. The key aim is to inform employees and visitors at the Site of travel alternatives to that of the car, particularly Single Occupancy Vehicle (SOV) trips, by promoting active travel and other sustainable travel modes with a view to creating sustainable communities consistent with the overarching aims of the National Planning Policy Framework (NPPF).

Travel Plans are dynamic documents that evolve over time with changing travel needs. They are not meant to be onerous documents, but rather developed to enhance awareness of alternative modes of travel to the single occupancy private car. As such, its content will develop over time to respond to a changing environment in East Manchester. We note the points raised and will consider them as the Travel plan is reviewed over time.

With regard to marshalling, it is projected that up to 20,000 spectators on combined match day/arena event days/evenings may need to opt to walk to connect with public transport capacity in the city centre of Manchester. These numbers will require a specific operational plan to address the associated risks. A considerable allocation of personnel will be required to ensure this is safely facilitated. Major risks exist in terms of pedestrian vehicle interaction, Metrolink crossing, canal towpath, and crime. The deployment would need to be multi discipline, with security, traffic and an ask on GMP police resource too.

It is noted that co-incident event days (i.e. days where there is a Stadium event and an event at the arena) could be expected 10-15 times per year on average. Events at the proposed arena would be scheduled where possible to ensure that they do not coincide with events at the Etihad Stadium. This could help to reduce the number of co-incident event days further.

It should be noted, however, that should there be an event at both venues on the same day, it does not necessarily mean that arrivals or departures from the venues would be taking place concurrently. There are a range of potential event time combinations for the Stadium and the arena, the majority of which would result in little or no overlap between the arrival or departure of visitors to the two venues.

On the limited number of occasions that a Stadium match/event would be coincident with an event at the proposed Arena, additional transport interventions would be implemented through the delivery of a 'special event operational plan'.

On these occasions, increased levels of stewarding and security along routes are proposed. This will help people to feel confident about using the walking routes from a safety and personal security perspective, particularly in the evenings. It should be noted that considerable numbers of people already access the Campus via these walking routes for a Stadium event. Safety perceptions would clearly be supported by the fact that these pedestrians would be making this journey as part of a large group of people, with supportive and visible operational management.

BURO HAPPOLD

30 June 2020

Jennifer Atkinson
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Planning Building Control and Licensing - Growth and Development
Manchester City Council Town Hall Extension
Lloyd Street
Manchester
M2 5DB

By Email Only

For the attention of Jennifer Atkinson

RE: OVG Manchester: Manchester City Council Comments (Planning Ref. 126431/FO/2020)

Dear Jennifer,

Thank you for providing comments on transport issues raised by statutory consultees in relation to the proposed multi-use indoor arena ('OVG Manchester') at the Etihad Campus in Manchester (Planning Ref: 126431/FO/2020), as set out in your email dated 13 May 2020.

The remainder of this letter sets out our responses to the particular issues raised, which should be read in conjunction with the submitted Transport Assessment (TA) and Transport Assessment Addendum (TAA) submitted with the planning application for OVG Manchester.

MCC Comment 1: Trip Generation

> *"The assessment work mostly applies existing data at the Etihad Stadium and other facilities similar to the proposed development.*
>
> *For the wider network impact, the basis of the analysis is origin data for the Spice Girls concert only. It could be argued that a Spice Girls concert may attract a different demographic compared to other types of events. It should be noted that as part of the pre-application discussions, it was advised that a wider range of events should be used for the analysis as the Spice Girls concert wasn't a completely typical event.*
>
> *The traffic diagrams for the highway network which show baseline / development and distribution trips should be provided as these are required in order to validate the turn movements that have been inputted into the models.*
>
> *The TA does not describe whether there is other parking available within the vicinity of the development such as unrestricted on road parking which could affect trips. This should be confirmed and detailed."*

Applicant Response (MCC Comment 1):

As set out in the TA, the assessment of arena traffic on the wider highway network has been undertaken using origin and destination data from available travel survey data collected on behalf of Manchester City F.C. on the occasion of concert events held at the Etihad Stadium. This travel survey data was collected during concerts featuring the Spice Girls, on the following dates:

- Wednesday 29 May 2019 – Spice Girls;
- Friday 31 May 2019 – Spice Girls; and
- Saturday 1 June 2019 – Spice Girls.

The travel survey data from these concerts cover all the days and time periods that need to be assessed for the arena, and it was concluded that it provides a robust data set for use as a proxy for distributing future trips to concerts at the OVG Arena on the wider highway network in the city centre.

It must be stressed though that the data was used only for trip distribution and not for generating mode split. We believe that the Spice Girls' home postcode data therefore provides a reasonable proxy to assess trip distribution. However, following comments received from MCC on whether the Spice Girls' concert represented a 'typical event', the travel survey data used for distribution purposes in the TA has been further validated against travel survey data collected on behalf Manchester City F.C. during Muse, Metallica and Taylor Swift concerts at the Etihad Stadium on the following occasions:

- Saturday 8 June 2019 – Muse;
- Tuesday 18 June 2019 – Metallica;
- Friday 8 June 2018 – Taylor Swift; and
- Saturday 9 June 2018 – Taylor Swift.

Table 1 compares the distribution of home postcode locations (trip origins) for weekdays (Spice Girls' average with Metallica and Taylor Swift) and weekends (Spice Girls with Muse and Taylor Swift), and shows the percentage difference compared with the Spice Girls.

Table 1 Comparison of 2019/2018 Concert Trip Distribution Data

Region	Weekday Concert Period			Weekend Concert Period			Taylor Swift (weekday/ weekend data)	Taylor Swift/Spice Girls (weekday difference)	Taylor Swift/Spice Girls (weekend difference)
	Spice Girls (Average)	Metallica	Difference	Spice Girls	Muse	Difference			
Scotland	0.2%	2.1%	1.9%	0.0%	1.4%	1.4%	9.5%	9.3%	9.5%
North East	0.2%	3.1%	2.9%	0.7%	2.9%	2.3%	4.1%	3.9%	3.4%
Yorkshire	24.3%	24.3%	0.0%	28.0%	27.7%	-0.3%	18.7%	-5.6%	-9.3%
East and Surrounding	5.3%	7.0%	1.7%	5.6%	6.6%	0.9%	5.3%	0.0%	-0.3%
London/Home Counties	2.2%	0.8%	-1.4%	2.2%	1.1%	-1.1%	5.9%	3.7%	3.7%
South East	0.5%	0.1%	-0.4%	0.2%	0.1%	-0.1%	0.9%	0.4%	0.7%
North West	55.4%	46.8%	-8.6%	53.4%	46.2%	-7.2%	37.1%	-18.3%	-16.3%
Midlands and Surrounding	5.6%	7.7%	2.1%	4.6%	8.9%	4.3%	8.7%	3.1%	4.1%
Wales and Borders	4.5%	6.6%	2.1%	4.1%	4.0%	-0.1%	5.7%	1.2%	1.6%
South West	1.7%	1.5%	-0.2%	1.1%	1.0%	-0.1%	3.8%	2.1%	2.7%
Isles/ Other	0.0%	0.0%	0.0%	0.2%	0.0%	-0.2%	0.3%	0.3%	0.1%
Total	**100.0%**	**100.0%**	**0.0%**	**100.0%**	**100.0%**	**0.0%**	**100%**	**0.0%**	**0.0%**

Table 1 shows that the distribution of home postcodes on weekdays and weekends between the bands are overall similar. The (few) differences in the catchments for Muse and Metallica and Taylor Swift are likely related to the wider geographical spread of Spice Girls' concerts at other venues across the UK compared with the other bands that attracted a higher proportion from further afield. However, it is noted that once the trips are distributed onto the highway network within the M60, which is the area being assessed, the difference in trip origins of spectators going to these events would likely make very little difference in terms of trip loadings on individual corridors. This analysis further ratifies the robustness of using data from the Spice Girls' concerts in the assessments made in the TA and TAA.

In addition to the above, the TAA provides additional information which considers the impact of the proposed development in relation to the wider highway network based on journey time data collected from Transport for Greater Manchester (TfGM). More specifically, nine routes have been chosen to broadly assess the impact of traffic generated by the arena on journey times in the city (on locations previously agreed with MCC) during weekday and weekend periods as follows:

- A 'typical' day in Manchester, when there were no major events occurring;
- A day when there was a football match at Etihad Stadium; and
- A day when there was an event at the Manchester Arena.

It is therefore considered that the trip generation/ distribution assumptions presented within the TA and TAA are robust.

Traffic diagrams for the highway network which show baseline, development and distribution of trips that have been requested are appended to this letter (Appendix A).

In relation to the availability of on-street parking within the vicinity of the development and its potential impact on the assessment, it is noted that the availability of parking on-campus and on and off-street around the campus is directly related to the modal split of spectators - the more parking available, the more likely it is for people to travel by car and the higher the car mode split. As the worst-case modal split for the arena has been derived from the existing modal split of people travelling to the stadium on event days, the availability of parking is directly linked to travel behaviour, and therefore the impact of parking has been assessed.

It is also worth noting that following development of the arena, there will be some 3,500 parking spaces available on-campus for use by the stadium and arena on occasions where a football match at the stadium is coincident with an event at the arena. This parking quantum is broadly similar to the number of spaces taken up on-campus during the Manchester City v. Tottenham Champions League game in April 2019, which did not result in any notable traffic impacts, other than those which are routinely managed on other match days at the stadium. It is therefore reasonable to conclude that the highway network conditions immediately around the campus on a coincident event day would be broadly similar to those witnessed during stadium events where this level of on-site parking has successfully been utilised previously. The TA and TAA also then consider a scenario following implementation of mitigation measures. This also considers changes to the Residents Parking Zone (RPZ), which is a significant feature. Chapter 8 of the TA covers this matter and states that the changes to the scheme will enable it to operate on all days and across an expanded geographic area. The extents of the RPZ are shown in Appendix K of the TA.

It is not considered that any further assessment of parking impact / effect on travel behaviour is required at this stage.

MCC Comment 2: Junction Assessments

> *"The PICADY outputs in the TA are illegible. Clear extracts of the outputs are required to validate the junction analysis."*

Applicant Response (MCC Comment 2):

The PICADY model outputs, are appended to this letter (Appendix A).

MCC Comment 3: Modelling

> *"There are plans to upgrade the junction of Alan Turing Way/Ashton New Road to a cyclops style junction. It is unclear if the existing junction arrangement or the proposed junction arrangement has been modelled - this should be clarified. There is likely to be a requirement to change the models to reflect the proposed design.*
>
> *With reference to Section 4.7.5 of the TA, tabulating the results of the surveys would have been useful to understand how the road network is operating. This is the actual behaviour rather than modelled results. Fifteen-minute (or similar) time periods can be shown from the surveys. This isn't available from the LINSIG modelling. Furthermore, the junctions run on SCOOT day to day and LINSIG isn't able to correctly model SCOOT. For match days, the timings are controlled by Fixed-Time and manual control by the stewards. It is suspected that the LINSIG timings used are 'optimised' timings rather than the actual timings running.*
>
> *The results presented for the match situation are much lower than in reality. It is suspected that this is because only the traffic passing the stopline is counted. The survey data needs re-assessing*

and the actual traffic conditions (and 'suppressed' demand) should be represented in the modelling.

Additionally, the results per road should be presented; not the overall junction. This provides a much clearer view of the operation of the junction. The delays and queues should be included in the results.

The tables presenting the information are confusing. This is because it is necessary to keep referring back to code letters describing the scenarios.

The situation for matches is presented as operating over-efficiently. This raises questions about the remaining analysis and will be an area that could be subject to criticism. This is replicated with the results of the match situation with much lower flows reported. This is not an accurate representation of onsite conditions. After the match, there is a continuous flow of pedestrians and buses along Ashton New Road and as such there is no traffic flowing.

The traffic increases for matches should be presented using the ATC data at the various data collection points. It should be noted that the LINSIG models have not yet been audited. Clarification is sought as to whether the food and retail outlets will be open when there are events or at all times. The latter should be assessed separately if they are operating at different times to the Arena.

In respect of Section 6.3.15, this doesn't actually appear to be the worst-case scenario. Evidence based upon previous concerts at the Etihad Stadium should be used or if that information isn't available then sensitivity tests should be carried out with a higher proportion of private vehicle trips.

The results shown in Section 7.1.42 should be presented on a link by link basis and should include delays and queue lengths. It should be highlighted that in terms of Section 7.1.44, there are no traffic problems anticipated at normal events at the stadium because the traffic volumes will be less than a normal football match.

With reference to Table 7.14, the increase in traffic flows doesn't actually describe the impact. The percentage increase in traffic volumes should also be provided in this section of the TA as well as the traffic delays before and after. Traffic flow changes don't describe the impact of the event on a wider scale as requested previously requested."

Applicant Response (MCC Comment 3):

Whilst the Etihad Campus Movement and Transport Strategy recommends the implementation of the funded scheme referred to, the modelling within the TA is of the existing arrangement of the Alan Turing Way/Ashton New Road junction. This is given that the plans to upgrade the Alan Turing Way/Ashton New Road junction, were not committed at the time that the assessment was undertaken. However, we would have thought that the proposed upgrade to the junction would not have made its operation for all road users materially worse than the existing arrangement, and therefore we feel that there should be no need to update the assessment.

With regard to MCC's comment about the modelling not reflecting on-site conditions, we believe that the modelling methodology shows that this is taken into account. The LINSIG modelling was undertaken by CFG's consultant's Arup, who have provided a summary of the methodology they used for the modelling and this shows how on-site conditions have been replicated as far as possible. This methodology is included in Appendix B of this letter. It should be noted that in establishing the base

models for the signalised junctions, the signal specifications were obtained from TfGM for each junction (included in Appendix B for reference).

It is also worth noting that the traffic that is not captured at a specific junction at a given time, would partly be taken into account at the remaining assessed junctions in close proximity or within subsequent time periods at the same junction.

Notwithstanding, it is recognised that on the occasion of major events occurring at the campus, there are inevitably going to be travel delays. The applicant has therefore committed to delivering a significant package of transport mitigation measures. These measures are aimed at promoting sustainable travel and reducing the car mode share of visitors. In particular, there is a firm commitment to delivering physical amendments to the RPZ surrounding the Etihad Campus and driving a shift towards sustainable modes of transport. The proposed mitigation measures are deemed an appropriate response to the impact of major events at the OVG Arena on the Etihad Campus.

Although the TA main report presents the overall junction results per each scenario, the full LINSIG modelling outputs per road and per overall junction are included in Appendix C of the TA. The delays and queues at each arm of the assessed junctions during the assessed time periods are also included in Appendix C of the TA. Queue length surveys have been undertaken during the assessed periods at the six assessed junctions and the results are included in Appendix D of this letter for reference.

The TA tables showing the overall modelling outputs are presented in a way that comparisons can be drawn between each assessed scenario on each junction. A naming convention has been assigned to accommodate them in the report more efficiently. However, for additional clarity, we have recreated these tables for the purposes of this response showing the full details of each assessed scenario on each junction and these are provided in Appendix C.

The traffic increases during each assessed future scenario are shown in Appendix A of this letter. These traffic diagrams are based on Manual Classified Counts, which are considered to be more robust and appropriate than ATC surveys. The detailed information provided within Appendix A of this letter will assist in the auditing of the LINSIG models.

A more detailed breakdown of the ancillary retail offer proposed at the arena has been provided by the scheme architects Populous. This confirms that there is 3,032 sq. m of food and beverage and 6,652 sq. m of space that can be classified separately hospitality. A higher floorspace figure for ancillary retail was provided with the planning application, on the basis that general circulation space within the concourse was included. This space should not have been classified as ancillary retail. In addition, the applicant confirms the following in relation to the planned operation of the ancillary retail units on different types of occasion.

- **Arena event days:** The applicant would class these occasions as 'core arena activity', and the use of all food and retail outlets on these occasions – as an integral part of the different fan experiences on offer - has been assessed in the TA;
- **Event days at the Etihad Stadium, no arena event:** Flexibility is sought for food and retail outlets to open in order to serve people who are attending events at the Etihad Campus, and are therefore already there. This activity will not therefore generate new trips. It is noted

that the operation of these outlets may also have a positive impact in encouraging spectators to 'arrive early' and 'stay late', thereby spreading the peak travel demand.

- **No event at arena or stadium:** on these occasions' flexibility has been sought to operate small scale canal-side ancillary retail space in order to serve employees or visitors to the campus and local residents, generating pass-by and linked trips. The number of wholly new trips that would be generated by this activity is considered to be minimal.

In respect of Section 6.3.15 of the TA, the mode split has been derived from available Travel Surveys undertaken on major event days at the Etihad Stadium in 2017, which have been validated with 'preferred transport option' mode share data derived from 2019 concerts at Etihad Stadium. Therefore, the trip generation analysis presented in Chapter 6 of the TA is considered to be robust. As stated in the above paragraphs responding to MCC Comment 1, the modal split for the arena has been calculated based on the existing situation, which is robust given it considers that currently there is greater use of private vehicles in comparison to what has been estimated for the future situation with the expanded CPZ.

With regards to Section 7.1.42 of the TA, the full LINSIG modelling outputs per road and per overall junction are included in Appendix C of the TA. The delays and queues at each arm of the assessed junctions during the assessed time periods are also included in Appendix C of the TA. Queue length surveys have been undertaken during the assessed periods at the six assessed junctions and the results are included in Appendix D of this letter for reference. In terms of Section 7.1.44 of the TA, this shows that the traffic impact of an arena event is less than that generated by a football match at the Etihad Stadium, because the traffic volumes expected are less overall.

With reference to Table 7.14 of the TA, it shows the maximum traffic generated by the arena per direction during the weekday development peak hours, 19:00-20:00 and 22:00 – 23:00 on locations of the wider highway network that have been identified and requested to be assessed previously by MCC. Detailed analysis of the arena traffic impact to the wider highway network is presented within the TAA, which should be read in conjunction with the submitted TA to support the planning application for the proposed arena.

MCC Comment 4: Junction Modelling in proximity to ASDA

"The Transport Assessment accompanying the planning application is extensive; nonetheless, it is not entirely sound as there are notable gaps in the information provided; this is the case, particularly, in relation to the assessment of traffic impacts. Bearing in mind that one of the busiest periods for a food retail store typically coincides with the network evening peak period, there is a concentration of traffic movements at the junction of Gibbon Street and Alan Turning Way potentially around the same time as visitors to the proposed venue start to arrive for an evening event. This is likely compounded given the potential for the event to coincide with an evening football match at the Etihad Stadium. In this scenario, some 86,500 person trips could be generated in the period up to 8pm, in addition to trips associated with the operation of both venues and their support staff. Highways impact and junction assessments Unsurprisingly, given the above scenario, the Transport Assessment has shown that there is likely to be a material impact on the operation of several junctions in the local area. However, the report does not include any assessment - or provide any results for an assessment – of the operation of the signalised Alan Turing Way / Gibbon Street junction, the principal access to the Eastlands Supercentre. Employing Classified Turning Counts (CTC) and LINSIG analysis, the Transport Assessment suggests that the following junctions,

near the Gibbon Street junction, are likely to be materially, and negatively, impacted by the proposal:

- *Alan Turing Way (A6010) / Ashton New Road (A662);*
- *Alan Turing Way (A6010) / Briscoe Lane; and*
- *Hulme Hall Lane (A6010) / Oldham Road (A62).*

The detrimental impact of the development upon the operation of adjacent junctions, along ASDA's primary customer corridor, is a concern in itself. Notwithstanding this, however, the absence of any assessment of the operation Gibbon Street is a material issue that needs further consideration by the applicant bearing in mind that the junction forms a gateway to the application site and, thus, potentially and directly shares traffic turning movements.

Coincidental events The Transport Assessment also notes that more than one event can occur at the venue on any given day, these being a matinee event (11,750-person capacity) and a subsequent evening event (23,500-person capacity). This being the case, it is entirely likely that the traffic movements for a matinee event and the follow-on evening event will coincide, generating an extended and uninterrupted period of above average traffic impacts.

Again, we would note that, should matinee and evening events occur consecutively, the associated traffic impacts may affect the operation of the Gibbon Street junction, yet there is no consideration of the impacts in the Transport Assessment. Similarly, as a food retailer, ASDA sees a typical peak trip generation around the weekend midday period. The coincidence of a matinee performance at the venue and an afternoon kick off at the stadium will see a significant increase in person trips on the transport network as visitors exit the venue and spectators arrive for the football match. Clearly, the operation of the stadium is well established, nonetheless, a matinee event, it is suggested, could generate a further 11,750 person trips within the weekend peak period. Again, no assessment of the operation of the Gibbon Street junction is provided, given such a scenario. Parking It is understood that approximately 3,700 on campus parking spaces will be available to the arena when operational.

However, the 3,700 spaces are shared with the stadium and the availability of spaces is reduced to just 500 should an event coincide with a football match. Consequently, there is significant potential for antisocial, fly parking. The Transport Assessment discusses this and suggests the implementation or extension of residents parking schemes. Clearly, therefore, there is recognition that antisocial car parking will be an issue. Further, the applicant has suggested that a car park management plan should be a condition of any planning consent. Whilst this is welcome, it is considered that car parking is a fundamental and material consideration for planning and, as such, a comprehensive review of potential issues and their mitigation should accompany the planning application.

Applicant Response (MCC Comment 4):

With regards to traffic impact on the local network, the TA has assessed the following six junctions, as agreed with TfGM/MCC:

- Oldham Road (A62)/Hulme Hall Lane (A6010);
- Hulme Hall Lane (A6010)/Bradford Road/Alan Turing Way (A6010)/Briscoe Lane;

- Alan Turing Way (A6010)/Sportcity Way;
- Ashton New Road (A662)/Rowsley Street;
- Alan Turing Way (A6010)/Ashton New Road (A662); and
- Alan Turing Way (A6010)/Ashton Old Road (A635).

The Alan Turing Way / Gibbon Street junction was not identified as requiring assessment during the scoping discussions and therefore this junction was not modelled. However, it is noted the Alan Turing Way / Gibbon Street junction is located between the Alan Turing Way / Sportcity Way and the Alan Turing Way / Ashton New Road junctions, immediately to the east of Etihad Campus and west of ASDA. Therefore, it is anticipated that the traffic levels and delays at the Alan Turing Way / Gibbon Street junction would be comparable to the ones reported at the two junctions to either side of it.

Notwithstanding, we believe that understanding the performance of the junction in detailed modelling terms is less important than whether the impacts can be managed. In response to this, it is noted that the Transport Team at Manchester City Football Club (MCFC) are currently responsible for working with TfGM to manage traffic on the local network pre and post events at the Etihad Stadium. The team have confirmed that there is currently an operational plan in place that includes a range of measures that actively manage traffic in 'real time'. The plan helps optimise traffic flow through all local junctions, including the Gibbon Street / Alan Turing Way junction, to manage traffic flows and reduce delays as far as possible. The Transport Team have provided a summary of the relevant measures within the operational plan as summarised below.

- During football match days, the permanent traffic signals at six junction locations along Alan Turing Way / Hulme Hall Lane from Ashton Old Road to Oldham Road are manually controlled and similarly at one location on the Oldham Road / Grimshaw Lane junction.
- Each of these locations are staffed with suitably qualified traffic management operatives coordinated with radio communications through a singular manager with an overview of the full picture.
- The traffic lights are sequenced such that as traffic is released between junctions, the signals at the next junction are activated to receive a green light so there is a continual flow of traffic and less stop start of traffic.
- At the Gibbon Street / Gate 3 / Alan Turing Way junction, consideration is also given to the volume of traffic placing demand on each phase. During the egress of a typical match (from final whistle to 1-hour post final whistle), the traffic demand has been observed as follows:
    - Gate 3 onto Alan Turing Way (approximately 600 vehicles);
    - Alan Turing Way heading south (approximately 600 vehicles);
    - Alan Turing Way heading north (approximately 300 vehicles); and
    - Gibbon Street onto Alan Turing Way (approximately 150 vehicles).
- The priority on each phase of the traffic signals is therefore adjusted to reflect the demand.
- Additional consideration is given to pedestrians crossing the carriageway and keeping the centre of the junction clear of vehicles and ready for the next phase to be activated.
- Similar considerations are applied at each of the signal control locations with central coordination through a single command structure.

The applicant is committed to working with the Transport Team at the Etihad Campus to develop the operational plan, where required, to extend its use to cover major event days at the arena. It is envisaged that this requirement will be secured by planning condition following the grant of any planning permission.

In terms of parking, the proposed extension of the RPZ will significantly improve parking behaviour and limit anti-social fly-parking in the streets around the campus, which will benefit the wider population. Fly-parking has been taken into account in the assessments, as the worst-case modal split and trip generation for the arena has been based on the existing parking provision around the campus, which includes those people using fly-parking.

The transport strategy focuses on areas that it can influence and hence proposes a significant mitigation strategy aimed at promoting sustainable modes over the use of the car, backed up by the extension to event day parking controls.

There will be a comprehensive and targeted communication strategy, especially on coincident event days to encourage attendees to use sustainable transport modes to access the campus. This will include electronic messaging to explain that on-site parking is only available on a pre-booked basis and that parking in unofficial car parks is strongly discouraged.

MCC Comment 5: Junction Modelling Specifications

*"**x7: Ashton New Road / Alan Turing Way***

Baseline:

- *No cruise times/speeds on any of the links*
- *Ashton New Road East arm hasn't been signalised*

Future:

- *Same as in base*

x21: Bradford Road / Hulme Hall Lane

Baseline:

- *No cruise times/speeds on any of the links*

Future:

- *Same as in base*

x20: Briscoe Lane / Hulme Hall Lane

Baseline:

- *No cruise times/speeds on any of the links*

Future:

- *Same as in base*

x1148: Alan Turing Way / Sportcity Way

Baseline:

- *Missing a 3-1 phase delay*
- *No cruise times/speeds on any of the links*

Future:

- *Same as in base*

x76: Oldham Road / Hulme Hall Lane / Queens Road

Baseline:

- *No issues*

Future:

- *Same as in base*

x10: Pottery Lane / Ashton Old Road / Alan Turing Way

Baseline:

- *No cruise times/speeds on any of the links*

Future:

- *Same as in base*

Rowsley Street Model

Baseline: *Junctions 8 file so unable to open*

Future: *Junctions 8 file so unable to open*

It should be noted that the Ashton New Rd (East) Lanes is signal controlled which hasn't been replicated in the model.

It should be highlighted that the modelling in principle, in terms of the methodology is acceptable, however, the actual results could vary given the flows used are incorrect.

Alan Turing Way/Gibbon Street

The junction of Alan Turing Way – Gibbon Street – Asda should also be included in the assessment work.

Other

Consideration should also be given to the following:

- *Impact on the network of traffic movements for a matinee event and the follow-on evening event coinciding and generating an extended and uninterrupted period of above average traffic.*
- *Impact of the coincidence of a weekend matinee performance at the venue and an afternoon kick off at the stadium on the retail access."*

Applicant Response (MCC Comment 5):

Various granular technical comments have been made regarding the modelling of the junctions within the TA. It is noted that the modelling undertaken has used signal specification provided by TfGM, and therefore the assessments provided are robust.

Regarding the Alan Turing Way / Gibbon Street junction, this is discussed in MCC Comment 4 above.

In terms of matinee arena events followed by evening arena events, the TA states that there may be occasions where more than one event is held per day (a matinee and an evening event) but these would generally be expected to be lower capacity events. It is not considered realistic that a matinee event be followed on the same day by a full-capacity concert event with an attendance of 23,500. This is because each event would have a specific stage configuration and the change in stage set-up would not be achievable in the time between these two events. Conversely, it is not realistic that two major concert events take place on the same day with a maximum attendance of 23,500 at each. Therefore, on the occasions where a matinee arena event is followed by an evening arena event, both events will have an approximate capacity of up to half the maximum capacity of a single evening arena event (up to 23,500 spectators) and subsequently the traffic impact of these arena events will be less when compared to a single evening event, which has been assessed as a worst-case scenario within the submitted TA.

The weekday evening concert scenario is considered to be the worst-case as the spectator arrival period overlaps with the highway network PM peak period and has been assessed within the submitted TA. Within the submitted TA, it has been shown that during weekend events the level of traffic flow on the network is less than on a weekday evening and therefore a weekend scenario should not require assessment as it is not the worst-case scenario.

MCC Comment 6: Operational and Physical Mitigation Strategy Measures - Applicant Response

During the virtual meeting with MCC officers on Wednesday 24 June 2020, further clarifications have been requested with regard to various issues which are largely related to the operational and physical measures proposed as per the mitigation strategy for the arena. These are dealt with fully in the submitted TA but some further commentary is provided as follows.

Resident Parking Zone Improvements

There is a firm commitment to deliver physical amendments to the Resident Parking Zone surrounding the Etihad Campus, such that it is able to operate on all days and across an expanded geographic area. The proposals for the extended RPZ have been presented in principle to the relevant authorities but will be subject to receiving the necessary approvals following further consultation with local residents, local Councillors, businesses and other stakeholders. In addition, the applicant intends to undertake discussions with authorities and collaborate on required consultation during construction, sufficient to allow the improvements to be operational prior to the arena opening.

There is a commitment, independently of the Council or residents, to underwrite both the initial cost of provision and the cost of ongoing operations and it has been agreed that the applicant will be responsible for the delivery of the RPZ improvements. The requirements in respect of the RPZ will be secured through the s106.

Sportcity Way/ Alan Turing Way Junction

MCC has requested that this junction be redesigned to incorporate an all-green pedestrian phase. It is noted that the crowd management strategy for the arena is to direct people towards Gate 1 (if heading North), where physical interventions are proposed to assist with pedestrian management. Pedestrians heading in all other directions will be directed towards the identified walking routes. Significant physical and operational interventions are proposed along these routes. As a result of this strategy, the pedestrian flows on Sportcity Way / Alan Turing Way are predicted to be very low in comparison with those at Gate 1. Furthermore, during peak times on event days, pedestrian flow onto Alan Turing Way

will be controlled by stewarding, not the traffic signals. Therefore, it is felt that the redesign of the Sportcity Way junction is not an appropriate location to apply mitigation, and we would ask that MCC review their request on this basis.

Walking and Cycling Route Improvements

The mitigation strategy presented within the submitted TA, includes improvements proposed to existing walking routes between the City Centre (Great Ancoats Street) and the Etihad Campus (subject to relevant approvals): notably the Ashton New Road Route, the City Link Route and the Ashton Canal Towpath Route. The proposed improvements include amongst others signage, lighting, markings and pavement reconfiguration. The proposed walking and cycling improvements, presented within the submitted TA, should be read in conjunction with the operational measures which include proposals for additional stewarding and management for certain events.

Whilst the framework for these mitigation measures has been carefully thought through and consulted on at a strategic level; the detail of the improvements and arrangements for delivery will be agreed following detailed consultation with all stakeholders. Therefore, it is felt that an appropriate way to secure the improvements would be via planning obligation.

Management of Pick-up/ Drop-off

As explained within the submitted TA, managing vehicles that pick-up and drop-off at the campus for arena event and days where there are coincident events on at the campus will be a key part of the Operational Plan. This will consider pick-up and drop-off by black cabs, private hire taxis including Uber vehicles and by private individuals.

Subject to agreement with MCC and other stakeholders, it is proposed to extend the existing taxi rank along the full length of Rowsley Street and onto Philips Park Road. To improve the use of the bays and reduce potential for vehicle/pedestrian conflict, temporary traffic management measures could be implemented via a temporary traffic regulation order, to provide a one-way route along Rowsley Street and Philips Park Road. This would improve the efficiency of the pick-up and drop off operation, resulting in an 'airport-style' operation managed by traffic marshals. It would also work in conjunction with the temporary closure of Ashton New Road for major event days. In this configuration space could be provided for approximately 70 vehicles in a managed ranking facility along the kerbside. Assuming an average of two ticket holders travelling in each vehicle, this equates to space for 140 visitors at any one time. This is then multiplied as vehicles arrive and depart providing even more capacity.

In discussion with MCC and all stakeholders, a strategy would be developed to limit the impact of taxis and private hire vehicles plying for hire around the campus, on residential streets and roads likely to be impacted by this activity. This would likely include setting up a 'geofence' around the campus and neighbouring streets to create a virtual boundary so that apps would not be able to push their services in these areas.

In terms of coaches, as stated within the submitted TA, provision for coach parking is provided within the car parking areas on campus. Spaces are provided on a flexible basis depending on the requirements of each event day.

Marshalling

The marshalling of dedicated coach, taxi/private hire and pick-up and drop-off facilities will be facilitated to ensure that these operations can be managed effectively and efficiently without adverse effects on other modes. Marshalling would be provided, as appropriate, to ensure that these are well used and well

managed. The applicant is committed to provide marshalling on a wide-scale basis during the initial period of operation of the arena as part of the testing and proving of operational plans. Beyond that the applicant will review and refine the extent of marshalling to focus on key areas identified during testing.

Shuttle Buses

The applicant has committed to providing shuttle bus services between the Etihad Campus and the City Centre in the same way as currently operate on stadium event days.

Metrolink and Public Bus Services

During the pre-application period, the future operation of the Metrolink and public bus services on event days has been discussed extensively. Both Metrolink and TfGM have confirmed that whilst they cannot forecast exactly what additional capacity will be available to meet future demand on event days; as they are effectively commercial services it is in their interest to provide as many service enhancements as they can to meet demand. This will be reviewed with the arena and campus operational teams as part of the planning process for each event on a rolling and ongoing basis.

Yours sincerely

on behalf of Buro Happold Limited



George Magnisalis
Principal Transport Planner
Tel 020 7927 9700
email george.magnisalis@BuroHappold.com

BURO HAPPOLD

Appendix A – Traffic Survey Data

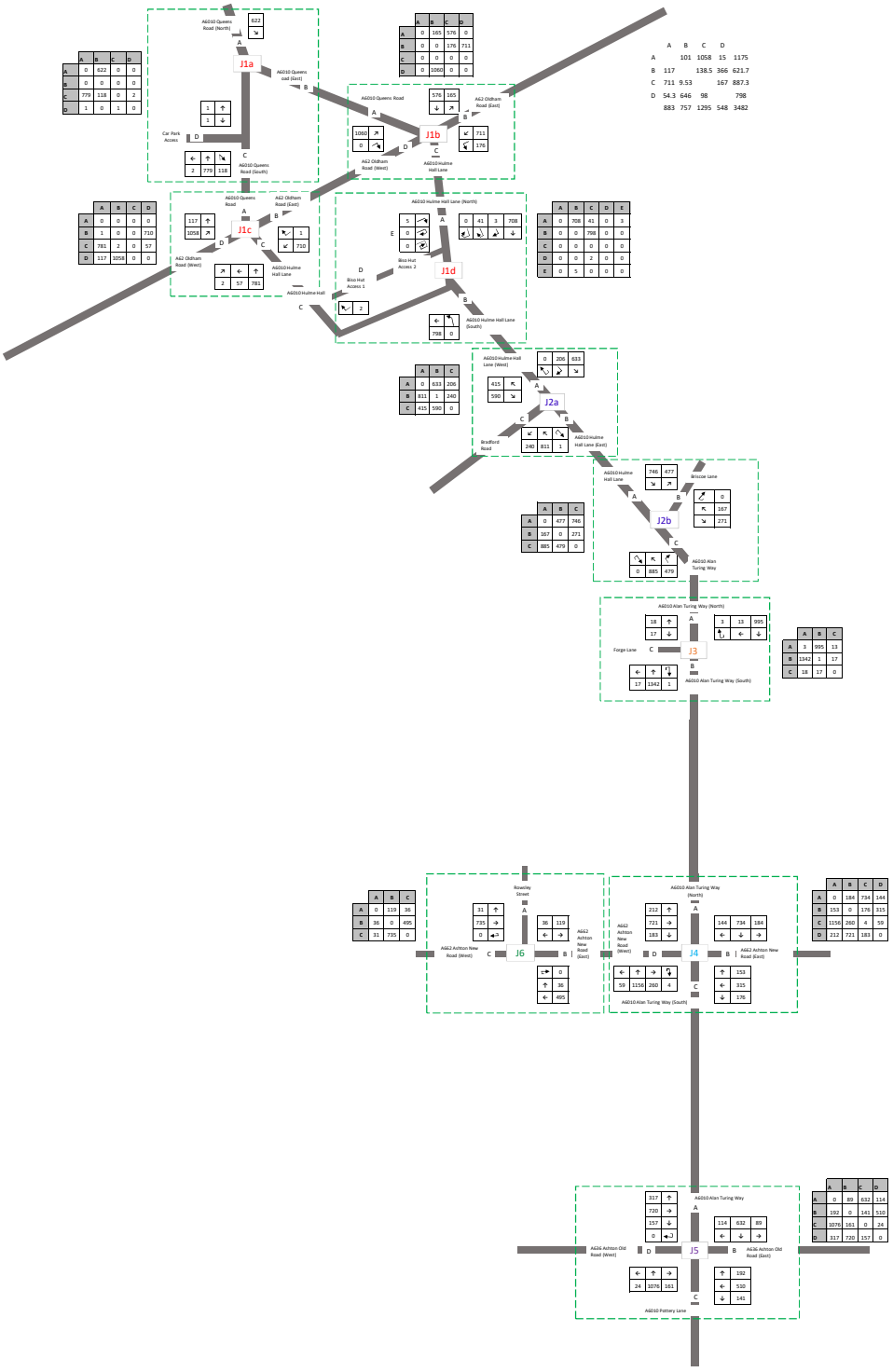
2019 Surveyed Flows

Thurs 7th November 2019

Selected Period

17:00-18:00

Non-Match Day

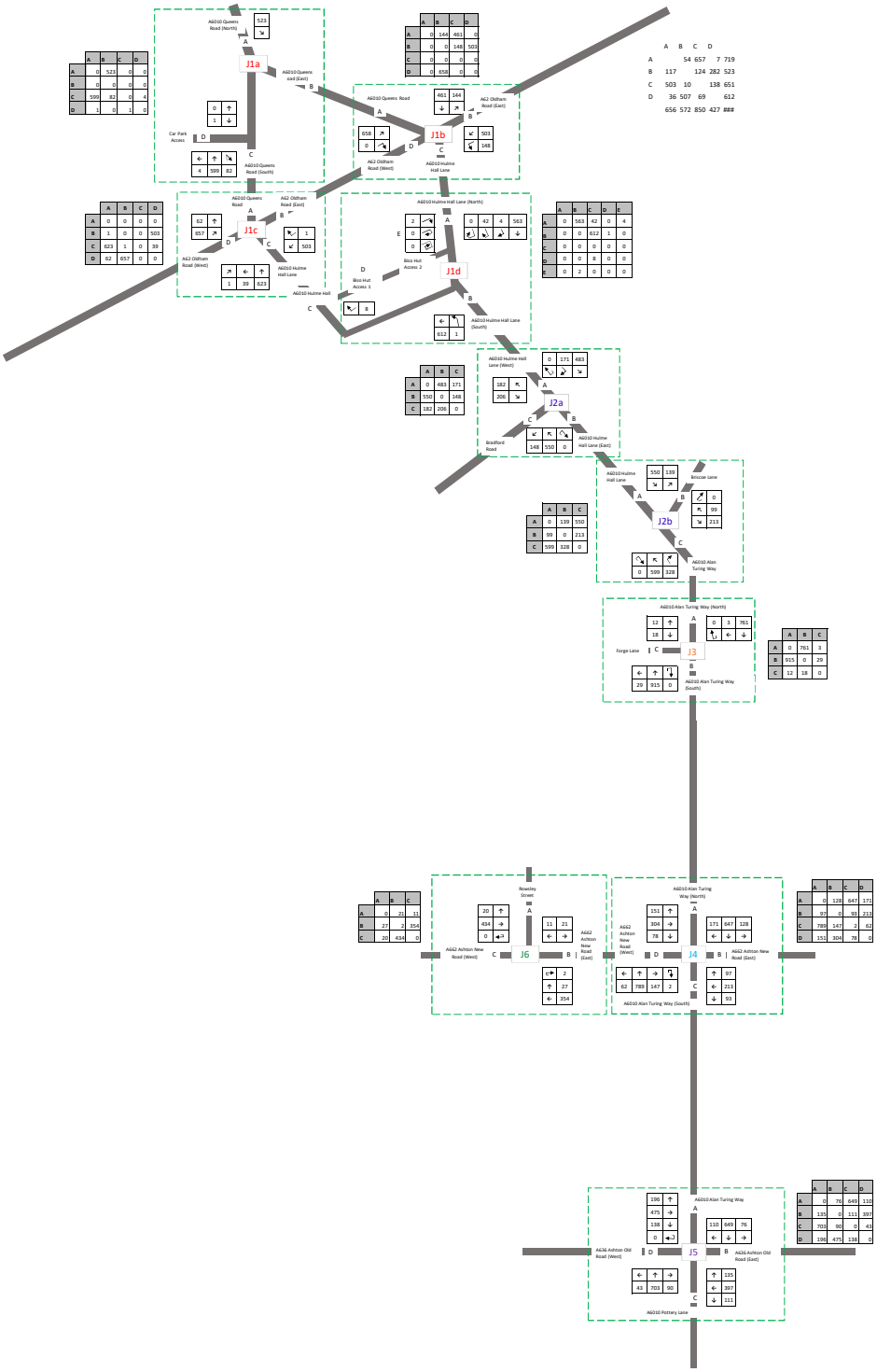


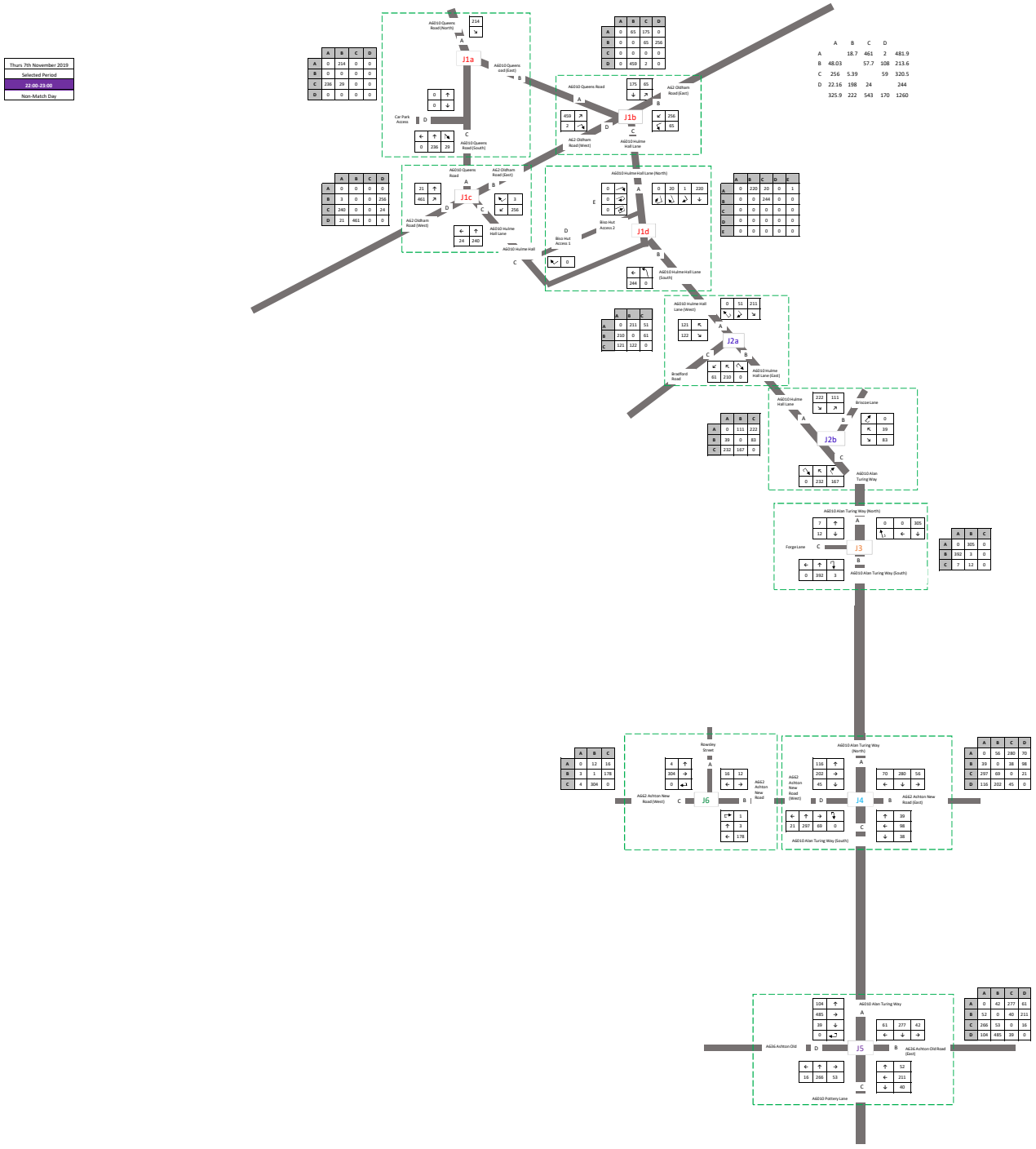
Thurs 7th November 2019

Selected Period

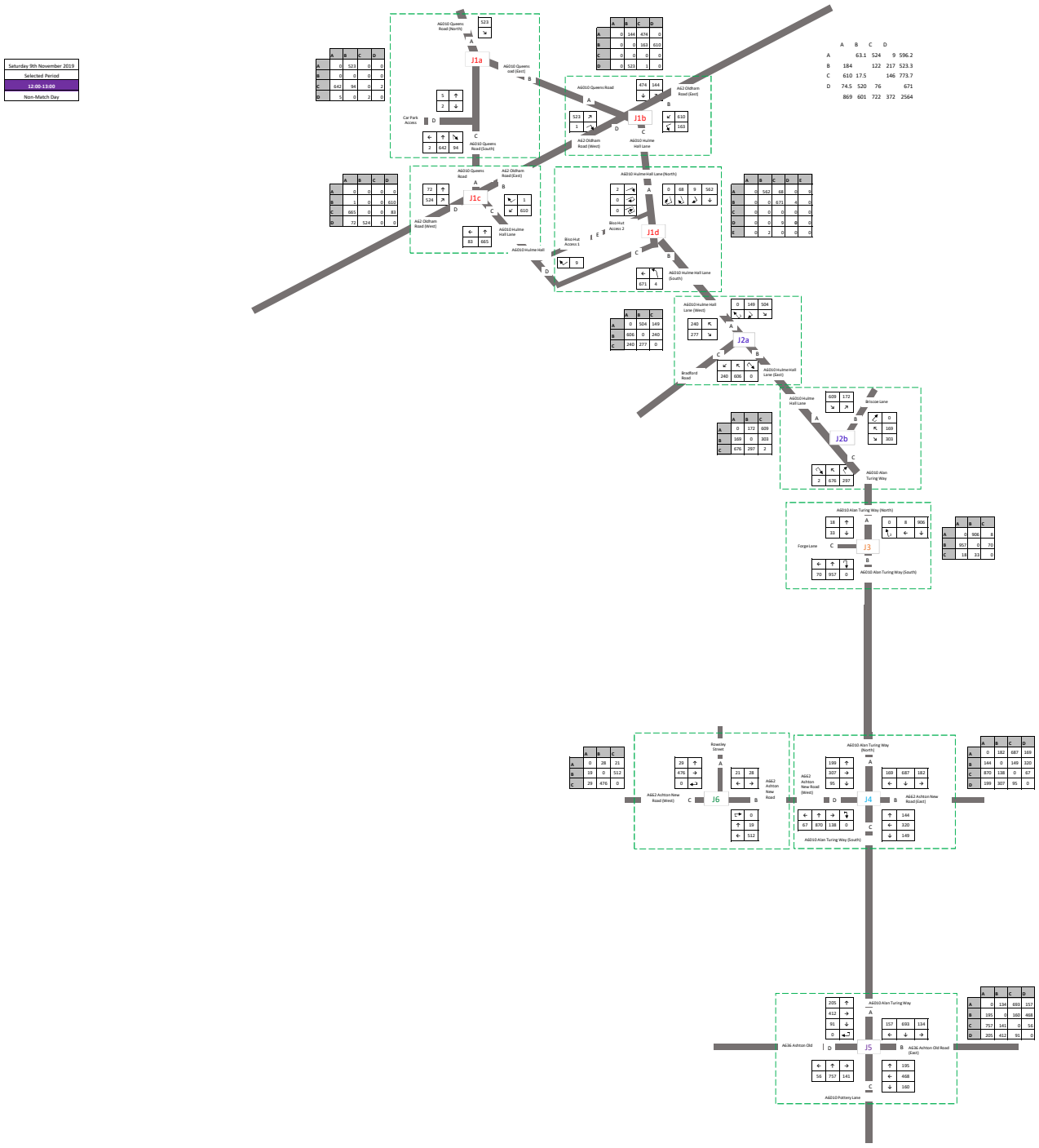
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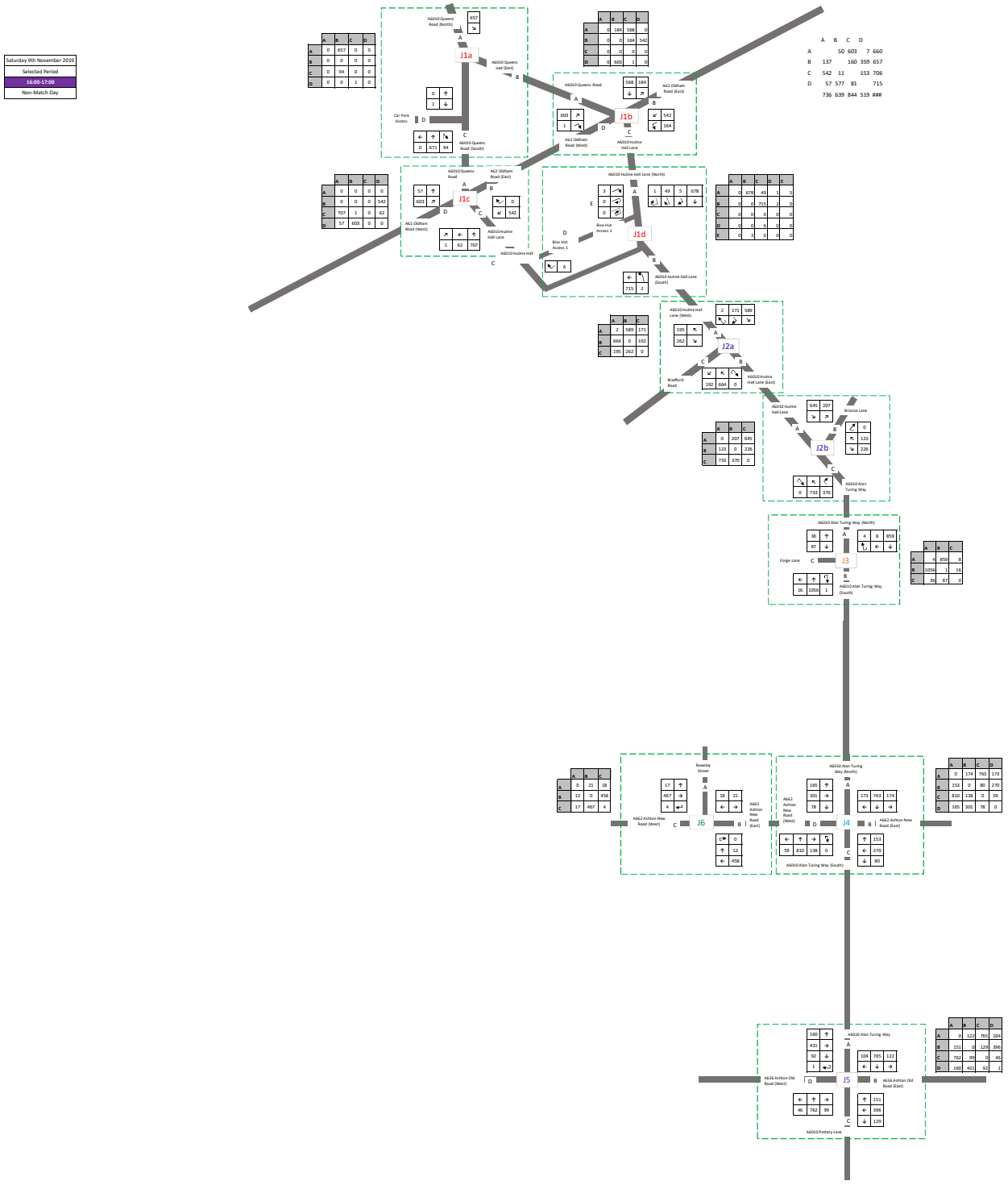
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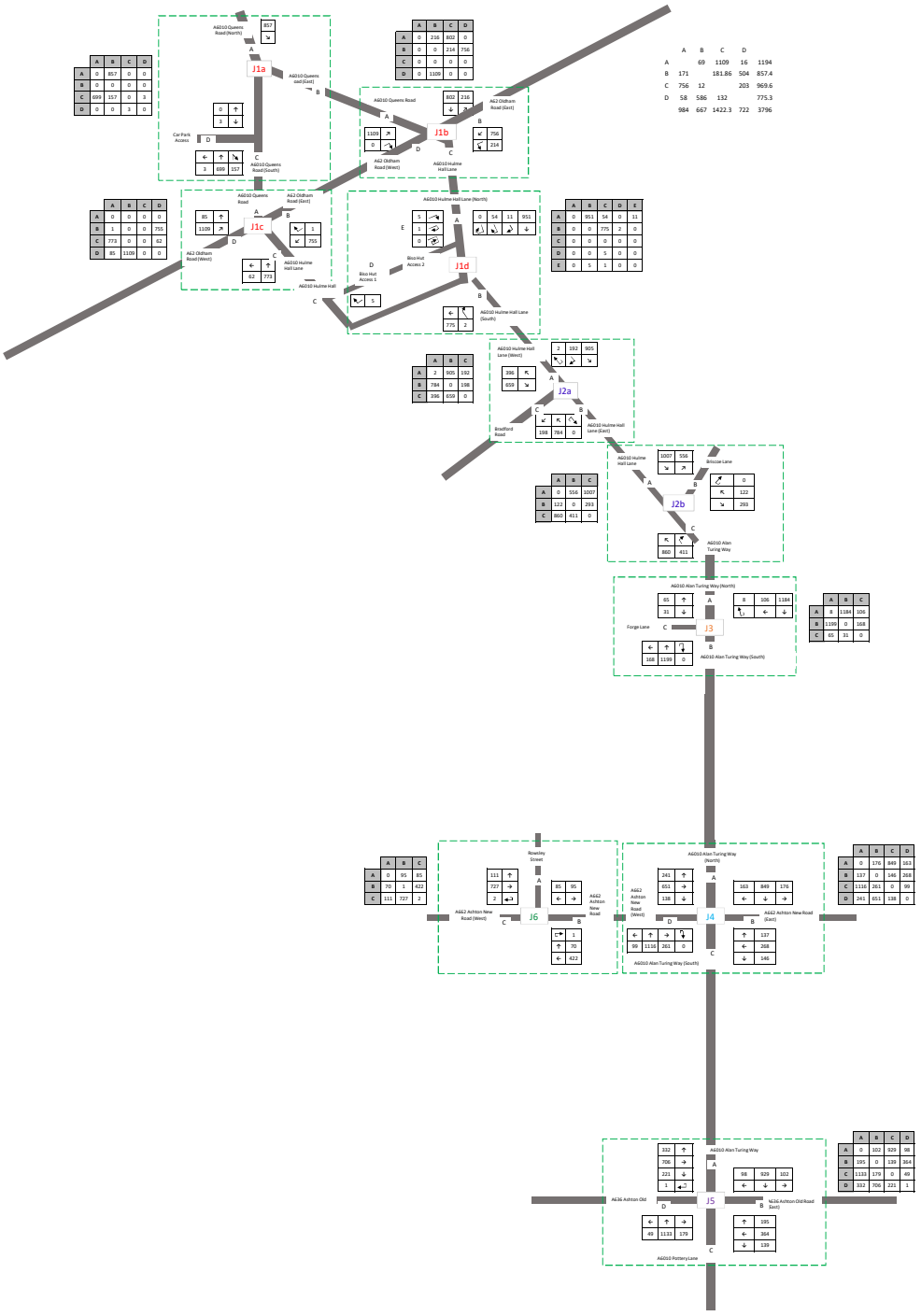


	A	B	C	D	
A		18.7	461	2	481.9
B	48.03		57.7	108	213.6
C	256	5.39		59	320.5
D	22.16	198	24		244
	325.9	222	543	170	1260

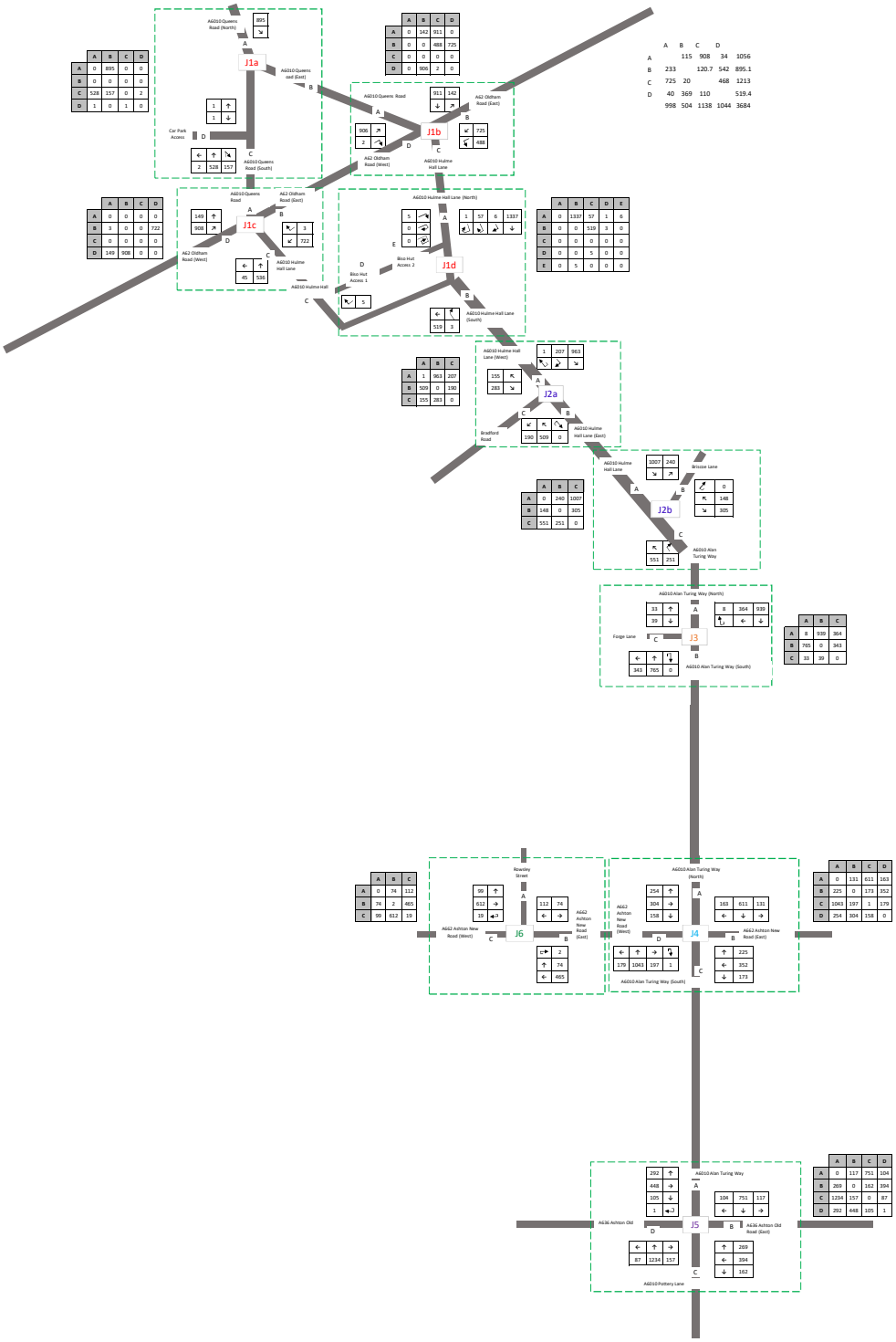

Saturday 9th November 2019
Selected Period
12:00-13:00
Non-Match Day
J1a
J1b
J1c
J1d
J2a
J2b
J3
J4
J5
J6
A6010 Queens Road (North)
A6010 Queens Road (East)
A6010 Queens Road (South)
A62 Oldham Road (East)
A62 Oldham Road (West)
A6010 Hulme Hall Lane
A6010 Hulme Hall Lane (North)
A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane (West)
A6010 Hulme Hall Lane (East)
Bradford Road
Bridge Lane
A6010 Alan Turing Way
A6010 Alan Turing Way (North)
A6010 Alan Turing Way (South)
Forge Lane
Rowsley Street
A662 Ashton New Road
A662 Ashton New Road (West)
A662 Ashton New Road (East)
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A6010 Pottery Lane
Car Park Access
Bloo Hut Access 1
Bloo Hut Access 2

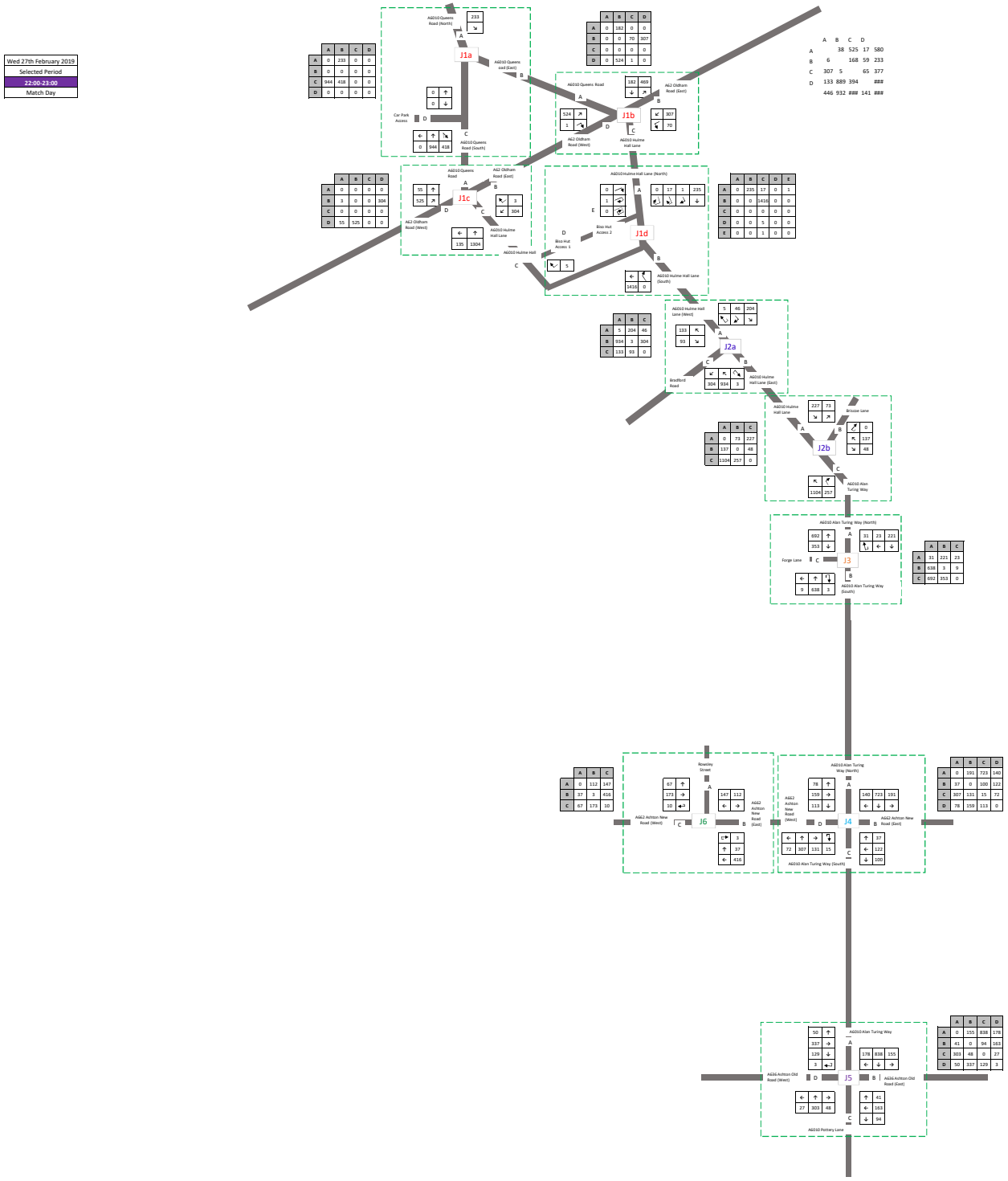

Saturday 9th November 2019
Selected Period
16:00-17:00
Non-Match Day
J1a
J1b
J1c
J1d
J2a
J2b
J3
J4
J5
J6
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A6010 Queens Road (East)
A6010 Queens Road (South)
A62 Oldham Road (East)
A62 Oldham Road (West)
A6010 Hulme Hall Lane
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A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane (West)
A6010 Hulme Hall Lane (East)
Bradford Road
Briscoe Lane
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Forge Lane
Rosebery Street
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A662 Ashton New Road (East)
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A636 Ashton Old Road (East)
A6010 Pottery Lane
Car Park Access
Bloo Hut Access 1
Bloo Hut Access 2

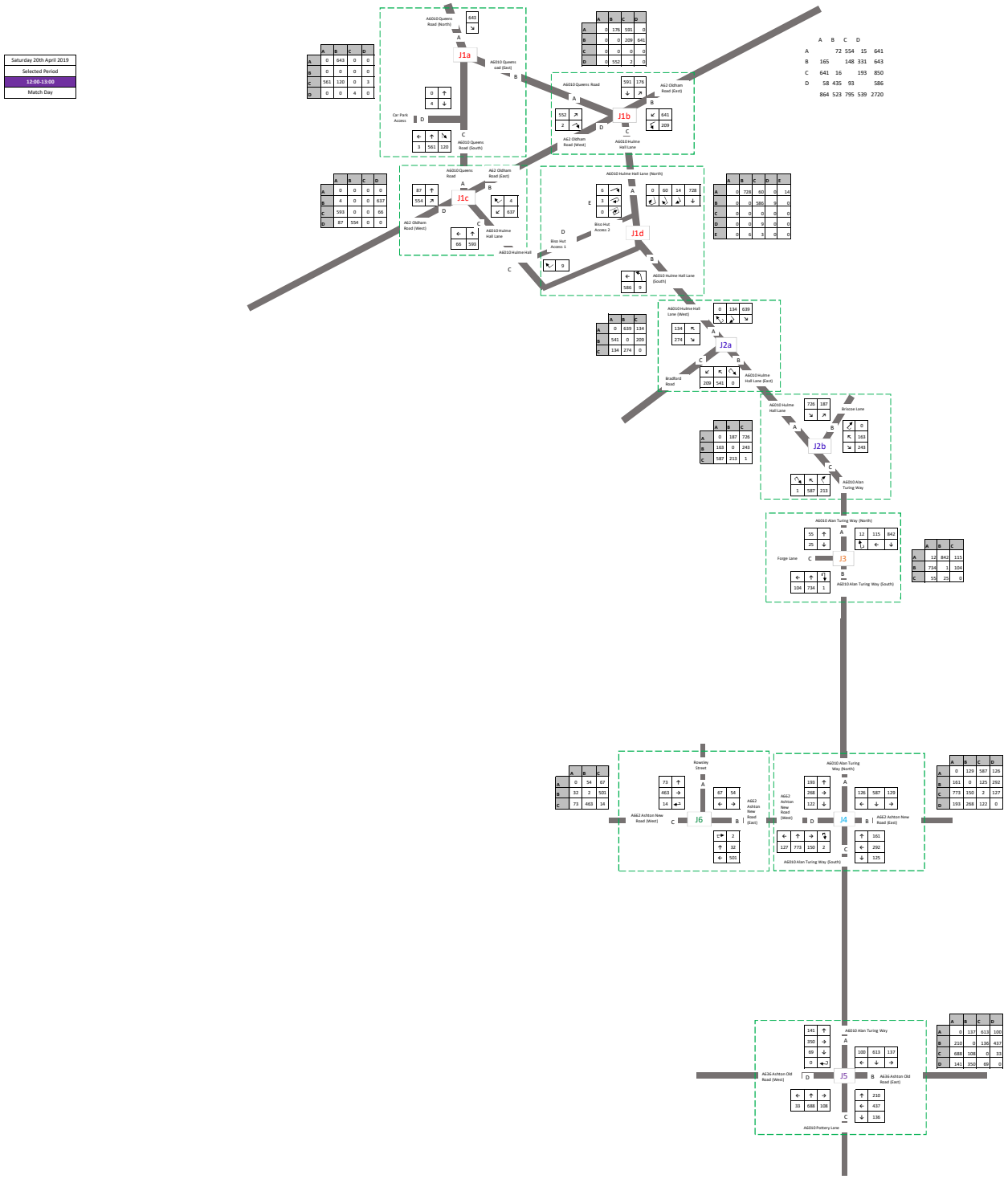
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Selected Period
17:00-18:00
Match Day

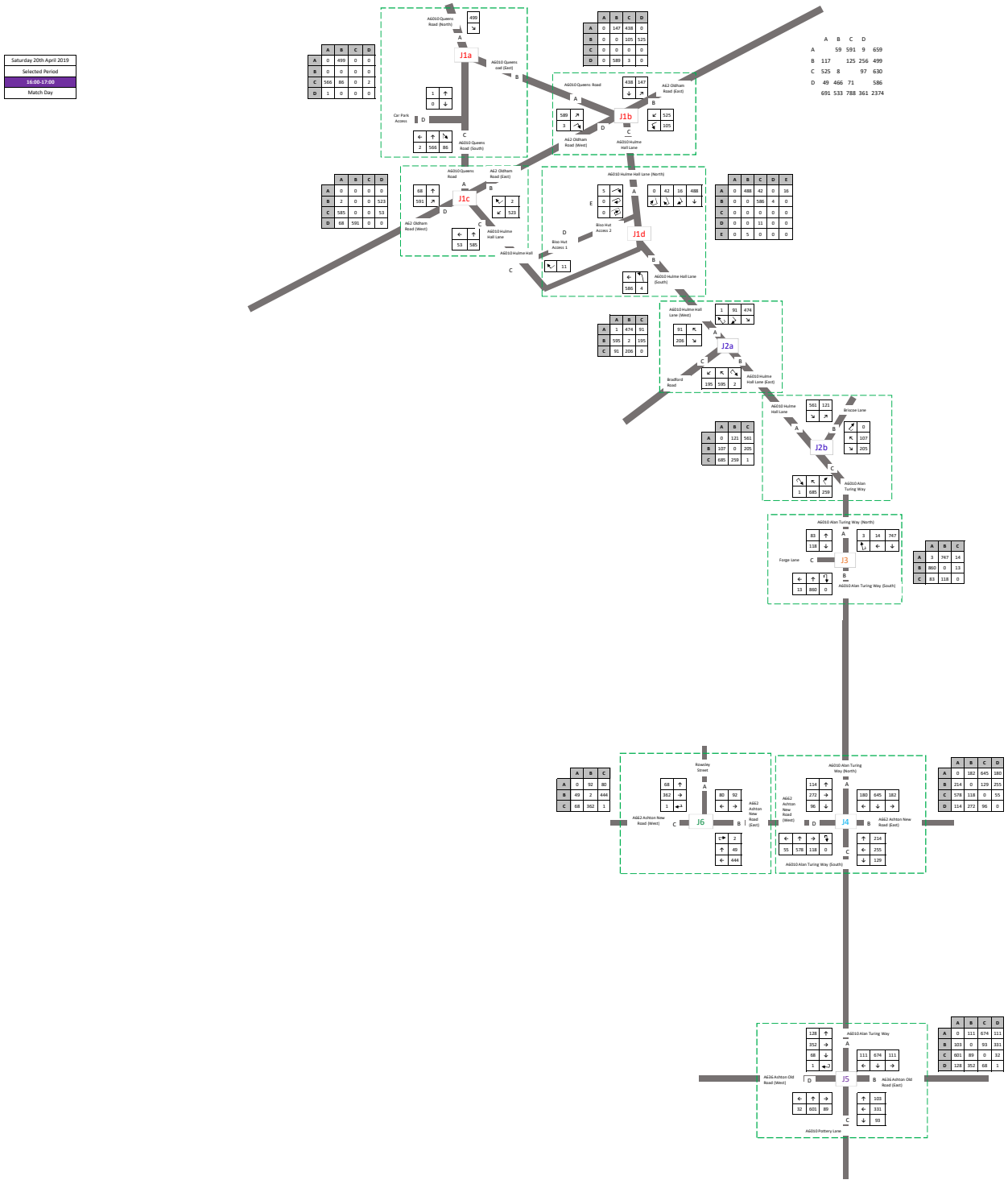


Wed 27th February 2019
Selected Period
19:00-20:00
Match Day




Wed 27th February 2019
Selected Period
22:00-23:00
Match Day
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J1b
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J1d
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J2b
J3
J4
J5
J6
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A6010 Queens Road (East)
A6010 Queens Road (South)
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A62 Oldham Road (West)
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A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane (West)
A6010 Hulme Hall Lane (East)
Bradford Road
Car Park Access
Bloo Hut Access 1
Bloo Hut Access 2
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A6010 Alan Turing Way (North)
A6010 Alan Turing Way (South)
Forge Lane
Briscoe Lane
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Rowsley Street
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A6010 Pottery Lane

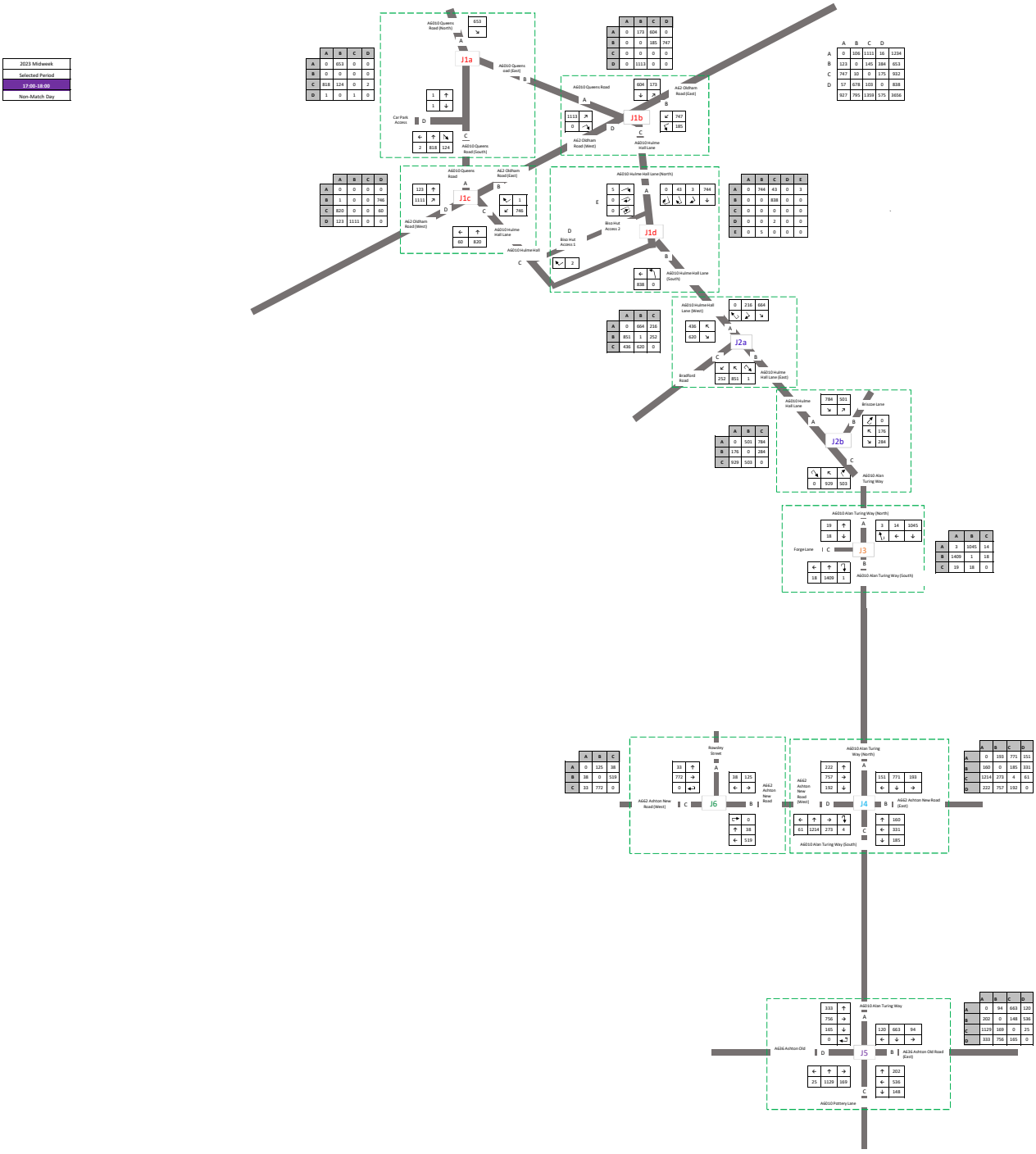

Saturday 20th April 2019
Selected Period
12:00-13:00
Match Day
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J1b
J1c
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J2b
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J6
A6010 Queens Road (North)
A6010 Queens Road (East)
A6010 Queens Road (South)
A62 Oldham Road (East)
A62 Oldham Road (West)
A6010 Hulme Hall Lane
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Bradford Road
Briscoe Lane
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Forge Lane
Rosebay Street
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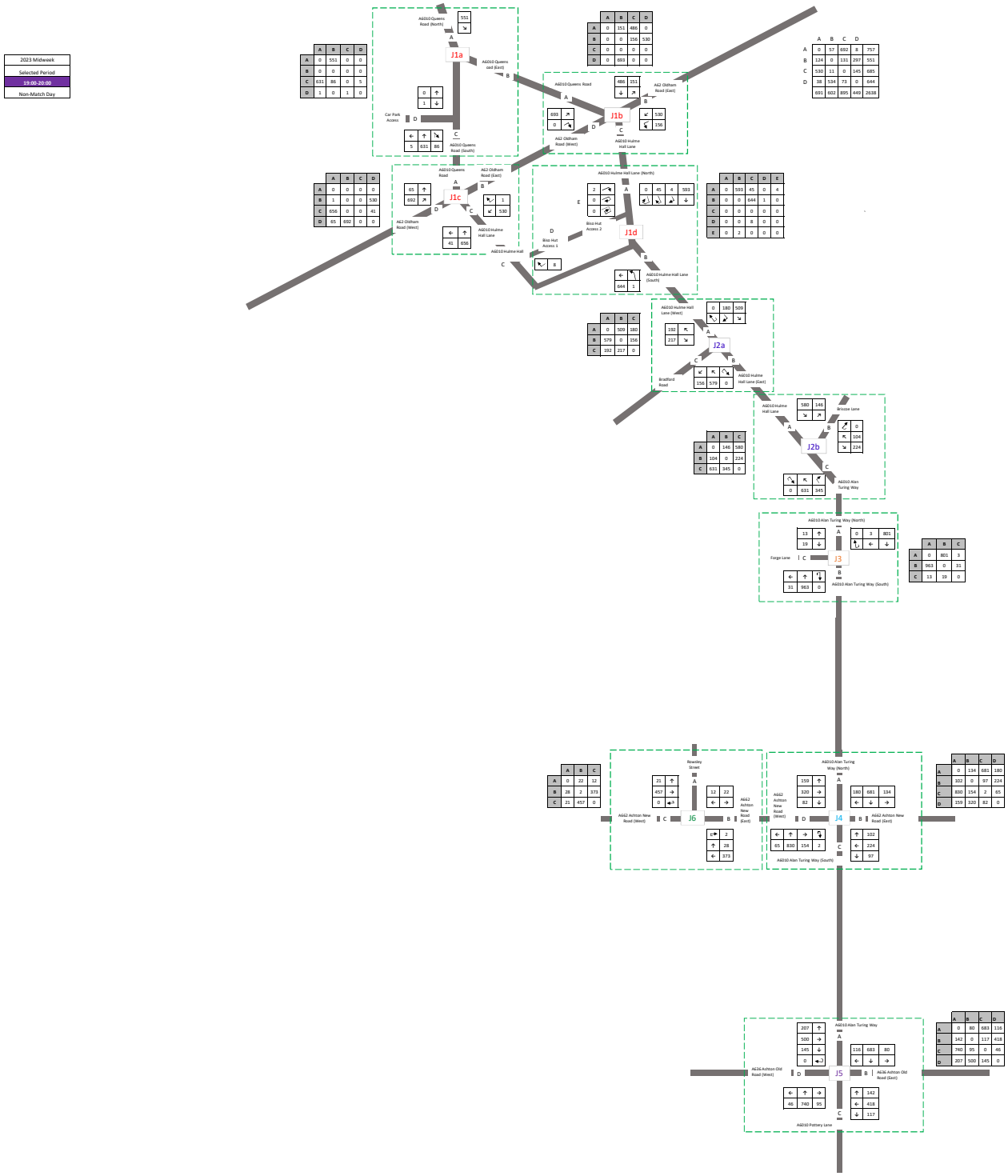

Saturday 20th April 2019
Selected Period
16:00-17:00
Match Day
J1a
J1b
J1c
J1d
J2a
J2b
J3
J4
J5
J6
A6010 Queens Road (North)
A6010 Queens Road (East)
A6010 Queens Road (South)
A6010 Queens Road
A62 Oldham Road (East)
A62 Oldham Road (West)
A6010 Hulme Hall Lane
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Bradford Road
Briscoe Lane
A6010 Alan Turing Way
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Forge Lane
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A6010 Pottery Lane
Car Park Access
Bloo Hut Access 1
Bloo Hut Access 2

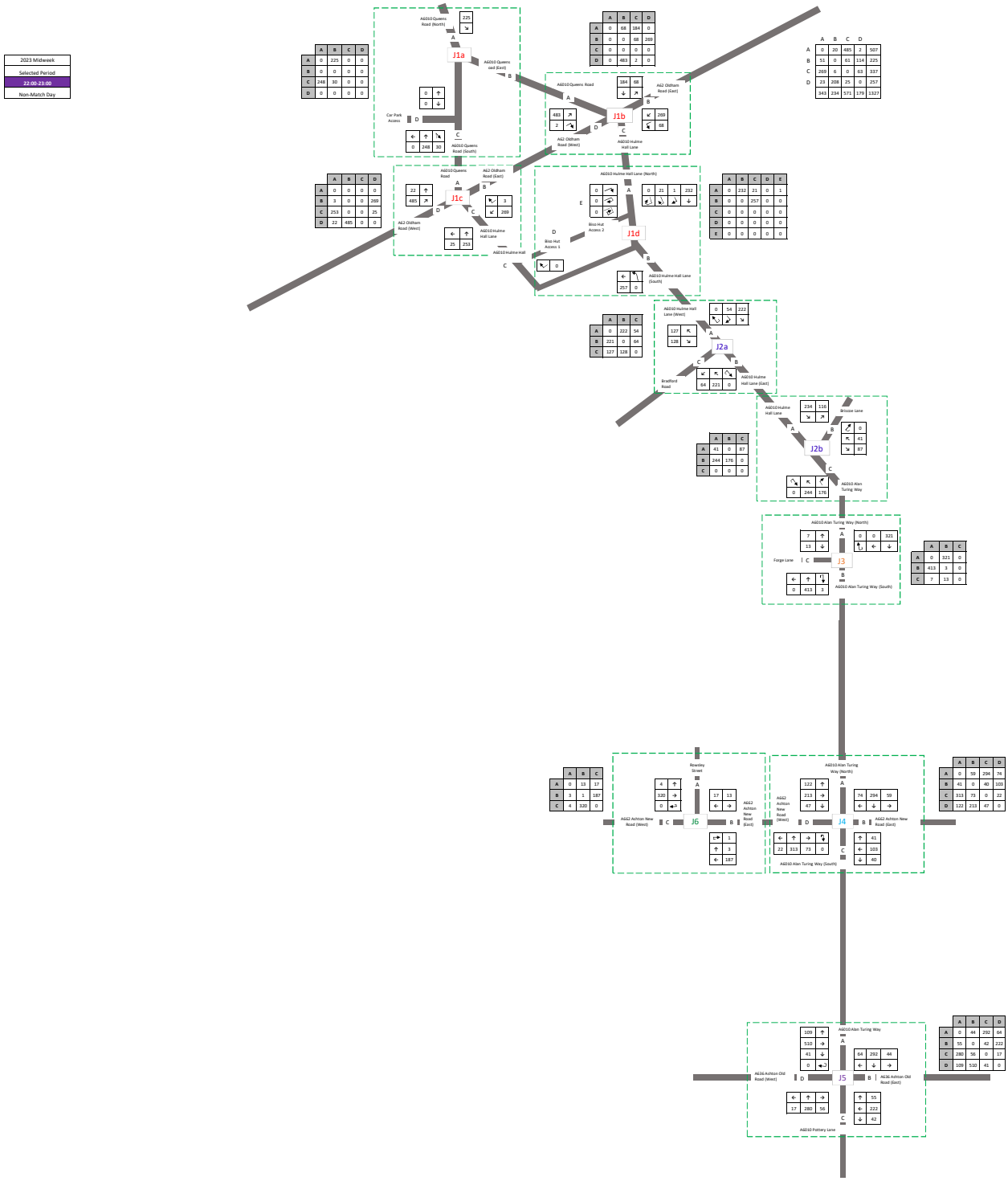
2023 Future Baseline Flows

TEMPRO	AM Peak			Interpeak			PM Peak			Off Peak			Saturday (all times)		
Factors	Att	Pro	Average	Att	Pro	Average	Att	Pro	Average	Att	Pro	Average	Att	Pro	Average
2019 - 2023	1.0786	1.0371	1.05785	1.0636	1.0412	1.0524	1.0621	1.0379	1.05	1.0713	1.0345	1.0529	1.0696	1.0398	1.0547

Manchester "district"


2023 Midweek
Selected Period
17:00-18:00
Non-Match Day
J1a
J1b
J1c
J1d
J2a
J2b
J3
J4
J5
J6


2023 Midweek
Selected Period
19:00-20:00
Non-Match Day
J1a
J1b
J1c
J1d
J2a
J2b
J3
J4
J5
J6
A6010 Queens Road (North)
A6010 Queens Road (East)
A6010 Queens Road (South)
A62 Oldham Road (West)
A62 Oldham Road (East)
A6010 Hulme Hall Lane
A6010 Hulme Hall Lane (North)
A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane (West)
A6010 Hulme Hall Lane (East)
Bradford Road
Bloo Hut Access 1
Bloo Hut Access 2
Car Park Access
Bridge Lane
A6010 Alan Turing Way
A6010 Alan Turing Way (North)
A6010 Alan Turing Way (South)
Forge Lane
Rowsley Street
A662 Ashton New Road (West)
A662 Ashton New Road (East)
A6010 Alan Turing Way (North)
A6010 Alan Turing Way (South)
A636 Ashton Old Road (West)
Ashton Old Road (East)
A6010 Pottery Lane

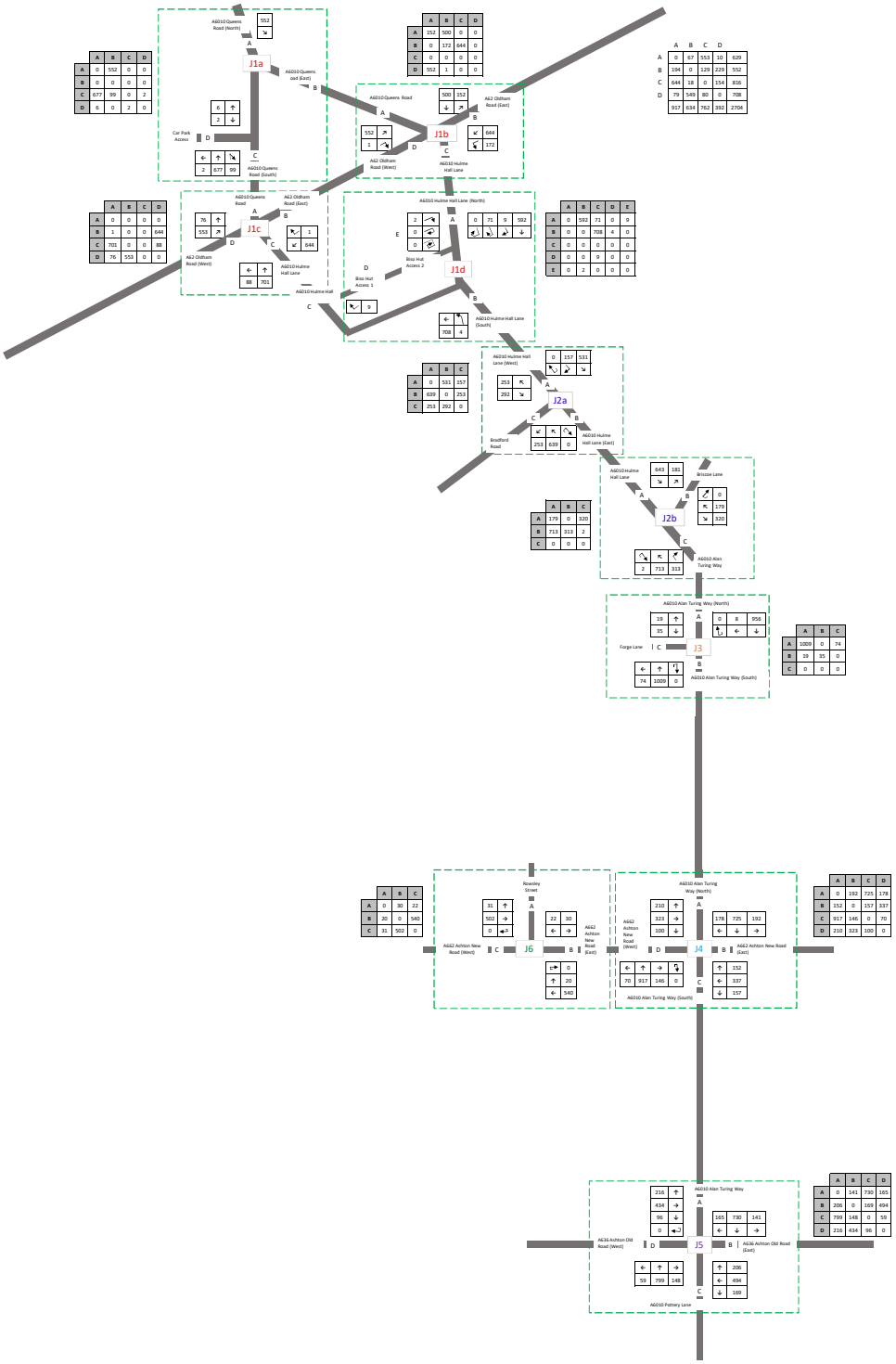

2023 Midweek
Selected Period
22:00-23:00
Non-Match Day
J1a
J1b
J1c
J1d
J2a
J2b
J3
J4
J5
J6
A6010 Queens Road (North)
A6010 Queens Road (East)
A6010 Queens Road (South)
A62 Oldham Road (West)
A62 Oldham Road (East)
A6010 Hulme Hall Lane
A6010 Hulme Hall Lane (North)
A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane (West)
A6010 Hulme Hall Lane (East)
Bradford Road
Bloo Hut Access 1
Bloo Hut Access 2
Car Park Access
Bridge Lane
A6010 Alan Turing Way
A6010 Alan Turing Way (North)
A6010 Alan Turing Way (South)
Forge Lane
Rowsley Street
A662 Ashton New Road (West)
A662 Ashton New Road (East)
A6140 Ashton Old Road (East)
A6136 Ashton Old Road (West)
A6010 Pottery Lane

2023 Saturday

Selected Period

12:00-13:00

Non-Match Day

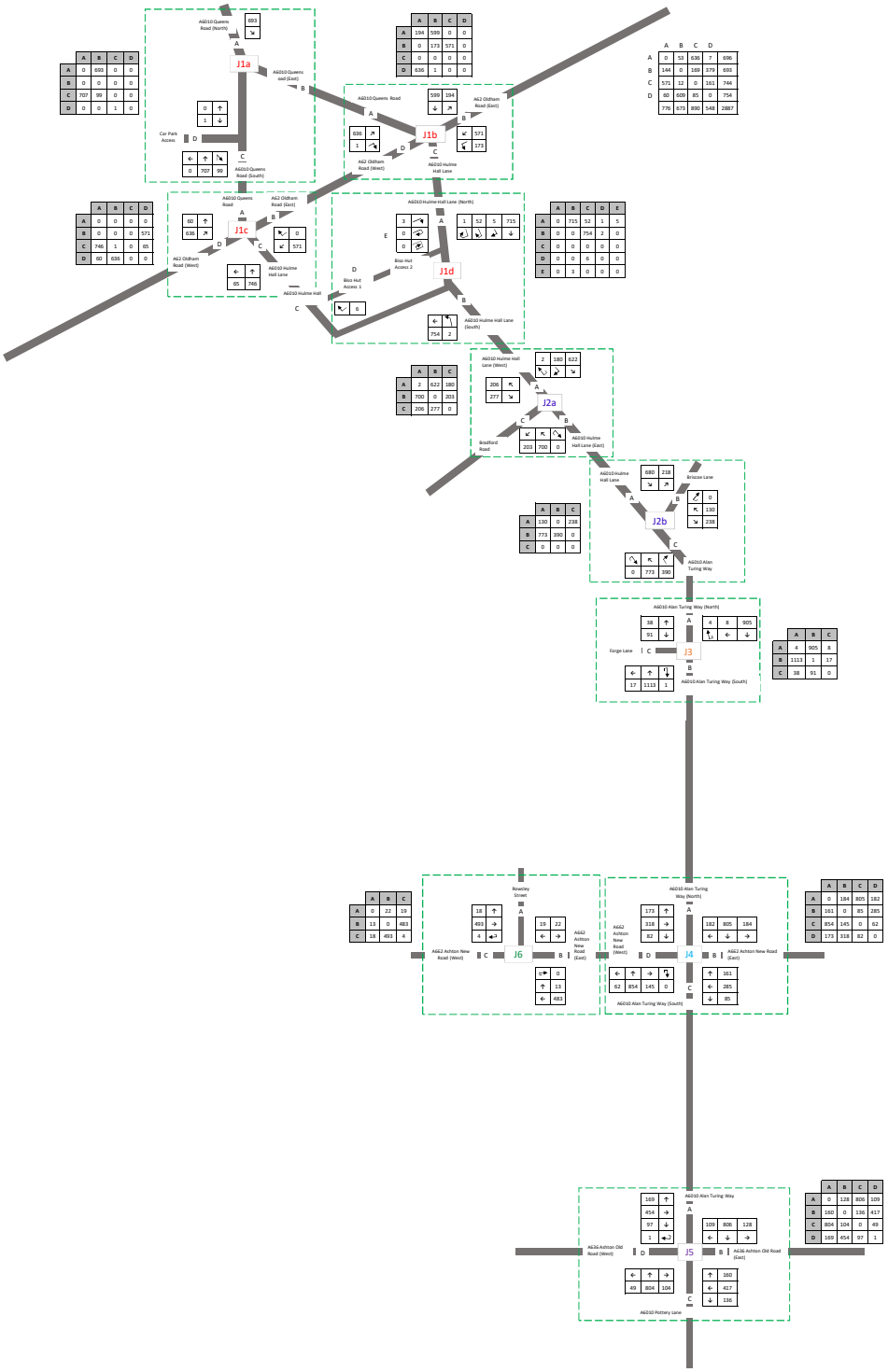


2023 Saturday

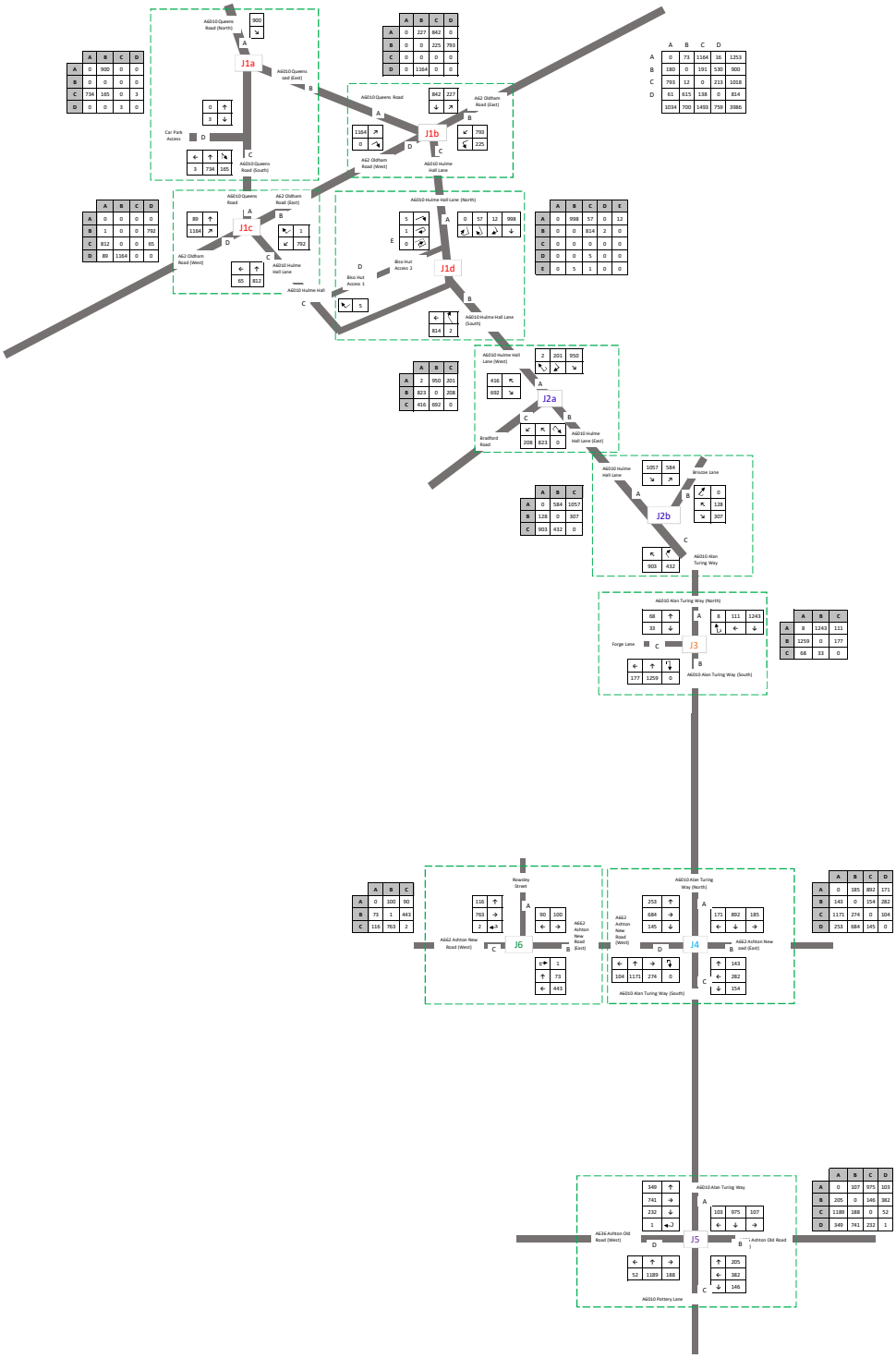
Selected Period

16:00-17:00

Non-Match Day



2023 Midweek
Selected Period
17:00-18:00
Match Day

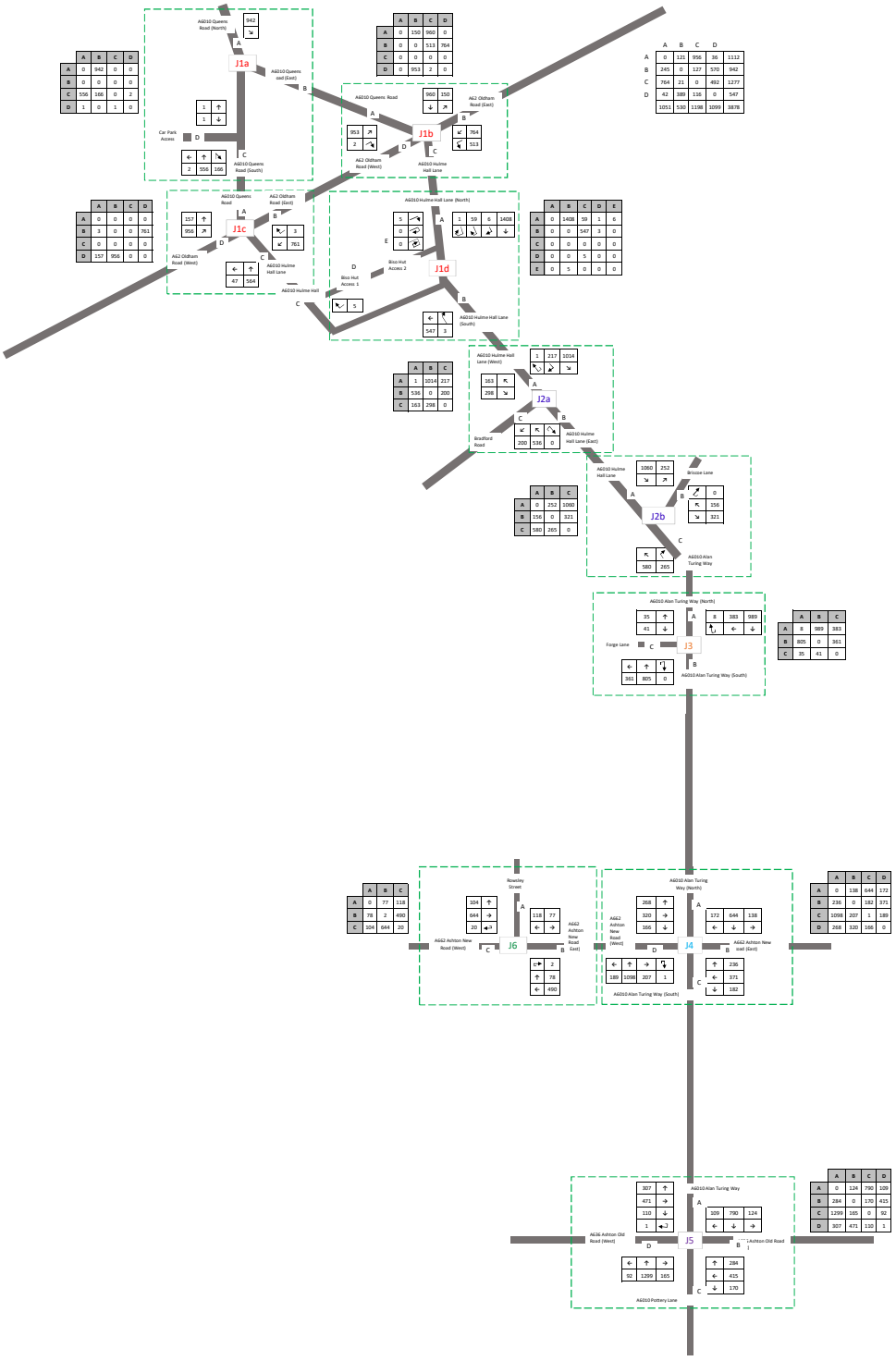


2023 Midweek

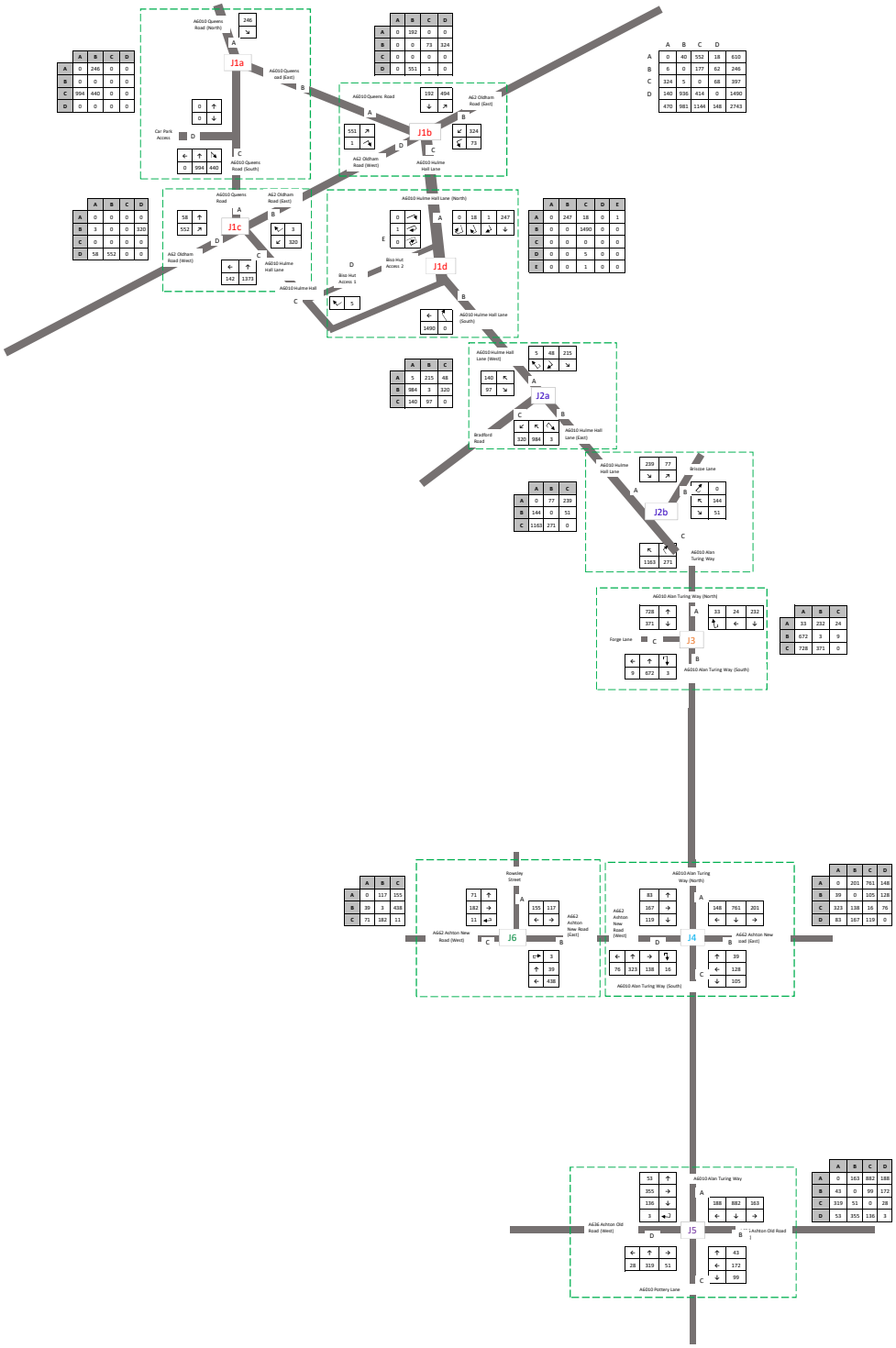
Selected Period

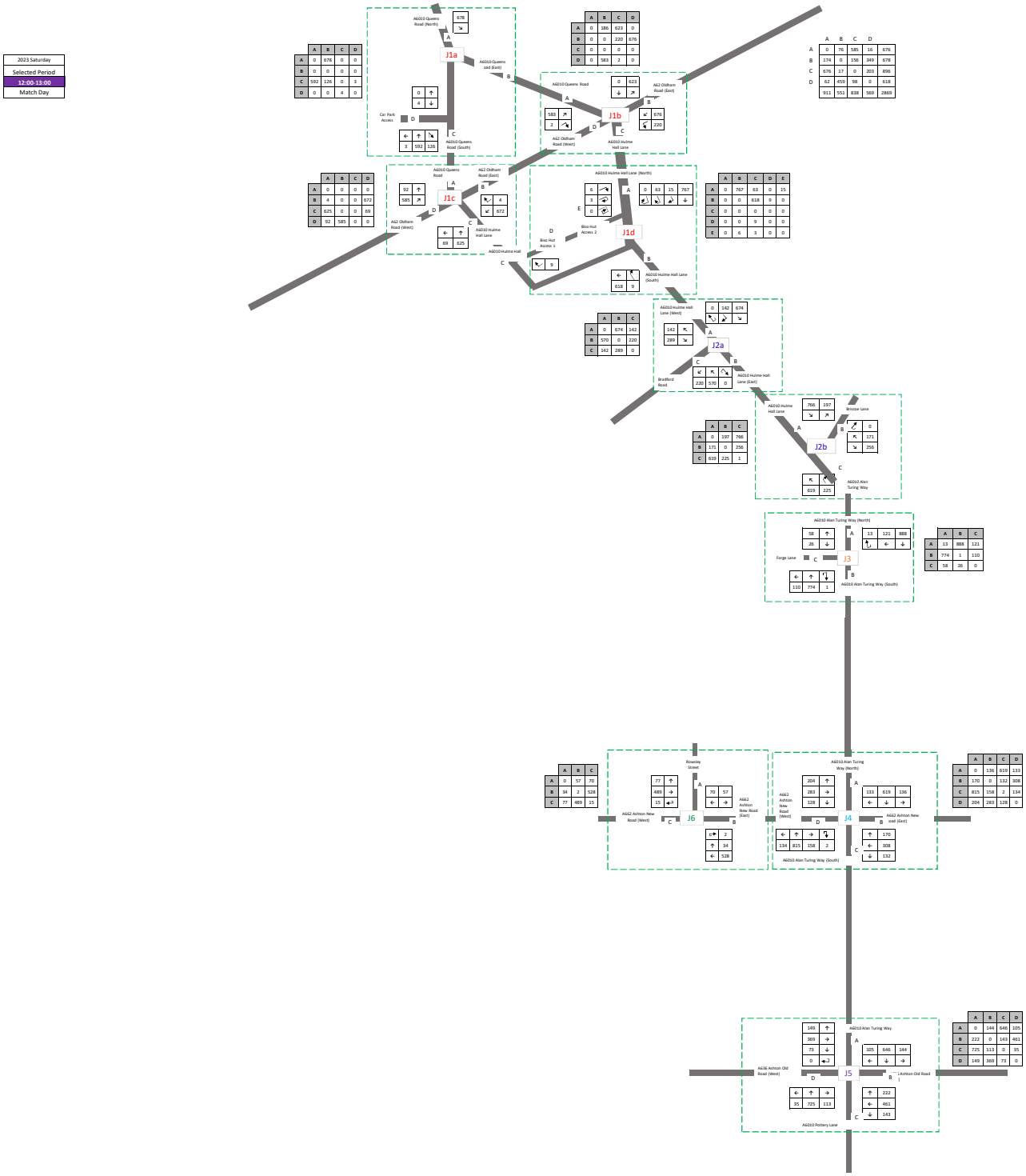
19:00-20:00

Match Day



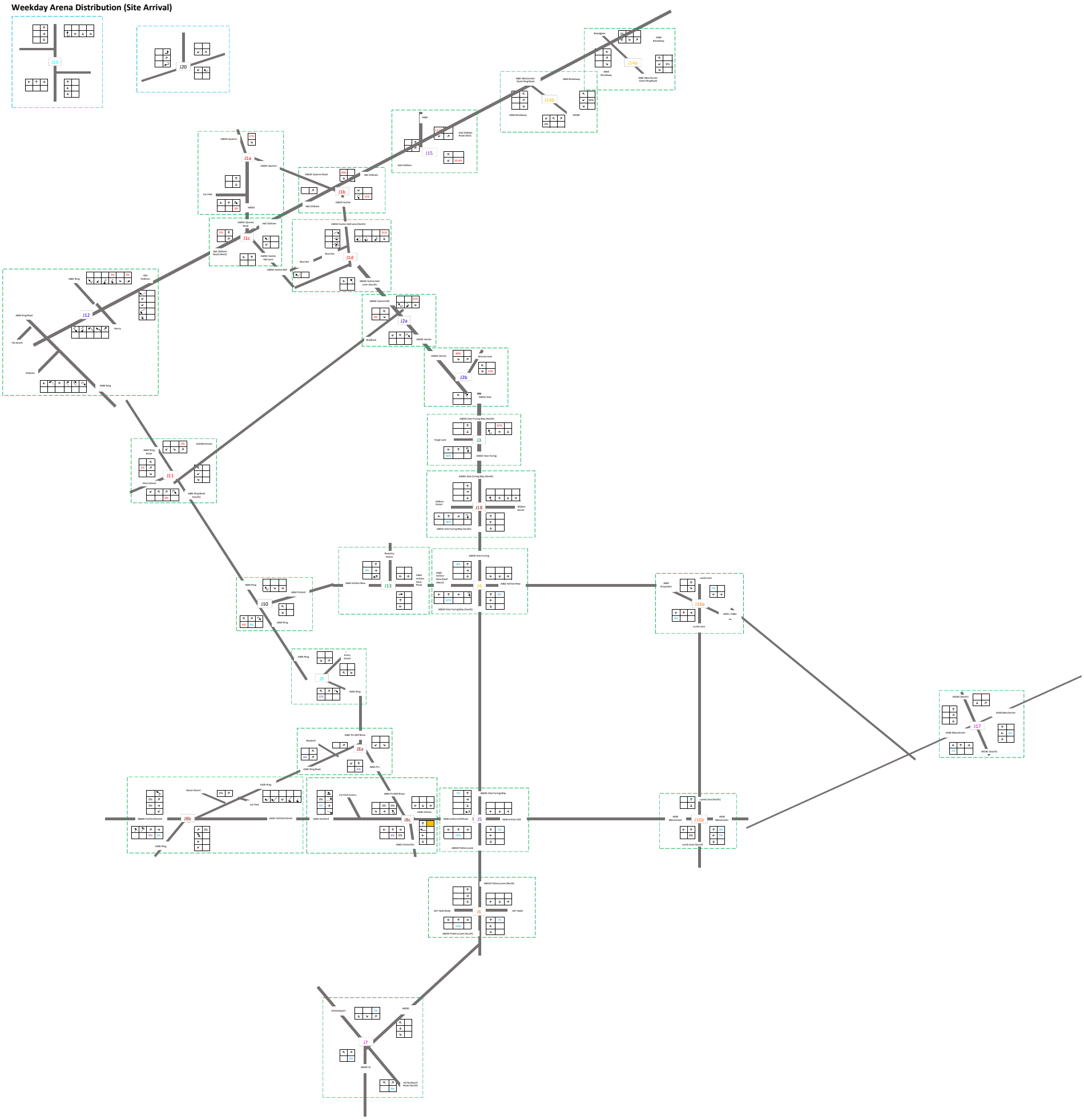
2023 Midweek
Selected Period
22:00-23:00
Match Day



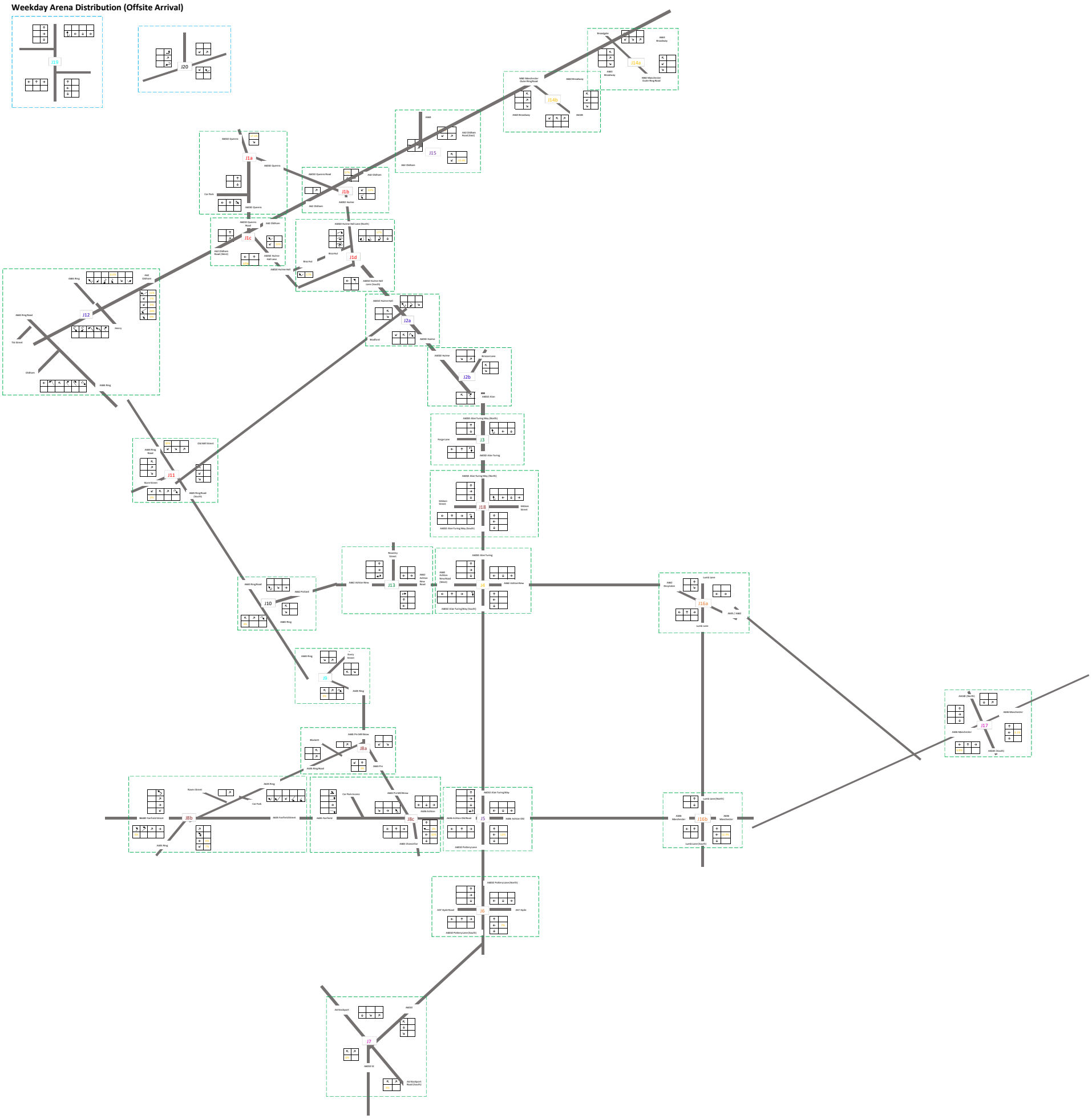

2023 Saturday
Selected Period
12:00-13:00
Match Day
J1a
J1b
J1c
J1d
J2a
J2b
J3
J4
J5
J6
A6010 Queens Road (North)
A6010 Queens Road (East)
A6010 Queens Road (South)
A62 Oldham Road (East)
A62 Oldham Road (West)
A6010 Hulme Hall Lane
A6010 Hulme Hall Lane (North)
A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane (West)
A6010 Hulme Hall Lane (East)
Car Park Access
Bloo Hut Access 1
Bloo Hut Access 2
Bradford Road
Bristole Lane
A6010 Alan Turing Way
A6010 Alan Turing Way (North)
A6010 Alan Turing Way (South)
Forge Lane
Rowsley Street
A662 Ashton New Road (West)
A662 Ashton New Road (East)
A6010 Alan Turing Way (North)
A6010 Alan Turing Way (South)
A6010 Alan Turing Way
A636 Ashton Old Road (West)
Ashton Old Road
A6010 Pottery Lane

Distributions

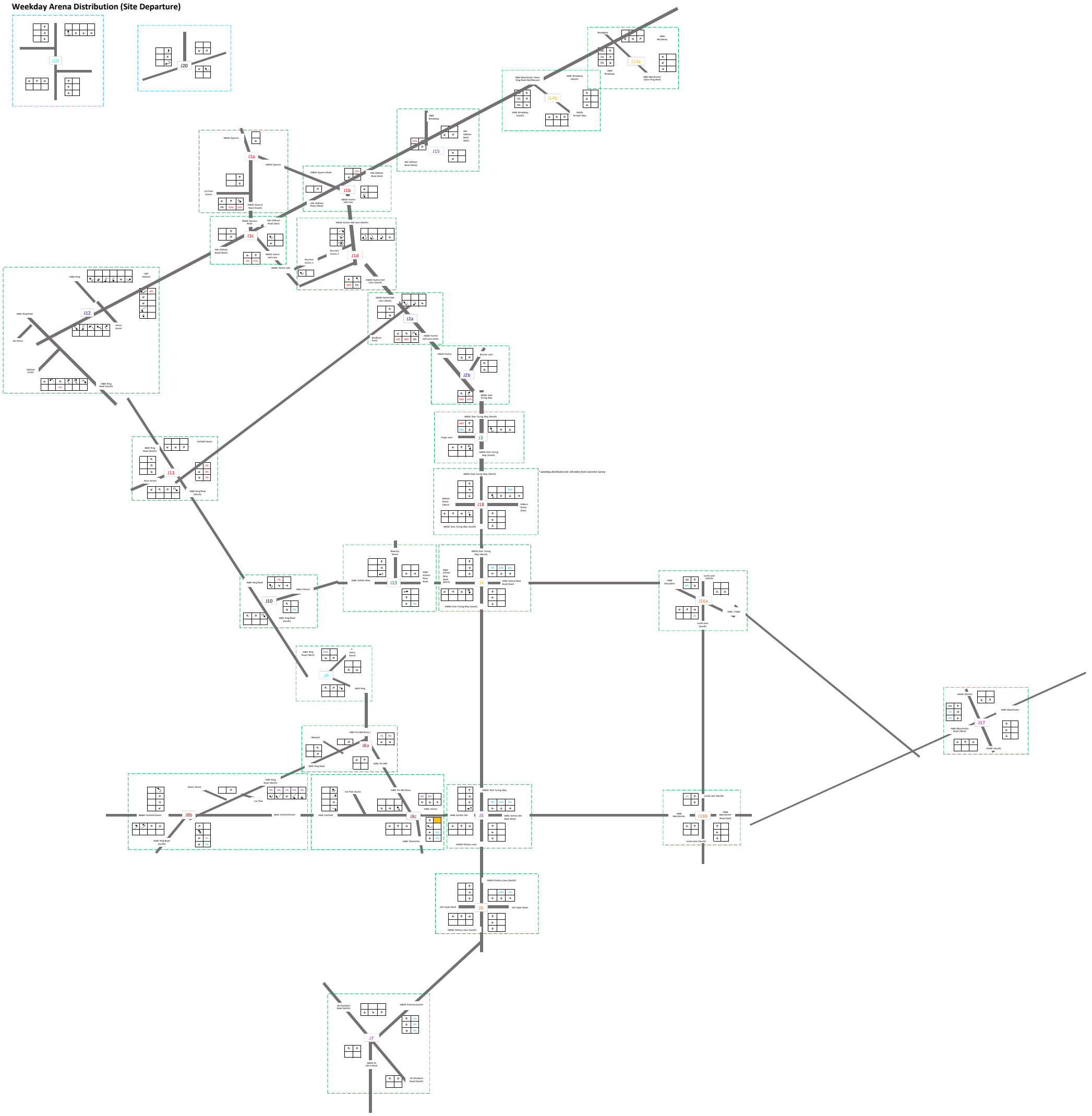
Weekday Arena Distribution (Site Arrival)



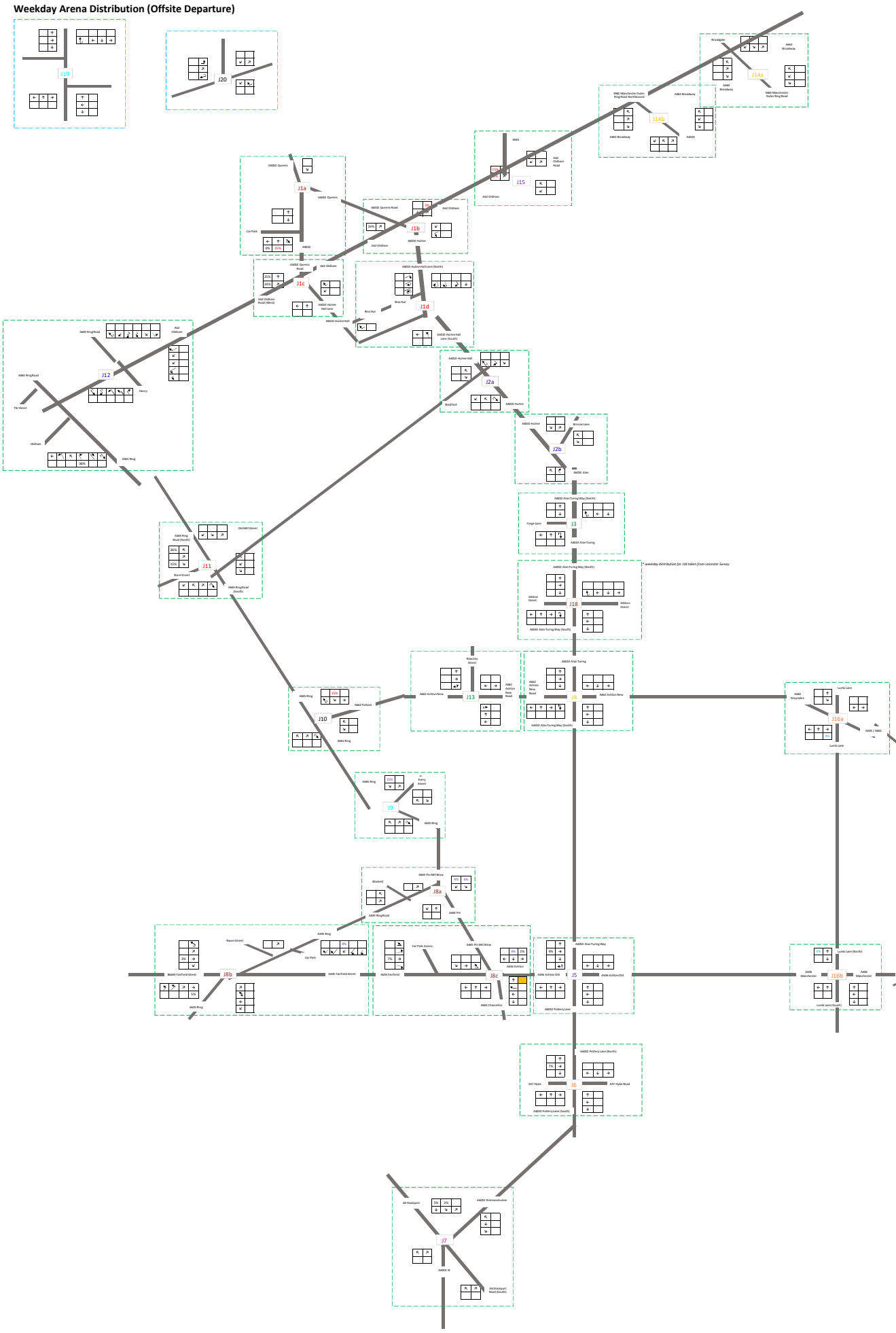
Weekday Arena Distribution (Offsite Arrival)



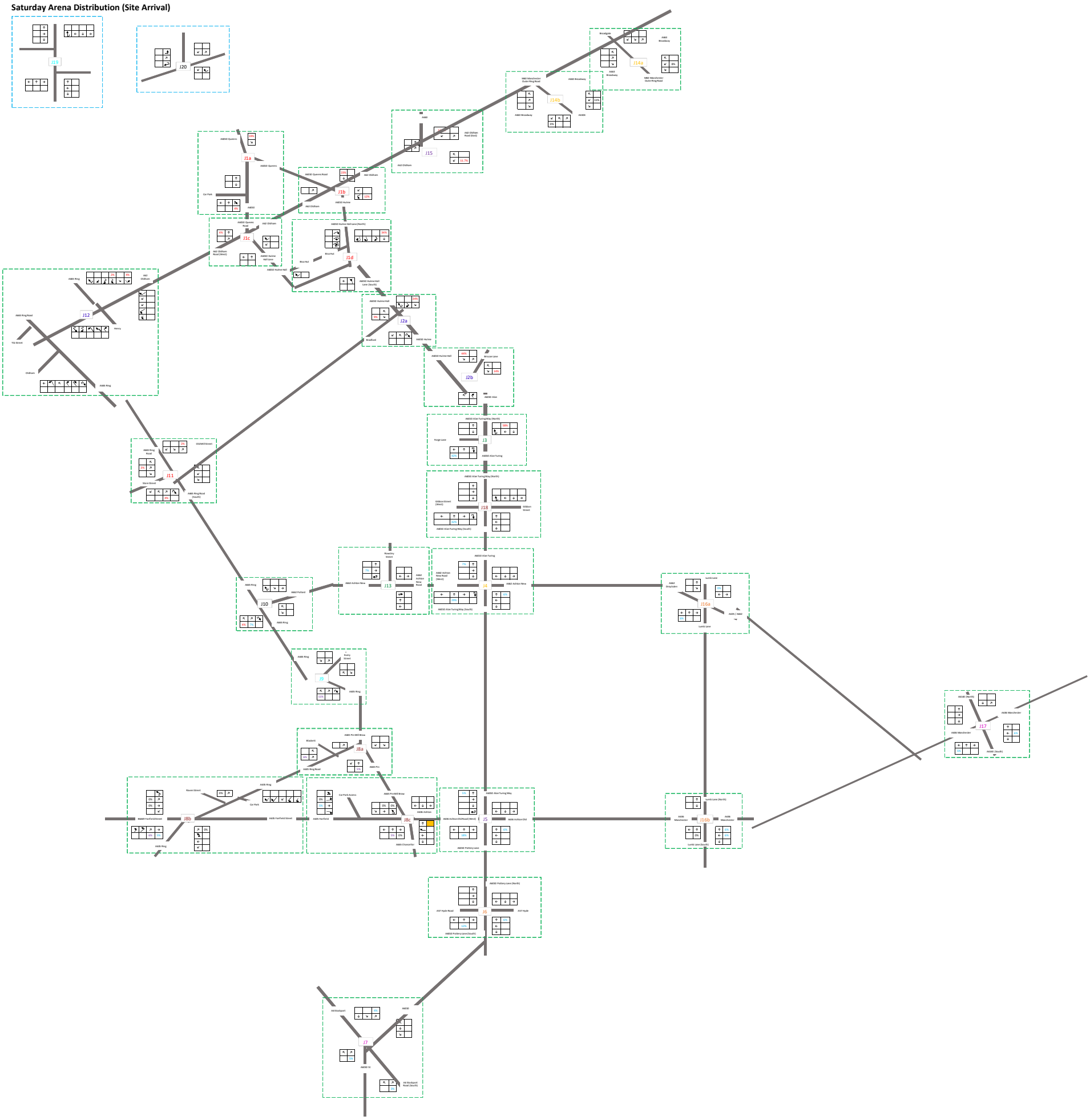
Weekday Arena Distribution (Site Departure)



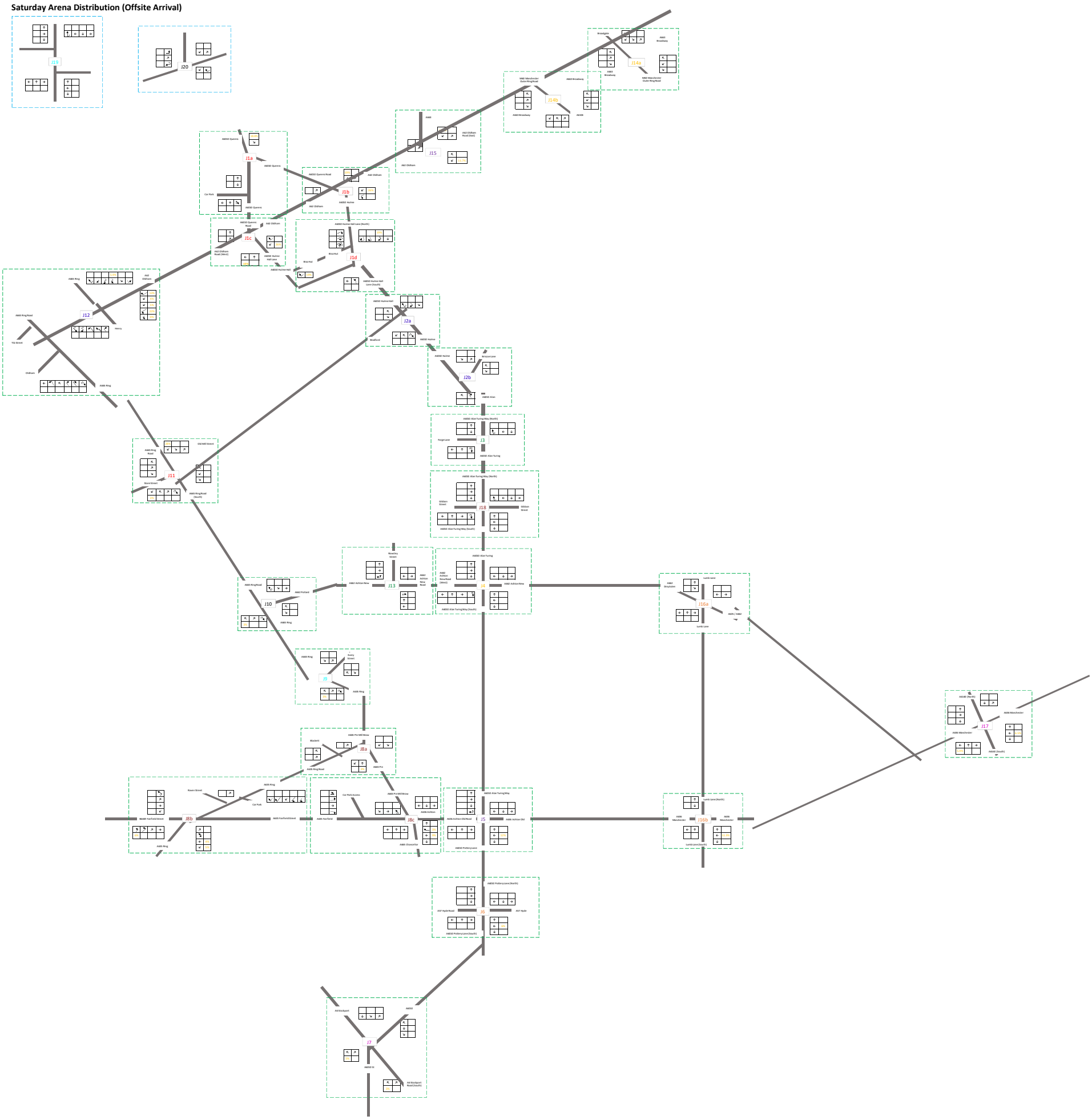
Weekday Arena Distribution (Offsite Departure)



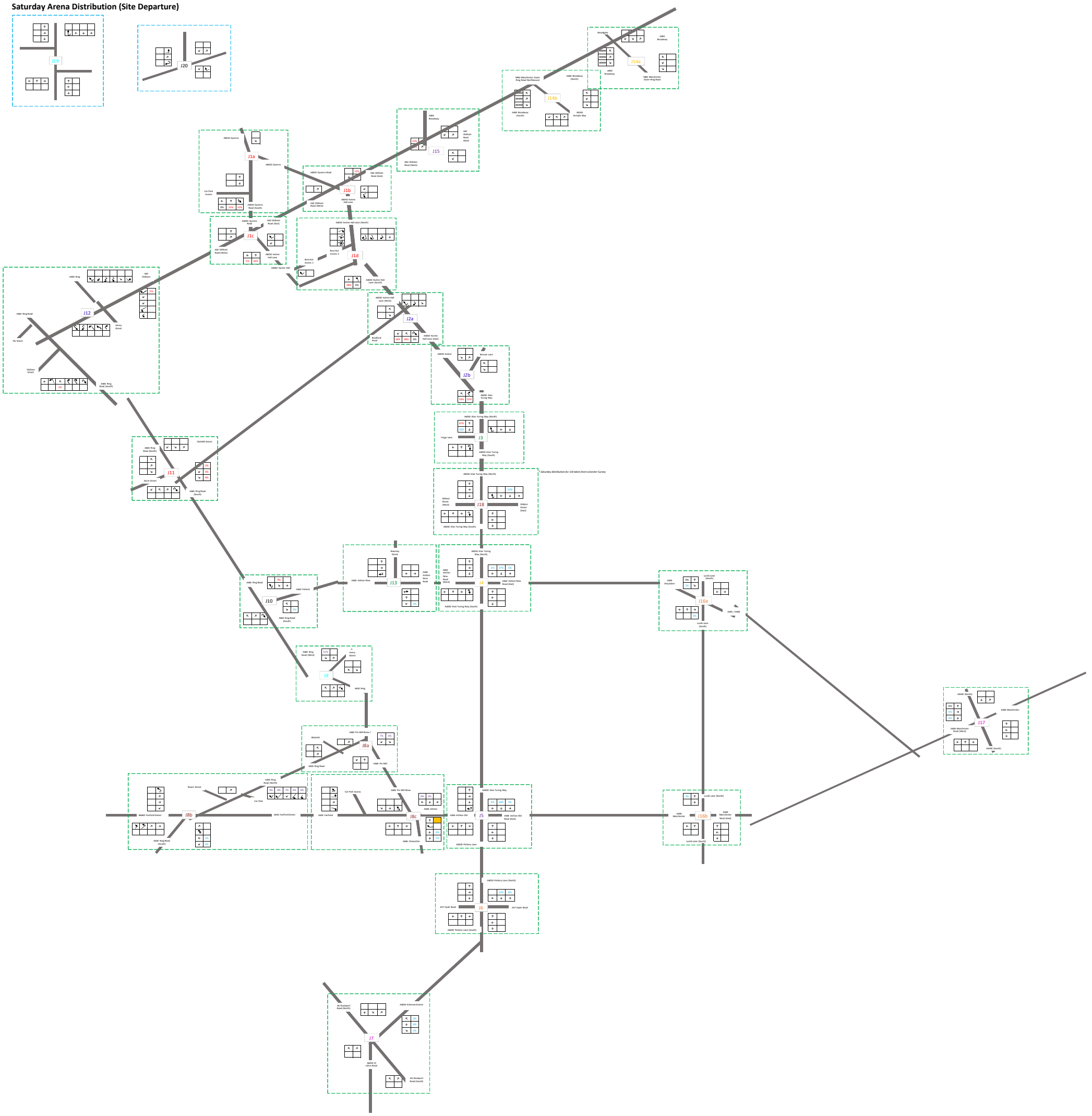
Saturday Arena Distribution (Site Arrival)



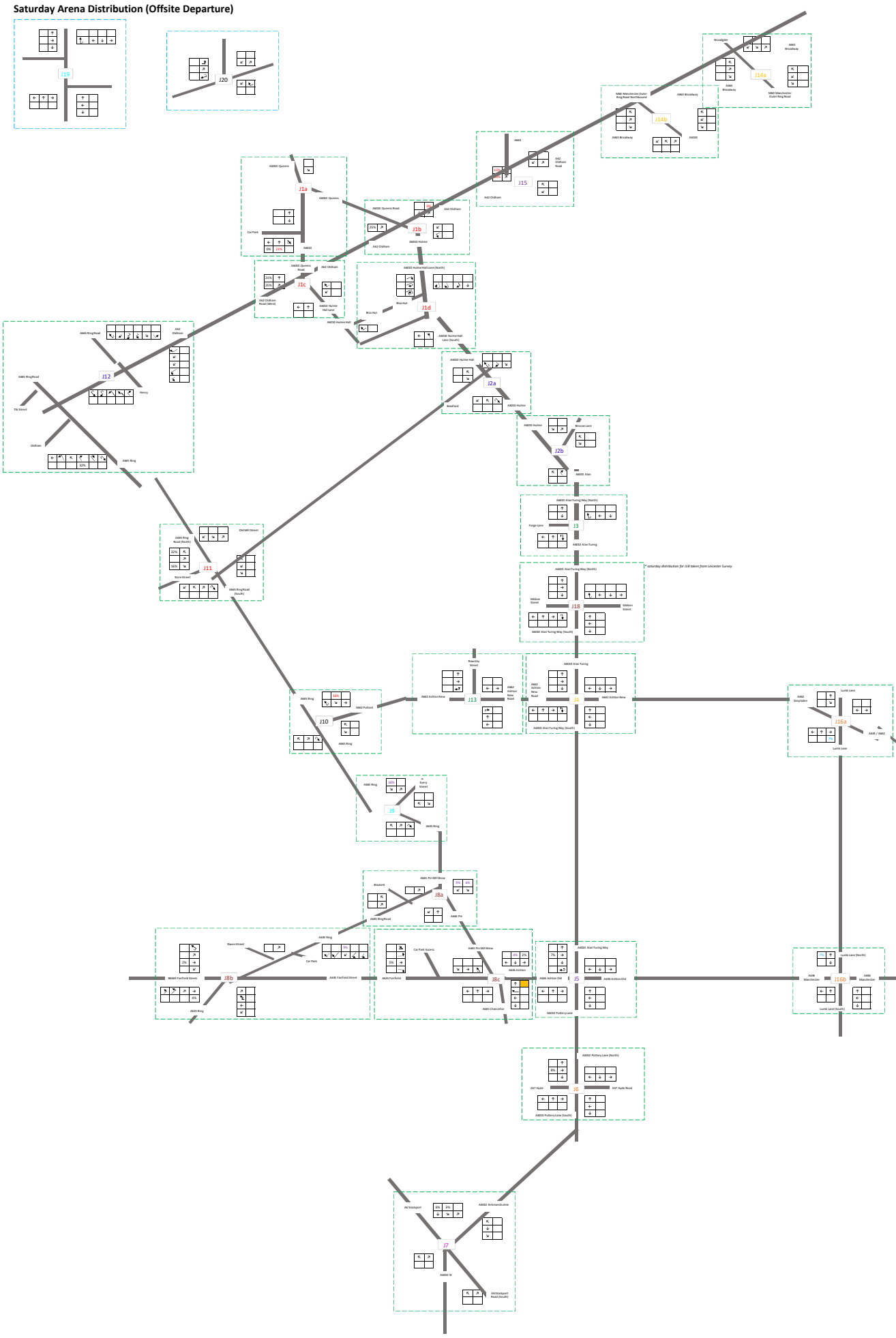
Saturday Arena Distribution (Offsite Arrival)



Saturday Arena Distribution (Site Departure)

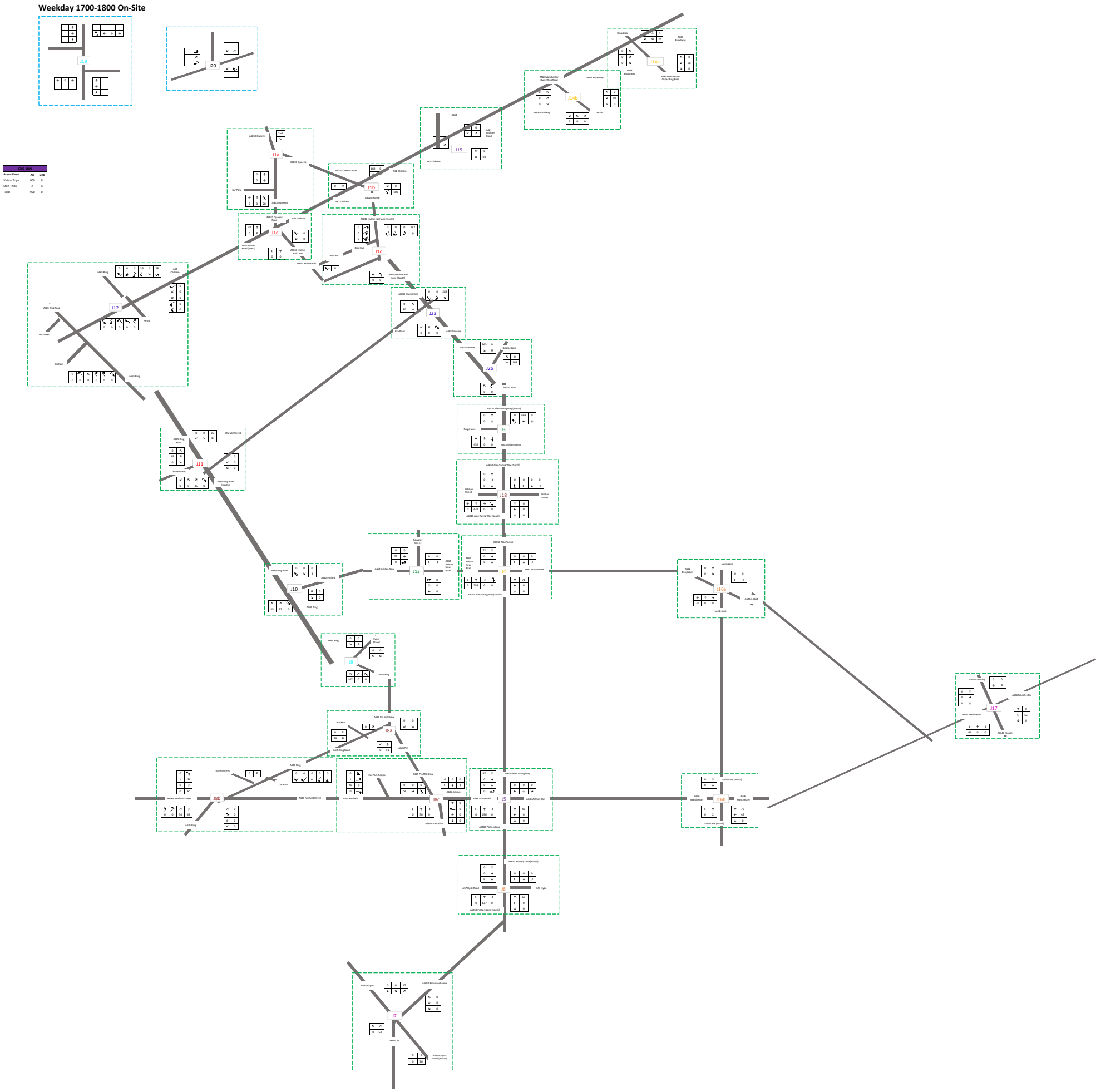


Saturday Arena Distribution (Offsite Departure)

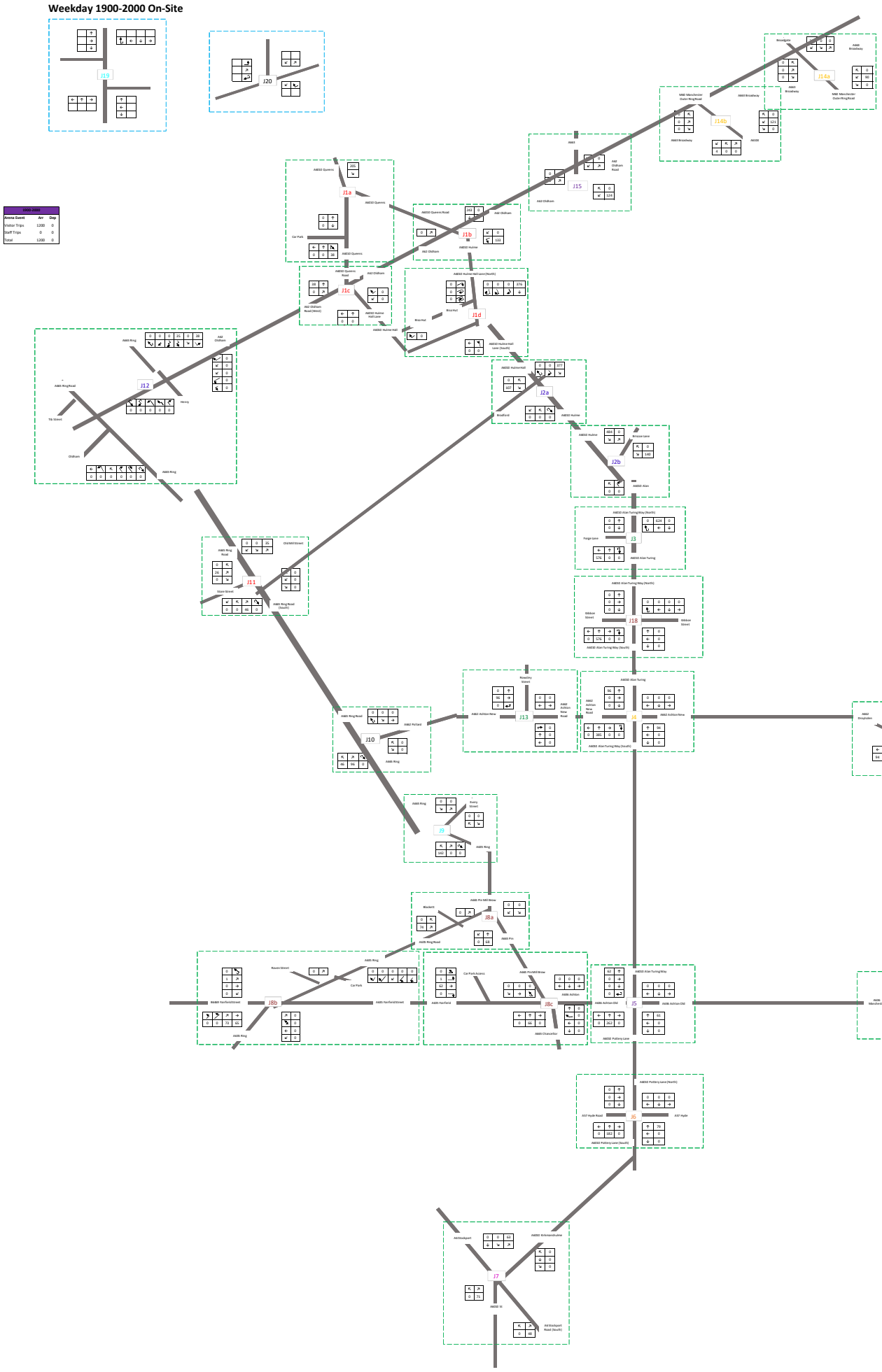


Arena Trips

Weekday 1700-1800 On-Site

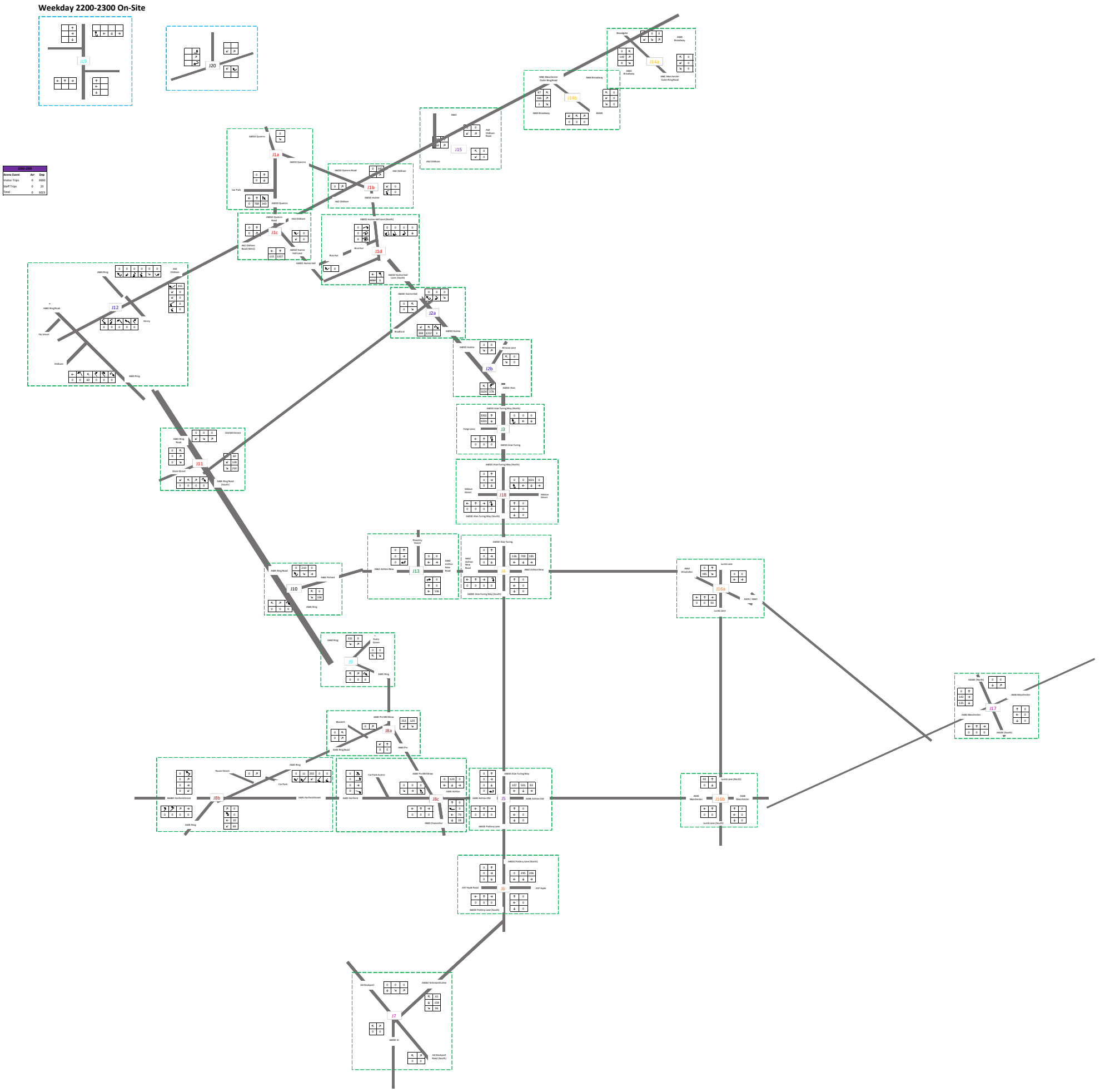


Weekday 1900-2000 On-Site

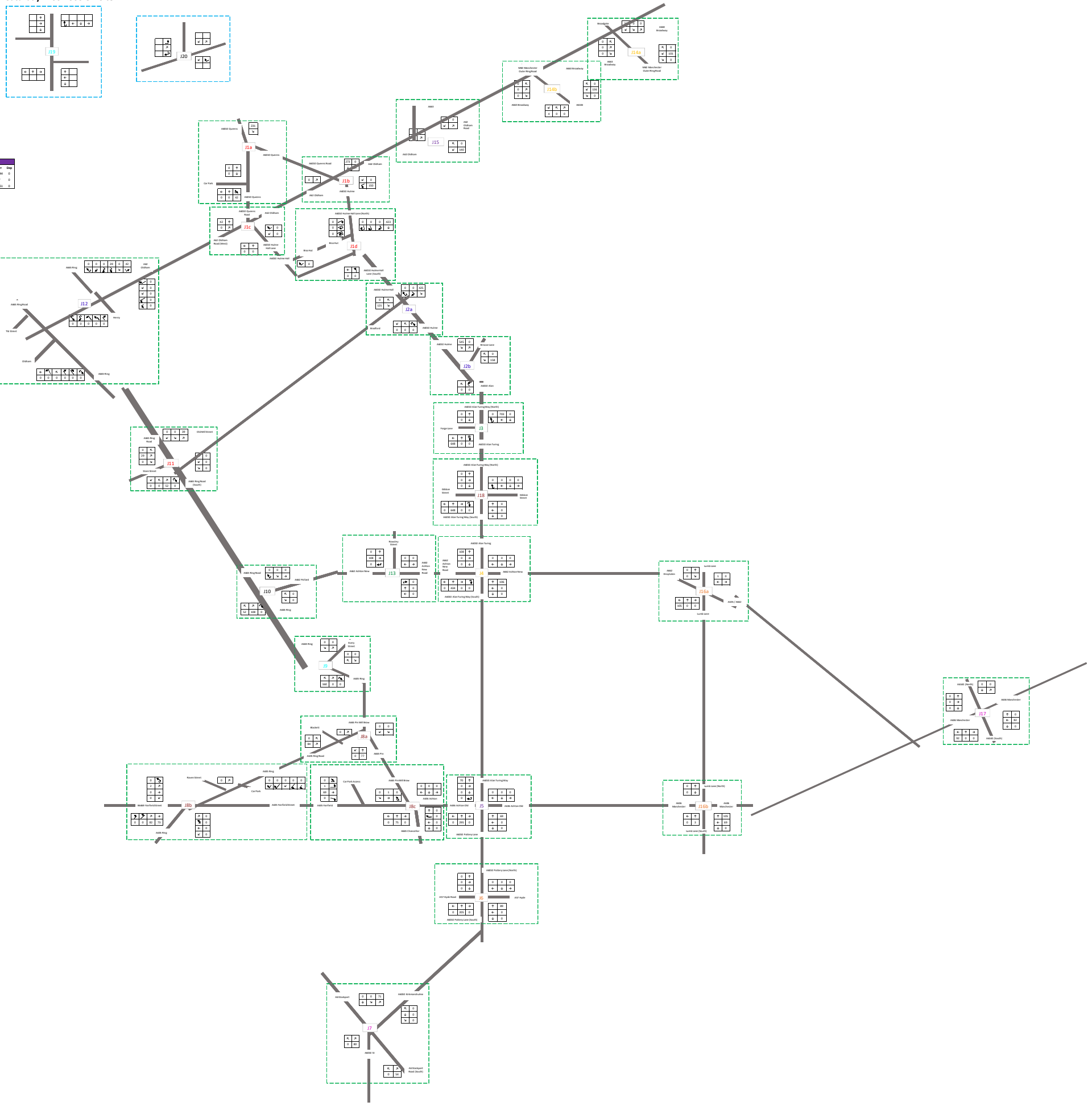


1900-2000		
Arena Event	**Arr**	**Dep**
Visitor Trips	1200	0
Staff Trips	0	0
Total	1200	0

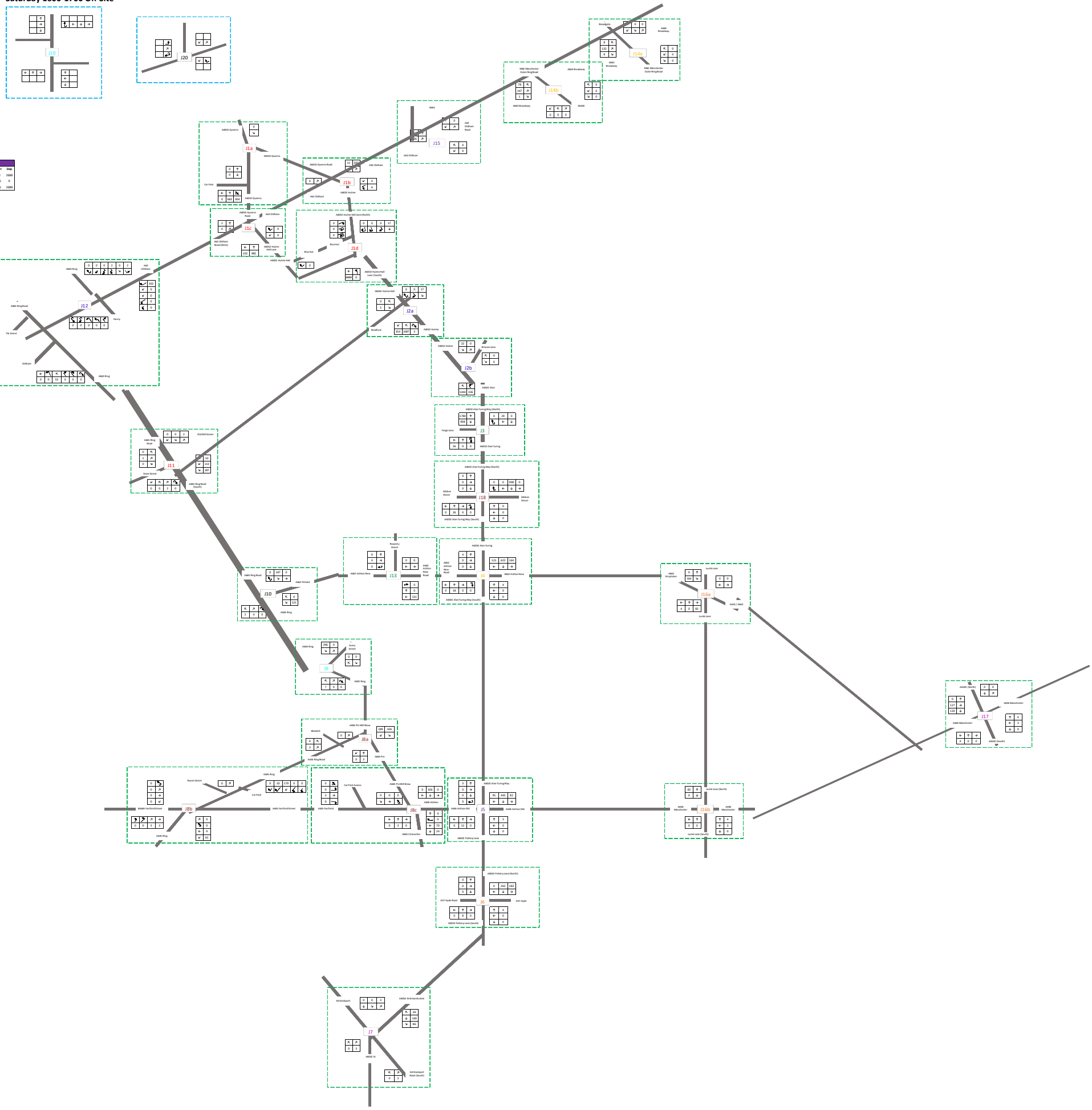
Weekday 2200-2300 On-Site



Saturday 1200-1300 On-Site

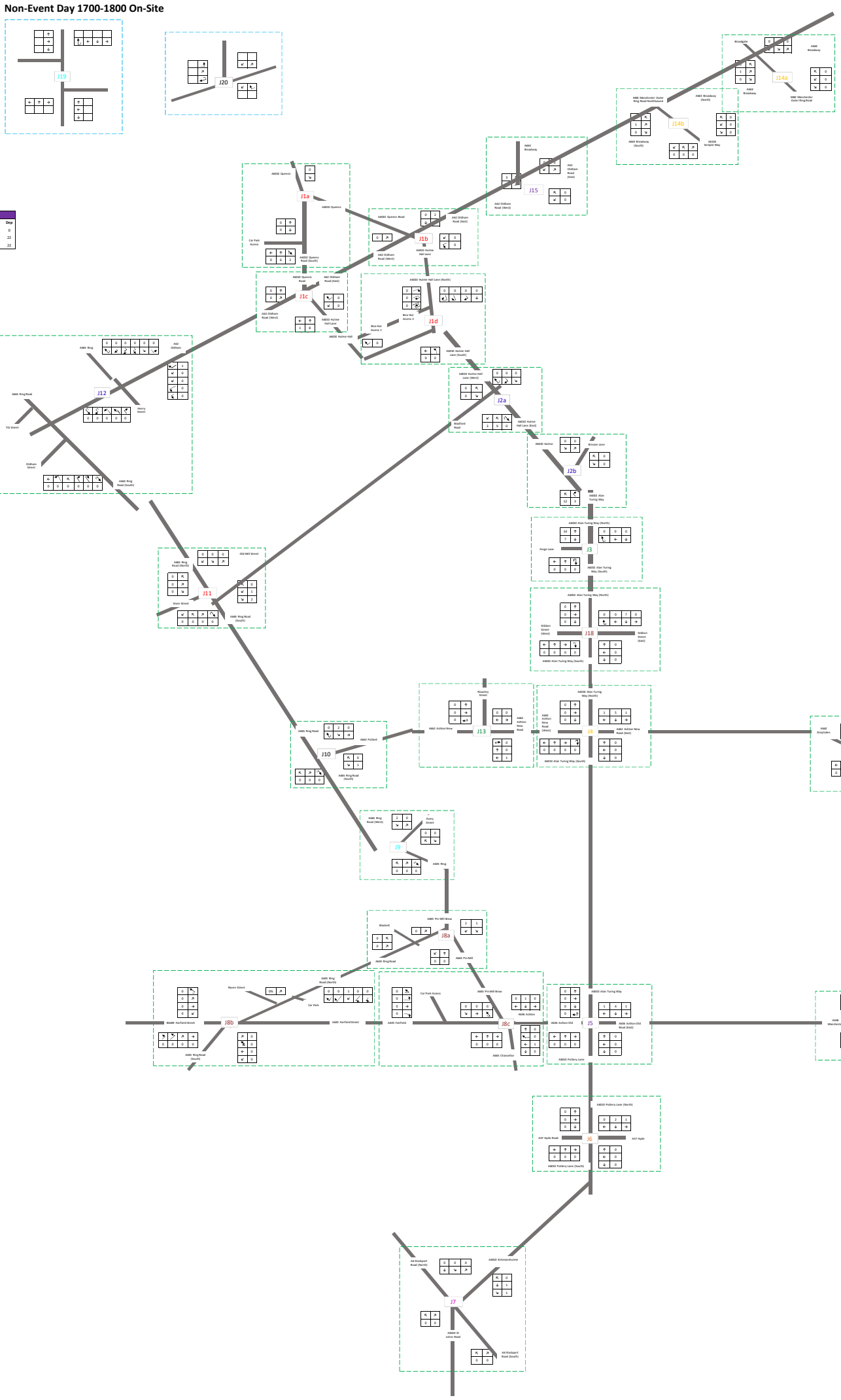


Saturday 1600-1700 On-Site

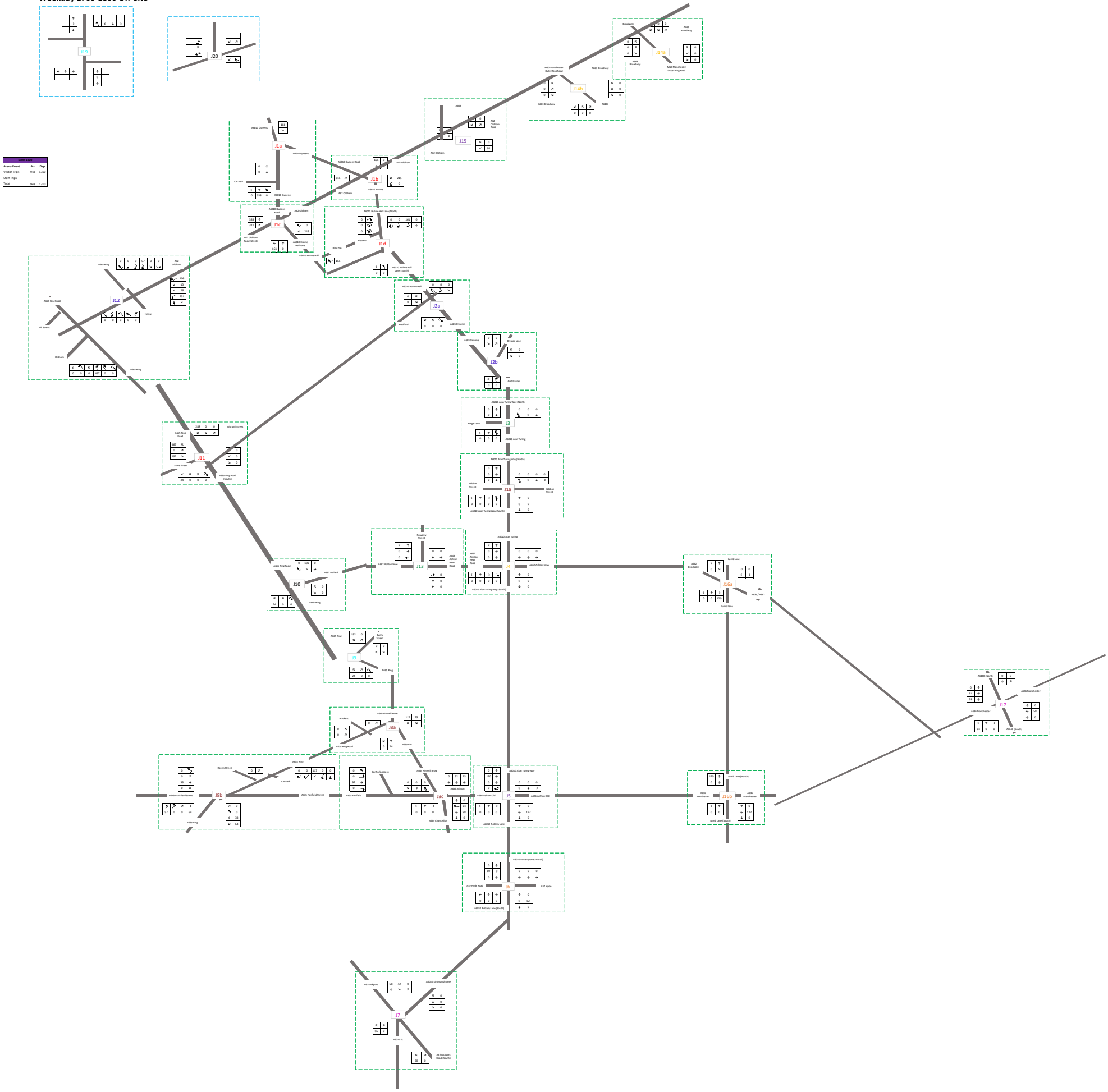


Arena Event	Arr	Dep
Visitor Trips	0	2688
Staff Trips	55	0
Total	55	2688

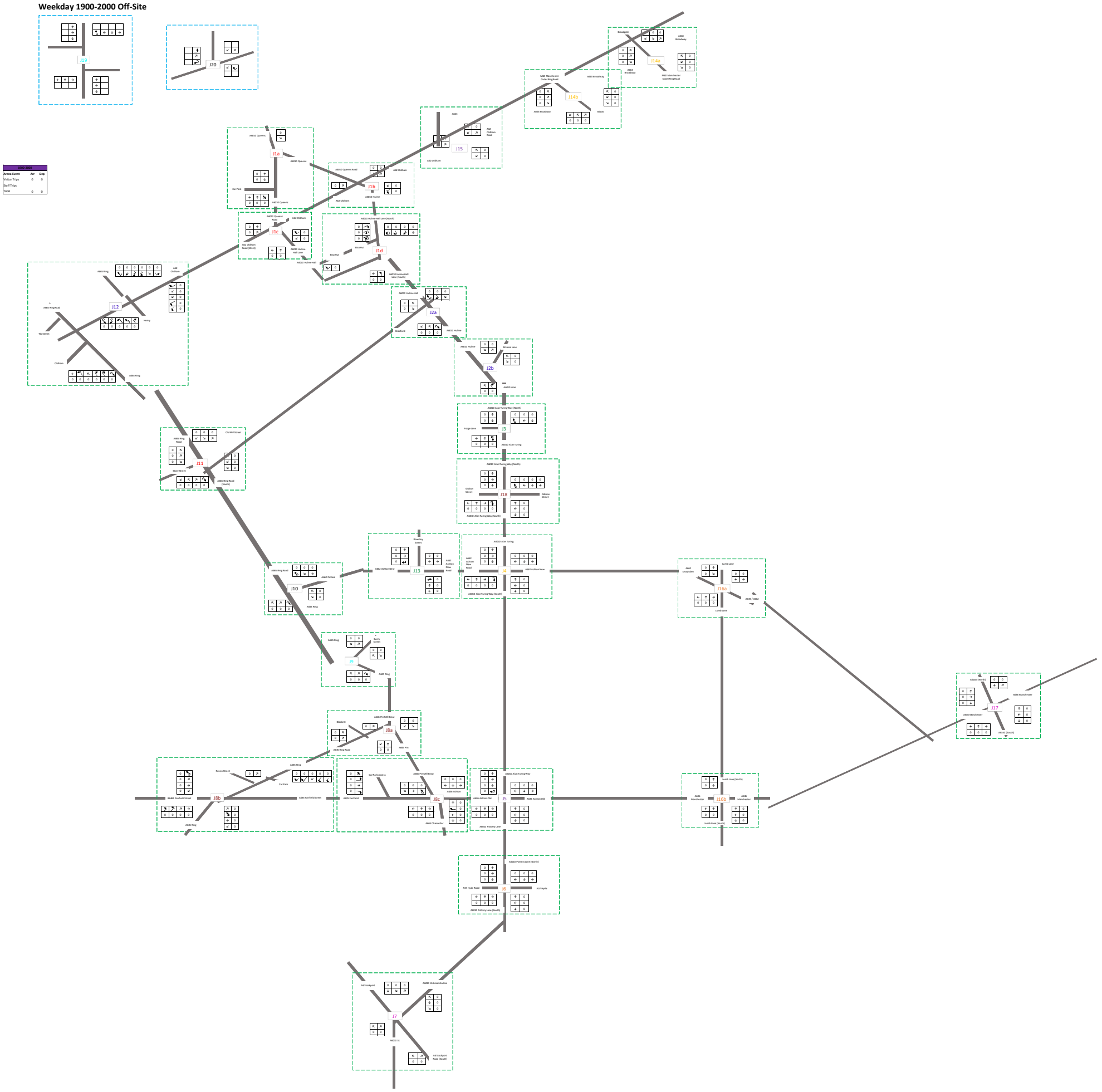
Non-Event Day 1700-1800 On-Site



Weekday 1700-1800 Off-Site

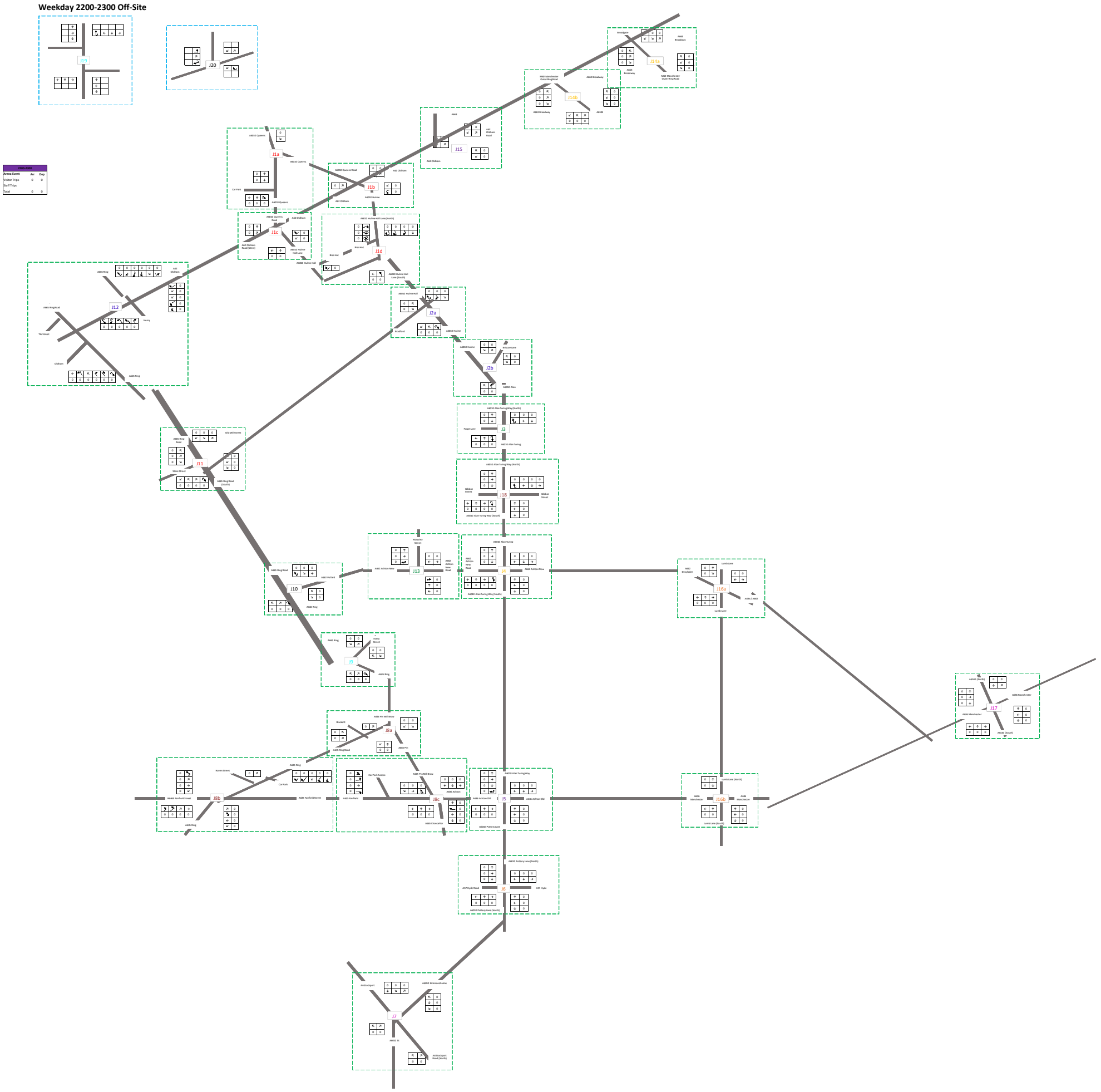


Weekday 1900-2000 Off-Site

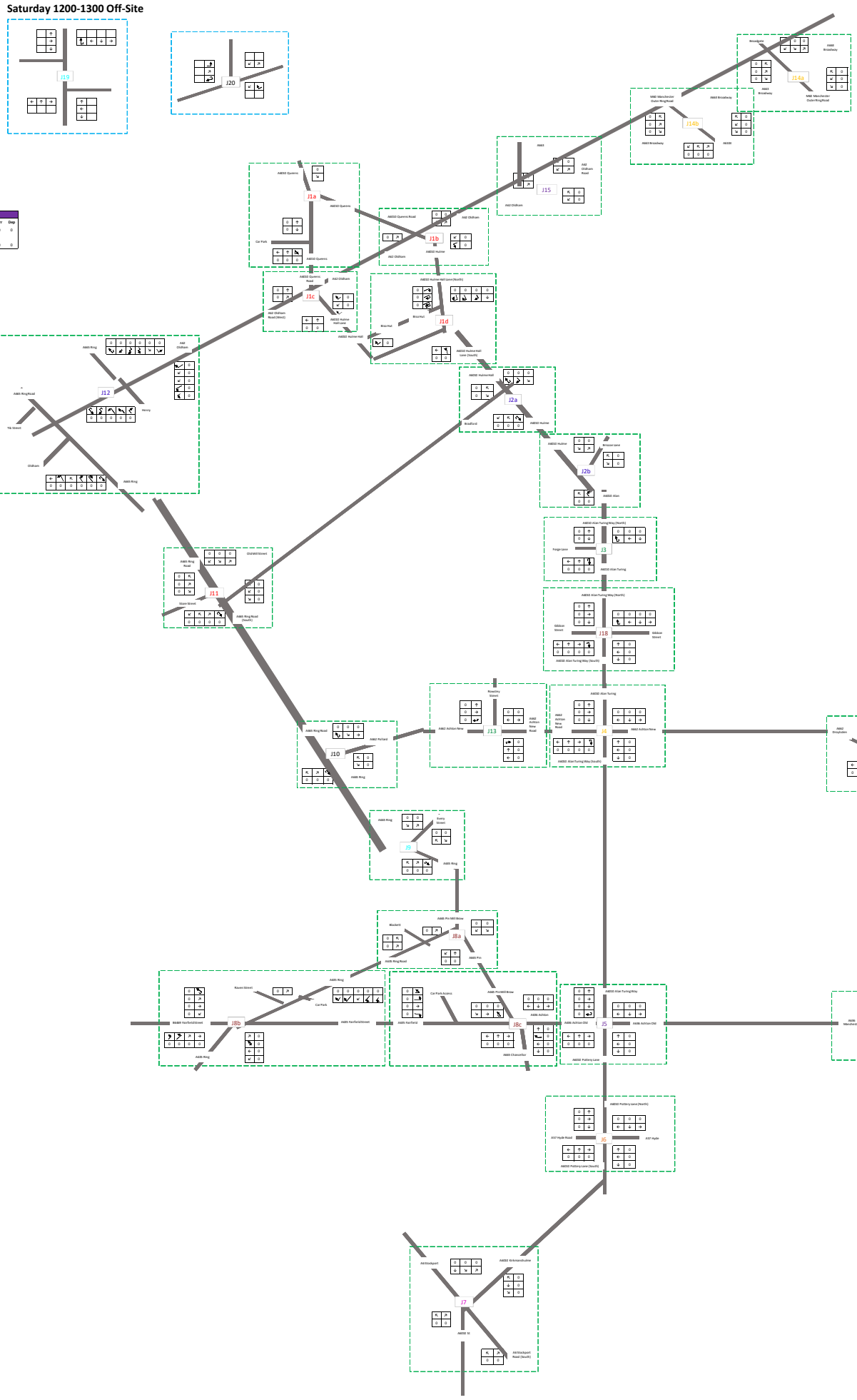


2000-2100		
Arena Event	Arr	Dep
Visitor Trips	0	0
Staff Trips		
Total	0	0

Weekday 2200-2300 Off-Site

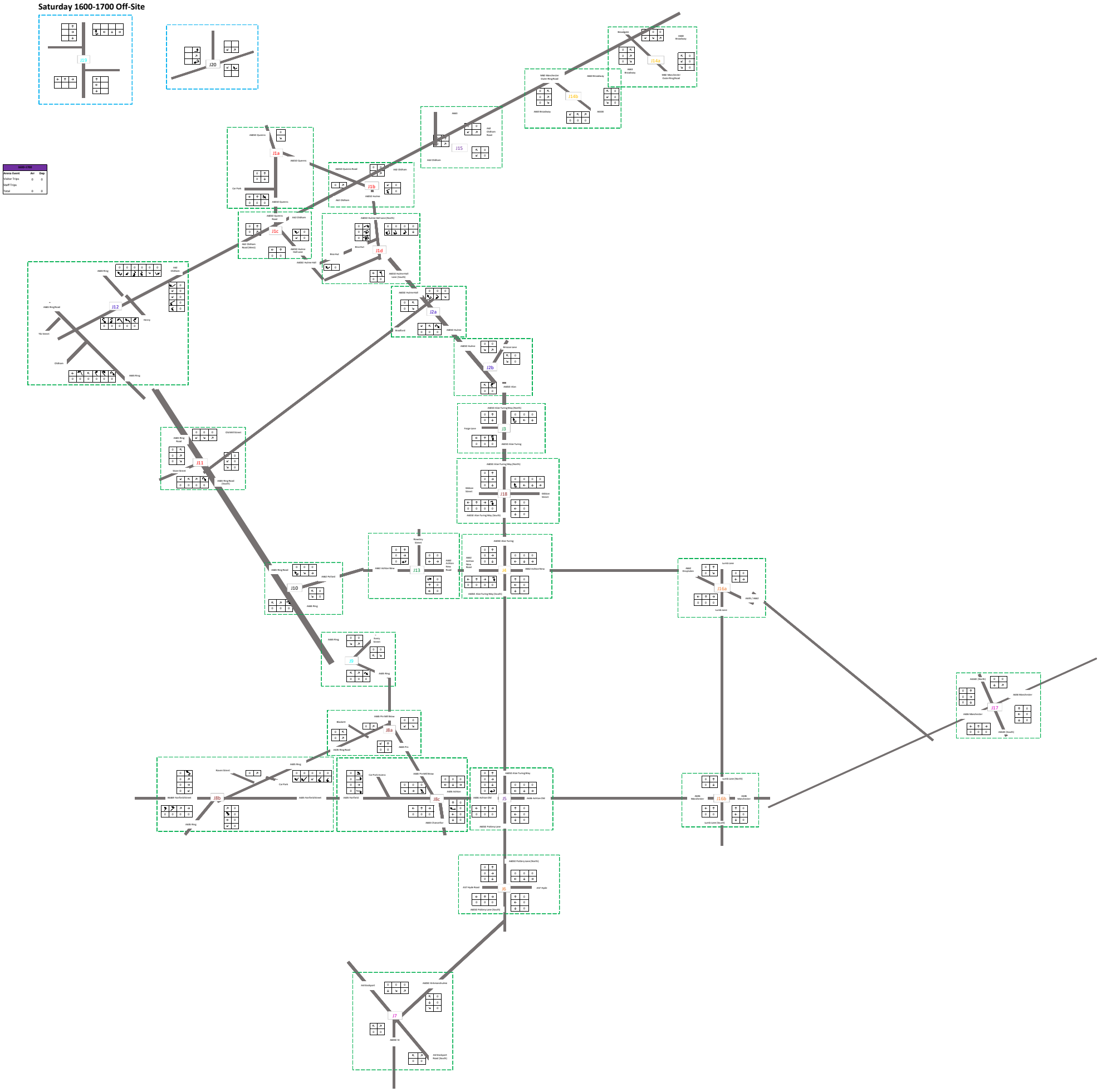


Saturday 1200-1300 Off-Site



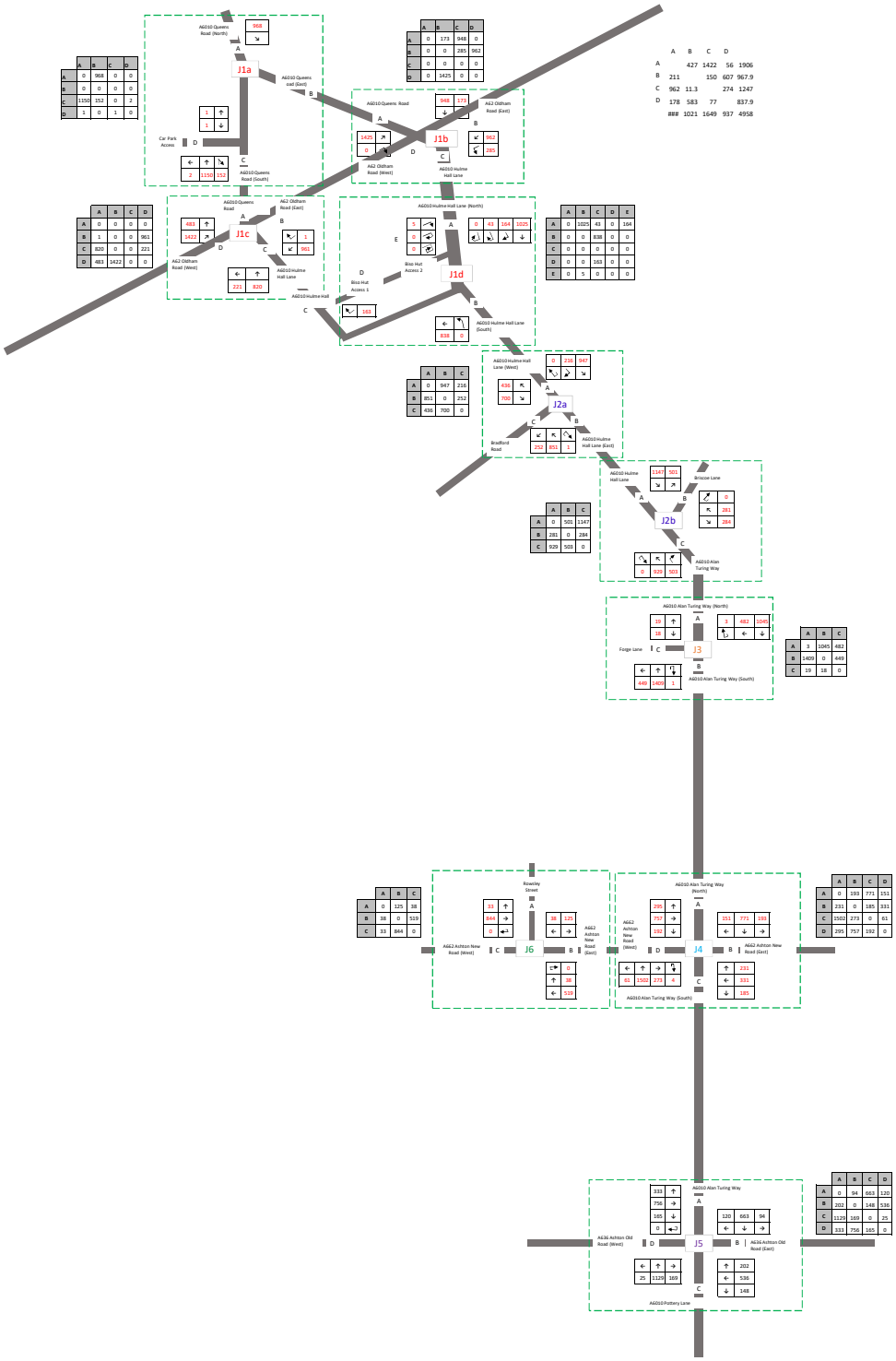
Arena Event	Arr	Dep
Visitor Trips	0	0
Staff Trips		
Total	0	0

Saturday 1600-1700 Off-Site

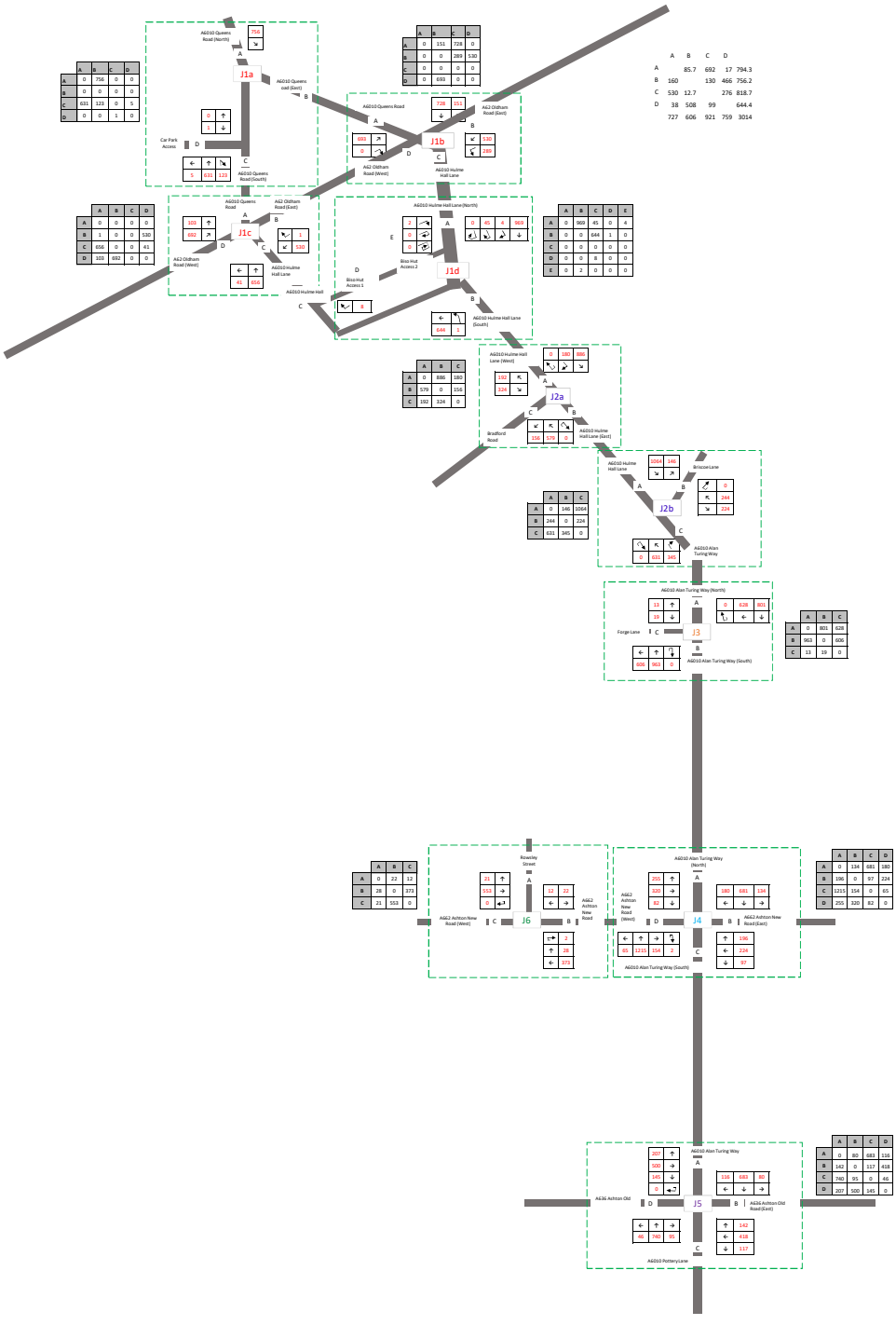


2023 Baseline + Arena Flows

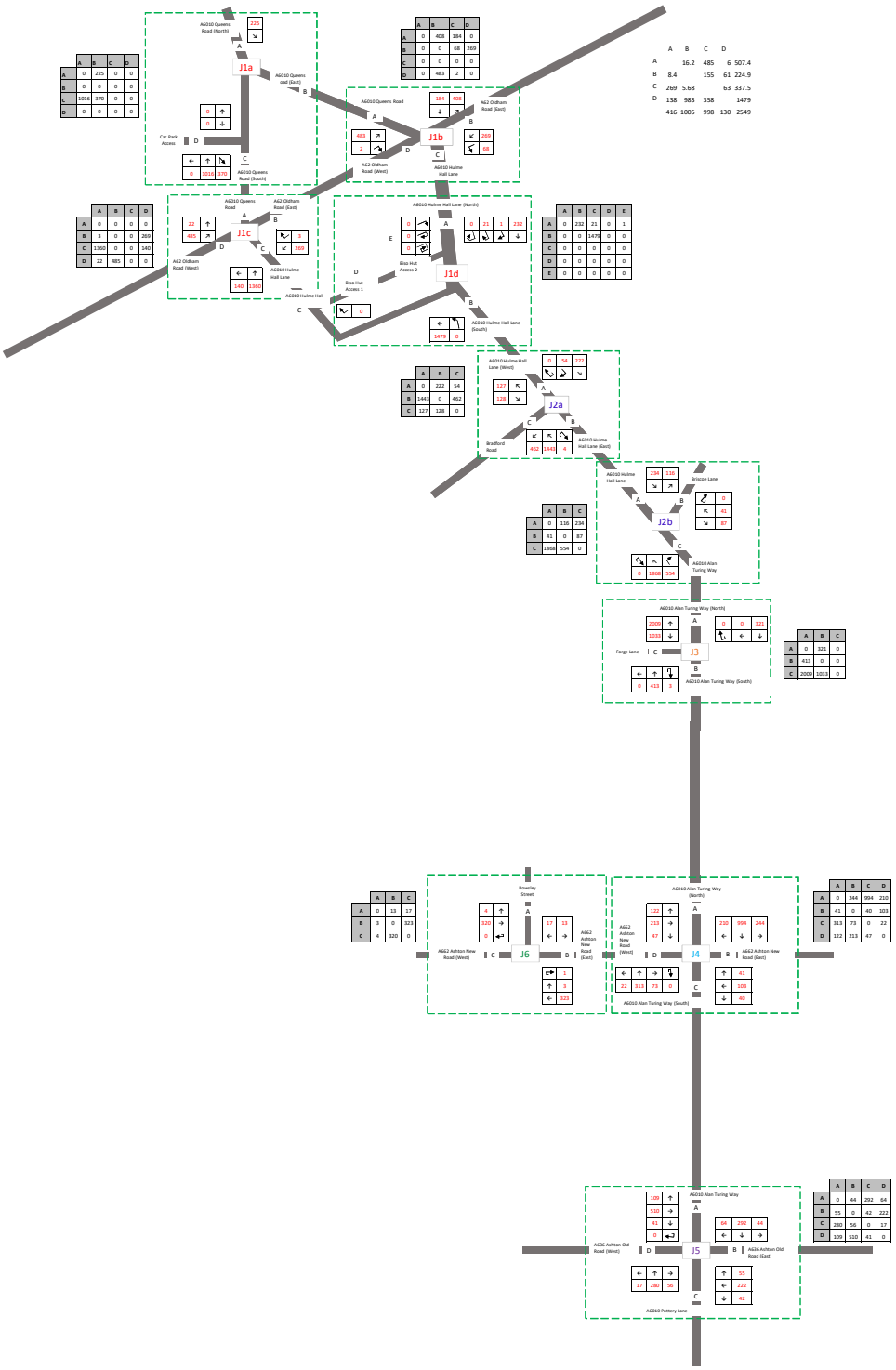
Weekday 1700-1800 (Non-Match)



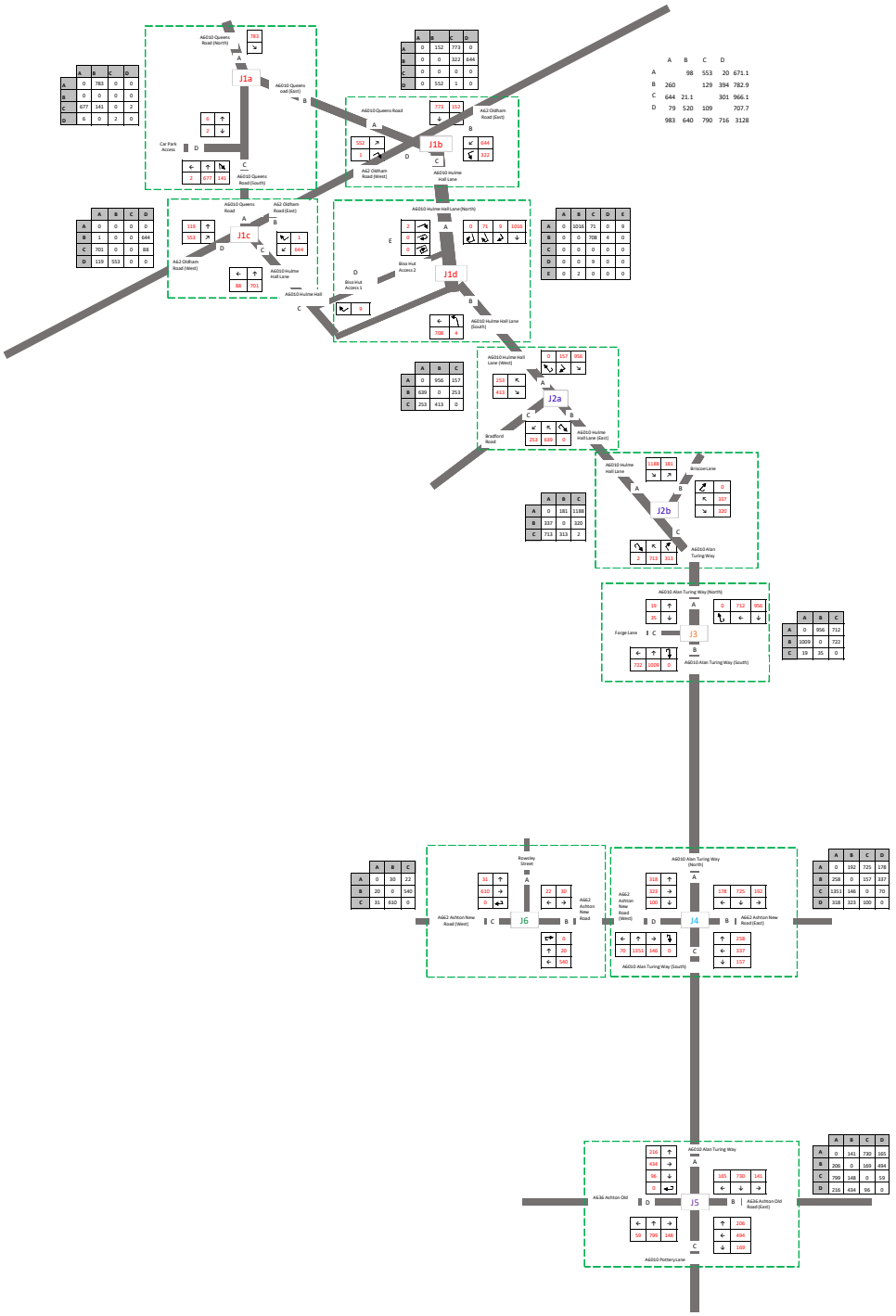
Weekday 1900-2000 (Non-Match)



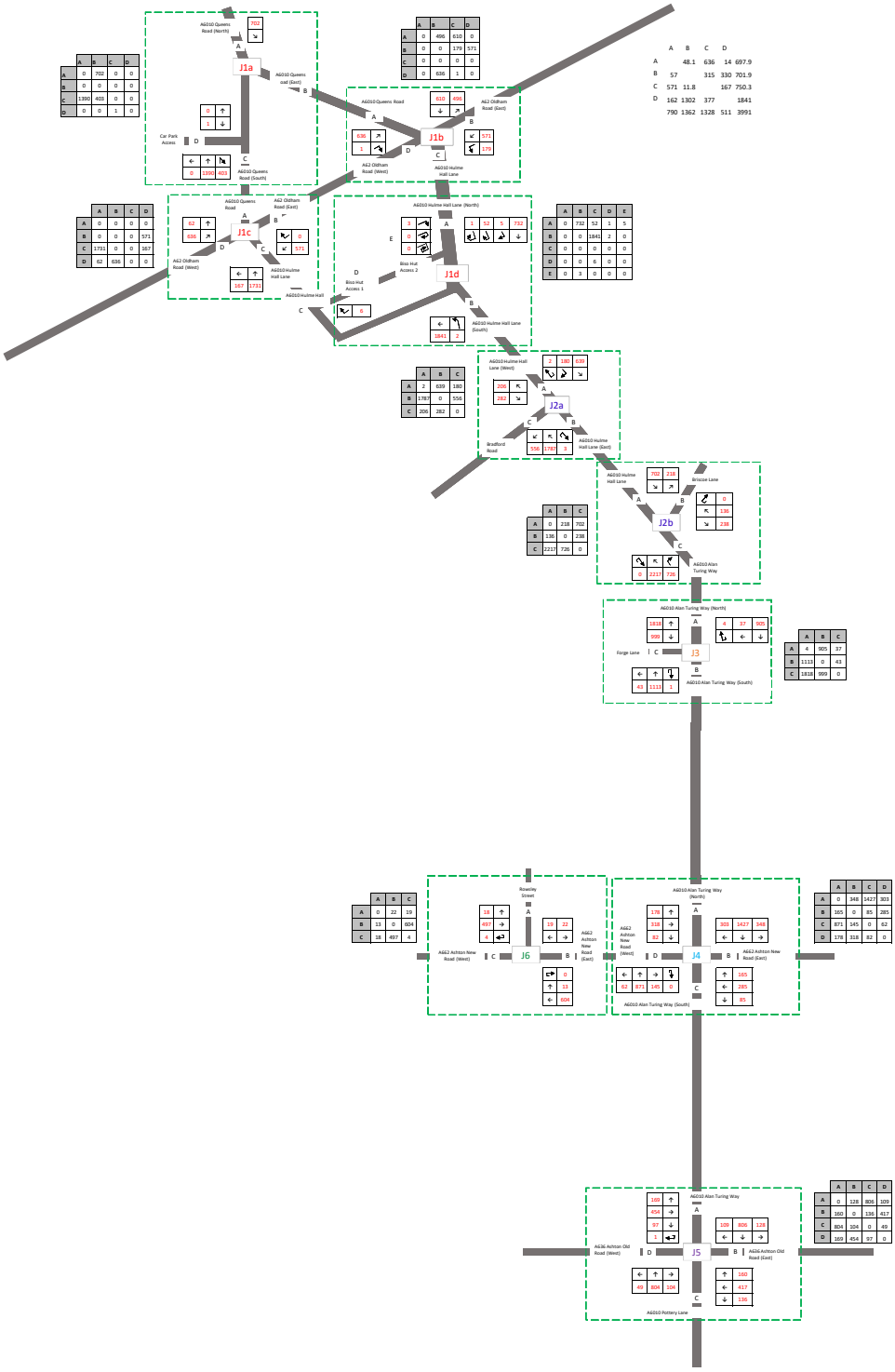
Weekday 2200-2300 (Non-Match)



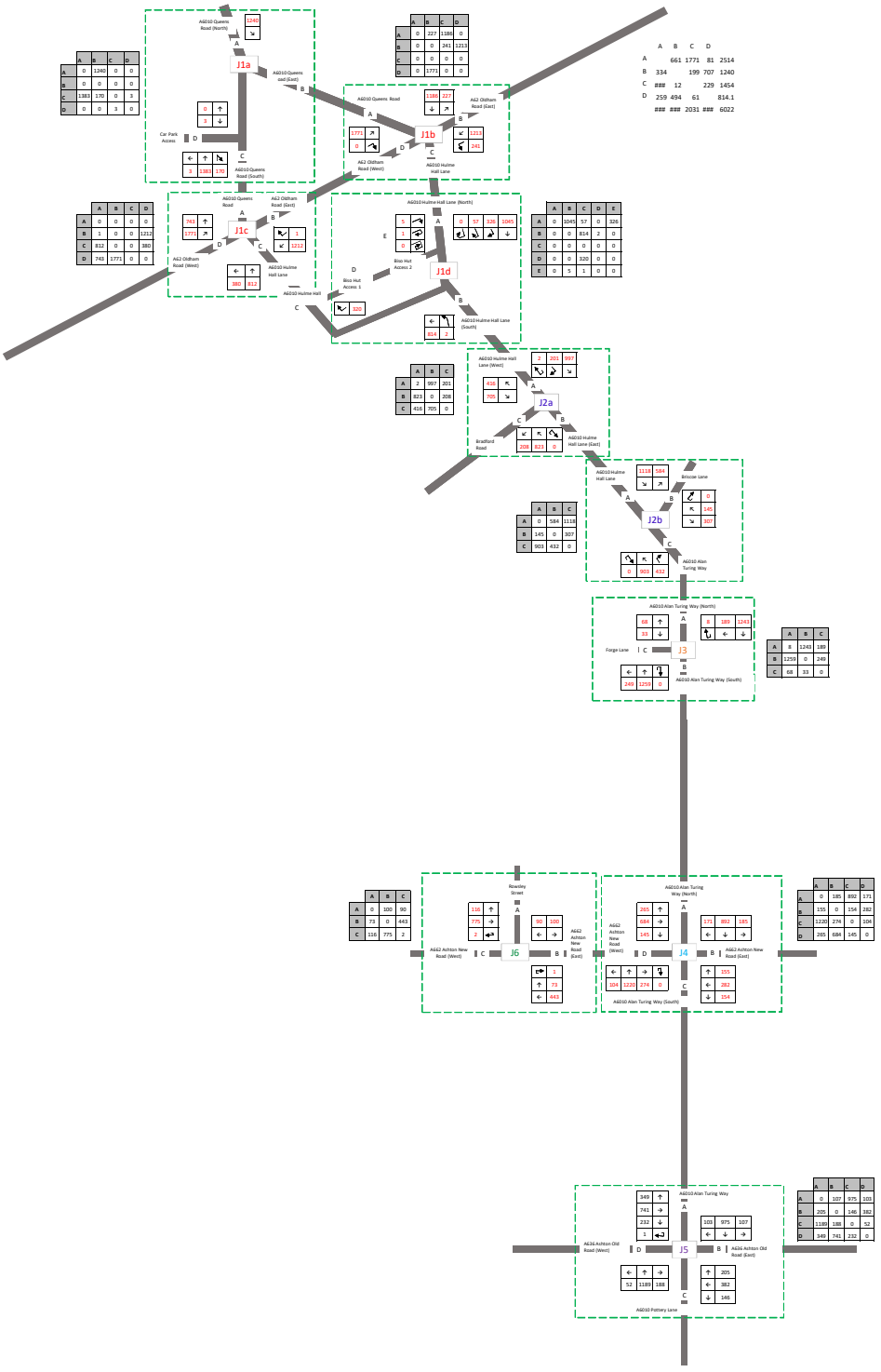
Saturday 1200-1300 (Non-Match)



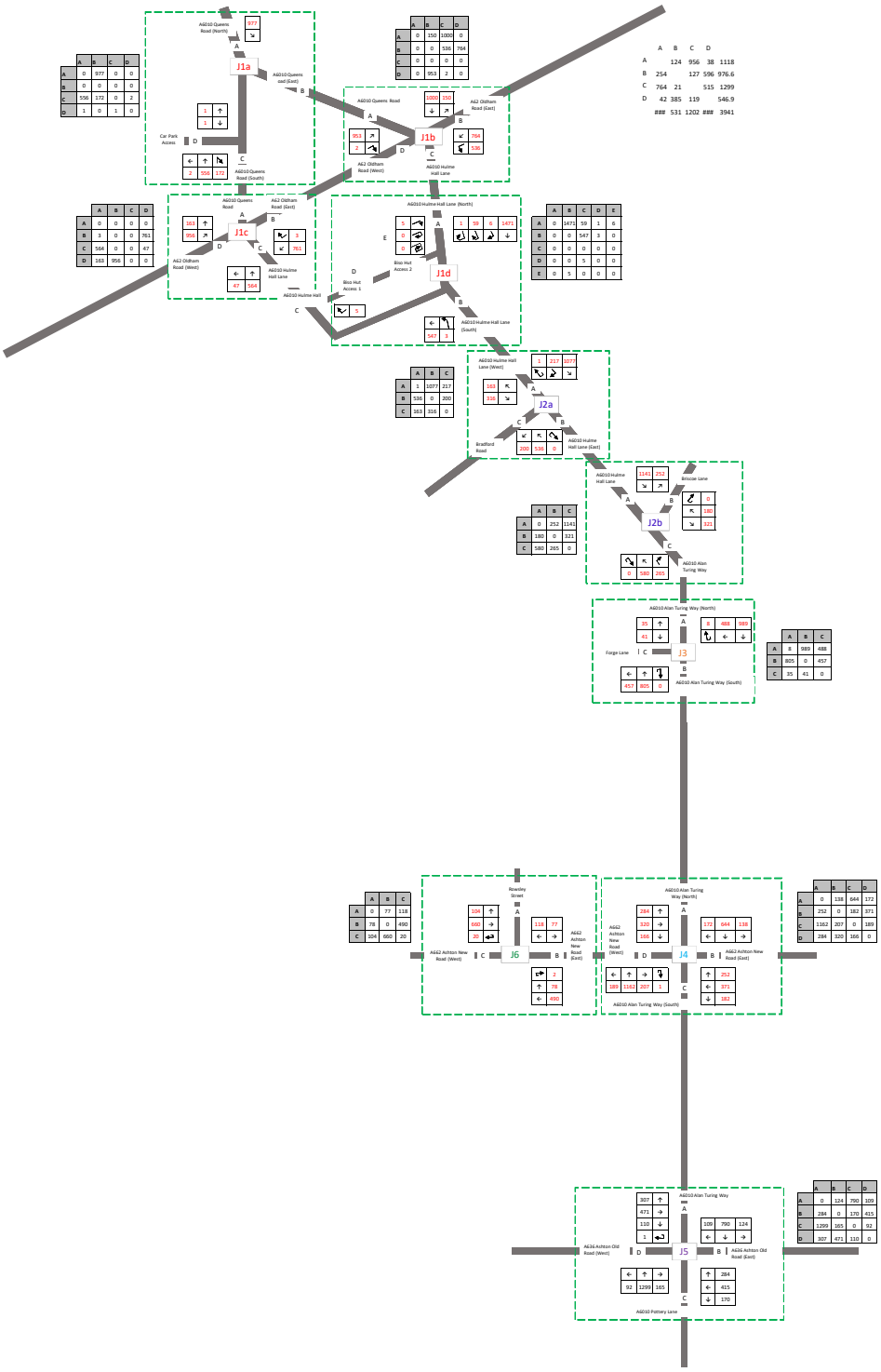
Saturday 1600-1700 (Non-Match)



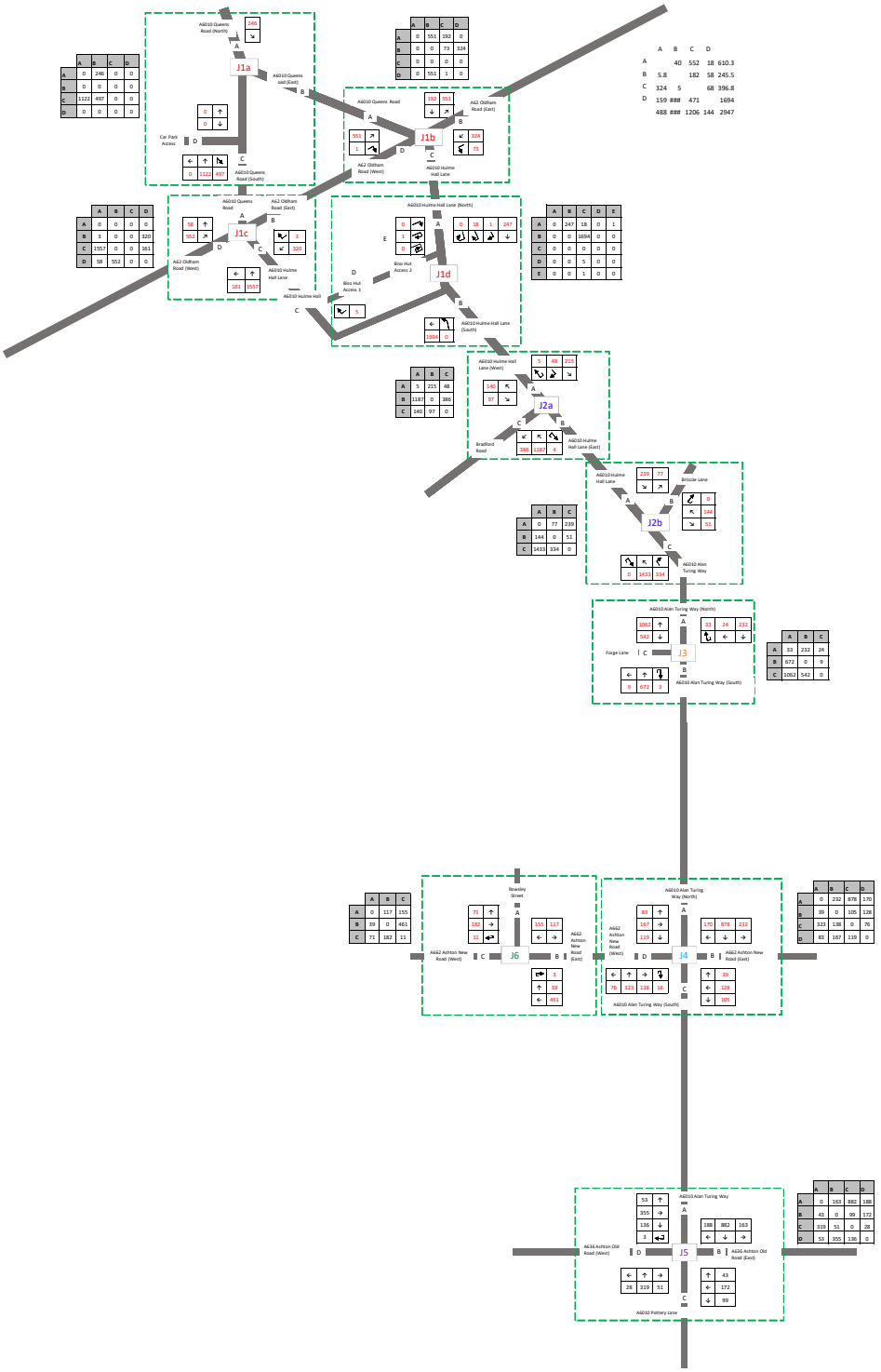
Weekday 1700-1800 (Match Day)



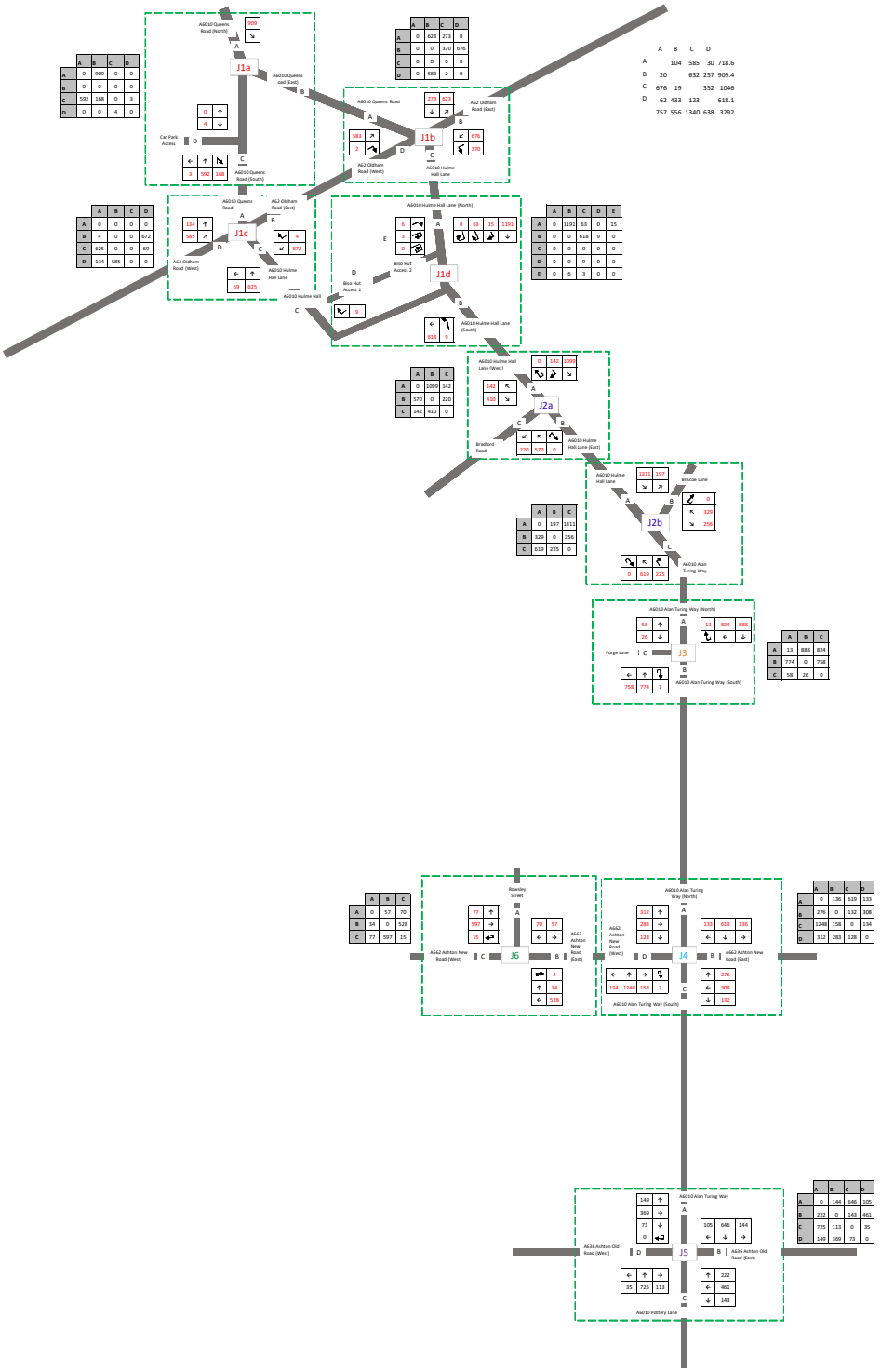
Weekday 1900-2000 (Match Day)



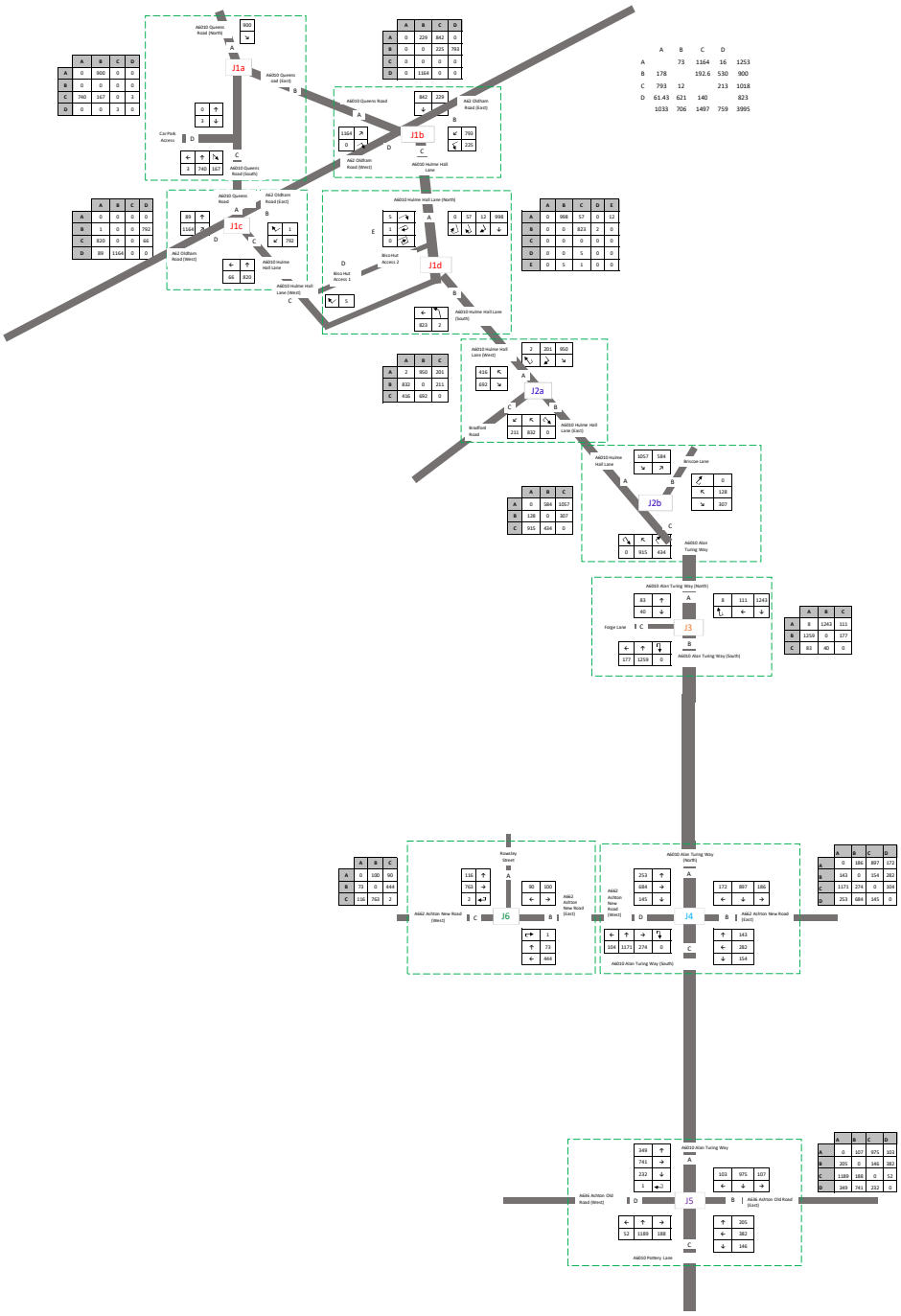
Weekday 2200-2300 (Match Day)



Saturday 1200-1300 (Match Day)



Weekday 1700-1800 (Match Day - No Arena Event)



BURO HAPPOLD

Appendix B – TfGM Signal Specifications and Modelling Methodology

From: Peter Webster <Peter.Webster@arup.com>
Sent: 29 June 2020 16:24
To: Chris Mullett <Chris.Mullett@BuroHappold.com>
Subject: RE: OVG Manchester - Traffic Modelling Methodology

**** External Email ****

Hi Chris

To confirm, in establishing the base models for the signalised junctions, signal specifications were obtained from TfGM for each junction and were used to set the models up alongside survey data obtained on the matchday and non-matchdays.

Once the models had been built, they were validated by comparing observed queue lengths recorded during the surveys to the corresponding queue lengths forecast by the model. The observed (survey) queue lengths were recorded by the survey company at the end of each red signal and recorded on a 5-minute frequency. The queues on each lane were averaged over the modelled hour and compared to the Mean Max Queue value in the models.

The non-matchday surveys were used as the primary set of surveys for validation as there are a number of operational issues on a matchday that cannot easily be replicated in the model, such as:

- Traffic management operations that close parts of some junctions for some periods and manual management of traffic flows
- Pedestrians walking within the carriageway/crossings outside of 'allowed' crossing periods
- Taxi/drop-off manoeuvres/u-turns that hold up other traffic movements
- Blocking back through adjacent junctions and into/out of car parks

Nonetheless, a comparison of matchday observed and modelled queues was also undertaken.

In total, this provided a total of 10 modelled time periods for each junction for which a queue comparison was undertaken on each arm. Whilst there will always be some variation between observed and modelled values across such a large number of comparisons, generally the observed queues on each junction approach were equal to or below the modelled values. As such, it is considered that the models provide an accurate simulation of the existing baseline conditions.

Regards

Peter

From: Chris Mullett <Chris.Mullett@BuroHappold.com>
Sent: 29 June 2020 15:40
To: Peter Webster <Peter.Webster@arup.com>
Subject: [External] OVG Manchester - Traffic Modelling Methodology

Hi Peter

To assist us in responding to comments raised by MCC regarding the methodology used for modelling of the junctions assessed in the TA; please can Arup provide a summary of this so that we can append it to our submittal?

If you would like to discuss further, please call.

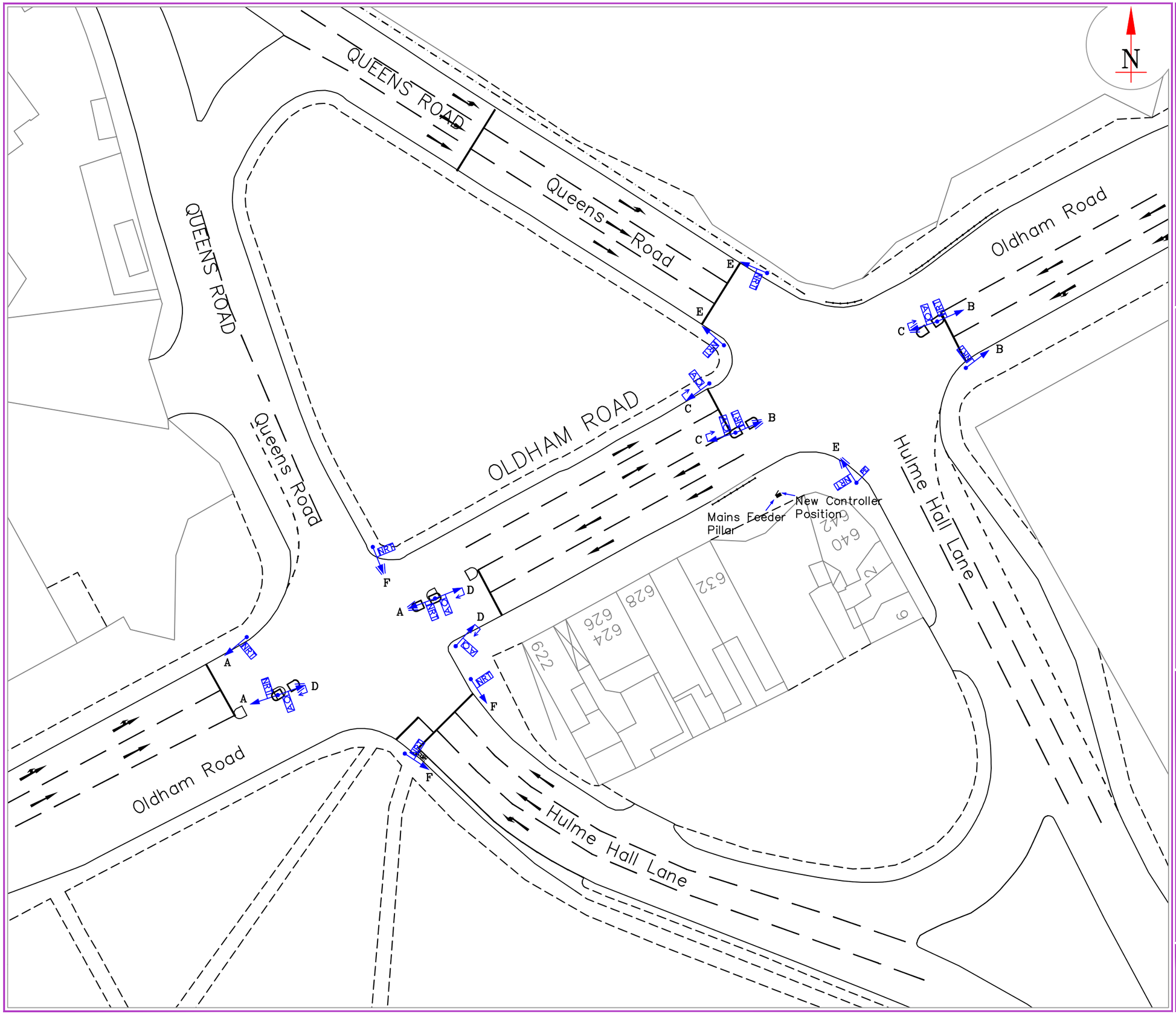
Thanks
Chris

Chris Mullett
Associate Director
BuroHappold Engineering | Transport & Mobility
T: +44 (0)20 7927 9700
M: +44 (0)7753 289911
www.burohappold.com | @burohappold

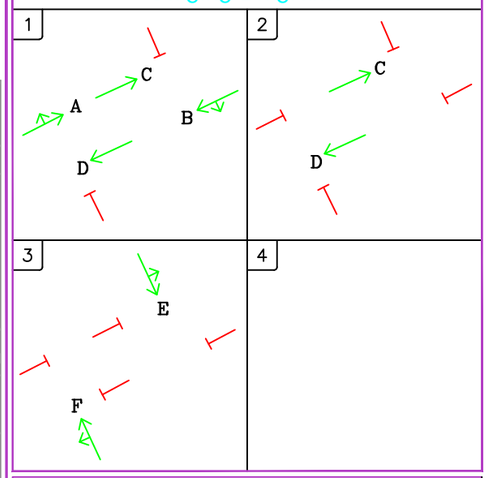


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Staging Diagrams



A	Site survey & photos	09.09.09	PM	
	REVISIONS	DATE	BY	APP

Oldham Rd/Hulme Hall Lane/Queens Road

Manchester (76)

SCALE 1:500

0.0 5 10 15 20 25 30 metres

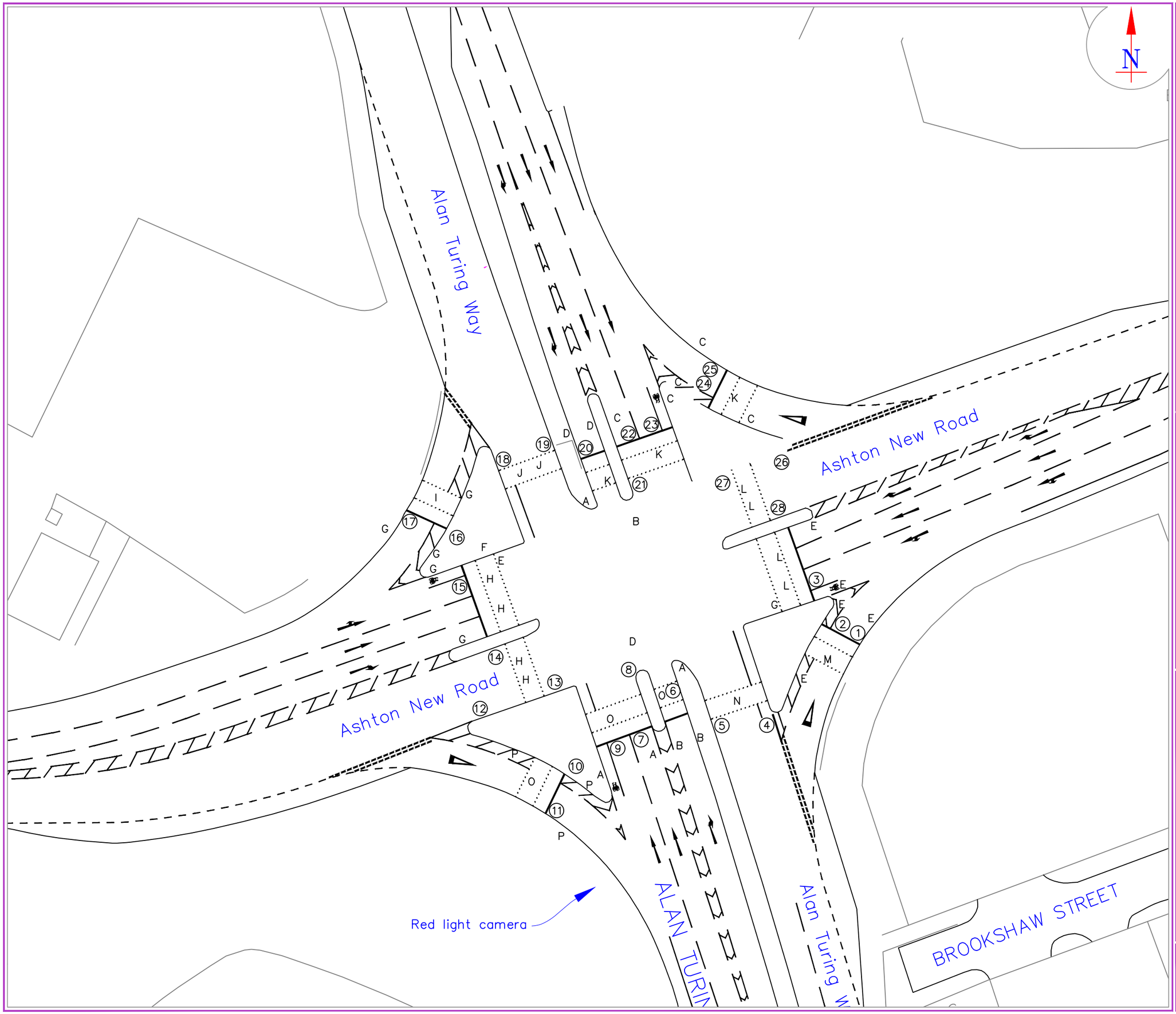
OS-REF	SJ8699	CHECKED ON SITE BY	PM
DATE	14/11/2006	CHECKED BY	
STATUS	As built	DRAWN BY	HS
ORIGINAL DRAWING SIZE	A3	CAD FILE	Sig76X.dwg
XREF	X3_ALAN-TURING-WAY_SCOOT		REV
DRAWING No.	A3/03/76/3		A

·A·G·M·A·

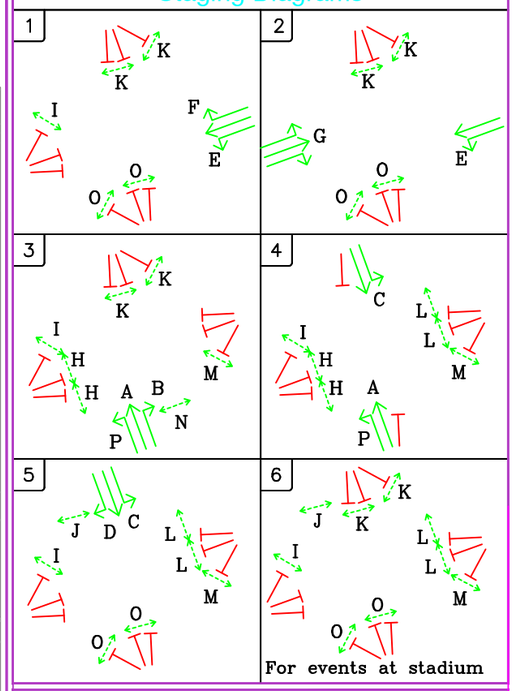
ASSOCIATION OF GREATER MANCHESTER AUTHORITIES

GREATER MANCHESTER URBAN TRAFFIC CONTROL UNIT

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Staging Diagrams



Notes:

To re–use the existing signal cables, which have been diverted due to installation of bridge stanchions on the SE & NW triangular islands, 2 termination cabinets have been installed.

The signal heads, for Phase A, on poles 7, 9 & 20, have kept their halogen signal heads due to the red light camera, at this junction.

F	Passive bluetooth sensor added	03.10.14	MJK	
E	Heads 10,11,12 LED Phase P	14/07/14	PH	
D	T900LV Cuckoo installed & aspects changed to L.E.D.s	09/08/13	PAT	
C	SCOOT duct and loops added	15/12/08	SLC	
B	New stage added	09/08/06	ETC	
A	Site survey	24/06/05	PM	
	REVISIONS	DATE	BY	APP

Ashton New Road/Alan Turing Way
Manchester (7)

SCALE 1:500 — 0.0 5 10 15 20 25 30 metres

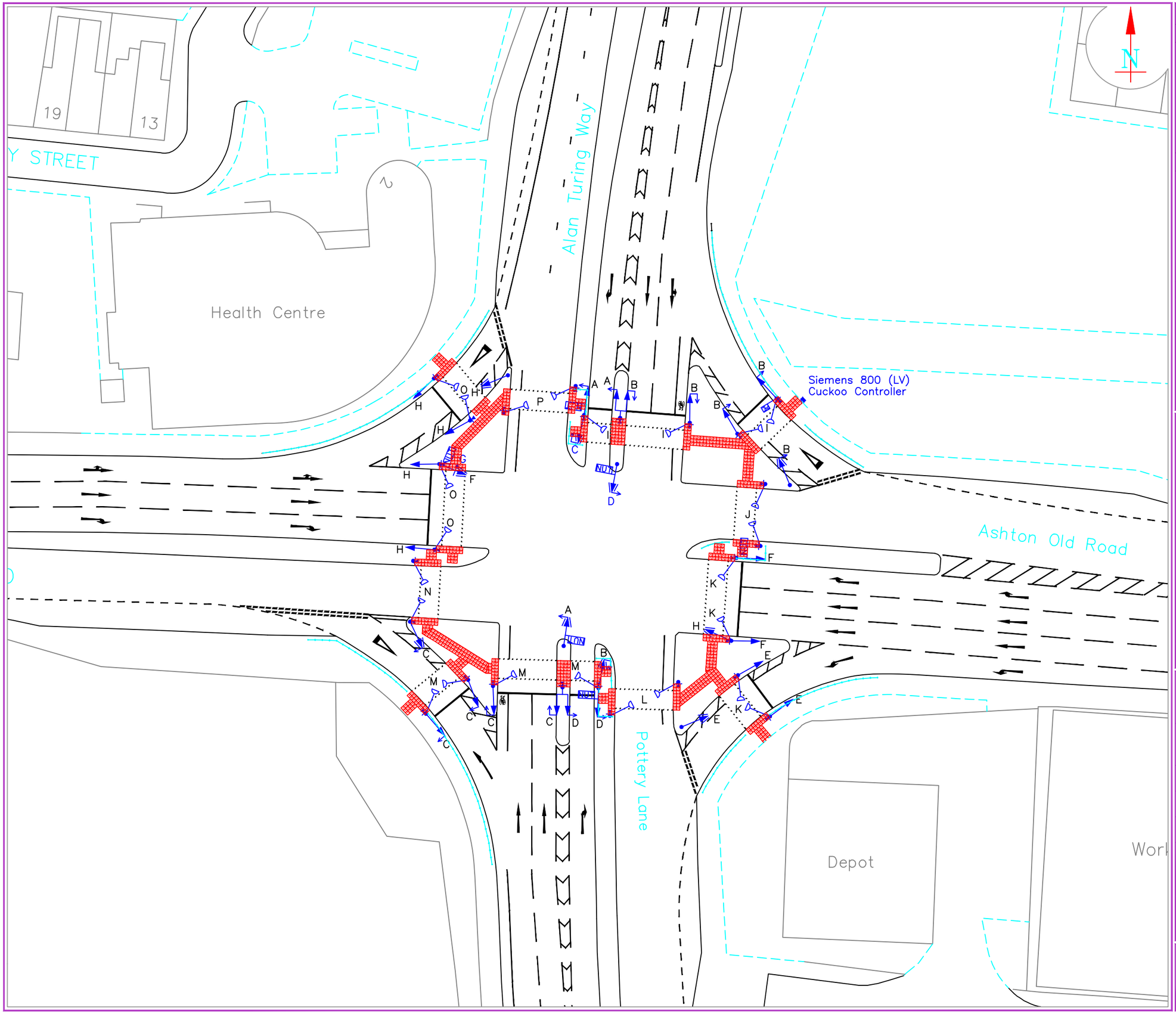
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DATE	14/11/2006	CHECKED BY	
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XREF	X3_ALAN-TURING-WAY_SCOOT		REV
DRAWING No.	A3/03/7/2		F

·A·G·M·A·

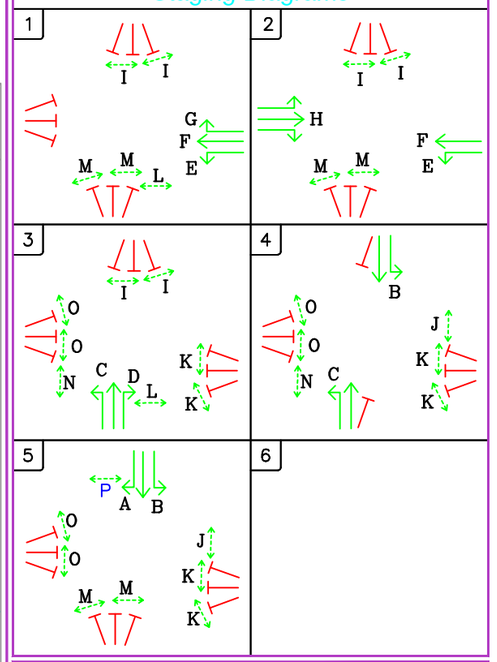
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Staging Diagrams



REV	REVISIONS	DATE	BY	APP
C	T800 cuckoo added 29/4/12	30/4/12	PH	
B	SCOOT ducts and loops added	08/12/08	SLC	
A	Site Survey	24/06/05	SLC	

Ashton Old Road/Pottery Lane
Manchester (10)

SCALE 1:500 (0.0 5 10 15 20 25 30 metres)

OS-REF	SJ8797	CHECKED ON SITE BY	
DATE	13/11/2006	CHECKED BY	
STATUS	Draft	DRAWN BY	HS
ORIGINAL DRAWING SIZE	A3	CAD FILE	SIG10
XREF	X3_ALAN-TURING-WAY_SCOOT	REV	
DRAWING No.	A3/03/10/3	C	

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GREATER MANCHESTER URBAN TRAFFIC CONTROL UNIT
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Fire Station

Siemens
ST900
Controller

Hulme Hall Lane

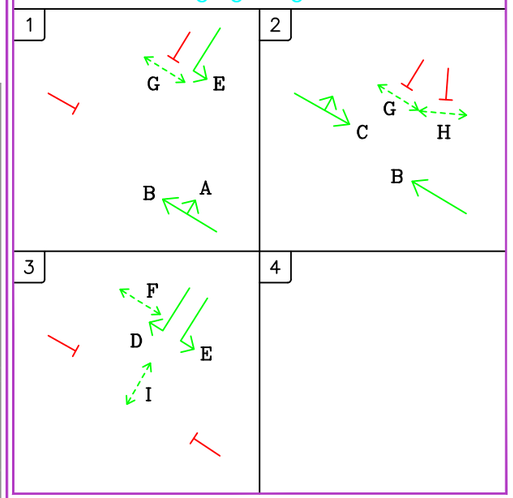
Briscoe Lane

Alan Turing Way

Lodge

Gas Holder

Staging Diagrams



B	SCOOT duct and loops added	07/03/05	SLC	
A	Site survey	07/03/05	PM	
	REVISIONS	DATE	BY	APP

Hulme Hall Lane/Briscoe Lane
Manchester (20)

SCALE 1:500

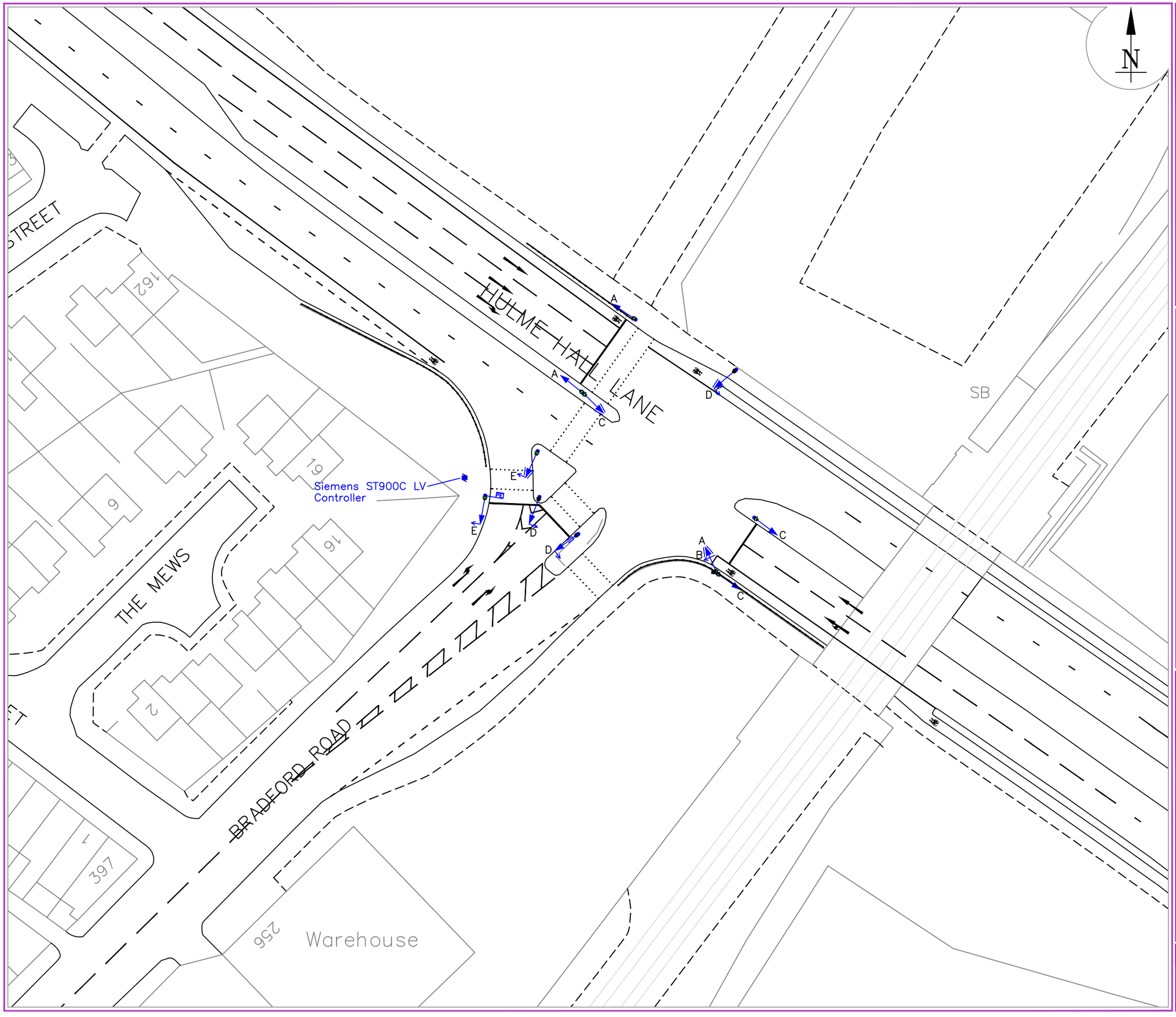
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DATE	14/11/2006	CHECKED BY	
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XREF	X3_ALAN-TURING-WAY_SCOOT		REV
DRAWING No.	A3/03/20/3		B

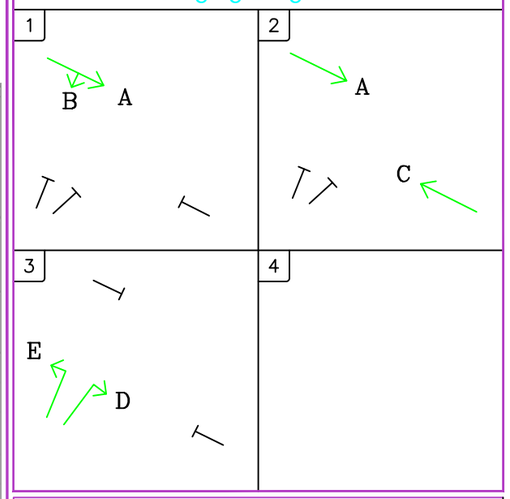
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Staging Diagrams



	REVISIONS	DATE	BY	APP
B	SCOOT duct and loops added	30/12/08	SLC	
A	Site survey	07/03/05	PM	

Hulme Hall Lane/Bradford Road
Manchester (21)

SCALE 1:500

0.0 5 10 15 20 25 30 metres

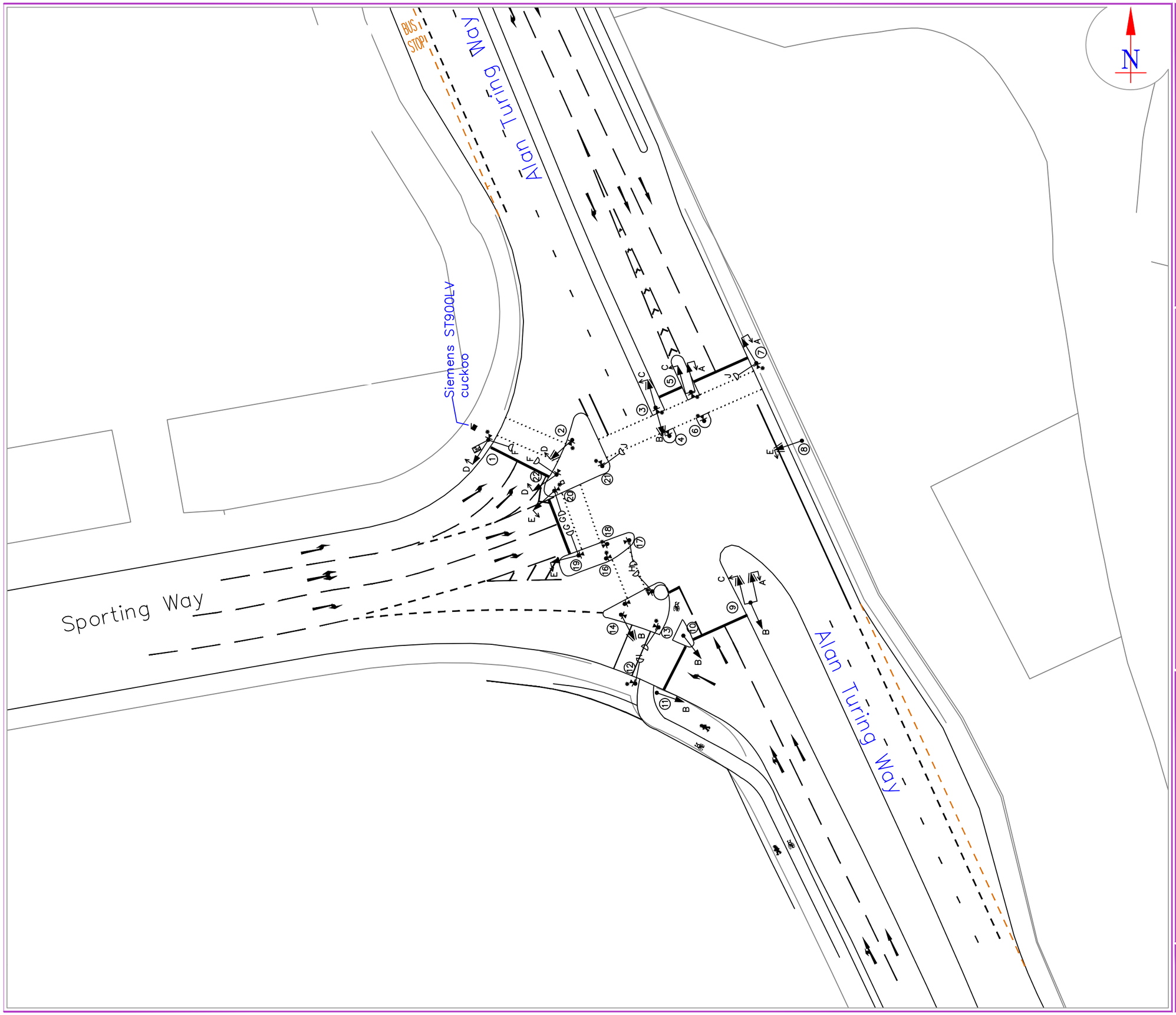
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DATE	14/11/2006	CHECKED BY	
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ORIGINAL DRAWING SIZE	A3	CAD FILE	Sig21.dwg
XREF	X3_ALAN-TURING-WAY_SCOOT		REV
DRAWING No.	A3/03/21/3		B

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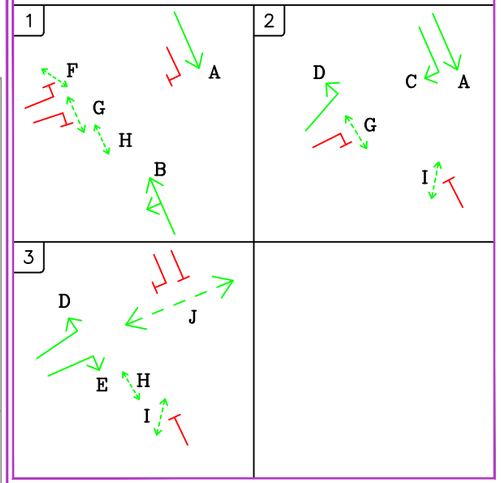
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Staging Diagrams



C	ARP Controller Upgrade	15/01/13	DJ	LW
B	SCOOT duct and loops added	29/12/08	SLC	
A	Site survey	10/03/05	PM	
	REVISIONS	DATE	BY	APP

Alan Turing Way - Development Access, Stadium

Manchester (1148)

SCALE 1:500

0.0 5 10 15 20 25 30 metres

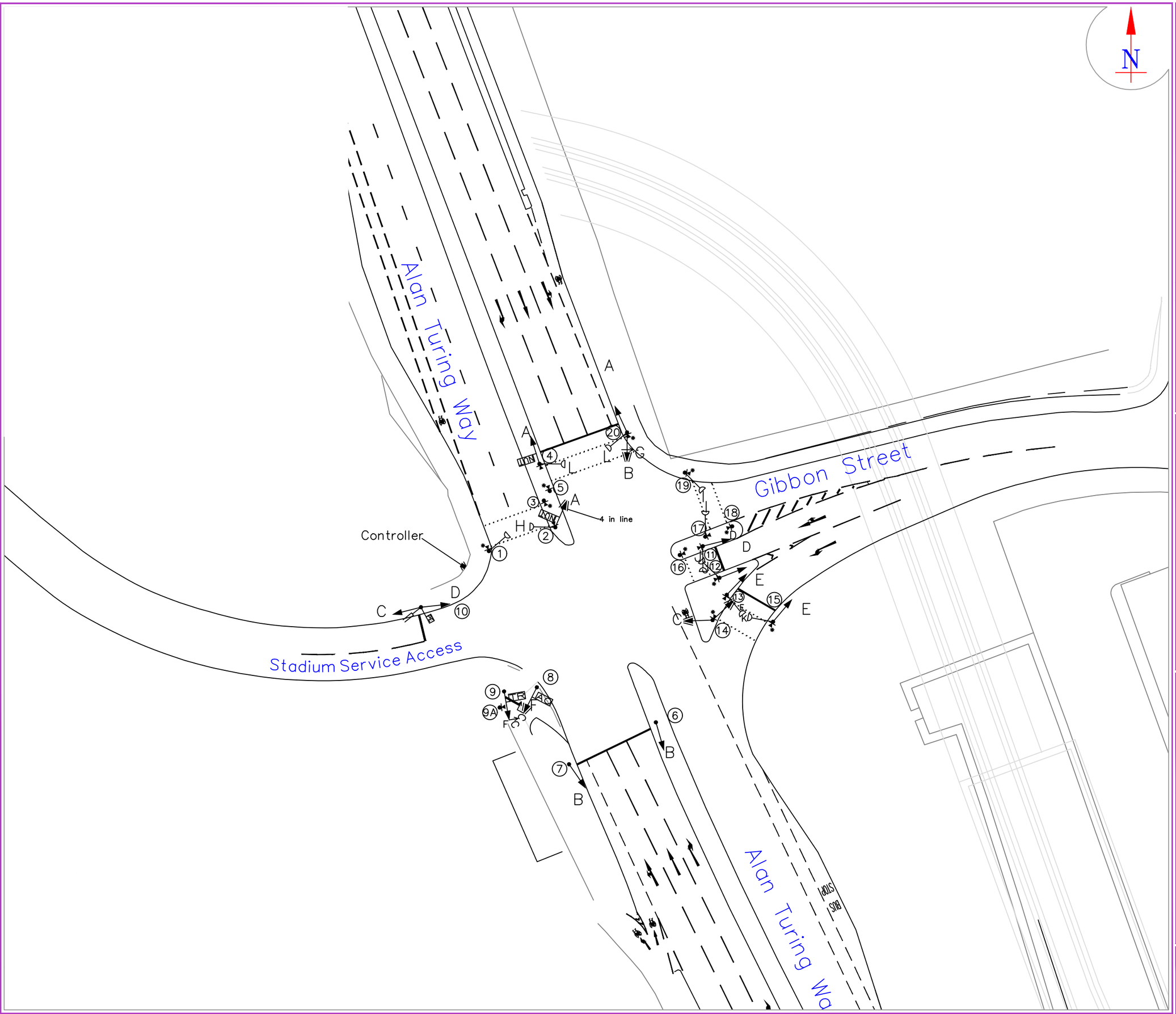
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XREF	X3_ALAN-TURING-WAY_SCOOT		REV
DRAWING No.	A3/03/1148/3		C

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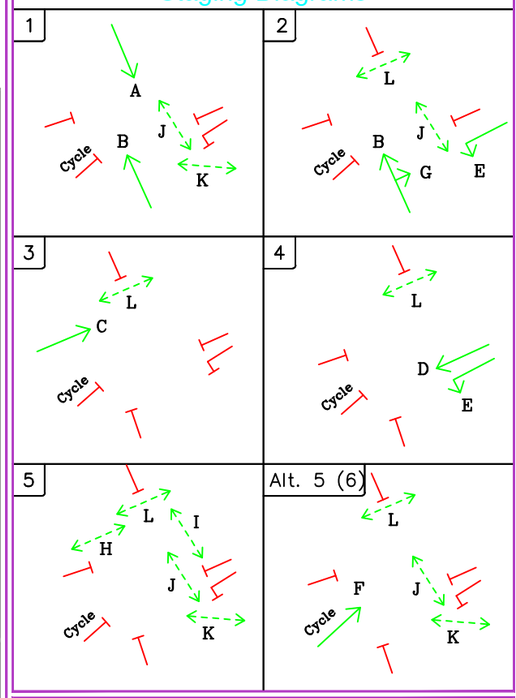
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Staging Diagrams



Note: Stage 5 and Stage 6 are alternate stages

B	SCOOT duct and loops added	29/12/08	SLC
A	Railing and Tactile Added	04/10/02	DGS
	REVISIONS	DATE	BY APP

Alan Turing Way/Gibbon Street/Stadium Service Access

Manchester (1149)

SCALE 1:500

0.0 5 10 15 20 25 30 metres

OS-REF	SJ8798	CHECKED ON SITE BY	
DATE	14/11/2006	CHECKED BY	
STATUS	Draft	DRAWN BY	HS
ORIGINAL DRAWING SIZE	A3	CAD FILE	
XREF	X3_ALAN-TURING-WAY_SCOOT		REV
DRAWING No.	A3/03/1149/3		B

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Transport for Greater Manchester

Urban Traffic Control Unit

Client: Arup

Subject: Controller data and traffic signal timings information

Doc: UTC35/ORN-10/ALD

Author: Alan Dhahir

Location: Ashton Old Road/Pottery Lane/Alan Turning Way

Contact:	**E-Mail:**	**Tel:**
Alan Dhahir	Alan.Dhahir@TfGM.com	0161 244 1667
Richard Dolphin	Richard.Dolphin@TfGM.com	0161 244 1800

This Site Operates under SCOOT Control

Staging

1.	Ashton Old Road East Left Turn (Phase E) Ashton Old Road East (Phase F) Ashton Old Road East Right Turn Green Arrow (Phase G) Pedestrians across Phases A and B (Phase I) Pedestrians across Pottery Lane East (Phase L) Pedestrians across Phases C and D (Phase M)
2.	Ashton Old Road East Left Turn (Phase E) Ashton Old Road East (Phase F) Ashton Old Road West (Phase H) Pedestrians across Phases A and B (Phase I) Pedestrians across Phases C and D (Phase M)
3.	Pottery Lane Ahead and Left Turn (Phase C) Pottery Lane Right Turn (Phase D) Pedestrians across Phases A and B (Phase I) Pedestrians across Phases E, F and G (Phase K) Pedestrians across Pottery Lane East (Phase L) Pedestrians across Ashton Old Road Sorthwest (Phase N) Pedestrians across Ashton Old Road West (Phase O)

4.	Alan Turing Way Ahead and Left Turn (Phase B) Pottery Lane Ahead and Left Turn (Phase C) Pedestrians across Ashton Old Road Northeast (Phase J) Pedestrians across Phases E, F and G (Phase K) Pedestrians across Ashton Old Road Sorthwest (Phase N) Pedestrians across Ashton Old Road West (Phase O)
5.	Alan Turing Way Right Turn (Phase A) Alan Turing Way Ahead and Left Turn (Phase B) Pedestrians across Ashton Old Road Northeast (Phase J) Pedestrians across Phases E, F and G (Phase K) Pedestrians across Phases C and D (Phase M) Pedestrians across Ashton Old Road West (Phase O) Pedestrians across Alan Turing Way West (Phase P)

Note: The attached drawing shows a detailed staging diagram. Note that this layout is based on Ordnance Survey data and is not taken from a topographical survey. The geometry and lane markings are correct to the best of our knowledge, however, changes may have been implemented by the Highway Authority without the involvement of the UTC Unit. The UTC Unit cannot be held responsible for any omissions or errors on the drawing.

Controller phase minimum greens and intergreens

Minimum phase green	To / From	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
7	A		-	7	-	-	5	5	6	5	-	-	-	-	9	-	-
7	B	-		-	5	9	7	7	5	5	-	-	9	-	-	-	-
7	C	5	-		-	-	5	5	7	-	-	-	-	5	-	-	9
7	D	-	6	-		-	6	6	6	-	9	-	-	5	-	-	-
7	E	-	3	-	-		-	-	-	-	-	5	-	-	-	-	-
7	F	6	5	7	6	-		-	-	-	-	5	-	-	9	-	9
4	G	6	5	7	6	-	-		4	-	-	5	-	-	-	-	9
7	H	6	7	5	6	-	-	6		-	9	-	10	-	-	5	-
10	I	8	8	-	-	-	-	-	-		-	-	-	-	-	-	-
5	J	-	-	-	6	-	-	-	7	-		-	-	-	-	-	-
7	K	-	-	-	-	6	10	10	-	-	-		-	-	-	-	-
5	L	-	7	-	-	-	-	-	6	-	-	-		-	-	-	-
10	M	-	-	8	8	-	-	-	-	-	-	-	-		-	-	-
5	N	5	-	-	-	-	6	-	-	-	-	-	-	-		-	-
7	O	-	-	-	-	-	-	-	13	-	-	-	-	-	-		-
5	P	-	-	6	-	-	6	6	-	-	-	-	-	-	-	-	

Phase Delays

Phase	G	runs on for an additional 2	seconds on the change from stage	1	to	2
Phase	E	runs on for an additional 1	second on the change from stage	2	to	3
Phase	F	runs on for an additional 1	second on the change from stage	2	to	3
Phase	E	runs on for an additional 4	seconds on the change from stage	2	to	4
Phase	E	runs on for an additional 4	seconds on the change from stage	2	to	5
Phase	C	runs on for an additional 4	seconds on the change from stage	3	to	1
Phase	D	runs on for an additional 4	seconds on the change from stage	3	to	1
Phase	N	runs on for an additional 4	seconds on the change from stage	3	to	1
Phase	L	runs on for an additional 1	second on the change from stage	3	to	4
Phase	L	runs on for an additional 1	second on the change from stage	3	to	5
Phase	N	runs on for an additional 3	seconds on the change from stage	3	to	5
Phase	B	runs on for an additional 1	second on the change from stage	4	to	1
Phase	C	runs on for an additional 3	seconds on the change from stage	4	to	1
Phase	N	runs on for an additional 3	seconds on the change from stage	4	to	1
Phase	A	runs on for an additional 1	second on the change from stage	5	to	1
Phase	B	runs on for an additional 1	second on the change from stage	5	to	1
Phase	P	runs on for an additional 4	seconds on the change from stage	5	to	1
Phase	A	runs on for an additional 1	second on the change from stage	5	to	3
Phase	B	runs on for an additional 1	second on the change from stage	5	to	3

Phase	J	runs on for an additional 2	seconds on the change from stage	5	to	3
Phase	P	runs on for an additional 2	seconds on the change from stage	5	to	3
Phase	M	runs on for an additional 1	second on the change from stage	5	to	4
Phase	P	runs on for an additional 2	seconds on the change from stage	5	to	4

Stage Lengths

SCOOT

The site operates under SCOOT Control. The green times are variable throughout the day depending on traffic conditions on site. The SCOOT maximum cycle time for this region is 104 seconds and the site will run up to this cycle time during the peak periods.

Transport for Greater Manchester

Urban Traffic Control Unit

Client: Arup

Subject: Controller data and traffic signal timings information

Doc: UTC35/ORN-21/ALD

Author: Alan Dhahir

Location: Hulme Hall Lane / Bradford Road Manchester

Contact:	**E-Mail:**	**Tel:**
Alan Dhahir	Alan.Dhahir@TfGM.com	0161 244 1667
Richard Dolphin	Richard.Dolphin@TfGM.com	0161 244 1800

This Site Operates under SCOOT Control

Staging

1.	Hulme Hall Lane North (Phase A) Hulme Hall Lane North Right Turn Green Arrow (Phase B)
2.	Hulme Hall Lane North (Phase A) Hulme Hall Lane South (Phase C)
3.	Bradford Road Right Turn (Phase D) Bradfor Road Left Turn (Phase E)

Note: The attached drawing shows a detailed staging diagram. Note that this layout is based on Ordnance Survey data and is not taken from a topographical survey. The geometry and lane markings are correct to the best of our knowledge, however, changes may have been implemented by the Highway Authority without the involvement of the UTC Unit. The UTC Unit cannot be held responsible for any omissions or errors on the drawing.

Controller phase minimum greens and intergreens

Minimum phase green	To / From	A	B	C	D	E
7	A		-	-	7	-
5	B	-		4	5	-
7	C	-	5		6	7
7	D	7	7	6		-
7	E	-	-	5	-	

SCOOT

The site operates under SCOOT Control. The green times are variable throughout the day depending on traffic conditions on site. The SCOOT maximum cycle time for this region is 104 seconds and the site will run up to this cycle time during the peak periods.

Transport for Greater Manchester

Urban Traffic Control Unit

Client: Arup

Subject: Controller data and traffic signal timings information

Doc: UTC35/ORN-76/ALD

Author: Alan Dhahir

Location: Oldham Road/Hulme Hall Lane/Queens Road

Contact:	**E-Mail:**	**Tel:**
Alan Dhahir	Alan.Dhahir@TfGM.com	0161 244 1667
Richard Dolphin	Richard.Dolphin@TfGM.com	0161 244 1800

This Site Operates under SCOOT Control

Staging

1.	Oldham Road Northeast Bound (Phase A) Oldham Road Southwest Bound (Phase B) Oldham Road Northeast Bound Reservoir (Phase C) Oldham Road Southwest Bound Reservoir (Phase D)
2.	Oldham Road Northeast Bound Reservoir (Phase C) Oldham Road Southwest Bound Reservoir (Phase D) *Dummy for stage 2 minimum green timing and `G2' reply bit (Phase G)
3.	Queens Road (Phase E) Hulme Hall Lane (Phase F)

***Phase G is a dummy phase**

Note: The attached drawing shows a detailed staging diagram. Note that this layout is based on Ordnance Survey data and is not taken from a topographical survey. The geometry and lane markings are correct to the best of our knowledge, however, changes may have been implemented by the Highway Authority without the involvement of the UTC Unit. The UTC Unit cannot be held responsible for any omissions or errors on the drawing.

Controller phase minimum greens and intergreens

Minimum phase green	To / From	A	B	C	D	E	F	G
7	A		-	-	-	-	6	3
7	B	-		-	-	6	-	3
7	C	-	-		-	6	-	-
7	D	-	-	-		-	6	-
7	E	-	7	7	-		-	-
7	F	7	-	-	7	-		-
3	G	-	-	-	-	-	-	

Phase Delays

There are no phase delays

Stage Lengths

SCOOT

The site operates under SCOOT Control. The green times are variable throughout the day depending on traffic conditions on site. The SCOOT maximum cycle time for this region is 104 seconds and the site will run up to this cycle time during the peak periods.

Transport for Greater Manchester

Urban Traffic Control Unit

Client: Arup

Subject: Controller data and traffic signal timings information

Doc: UTC35/ORN-7/ALD

Author: Alan Dhahir

Location: Ashton New Road/ Alan Turing Way, Manchester

Contact:	**E-Mail:**	**Tel:**
Alan Dhahir	Alan.Dhahir@TfGM.com	0161 244 1667
Richard Dolphin	Richard.Dolphin@TfGM.com	0161 244 1800

This Site Operates under SCOOT Control

Staging

1.	Ashton New Road East (Phase E) Ashton New Road East Right Turn Green Arrow (Phase F) Pedestrians across Ashton New Road West Left Turn (Phase I) Pedestrians across Phases C and D (Phase K) Pedestrians across Phases A and B (Phase O)
2.	Ashton New Road East (Phase E) Ashton New Road West (Phase G) Pedestrians across Phases C and D (Phase K) Pedestrians across Phases A and B (Phase O)
3.	Alan Turing Way South Ahead (Phase A) Alan Turing Way South Right Turn (Phase B) Pedestrians across Ashton New Road West (Phase H) Pedestrians across Ashton New Road West Left Turn (Phase I) Pedestrians across Phases C and D (Phase K) Pedestrians across Ashton New Road East Left Turn (Phase M) Pedestrians across Alan Turing Way Southeast Side (Phase N) Alan Turing Way South Left Turn (Phase P)
4.	Alan Turing Way South Ahead (Phase A) Alan Turing Way North Ahead and Left (Phase C)

	Pedestrians across Ashton New Road West (Phase H) Pedestrians across Ashton New Road West Left Turn (Phase I) Pedestrians across Ashton New Road East (Phase L) Pedestrians across Ashton New Road East Left Turn (Phase M) Alan Turing Way South Left Turn (Phase P) * Dummy for Stage 4 minimum Green Timing (Phase Q)
5.	Alan Turing Way North Ahead and Left (Phase C) Alan Turing Way North Right Turn (Phase D) Pedestrians across Ashton New Road West Left Turn (Phase I) Pedestrians across Alan Turing Way Northwest Side (Phase J) Pedestrians across Ashton New Road East (Phase L) Pedestrians across Ashton New Road East Left Turn (Phase M) Pedestrians across Phases A and B (Phase O)

*** Phase Q is a dummy phase**

Note: The attached drawing shows a detailed staging diagram. Note that this layout is based on Ordnance Survey data and is not taken from a topographical survey. The geometry and lane markings are correct to the best of our knowledge, however, changes may have been implemented by the Highway Authority without the involvement of the UTC Unit. The UTC Unit cannot be held responsible for any omissions or errors on the drawing.

Controller phase minimum greens and intergreens

Minimum phase green	To / From	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	*Q
7	A		-	-	5	5	5	7	-	-	8	-	-	-	-	5	-	-
7	B	-		6	-	6	6	6	-	-	-	-	8	-	-	5	-	8
7	C	-	5		-	7	7	6	-	-	-	5	-	-	8	-	-	-
7	D	7	-	-		7	7	6	8	-	-	5	-	-	-	-	7	8
7	E	7	7	6	6		-	-	8	-	10	-	5	5	-	-	7	8
4	F	7	7	5	6	-		5	-	-	10	-	5	-	-	-	-	7
7	G	6	6	7	6	-	6		5	5	-	-	8	-	10	-	-	8
11	H	-	-	-	7	7	-	8		-	-	-	-	-	-	-	-	-
5	I	-	-	-	-	-	-	6	-		-	-	-	-	-	-	-	-
5	J	6	-	-	-	6	6	-	-	-		-	-	-	-	-	-	6
10	K	-	-	8	8	-	-	-	-	-	-		-	-	-	-	-	8
11	L	-	6	-	-	8	8	6	-	-	-	-		-	-	-	-	-
5	M	-	-	-	-	6	-	-	-	-	-	-	-		-	-	-	-
5	N	-	-	7	-	-	-	7	-	-	-	-	-	-		-	-	7
9	O	7	7	-	-	-	-	-	-	-	-	-	-	-	-		7	7
7	P	-	-	-	5	5	-	-	-	-	-	-	-	-	-	5		-
1	*Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*** Phase Q is a dummy phase**

Phase Delays

Phase	F	runs on for an additional 1	second on the change from stage	1	to	2
Phase	E	runs on for an additional 1	second on the change from stage	2	to	4
Phase	G	runs on for an additional 1	second on the change from stage	2	to	4
Phase	E	runs on for an additional 1	second on the change from stage	2	to	5
Phase	G	runs on for an additional 1	second on the change from stage	2	to	5
Phase	A	runs on for an additional 1	second on the change from stage	3	to	1
Phase	B	runs on for an additional 1	second on the change from stage	3	to	1
Phase	B	runs on for an additional 2	seconds on the change from stage	3	to	4
Phase	N	runs on for an additional 1	second on the change from stage	3	to	4
Phase	A	runs on for an additional 2	seconds on the change from stage	3	to	5
Phase	B	runs on for an additional 2	seconds on the change from stage	3	to	5
Phase	N	runs on for an additional 1	second on the change from stage	3	to	5
Phase	A	runs on for an additional 3	seconds on the change from stage	4	to	1
Phase	C	runs on for an additional 1	second on the change from stage	4	to	1
Phase	M	runs on for an additional 2	seconds on the change from stage	4	to	1
Phase	C	runs on for an additional 1	second on the change from stage	4	to	3
Phase	A	runs on for an additional 2	seconds on the change from stage	4	to	5
Phase	C	runs on for an additional 1	second on the change from stage	5	to	1
Phase	D	runs on for an additional 1	second on the change from stage	5	to	1
Phase	J	runs on for an additional 2	seconds on the change from stage	5	to	1
Phase	J	runs on for an additional 1	second on the change from stage	5	to	4
Phase	P	runs on for an additional 1	second on the change from stage	3	to	1
Phase	P	runs on for an additional 2	seconds on the change from stage	3	to	5
Phase	P	runs on for an additional 3	seconds on the change from stage	4	to	1
Phase	P	runs on for an additional 2	seconds on the change from stage	4	to	5

Stage Lengths

SCOOT

The site operates under SCOOT Control. The green times are variable throughout the day depending on traffic conditions on site. The SCOOT maximum cycle time for this region is 104 seconds and the site will run up to this cycle time during the peak periods.

Transport for Greater Manchester

Urban Traffic Control Unit

Client: Arup

Subject: Controller data and traffic signal timings information

Doc: UTC35/ORN-20/ALD

Author: Alan Dhahir

Location: Hulme Hall Lane/Briscoe Lane, Manchester

Contact:	**E-Mail:**	**Tel:**
Alan Dhahir	Alan.Dhahir@TfGM.com	0161 244 1667
Richard Dolphin	Richard.Dolphin@TfGM.com	0161 244 1800

This Site Operates under SCOOT Control

Staging

1.	Hulme Hall Lane South Right Turn Green Arrow (Phase A) Hulme Hall Lane South (Phase B) Briscoe Lane Left Turn (Phase E) Pedestrians across Briscoe Lane Right Turn (Phase G)
2.	Hulme Hall Lane South (Phase B) Hulme Hall Lane North (Phase C) Pedestrians across Briscoe Lane Right Turn (Phase G) Pedestrians across Briscoe Lane Left Turn (Phase H)
3.	Briscoe Lane Right Turn (Phase D) Briscoe Lane Left Turn (Phase E) Pedestrians across Briscoe Lane Northside (Phase F) *Pedestrians across Hulme Hall Lane (Phase I)

***Phase I is demand dependent**

Note: The attached drawing shows a detailed staging diagram. Note that this layout is based on Ordnance Survey data and is not taken from a topographical survey. The geometry and lane markings are correct to the best of our knowledge, however, changes may have been implemented by the Highway Authority without the involvement of the UTC Unit. The UTC Unit cannot be held responsible for any omissions or errors on the drawing.

Controller phase minimum greens and intergreens

Minimum phase green	To / From	A	B	C	D	E	F	G	H	I
3	A		-	3	6	-	9	-	-	5
7	B	-		-	5	-	9	-	-	5
7	C	6	-		6	8	7	-	-	8
7	D	6	6	5		-	-	5	-	-
7	E	-	-	5	-		-	-	5	-
5	F	6	6	6	-	-		-	-	-
5	G	-	-	-	5	-	-		-	-
7	H	-	-	-	-	8	-	-		-
12	I	10	10	10	-	-	-	-	-	

Phase Delays

1. Phase A runs on for an additional 2 seconds on the change from stage 1 to 2
2. Phase B runs on for an additional 1 second on the change from stage 2 to 3
3. Phase G runs on for an additional 1 second on the change from stage 2 to 3
4. Phase D runs on for an additional 4 seconds on the change from stage 3 to 1
5. Phase F runs on for an additional 4 seconds on the change from stage 3 to 1

Phase delays 4 and 5 will be deleted if phase I does not appear in stage 3.

Stage Lengths

SCOOT

The site operates under SCOOT Control. The green times are variable throughout the day depending on traffic conditions on site. The SCOOT maximum cycle time for this region is 104 seconds and the site will run up to this cycle time during the peak periods.

Transport for Greater Manchester

Urban Traffic Control Unit

Client: Arup

Subject: Controller data and traffic signal timings information

Doc: UTC35/ORN-1148/ALD

Author: Alan Dhahir

Location: Alan Turing Way / Stadium Access, Manchester

Contact:	**E-Mail:**	**Tel:**
Alan Dhahir	Alan.Dhahir@TfGM.com	0161 244 1667
Richard Dolphin	Richard.Dolphin@TfGM.com	0161 244 1800

This Site Operates under SCOOT Control

Staging

1.	Alan Turing Way Southbound Ahead (Phase A) Alan Turing Way Northbound (Phase B) Pedestrians across Phase D (Phase F) Pedestrians across Phase E (Phase G) Pedestrians across Stadium Entrance (Phase H)
2.	Alan Turing Way Southbound Ahead (Phase A) Alan Turing Way Southbound Right Turn (Phase C) Stadium Exit Left Turn (Phase D) Pedestrians across Phase E (Phase G) Pedestrians across Phase B Left Turn (Phase I)
3.	Stadium Exit Left Turn (Phase D) Stadium Exit Right Turn (Phase E) Pedestrians across Stadium Entrance (Phase H) Pedestrians across Phase B Left Turn (Phase I) *Pedestrians across Alan Turing Way (Phase J)

*** Phase J is demand dependent**

Note: The attached drawing shows a detailed staging diagram. Note that this layout is based on Ordnance Survey data and is not taken from a topographical survey. The geometry and lane markings are correct to the best of our knowledge, however, changes may have been implemented by the Highway Authority without the involvement of the UTC Unit. The UTC Unit cannot be held responsible for any omissions or errors on the drawing.

Controller phase minimum greens and intergreens

Minimum phase green	To / From	A	B	C	D	E	F	G	H	I	J
7	A		-	-	-	6	-	-	-	-	8
7	B	-		5	9	5	-	-	-	5	8
7	C	-	5		-	5	-	-	8	-	8
7	D	-	3	-		-	5	-	-	-	-
7	E	6	6	6	-		-	5	-	-	-
5	F	-	-	-	7	-		-	-	-	-
5	G	-	-	-	-	7	-		-	-	-
5	H	-	-	5	-	-	-	-		-	-
5	I	-	5	-	-	-	-	-	-		-
9	J	12	12	12	-	-	-	-	-	-	

Phase Delays

1. Phase A runs on for an additional 1 second on the change from stage 1 to 3
2. Phase A runs on for an additional 1 second on the change from stage 2 to 3
3. Phase D runs on for an additional 3 seconds on the change from stage 3 to 1
4. Phase D runs on for an additional 7 seconds on the change from stage 3 to 1
5. Phase E runs on for an additional 6 seconds on the change from stage 3 to 1

Phase delay 2 will be deleted if phase J does appear in stage 3 and phase delays 3 and 4 will be deleted if phase J does not appear in stage 3.

Stage Lengths

SCOOT

The site operates under SCOOT Control. The green times are variable throughout the day depending on traffic conditions on site. The SCOOT maximum cycle time for this region is 104 seconds and the site will run up to this cycle time during the peak periods.

Transport for Greater Manchester

Urban Traffic Control Unit

Client: Arup

Subject: Controller data and traffic signal timings information

Doc: UTC35/ORN-1149/ALD

Author: Alan Dhahir

Location: Alan Turing Way/Gibbon Street/Stadium Service Access

Contact:	**E-Mail:**	**Tel:**
Alan Dhahir	Alan.Dhahir@TfGM.com	0161 244 1667
Richard Dolphin	Richard.Dolphin@TfGM.com	0161 244 1800

This Site Operates under SCOOT Control

Staging

1.	Alan Turing Way Northside (Phase A) Alan Turing Way Southside (Phase B) Pedestrians across Gibbon Street Ahead (Phase J) Pedestrians across Gibbon Street Left Turn (Phase K)
2.	Alan Turing Way Southside (Phase B) Gibbon Street Left Turn (Phase E) Alan Turing Way Southside Right Turn Green Arrow (Phase G) Pedestrians across Gibbon Street Ahead (Phase J) Pedestrians across Alan Turing Way Northside (Phase L)
3.	Stadium Service Access (Phase C) Pedestrians across Alan Turing Way Northside (Phase L)
4.	Gibbon Street (Phase D) Gibbon Street Left Turn (Phase E) Pedestrians across Alan Turing Way Northside (Phase L)
5.	Pedestrians across Alan Turing Way Northside Exit (Phase H) Pedestrians across Gibbon Street Exit (Phase I) Pedestrians across Gibbon Street Ahead (Phase J) Pedestrians across Gibbon Street Left Turn (Phase K) Pedestrians across Alan Turing Way Northside (Phase L)

6.	Cycle Alan Turing Way Southside (Phase F) Pedestrians across Gibbon Street Ahead (Phase J) Pedestrians across Gibbon Street Left Turn (Phase K) Pedestrians across Alan Turing Way Northside (Phase L)

Stages 5 and 6 are alternative to each other in any controller cycle. If a demand for phase H or I exists but none for phase F then stage 5 will appear. If a demand for phase F but no demand for phase H or I then stage 6 will appear. If the controller has demands for both phase H or I and Phase F then the controller will alternate between stage 5 and stage 6 appearance every complete cycle.

Note: The attached drawing shows a detailed staging diagram. Note that this layout is based on Ordnance Survey data and is not taken from a topographical survey. The geometry and lane markings are correct to the best of our knowledge, however, changes may have been implemented by the Highway Authority without the involvement of the UTC Unit. The UTC Unit cannot be held responsible for any omissions or errors on the drawing.

Controller phase minimum greens and intergreens

Minimum phase green	To / From	A	B	C	D	E	F	G	H	I	J	K	L
7	A		-	6	6	7	5	5	-	8	-	-	5
7	B	-		6	6	-	5	-	8	11	-	-	-
7	C	7	5		6	7	5	5	8	11	-	-	-
7	D	5	7	6		-	6	5	10	-	5	-	-
7	E	5	-	6	-		-	-	-	-	-	5	-
7	F	8	8	7	8	-		6	10	12	-	-	-
4	G	7	-	6	6	-	5		-	11	-	-	-
5	H	-	8	8	8	-	8	-		-	-	-	-
4	I	5	5	5	-	-	5	5	-		-	-	-
2	J	-	-	-	5	-	-	-	-	-		-	-
3	K	-	-	-	-	5	-	-	-	-	-		-
6	L	11	-	-	-	-	-	-	-	-	-	-	

Phase Delays

Phase	H	runs on for an additional 3	seconds on the change from stage	5	to	1
Phase	I	runs on for an additional 6	seconds on the change from stage	5	to	1
Phase	I	runs on for an additional 2	seconds on the change from stage	5	to	2
Phase	K	runs on for an additional 2	seconds on the change from stage	5	to	2
Phase	I	runs on for an additional 2	seconds on the change from stage	5	to	3
Phase	J	runs on for an additional 3	seconds on the change from stage	5	to	3
Phase	K	runs on for an additional 2	seconds on the change from stage	5	to	3
Phase	I	runs on for an additional 2	seconds on the change from stage	5	to	4
Phase	J	runs on for an additional 3	seconds on the change from stage	5	to	4
Phase	K	runs on for an additional 2	seconds on the change from stage	5	to	4
Phase	K	runs on for an additional 2	seconds on the change from stage	1	to	2
Phase	J	runs on for an additional 1	second on the change from stage	1	to	3
Phase	K	runs on for an additional 1	second on the change from stage	1	to	3
Phase	C	runs on for an additional 4	seconds on the change from stage	3	to	1
Phase	D	runs on for an additional 4	seconds on the change from stage	4	to	1
Phase	E	runs on for an additional 6	seconds on the change from stage	4	to	1
Phase	F	runs on for an additional 3	seconds on the change from stage	6	to	1
Phase	H	runs on for an additional 3	seconds on the change from stage	5	to	1
Phase	J	runs on for an additional 3	seconds on the change from stage	6	to	3
Phase	K	runs on for an additional 3	seconds on the change from stage	6	to	3
Phase	K	runs on for an additional 3	seconds on the change from stage	5	to	4

Stage Lengths

SCOOT

The site operates under SCOOT Control. The green times are variable throughout the day depending on traffic conditions on site. The SCOOT maximum cycle time for this region is 104 seconds and the site will run up to this cycle time during the peak periods.

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Appendix C – TA Impact Assessment Tables

Table 4.5 2019 Baseline LINSIG Modelling Results (Maximum Degree of Saturation)

Junction Name	Assessment Scenarios									
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)		Weekday evening (matchday peak arrivals) (19:00 – 20:00)		Weekday evening (matchday peak departures) (22:00 – 23:00)		Saturday (matchday peak arrivals) (12:00 – 13:00)		Saturday (matchday peak departures) (16:00 – 17:00)	
	Football Match Day	Non-Football Match Day	Football Match Day	Non-Football Match Day	Football Match Day	Non-Football Match Day	Football Match Day	Non-Football Match Day	Football Match Day	Non-Football Match Day
Oldham Road (A62)/Hulme Hall Lane (A6010)	73.2%	76.0%	65.7%	53.7%	72.4%	26.9%	55.2%	58.1%	49.2%	58.7%
Hulme Hall Lane (A6010)/Bradford Rd	97.5%	96.3%	55.3%	44.9%	51.2%	21.7%	49.2%	54.6%	42.9%	54.2%
Alan Turing Way (A6010)/Briscoe Ln	89.0%	83.8%	62.5%	44.3%	49.7%	18.3%	44.3%	45.1%	36.7%	55.3%
Alan Turing Way (A6010)/Gate 2 Car Park Access	61.3%	57.6%	71.7%	40.5%	41.8%	16.6%	55.1%	44.2%	37.1%	45.6%
Alan Turing Way (A6010)/Ashton New Road (A662)	94.8%	86.8%	81.6%	66.2%	57.3%	29.8%	63.6%	64.1%	62.5%	62.1%
Alan Turing Way (A6010)/Ashton Old Road (A635)	96.7%	93.2%	97.2%	63.8%	61.3%	40.0%	62.9%	72.9%	57.2%	66.7%

Table 4.6 2019 Baseline PICADY Modelling Results (Ratio of Flow to Capacity)

Ashton New Road (A662)/Rowsley St	Assessment Scenarios									
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)		Weekday evening (matchday peak arrivals) (19:00 – 20:00)		Weekday evening (matchday peak departures) (22:00 – 23:00)		Saturday (matchday peak arrivals) (12:00 – 13:00)		Saturday (matchday peak departures) (16:00 – 17:00)	
	Football Match Day	Non-Football Match Day	Football Match Day	Non-Football Match Day	Football Match Day	Non-Football Match Day	Football Match Day	Non-Football Match Day	Football Match Day	Non-Football Match Day
Stream B-C*	0.18	0.22	0.14	0.03	0.17	0.02	0.09	0.05	0.15	0.03
Stream B-A*	0.26	0.11	0.33	0.03	0.32	0.03	0.17	0.05	0.20	0.04
Stream C-B*	0.17	0.08	0.17	0.06	0.07	0.01	0.07	0.04	0.10	0.02

where A – Ashton New Road (West), B – Rowsley Street and C – Ashton New Road (East).

Table 7.2 2023 Future Baseline LINSIG Modelling Results (Non-Football Match Day)

Junction Name	Assessment Scenarios (Non-Football Match Day)				
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)	**Weekday evening (matchday peak arrivals) (19:00 – 20:00)**	**Weekday evening (matchday peak departures) (22:00 – 23:00)**	**Saturday (matchday peak arrivals) (12:00 – 13:00)**	**Saturday (matchday peak departures) (16:00 – 17:00)**
Oldham Road (A62)/Hulme Hall Lane (A6010)	79.7%	56.6%	28.2%	61.2%	62.0%
Hulme Hall Lane (A6010)/Bradford Rd	100.2%	47.9%	22.8%	58.4%	58.4%
Alan Turing Way (A6010)/Briscoe Ln	88.3%	47.5%	19.5%	48.5%	59.6%
Alan Turing Way (A6010)/Gate 2 Car Park Access	60.5%	42.5%	17.6%	46.6%	48.1%
Alan Turing Way (A6010)/Ashton New Road (A662)	91.2%	64.8%	31.6%	67.7%	65.1%
Alan Turing Way (A6010)/Ashton Old Road (A635)	97.7%	66.8%	42.0%	76.8%	70.2%

Table 7.3 2023 Future Baseline + Arena LINSIG Modelling Results (Non-Football Match Day)

Junction Name	Assessment Scenarios (Non-Football Match Day)				
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)	**Weekday evening (matchday peak arrivals) (19:00 – 20:00)**	**Weekday evening (matchday peak departures) (22:00 – 23:00)**	**Saturday (matchday peak arrivals) (12:00 – 13:00)**	**Saturday (matchday peak departures) (16:00 – 17:00)**
Oldham Road (A62)/Hulme Hall Lane (A6010)	95.3%	58.7%	80.0%	65.1%	104.4%
Hulme Hall Lane (A6010)/Bradford Rd	105.7%	56.8%	72.2%	68.2%	99.6%
Alan Turing Way (A6010)/Briscoe Ln	98.7%	68.3%	88.8%	77.7%	107.8%
Alan Turing Way (A6010)/Gate 2 Car Park Access	89.1%	84.1%	51.1%	93.6%	62.7%
Alan Turing Way (A6010)/Ashton New Road (A662)	103.2%	79.1%	68.4%	86.2%	96.6%
Alan Turing Way (A6010)/Ashton Old Road (A635)	97.7%	66.6%	41.9%	76.6%	69.9%

Table 7.4 2023 Future Baseline PICADY Modelling Results (Non-Football Match Day)

Ashton New Road (A662)/ Rowsley St	Assessment Scenarios (Non-Football Match Day)				
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)	Weekday evening (matchday peak arrivals) (19:00 – 20:00)	Weekday evening (matchday peak departures) (22:00 – 23:00)	Saturday (matchday peak arrivals) (12:00 – 13:00)	Saturday (matchday peak departures) (16:00 – 17:00)
Stream B-C*	0.23	0.04	0.02	0.05	0.04
Stream B-A*	0.12	0.03	0.04	0.06	0.05
Stream C-B*	0.09	0.06	0.01	0.04	0.03

where A – Ashton New Road (West), B – Rowsley Street and C – Ashton New Road (East).

Table 7.5 2023 Future Baseline + Arena PICADY Modelling Results (Non-Football Match Day)

Ashton New Road (A662)/ Rowsley St	Assessment Scenarios (Non-Football Match Day)				
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)	Weekday evening (matchday peak arrivals) (19:00 – 20:00)	Weekday evening (matchday peak departures) (22:00 – 23:00)	Saturday (matchday peak arrivals) (12:00 – 13:00)	Saturday (matchday peak departures) (16:00 – 17:00)
Stream B-C*	0.24	0.04	0.02	0.05	0.04
Stream B-A*	0.13	0.03	0.04	0.06	0.05
Stream C-B*	0.09	0.06	0.01	0.04	0.03

where A – Ashton New Road (West), B – Rowsley Street and C – Ashton New Road (East).

Table 7.7 2023 Future Baseline LINSIG Modelling Results (Football Match Day)

Junction Name	Assessment Scenarios (Football Match Day)				
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)	**Weekday evening (matchday peak arrivals) (19:00 – 20:00)**	**Weekday evening (matchday peak departures) (22:00 – 23:00)**	**Saturday (matchday peak arrivals) (12:00 – 13:00)**	**Saturday (matchday peak departures) (16:00 – 17:00)**
Oldham Road (A62)/Hulme Hall Lane (A6010)	76.7%	69.0%	76.2%	58.4%	51.8%
Hulme Hall Lane (A6010)/Bradford Rd	101.9%	56.5%	53.9%	50.8%	45.2%
Alan Turing Way (A6010)/Briscoe Ln	93.5%	67.2%	52.4%	46.9%	39.3%
Alan Turing Way (A6010)/Gate 2 Car Park Access	64.2%	75.0%	44.0%	58.1%	39.2%
Alan Turing Way (A6010)/Ashton New Road (A662)	99.5%	86.5%	60.2%	66.9%	63.6%
Alan Turing Way (A6010)/Ashton Old Road (A635)	101.6%	101.4%	64.4%	66.4%	60.4%

Table 7.8 2023 Future Baseline + Arena LINSIG Modelling Results (Football Match Day)

Junction Name	Assessment Scenarios (Football Match Day)				
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)	**Weekday evening (matchday peak arrivals) (19:00 – 20:00)**	**Weekday evening (matchday peak departures) (22:00 – 23:00)**	**Saturday (matchday peak arrivals) (12:00 – 13:00)**	**Saturday (matchday peak departures) (16:00 – 17:00)**
Oldham Road (A62)/Hulme Hall Lane (A6010)	116.5%	70.5%	86.6%	84.1%	96.6%
Hulme Hall Lane (A6010)/Bradford Rd	103.4%	59.8%	62.2%	64.1%	89.9%
Alan Turing Way (A6010)/Briscoe Ln	95.0%	69.7%	64.5%	76.0%	101.7%
Alan Turing Way (A6010)/Gate 2 Car Park Access	65.2%	67.7%	37.0%	89.9%	57.7%
Alan Turing Way (A6010)/Ashton New Road (A662)	99.5%	83.9%	65.5%	86.1%	95.2%
Alan Turing Way (A6010)/Ashton Old Road (A635)	101.5%	101.4%	64.4%	66.3%	60.3%

Table 7.9 2023 Future Baseline PICADY Modelling Results (Football Match Day)

Ashton New Road (A662)/ Rowsley St	Assessment Scenarios (Football Match Day)				
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)	Weekday evening (matchday peak arrivals) (19:00 – 20:00)	Weekday evening (matchday peak departures) (22:00 – 23:00)	Saturday (matchday peak arrivals) (12:00 – 13:00)	Saturday (matchday peak departures) (16:00 – 17:00)
Stream B-C*	0.20	0.15	0.19	0.10	0.16
Stream B-A*	0.29	0.36	0.34	0.19	0.21
Stream C-B*	0.18	0.18	0.07	0.07	0.11

where A – Ashton New Road (West), B – Rowsley Street and C – Ashton New Road (East).

Table 7.10 2023 Future Baseline + Arena PICADY Modelling Results (Football Match Day)

Ashton New Road (A662)/ Rowsley St	Assessment Scenarios (Football Match Day)				
	Weekday PM (Highway) Peak Hour (17:00 – 18:00)	Weekday evening (matchday peak arrivals) (19:00 – 20:00)	Weekday evening (matchday peak departures) (22:00 – 23:00)	Saturday (matchday peak arrivals) (12:00 – 13:00)	Saturday (matchday peak departures) (16:00 – 17:00)
Stream B-C*	0.20	0.15	0.18	0.10	0.16
Stream B-A*	0.29	0.36	0.34	0.20	0.22
Stream C-B*	0.18	0.18	0.07	0.08	0.11

where A – Ashton New Road (West), B – Rowsley Street and C – Ashton New Road (East).

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Appendix D – Queue Length Surveys

Midweek Match Queue Length Surveys

Man City Surveys - Part 1
Queue Length Survey

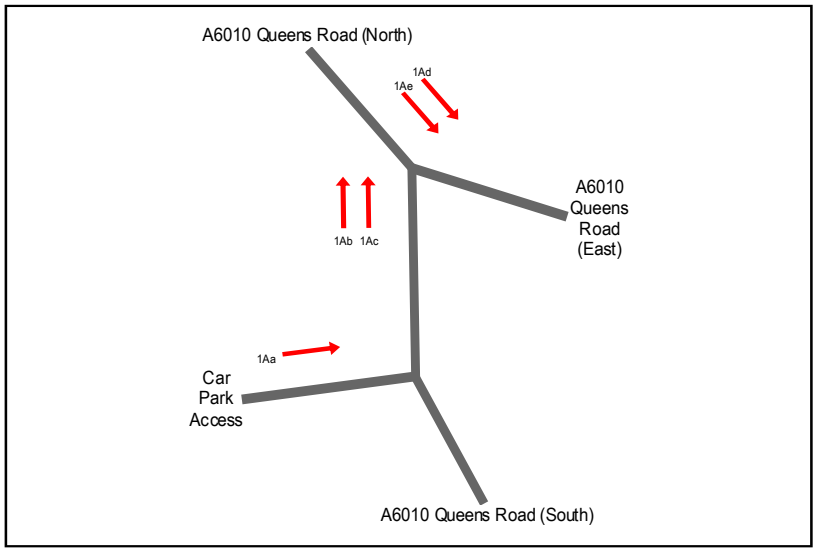
Site 1A
A6010 Queens Road (East)
A6010 Queens Road (South)
Car Park Access
A6010 Queens Road (North)

Lat/Long
lat 53.496055° lon -2.211719°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)



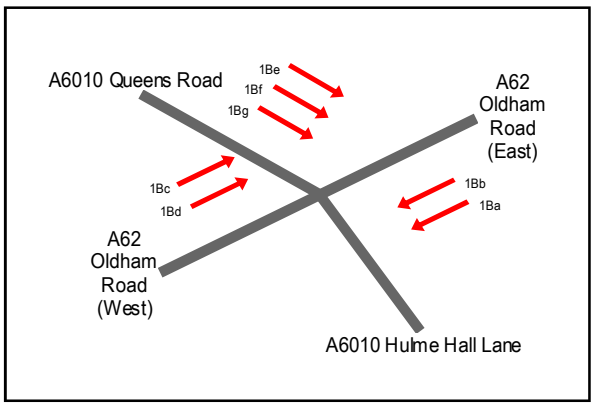
TIME	1Aa	1Ab	1Ac	1Ad	1Ae
16:00	0	0	0	0	0
16:05	0	0	0	0	0
16:10	0	0	0	0	0
16:15	0	0	0	0	0
16:20	0	0	0	0	0
16:25	0	0	0	0	0
16:30	0	2	1	0	0
16:35	0	0	0	0	0
16:40	0	0	0	0	2
16:45	0	0	0	0	0
16:50	0	0	0	0	0
16:55	0	0	0	0	0
Hourly Average	**0.00**	**0.17**	**0.08**	**0.00**	**0.17**
17:00	0	2	0	0	0
17:05	0	2	0	0	0
17:10	0	0	0	0	0
17:15	0	3	1	0	4
17:20	0	0	0	0	6
17:25	0	0	0	0	7
17:30	0	0	0	0	8
17:35	0	4	0	0	0
17:40	0	0	0	0	0
17:45	0	0	0	0	0
17:50	0	0	0	0	8
17:55	0	0	0	0	4
Hourly Average	**0.00**	**0.92**	**0.08**	**0.00**	**3.08**
18:00	0	0	0	0	12
18:05	0	0	0	0	0
18:10	0	0	0	0	0
18:15	0	0	0	0	0
18:20	0	0	0	0	3
18:25	0	0	0	0	0
18:30	0	1	0	0	11
18:35	0	0	0	0	8
18:40	0	0	0	0	0
18:45	0	0	0	0	0
18:50	0	0	0	0	0
18:55	0	0	0	0	0
Hourly Average	**0.00**	**0.08**	**0.00**	**0.00**	**2.83**
19:00	0	0	0	0	0
19:05	0	0	0	0	0
19:10	0	0	0	0	8
19:15	0	0	1	0	7
19:20	0	0	0	0	11
19:25	0	0	0	0	0
19:30	0	0	0	0	0
19:35	0	1	0	0	0
19:40	0	0	0	0	0
19:45	0	0	0	0	0
19:50	0	0	0	0	0
19:55	0	0	0	0	0

Hourly Average	0.00	0.08	0.08	0.00	2.17
20:00	0	0	0	0	1
20:05	0	0	0	0	0
20:10	0	0	0	0	0
20:15	0	0	0	0	0
20:20	0	0	0	0	0
20:25	0	0	0	0	0
20:30	0	0	0	0	0
20:35	0	0	0	0	0
20:40	0	0	0	0	0
20:45	0	0	0	0	0
20:50	0	0	0	0	0
20:55	0	0	0	0	0
Hourly Average	0.00	0.00	0.00	0.00	0.08
21:00	0	0	0	0	0
21:05	0	0	0	0	0
21:10	0	0	0	0	0
21:15	0	0	0	0	0
21:20	0	0	0	0	0
21:25	0	0	0	0	0
21:30	0	0	0	0	0
21:35	0	0	0	0	0
21:40	0	0	0	0	0
21:45	0	0	0	0	0
21:50	0	0	0	0	0
21:55	0	0	0	0	0
Hourly Average	0.00	0.00	0.00	0.00	0.00
22:00	0	0	0	0	0
22:05	0	0	0	1	0
22:10	0	1	0	0	0
22:15	0	1	0	0	0
22:20	0	0	0	0	0
22:25	0	0	0	0	0
22:30	0	0	0	0	0
22:35	0	0	0	0	0
22:40	0	0	0	0	0
22:45	0	0	0	0	0
22:50	0	0	0	0	0
22:55	0	0	0	0	0
23:00	0	0	0	0	0
Hourly Average	0.00	0.15	0.00	0.08	0.00

Session Total	0.00	0.20	0.04	0.01	1.18

Man City Surveys - Part 1
Queue Length Survey

Site 1B
A62 Oldham Road (East)
A6010 Hulme Hall Lane
A62 Oldham Road (West)
A6010 Queens Road



Lat/Long
lat 53.495883° lon -2.210395°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)

TIME	1Ba	1Bb	1Bc	1Bd	1Be	1Bf	1Bg
1600 - 1605	2	2	1	0	4	12	3
	2	2			1	10	4
	1	3			3	9	9
					4	1	1
1605 - 1610	3	3	0	0	6	8	1
	4	3			4	6	3
	2	2			3	9	4
					3	6	2
1610 - 1615	2	4	0	0	3	6	2
	0	1			4	10	11
	2	2			3	12	10
					4	13	8
1615 - 1620	1	0	0	0	5	13	9
	6	3			5	14	8
	0	2			5	15	6
					0	5	2
1620 - 1625	0	1	0	0	2	11	7
	3	1			4	13	5
	2	1			4	16	13
					6	14	8
					6	12	6
					7	8	7
1625 - 1630	2	1	1	0	6	12	8
	2	5			6	11	7
	2	3			6	8	6
	3	1					
1630 - 1635	3	1	1	0	6	10	7
	0	2	1	0	5	12	7
	3	7			5	12	10
	1	0					
1635 - 1640	2	2	0	1	5	13	8
	4	1			7	14	7
	10	9			13	11	12
1640 - 1645	6	8	0	0	7	8	6
	6	7			5	10	5
	0	1			7	3	3
1645 - 1650	1	0	1	2	8	4	3
	2	0			5	13	6
	7	2			7	11	7
	2	3			4	10	5
1650 - 1655	5	5	0	0	5	11	7
	2	4			1	6	9
					7	13	11
					4	11	8
1655 - 1700	4	0	1	0	6	11	9
	1	3			3	10	7
	1	1			6	11	10
					0	3	3

1700 - 1705	4	11	0	0	7	11	7
	5	8			0	9	11
	1	1			4	14	5
1705 - 1710	0	3	0	0	6	12	7
	5	8			11	14	9
					8	9	9
1710 - 1715	2	5	0	0	2	10	7
	4	5			8	10	9
	1	4			13	7	8
1715 - 1720	5	5	0	0	4	14	8
	7	4			7	14	10
	1	0			8	13	11
1720 - 1725	6	7	0	0	8	13	11
	5	6			4	15	8
	5	9			5	10	9
					2	9	5
1725 - 1730	4	6	0	0	3	12	5
	1	0			3	13	8
	4	5			2	16	12
					6	10	4
1730 - 1735	2	3	0	0	5	11	6
	3	6			4	13	12
	10	13			9	12	7
					4	8	4
1735 - 1740	6	7	0	0	8	15	9
	3	4			8	11	5
					8	12	7
					0	2	1
1740 - 1745	5	9	0	0	5	11	7
	5	8			2	17	9
					4	16	11
1745 - 1750	5	3	0	0	4	14	7
	7	8			7	13	7
	3	4			5	14	11
1750 - 1755	7	3	0	0	5	14	11
	4	5			9	17	12
	8	9			7	16	6
					8	16	9
1755 - 1800	6	4	1	0	9	16	11
	2	4			5	13	11
	1	1			2	12	14
					5	15	6
1800 - 1805	3	3	0	0	5	17	6
	3	6			3	9	13
	4	5			4	10	14
					4	5	0
1805 - 1810	4	5	0	0	4	10	3
	1	1			3	8	8
	3	1			4	13	5
					1	4	3
1810 - 1815	1	2	0	0	4	14	8
	2	2			4	19	9
	3	2			5	15	5
1815 - 1820	3	2	1	0	4	15	6
	1	0	0	1	6	18	8
	5	3			6	17	8
	4	6					
1820 - 1825	6	7	1	0	5	15	5
	2	2			3	16	7
	5	4			4	14	8
	3	1					
1825 - 1830	4	4	0	1	7	16	9
	7	6			3	18	7
	9	7			7	19	3
	2	0					
1830 - 1835	6	5	0	0	1	17	11
	4	1			5	18	7

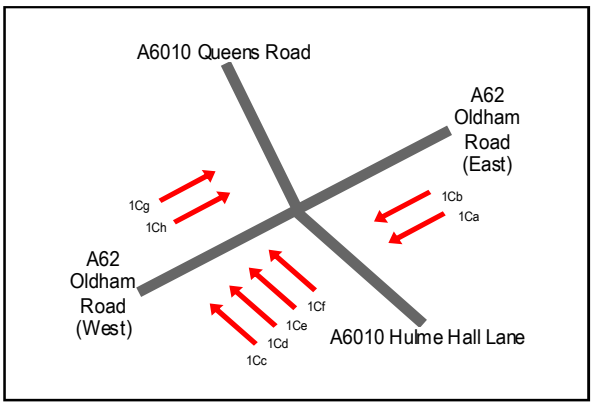
	6	4			2	11	7
1835 - 1840	4	7	0	0	2	18	8
	4	1			0	20	5
	8	5			2	14	7
					4	10	4
1840 - 1845	4	4	0	1	4	15	4
	6	4			1	14	8
	6	5			3	15	4
					4	10	6
1845 - 1850	7	6	0	0	4	13	7
	9	5			0	15	10
	10	6			7	16	9
	12	11			1	10	5
1850 - 1855	9	6	1	1	6	14	9
	11	2	1	0	4	14	10
	3	6			2	19	4
1855 - 1900	11	8	1	0	0	15	3
	15	10			2	17	7
	5	9			1	16	5
1900 - 1905	3	11	0	0	2	15	12
	4	7			3	14	11
	6	9			5	14	5
1905 - 1910	10	12	0	0	6	14	9
	8	7			1	14	11
	9	7			1	14	8
1910 - 1915	6	6	0	1	1	13	8
	10	8			2	10	3
	7	8			3	8	7
1915 - 1920	10	10	0	0	3	17	11
	8	8			2	18	8
	10	6			1	15	7
1920 - 1925	4	7	0	0	4	20	11
	6	9			1	21	10
	8	8			2	19	10
					0	10	2
1925 - 1930	10	7	1	0	0	17	8
	7	8			1	17	12
	7	10			9	13	10
1930 - 1935	11	13	0	0	4	16	15
	7	10			5	18	9
					5	15	8
1935 - 1940	9	12	0	0	2	19	8
	7	6			2	16	5
	5	7			11	18	7
1940 - 1945	10	7	0	0	0	8	4
	5	8			2	5	5
	6	5			1	6	5
1945 - 1950	4	7	0	0	1	9	5
	4	6			3	9	1
	5	6			2	5	1
1950 - 1955	1	1	0	0	2	7	5
	5	5			3	6	2
	4	1			2	5	2
1955 - 2000	1	4	0	0	3	8	4
	5	3			0	8	4
	4	1			2	5	3
					0	1	0
2000 - 2005	6	6	0	0	1	4	1
	3	3			1	6	1
	8	3			0	4	2
2005 - 2010	5	3	0	0	5	7	4
	6	2			2	4	2
					3	3	2
					0	1	0

2010 - 2015	2	1	0	0	1	2	2
	4	4			1	4	4
					2	6	4
2015 - 2020	5	6	0	2	5	5	4
	2	3			3	7	4
	1	2			1	9	1
	3	1			2	5	1
2020 - 2025	4	2	1	0	1	2	0
	5	1			6	5	4
	1	2			5	2	1
	1	6			1	4	4
2025 - 2030	0	1	0	0	1	4	4
	3	1			0	2	0
	2	2			5	3	4
	2	4			0	0	2
2030 - 2035	2	5	0	0	2	3	1
	6	6			3	3	2
	4	5			1	1	2
					0	1	0
2035 - 2040	2	2	0	0	2	3	1
	1	2			0	3	2
	0	2			3	6	2
	0	1			0	2	0
2040 - 2045	2	2	0	1	0	2	0
	4	6			0	4	1
	2	5			3	4	3
	0	1					
2045 - 2050	1	1	0	1	0	5	1
	4	1			1	2	1
	3	3					
	3	3					
2050 - 2055	1	2	0	0	2	5	5
	2	3			2	1	1
					0	5	1
					0	3	1
2055 - 2100	2	2	0	0	2	5	1
	5	5			1	4	1
	3	3			0	4	0
	0	3			0	1	1
					2	5	3
2100 - 2105	3	1	0	0	2	5	3
	0	2			0	2	0
	1	1			0	4	3
	0	1			2	4	1
2105 - 2110	1	1	0	0	1	2	0
	1	3			2	3	4
	5	6			0	5	2
	0	1					
2110 - 2115	5	2	0	0	1	3	0
	2	1			1	2	0
					2	3	2
					0	2	0
2115 - 2120	2	2	1	0	0	2	0
	2	5			1	3	2
	6	5			3	3	2
	5	2			2	2	0
2120 - 2125	7	4	1	0	1	1	0
	4	3			3	2	1
	0	1			0	2	1
	1	2			1	1	1
2125 - 2130	2	3	0	0	1	3	1
	0	1			1	2	1
	2	2			0	7	4
					2	1	0
2130 - 2135	1	0	0	0	2	4	1

	2	2			1	2	1
	1	1			2	3	0
	1	1					
2135 - 2140	4	4	0	0	1	5	2
	5	2			0	4	1
	1	2			0	2	1
					2	1	0
2140 - 2145	4	3	0	0	2	2	1
	5	5			1	2	2
	1	2			3	4	1
	1	2			1	2	0
2145 - 2150	4	5	0	0	0	3	0
	1	2			1	2	2
	5	2			2	1	0
	2	2					
2150 - 2155	4	2	0	0	5	1	1
	5	4			4	0	2
	3	2			3	2	1
	1	2					
2155 - 2200	1	2	0	1	4	1	1
	4	3	1	0	5	3	2
	3	2			2	1	1
	4	2					
2200 - 2205	6	5	0	1	6	1	0
	3	5			7	1	0
	3	2			0	1	0
2205 - 2210	2	4	0	1	2	1	1
	4	5	0	1	4	1	0
	4	2			11	3	2
2210 - 2215	7	6	0	1	6	0	0
	9	8			9	1	0
	7	7			10	1	0
2215 - 2220	7	5	2	2	5	3	1
	6	3			5	1	0
2220 - 2225	5	6	1	0	8	2	0
	3	3	2	1	7	1	1
			2	2			
2225 - 2230	10	11	2	2	6	2	0
	6	5	2	0	8	6	3
2230 - 2235	6	5	1	0	6	0	0
	6	10			7	2	0
	3	4					
2235 - 2240	13	12	1	2	8	4	2
					3	1	0
2240 - 2245	5	5	1	3	4	1	0
	2	1	2	0	2	0	0
	3	4					
2245 - 2250	10	6	0	0	2	3	1
	3	2			0	1	1
					0	0	1
2250 - 2255	6	3	1	0	3	2	0
	3	0			0	3	0
	1	0			1	3	0
2255 - 2300	5	1	0	0	1	2	0
	4	3			1	1	0
	2	2			0	4	0

Man City Surveys - Part 1
Queue Length Survey

Site 1C
A62 Oldham Road (East)
A6010 Hulme Hall Lane
A62 Oldham Road (West)
A6010 Queens Road



Lat/Long
lat 53.495554° lon -2.211378°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)

TIME	1Ca	1Cb	1Cc	1Cd	1Ce	1Cf	1Cg	1Ch
1600 - 1605	0	1	1	0	15	3	5	8
			0	2	5	7	1	7
			0	0	4	0	5	6
1605 - 1610	0	0	0	0	11	2	6	6
			0	0	20	6	4	4
			0	1	13	2	7	4
			0	0	6	4		
1610 - 1615	0	0	0	0	7	4	4	6
			0	0	14	4	4	11
			0	2	18	5	7	6
			0	1	14	5		
1615 - 1620	1	0	0	2	14	5	5	9
			0	0	12	6	2	11
			0	1	16	2	9	9
			0	0	9	0		
1620 - 1625	1	0	0	1	15	0	5	11
			0	0	13	2	2	10
			0	1	13	3	4	13
1625 - 1630	0	0	0	1	18	3	5	14
			0	2	22	7	2	3
			0	0	14	5	2	5
1630 - 1635	1	0	0	1	8	4	2	7
			0	1	9	3	3	8
			0	1	14	2	3	9
							0	6
1635 - 1640	0	0	0	2	11	3	5	12
			0	0	19	8	4	8
			0	1	18	8	7	10
							4	3
1640 - 1645	0	0	0	1	22	5	10	8
			0	1	6	6	5	7
			0	0	14	6	7	10
1645 - 1650	0	0	1	0	22	6	3	4
			1	0	23	14	5	10
			0	0	22	6	7	7
			0	2	21	6		
1650 - 1655	0	0	1	2	24	9	5	8
			0	1	13	1	6	10
			0	0	22	7	6	10
			0	0	12	4		
1655 - 1700	0	0	0	0	14	8	6	7
			0	0	24	9	5	6
			0	0	23	11	3	5
			0	0	10	4		
1700 - 1705	0	0	0	0	24	8	8	6
			0	1	22	11	6	12
			0	1	25	5	10	7
			0	1				
1705 - 1710	1	0	1	2	21	5	7	8
			0	1	24	8	5	12

			0	2	22	6	9	9
1710 - 1715	0	0	0	2	25	4	9	9
			0	0	23	7	5	10
			0	1	22	10	8	12
							1	3
1715 - 1720	1	0	0	1	22	12	6	15
			0	1	24	13	8	11
			0	0	21	8	11	8
							2	2
1720 - 1725	0	0	0	0	11	3	7	4
			0	1	8	2	8	10
			0	1	8	2	10	11
1725 - 1730	0	1	1	1	15	3	9	10
			0	3	13	2	6	13
			0	0	7	2	7	7
			0	1	5	2		
1730 - 1735	1	0	1	1	7	3	7	6
			0	3	6	4	7	4
			0	1	3	3	6	9
			0	1	2	2		
1735 - 1740	0	0	0	3	6	3	9	9
			0	0	10	8	6	10
			0	0	22	10	8	3
			0	1	4	0		
1740 - 1745	0	0	0	3	15	5	11	9
			0	2	13	4	6	8
			0	2	9	5	9	7
1745 - 1750	0	1	0	1	21	10	5	8
			0	0	25	8	8	9
			0	0	13	4	10	8
							2	0
1750 - 1755	2	0	0	2	13	4	9	13
			0	1	6	3	6	10
			0	0	6	0	5	8
			0	0	8	4		
1755 - 1800	1	0	1	1	9	2	6	8
			0	1	10	4	8	6
			0	1	2	1	6	10
1800 - 1805	0	0	0	1	1	1	6	4
			0	0	1	2	3	6
			0	1	4	3	1	8
			0	0	1	0		
1805 - 1810	0	0	0	1	4	1	6	7
			0	0	8	2	9	4
			0	0	15	4	6	5
			0	3	1	0		
1810 - 1815	0	0	0	3	7	1	7	4
			0	2	19	4	8	3
			0	0	14	2	4	3
1815 - 1820	0	0	1	1	16	5	4	3
			0	0	15	7	4	5
			0	0	11	3	6	4
							5	5
1820 - 1825	0	0	0	0	4	1	5	5
			0	0	17	6	6	4
			0	1	5	1	6	4
							7	5
1825 - 1830	0	0	0	0	3	1	7	7
			0	0	4	1	6	6
			1	1	7	3	4	5
1830 - 1835	0	0	0	0	9	2	6	3
			0	1	12	4	5	6
			0	0	9	1	7	5
1835 - 1840	0	0	0	0	13	1	6	7
			0	0	3	1	3	6
			1	1	2	1	5	4
			0	0	1	0		

1840 - 1845	0	0	0	0	1	0	1	1
			0	0	2	0	3	3
			0	0	6	0	1	1
			0	0	2	0		
1845 - 1850	1	0	0	0	4	0	4	4
			0	0	5	1	0	1
			0	1	1	1	2	2
			0	1	3	1		
1850 - 1855	0	0	0	1	4	1	6	6
			0	1	3	0	5	3
			0	1	2	1	6	5
1855 - 1900	0	1	0	0	4	0	5	2
			0	0	2	1	4	5
			0	0	13	2	5	6
			0	0	2	1		
1900 - 1905	0	0	1	0	6	2	0	1
			0	0	6	1	1	2
			0	0	7	2		
1905 - 1910	0	0	1	1	10	1	2	4
			0	0	4	0	4	2
			0	1	2	1	4	1
							1	0
1910 - 1915	0	0	1	0	4	1	4	2
			0	0	8	1	1	2
			0	0	1	0	3	0
1915 - 1920	0	1	0	1	3	0	3	4
			0	0	3	1	4	2
			0	0	2	0	6	2
1920 - 1925	1	0	0	1	2	0	6	3
			0	1	3	0	1	4
					3	0	2	1
1925 - 1930	0	0	0	0	5	0	1	1
			0	1	6	3	4	8
			0	0	3	0	1	0
1930 - 1935	0	0	0	1	1	1	6	5
			0	1	7	4	3	4
							1	0
1935 - 1940	0	0	0	0	3	2	4	2
			0	0	6	1	0	1
			0	0	5	1	2	3
							1	1
1940 - 1945	0	0	0	0	4	3	8	4
			0	0	3	1	1	3
			0	1	7	1	5	4
							2	3
1945 - 1950	0	1	0	0	7	2	8	4
			0	0	7	3	5	6
			0	1	5	3	1	0
1950 - 1955	0	0	1	0	4	1	5	6
			0	1	3	0	1	2
			0	1	7	3	1	3
1955 - 2000	0	0	0	1	7	3	1	1
			0	0	10	2	2	2
			0	0	8	1	1	4
					3	0		
2000 - 2005	0	0	0	0	5	2	7	6
			0	0	5	1	4	1
			0	0	7	1	6	6
					2	0		
2005 - 2010	0	0	0	1	5	0	1	3
			0	1	2	1	4	3
			0	0	6	2	3	5
			0	0	2	0		
2010 - 2015	0	0	0	1	6	0	6	7
			0	0	2	0	2	5
			0	1	4	2	5	3
					1	2		
2015 - 2020	0	0	0	0	3	1	0	1

			0	0	11	1	8	11
			0	0	3	1	2	1
							2	3
2020 - 2025	0	0	0	0	4	2	5	1
			0	0	1	0	3	6
			0	0	1	0	2	2
2025 - 2030	0	0	0	0	3	0	8	7
			0	0	7	1	4	1
			0	0	2	0	2	2
					1	0	3	3
2030 - 2035	0	0	0	1	5	1	4	3
			0	0	6	2	2	3
			0	0	1	1	6	4
			0	0	1	0	4	3
2035 - 2040	0	0	0	1	4	0	4	1
			0	0	1	1	1	5
					2	0	0	1
							2	1
2040 - 2045	0	1	0	0	4	0	3	5
			0	0	2	1	4	4
			0	0	2	1	4	1
							1	3
2045 - 2050	0	0	0	0	2	1	2	2
			0	0	3	2	6	4
			0	0	2	2		
2050 - 2055	0	0	0	0	4	2	1	1
			0	0	5	2	6	3
			0	0	0	1	1	2
					3	1	0	2
2055 - 2100	0	0	0	0	6	0	0	2
			0	0	10	0	0	1
			0	0	4	3	2	2
					2	0	3	8
2100 - 2105	0	0	0	1	2	0	2	1
			0	1	4	0	3	2
			0	0	2	0	4	3
					2	0	5	6
2105 - 2110	0	0	0	0	1	0	3	7
			0	0	4	1	2	1
			0	0	2	1	3	5
					1	0		
2110 - 2115	0	0	0	0	3	0	2	4
				0	3	1	2	6
					1	0	1	3
2115 - 2120	0	0	0	0	6	1	1	2
			0	0	4	0	2	1
			0	0	0	0	3	1
							2	4
2120 - 2125	1	0	0	0	5	1	1	4
			0	0	5	1	1	2
			0	1	0	0	4	1
2125 - 2130	0	0	0	0	3	0	6	1
			0	0	6	1	3	3
			0	0	0	1	2	6
			0	0	3	1	7	12
2130 - 2135	0	0	0	0	2	1	2	4
			0	0	3	2	3	2
			0	2	4	1	3	1
					1	0		
2135 - 2140	0	0	0	1	3	0	2	0
			0	0	2	0	1	2
			0	0	2	0	1	1
			0	0	3	2	3	0
2140 - 2145	0	0	0	1	5	2	1	1
			0	1	3	2	3	4
			0	1	6	1	3	1
					10	0	5	5
2145 - 2150	0	0	0	0	1	0	4	3
			0	1	14	3	2	2

			0	1	13	12	6	5
			0	1				
2150 - 2155	0	0	0	3	20	6	3	5
			0	0	21	5	5	4
			0	0	23	6	7	7
2155 - 2200	0	0	0	2	27	14	5	6
			0	2	20	0	5	6
			0	0	3	0	5	6
2200 - 2205	0	0	0	4	9	4	7	7
			1	0	10	9	3	8
			0	0	16	4	4	7
2205 - 2210	0	0	0	0	8	7	7	2
			0	0	22	8	7	6
			0	0	23	12	9	10
2210 - 2215	1	0	0	0	12	21	4	5
			0	0	22	8	7	7
			0	0	0	0	10	7
2215 - 2220	0	0	0	0	21	13	6	8
			0	0	23	14	13	12
					25	12	15	13
2220 - 2225	0	0	0	2	22	10	20	23
			0	0	24	14	12	21
			0	0	21	0	14	10
2225 - 2230	0	0	0	0	14	2	22	12
			0	0	5	0	12	11
			0	0	23	20	3	1
2230 - 2235	0	1	0	2	14	24	7	2
			0	0	24	12	6	3
			0	0			9	5
2235 - 2240	0	1	0	0	23	11	10	9
			0	0	10	0	4	1
			0	0	8	0		
					11	7		
2240 - 2245	0	1	0	0	16	0	4	5
	1	0	0	0	6	0	5	6
			0	0	7	0	7	3
					3	0		
2245 - 2250	0	0	0	0	12	3	3	2
			0	0	1	0		
2250 - 2255	0	1	0	1	7	0	2	2
	1	0	0	0	6	0	3	5
			0	0	11	4		
2255 - 2300	0	0	0	0	3	1	5	4
			0	0	10	2	2	2
			0	2	8	2	0	0

Man City Surveys - Part 1
Queue Length Survey

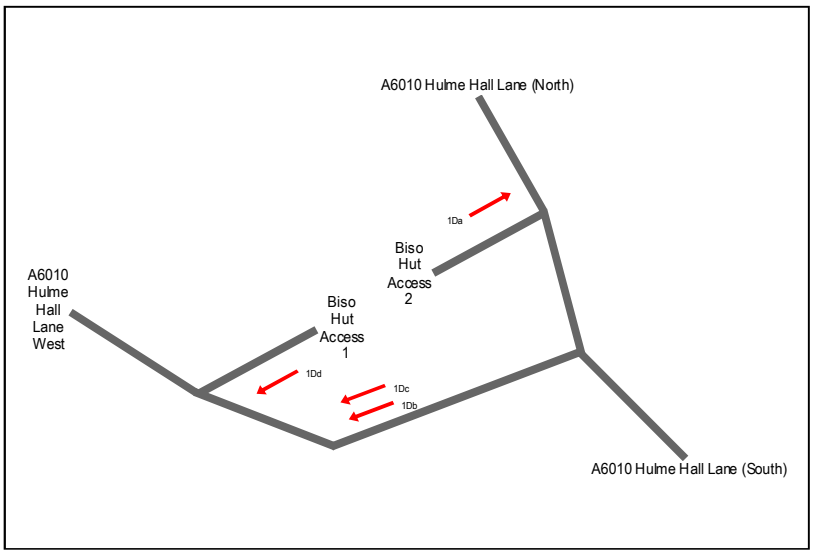
Site 1D
A6010 Hulme Hall Lane (North)
Biso Hut Access 2
A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane West
Biso Hut Access 1

Lat/Long
lat 53.495284° lon -2.210156°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)



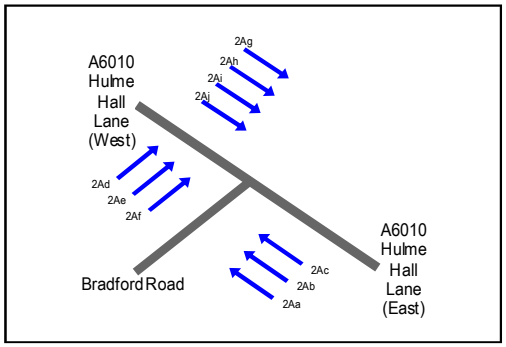
TIME	1Da	1Db	1Dc	1Dd
16:00	0	0	0	0
16:05	0	0	0	0
16:10	0	0	0	0
16:15	0	0	0	1
16:20	0	1	0	0
16:25	0	1	0	0
16:30	0	0	0	0
16:35	0	2	0	0
16:40	0	0	0	0
16:45	0	0	0	0
16:50	0	0	0	0
16:55	0	0	0	0
Hourly Average	**0.00**	**0.33**	**0.00**	**0.08**
17:00	0	0	0	0
17:05	0	0	0	0
17:10	0	0	0	0
17:15	0	0	0	0
17:20	0	1	0	0
17:25	0	0	0	0
17:30	0	0	0	0
17:35	0	0	0	0
17:40	0	0	0	0
17:45	0	0	0	0
17:50	0	0	0	0
17:55	0	0	0	0
Hourly Average	**0.00**	**0.08**	**0.00**	**0.00**
18:00	0	0	0	0
18:05	0	0	0	0
18:10	0	0	0	0
18:15	0	0	0	0
18:20	1	0	0	0
18:25	0	0	0	0
18:30	0	0	0	0
18:35	0	0	0	0
18:40	0	0	0	0
18:45	0	0	0	0
18:50	0	0	0	0
18:55	0	0	0	0
Hourly Average	**0.08**	**0.00**	**0.00**	**0.00**
19:00	0	0	0	0
19:05	0	0	0	0
19:10	0	0	0	0
19:15	0	0	0	0
19:20	0	0	0	0
19:25	0	0	0	0
19:30	0	0	0	0
19:35	0	0	0	0
19:40	0	0	0	0
19:45	0	0	0	0
19:50	0	0	0	0
19:55	0	0	0	0

Hourly Average	0.00	0.00	0.00	0.00
20:00	0	1	0	0
20:05	0	0	0	0
20:10	0	0	0	0
20:15	0	0	0	0
20:20	0	0	0	0
20:25	0	0	0	0
20:30	0	0	0	0
20:35	0	0	0	0
20:40	0	0	0	0
20:45	0	0	0	0
20:50	0	0	0	0
20:55	0	0	0	0
Hourly Average	0.00	0.08	0.00	0.00
21:00	0	0	0	0
21:05	0	0	0	0
21:10	0	0	0	0
21:15	0	0	0	0
21:20	0	0	0	0
21:25	0	0	0	0
21:30	0	0	0	0
21:35	0	0	0	0
21:40	0	0	0	0
21:45	0	0	0	0
21:50	0	0	0	0
21:55	0	0	0	0
Hourly Average	0.00	0.00	0.00	0.00
22:00	0	0	0	0
22:05	0	1	0	0
22:10	0	0	0	0
22:15	0	0	0	0
22:20	0	0	0	0
22:25	0	0	0	0
22:30	0	0	0	0
22:35	0	0	0	0
22:40	0	0	0	0
22:45	0	0	0	0
22:50	0	0	0	0
22:55	0	0	0	0
23:00	0	0	0	0
Hourly Average	0.00	0.08	0.00	0.00

Session Total	0.01	0.08	0.00	0.01

Man City Surveys - Part 1
Queue Length Survey

Site 2A
A6010 Hulme Hall Lane (East)
Bradford Road
A6010 Hulme Hall Lane (West)



Lat/Long
lat 53.490485° lon -2.203280°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)

TIME	2Aa	2Ab	2Ac	2Ad	2Ae	2Af	2Ag	2Ah	2Ai	2Aj
1600 - 1605	0	7	5	0	2	11	1	3	5	2
	0	10	5	0	7	10	0	2	2	1
	0	11	7	0	8	13	0	6	4	2
	0	2	2				0	2	1	0
1605 - 1610	0	9	10	0	3	6	0	6	2	3
	0	8	7	0	8	10	0	2	2	5
	0	4	3	0	10	9	0	3	5	5
1610 - 1615	0	11	9	0	3	12	0	2	2	3
	1	10	13	0	7	13	0	2	0	0
	0	12	6	0	4	8	1	4	3	4
							0	0	0	1
1615 - 1620	0	8	5	0	5	9	0	7	6	5
	0	10	12	0	7	14	0	8	5	2
	0	9	8	0	6	9	0	9	6	1
				0	2	10				
1620 - 1625	0	10	7	0	2	13	0	6	5	5
	0	9	10	0	7	12	0	6	6	4
	0	12	9	0	4	14	0	6	6	5
1625 - 1630	0	12	10	0	7	10	0	9	10	2
	0	14	8	0	4	10	0	6	7	2
	0	10	7	0	2	13	0	8	5	6
1630 - 1635	0	11	7	0	3	11	0	6	5	5
	0	11	11	0	6	12	0	6	2	3
	0	14	13	0	4	11	0	12	10	6
	0	7	8							
1635 - 1640	0	10	9	0	5	15	0	13	11	7
	0	14	9	0	10	9	0	9	10	6
	0	11	10	0	4	12	0	8	8	7
	0	4	2				0	7	6	4
1640 - 1645	0	13	9	0	7	14	0	8	7	4
	0	12	11	0	4	15	0	6	5	6
	0	15	13	0	3	19	0	4	1	6
	0	6	5				0	0	0	9
1645 - 1650	1	14	15	0	4	16	0	2	2	8
	0	13	6	0	7	13	0	0	2	8
	0	10	6	0	11	8	0	4	4	6
1650 - 1655	0	15	14	0	4	11	0	5	4	4
	0	12	13	0	8	14	0	6	2	4
	0	16	14	0	2	12	0	2	4	1
1655 - 1700	0	13	12	0	2	13	0	4	5	4
	0	16	15	0	10	6	0	3	3	5
	0	12	13	0	2	5	0	6	5	3
				0	3	4				
1700 - 1705	1	12	8	0	5	10	0	8	1	5
	0	21	15	0	7	17	0	7	14	4
	0	12	7	0	8	13	0	10	14	9
1705 - 1710	0	21	9	0	1	12	0	7	3	4
	0	24	18	0	17	9	0	6	15	3
	0	21	12	0	1	19	0	6	5	4
	1	9	6							
1710 - 1715	1	14	15	0	5	15	0	7	12	5
	0	24	23	0	5	14	0	6	9	10
	0	21	17	0	3	14	0	4	2	5
	0	6	6				0	2	2	0
1715 - 1720	0	17	14	0	3	14	0	4	5	4
	0	17	16	0	7	18	0	11	12	6
	0	8	5	0	6	16	0	4	6	1
	0	5	4							
1720 - 1725	0	22	16	0	7	14	0	8	12	5

	0	18	17	0	6	18	0	5	6	5
	0	17	15	0	6	16	0	3	5	4
							0	0	1	3
1725 - 1730	1	12	9	0	5	18	0	1	2	4
	0	14	13	0	5	18	0	5	3	2
	0	15	10	0	3	6	0	7	13	5
1730 - 1735	1	11	9	0	5	18	0	5	11	4
	0	13	8	0	9	12	0	11	7	4
	0	13	13	0	5	15	0	4	12	5
				0	3	5				
1735 - 1740	0	14	8	0	5	16	0	7	10	8
	0	12	13	0	7	11	0	11	17	2
	0	15	12	0	7	15	0	9	10	7
				0	3	5				
1740 - 1745	0	11	13	0	4	15	0	7	7	9
	0	10	7	0	7	12	0	9	8	5
	0	6	6	0	15	8	0	8	13	3
				0	0	1				
1745 - 1750	0	9	8	0	2	12	0	8	13	3
	0	16	7	0	9	10	0	6	16	1
	0	13	10	0	1	14	0	9	7	7
	0	11	8				0	7	6	6
1750 - 1755	0	15	11	0	7	6	0	9	10	6
	0	11	11	0	4	21	0	10	11	2
	0	11	7	0	6	11	0	15	12	7
	0	4	5				0	4	6	1
1755 - 1800	0	18	14	0	10	8	0	9	9	4
	0	10	3	0	5	12	0	15	7	7
	0	14	8	0	9	5	0	9	8	2
	0	2	2				0	5	5	0
1800 - 1805	1	15	10	0	10	11	0	9	10	3
	0	9	7	0	12	2	0	0	0	3
	0	10	9	0	4	8	1	12	8	2
							0	0	0	1
							0	5	6	2
							0	0	0	2
1805 - 1810	1	15	4	0	4	8	1	8	7	3
	0	11	6	0	8	6	0	0	0	5
	0	12	15	0	6	8	0	8	1	2
				0	9	8	0	4	2	2
							0	0	0	1
1810 - 1815	0	5	4	0	9	8	0	0	0	1
	1	13	15	0	7	7	0	8	4	3
	0	6	4	0	16	14	0	0	0	3
				0	9	14	0	9	4	0
							0	0	0	1
							0	4	4	1
							0	0	0	2
1815 - 1820	0	9	8	0	9	14	0	0	0	2
	0	15	10	0	2	8	0	8	6	4
	0	19	10	0	2	1	0	1	3	6
				0	5	6	0	0	0	6
							0	5	4	5
1820 - 1825	0	3	1	0	5	6	0	0	0	1
	0	11	5	0	8	11	0	5	6	3
	0	11	5	0	3	13	0	0	0	1
	0	8	6	0	2	0	0	12	7	0
							0	0	0	1
							0	10	5	3
1825 - 1830	0	8	6	0	3	13	0	0	0	1
	1	11	7	0	4	9	0	6	10	0
	0	5	3	0	3	13	0	0	0	4
	0	10	8				0	6	10	4
							0	10	8	1
1830 - 1835	0	10	8	0	6	8	0	10	8	1
	0	6	7	0	7	8	0	0	0	1
	0	15	18	0	2	13	0	5	7	4
	0	2	1				0	0	0	4
							0	9	5	4
							0	0	0	5
							0	7	5	6
1835 - 1840	0	7	1	0	8	9	0	7	5	6
	0	6	7	0	4	13	0	0	0	2
	0	9	10	1	5	5	0	7	8	2
	0	2	2				0	4	6	1
							0	0	0	2
							0	1	1	0
1840 - 1845	0	12	13	0	5	11	0	7	7	0
	0	11	4	0	2	12	0	0	0	3
	0	10	4	0	3	3	0	4	4	2
							0	0	0	2
							0	6	9	3
							0	0	0	1
1845 - 1850	0	12	3	0	3	3	0	7	0	2

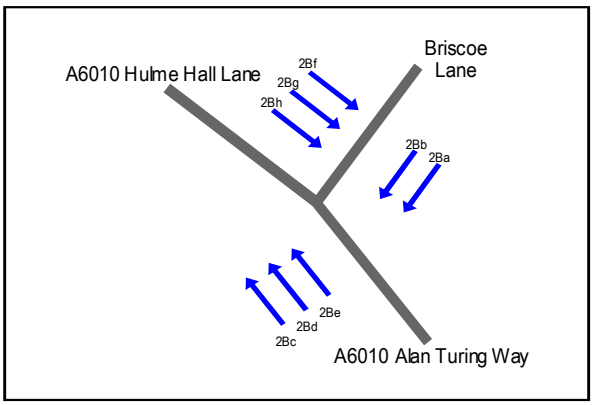
	0	8	6	0	5	5	0	4	6	0
	0	5	5	0	2	10	0	6	10	2
				0	3	1	0	0	0	1
1850 - 1855	1	11	3	0	3	1	0	0	0	1
	0	2	1	0	1	2	0	8	2	1
	0	9	3	0	0	7	0	0	0	2
				0	2	11	0	0	0	1
							0	4	2	0
							0	5	4	5
							0	0	0	3
1855 - 1900	0	9	1	0	2	11	0	0	0	3
	1	10	1	0	1	4	0	0	0	2
	0	7	4	0	2	7	0	7	6	3
				0	1	1	0	0	0	1
							0	1	0	1
							0	0	1	0
							0	0	0	2
1900 - 1905	1	4	1	0	2	4	0	0	0	1
	1	3	6	0	3	4	0	7	6	2
	0	5	0	0	2	4	0	0	0	4
				0	0	1	0	4	10	1
							0	0	0	3
							0	5	6	1
1905 - 1910	0	3	1	0	1	3	0	0	0	3
	0	3	1	0	3	5	0	0	0	1
	0	4	2	0	0	8	0	3	7	1
							0	1	0	2
							0	4	7	1
1910 - 1915	0	4	3	0	3	8	0	0	0	1
	0	8	4	0	3	6	0	1	3	2
	0	4	1	0	3	4	0	7	4	2
							0	0	0	2
							0	0	1	2
1915 - 1920	0	6	2	0	2	7	0	0	1	2
	0	3	0	0	3	6	0	0	0	1
	0	4	0	0	3	7	0	0	0	1
	0	1	0				0	2	1	1
							0	0	0	1
							0	0	2	0
							0	0	0	1
							0	0	0	3
							0	0	0	2
1920 - 1925	0	2	0	0	2	9	0	1	1	1
	0	5	0	0	0	6	0	2	2	2
	0	1	2	0	3	6	0	0	0	1
							0	1	1	0
							0	0	0	1
							0	0	0	2
1925 - 1930	0	4	1	0	3	8	0	4	3	3
	0	2	3	0	1	3	0	0	0	2
				0	2	5	0	0	0	1
				0	1	1	0	2	3	0
							0	6	4	1
1930 - 1935	0	4	2	0	1	2	0	0	0	2
	0	5	3	0	2	8	0	3	1	3
	0	6	4	0	2	6	0	0	0	1
				0	0	1	0	4	2	3
1935 - 1940	0	2	4	0	5	4	0	4	5	0
	0	9	0	0	2	2	0	3	5	1
	0	3	2	0	1	4	0	0	0	1
				0	0	3	0	3	2	1
1940 - 1945	0	6	2	0	2	5	0	4	3	1
	0	4	1	0	3	5	0	4	0	1
	1	3	2	0	3	7	0	0	0	1
				0	1	4	0	0	1	1
1945 - 1950	0	5	1	0	6	5	0	2	1	0
	1	7	1	0	4	8	0	5	3	0
	0	5	2	0	3	7	0	0	0	1
							0	4	1	1
1950 - 1955	0	6	3	0	3	5	0	2	3	0
	0	3	1	0	3	7	0	1	3	1
	1	6	5	0	6	1	0	6	2	0
	0	3	3							
1955 - 2000	0	9	3	0	4	5	0	0	0	1
	0	5	4	0	3	6	0	1	1	2
	0	5	3	0	1	3	0	0	0	1
	0	5	2				0	0	2	0
2000 - 2005	0	9	4	0	3	2	0	0	2	0
	0	2	2	0	3	3	0	0	0	1
	0	4	3	0	3	1	0	0	0	1
	0	6	2	0	2	1	0	1	2	0
	0	4	1	0	2	1				
	0	2	0							
2005 - 2010	0	0	2	0	1	1	0	0	0	1
	0	0	2	0	4	2	0	2	1	0

	0	5	3	0	1	0	0	1	0	1
	0	0	1	0	2	2	0	1	0	1
	0	4	2	0	2	0	0	0	0	1
				0	0	3				
2010 - 2015	0	4	2	0	0	3	0	0	0	2
	0	1	1	0	1	1	0	1	0	0
	0	5	1	0	3	5	0	0	0	1
	0	3	0	0	2	1	0	2	2	0
							0	5	1	1
							0	5	6	1
2015 - 2020	0	5	3	0	2	5	0	6	6	1
	0	8	4	1	0	4	0	0	0	2
	0	10	5	0	5	0	0	6	3	1
				0	2	5	0	6	2	1
							0	0	0	1
							0	5	4	1
							0	0	0	1
2020 - 2025	0	9	3	0	2	6	0	0	0	1
	0	8	5	0	2	3	0	8	1	2
	0	9	3	0	1	3	0	4	4	0
							0	6	2	0
							0	1	0	0
2025 - 2030	0	11	5	0	0	2	0	1	0	0
	0	5	2	0	1	3	0	4	2	1
	0	8	4	0	1	0	0	2	0	0
	0	4	2				0	2	0	1
2030 - 2035	0	4	2	0	0	2	0	2	4	1
	0	1	2	0	3	6	0	5	0	0
	0	5	4	0	4	3	0	2	0	0
	0	5	1	0	1	4				
2035 - 2040	0	6	4	0	2	4	0	2	1	1
	0	7	1	0	3	3	0	2	0	0
	0	6	4	0	2	2	0	2	1	0
	0	5	1	0	1	1	0	2	1	0
2040 - 2045	0	10	5	0	2	1	0	2	1	0
	0	3	0	0	4	3	0	0	1	0
	0	6	2	0	1	2	0	0	0	1
	0	7	3				0	3	0	1
							0	1	2	0
							0	0	0	1
2045 - 2050	0	6	5	0	1	2	0	1	0	0
	0	2	1	0	1	1	0	1	0	0
	0	4	3	0	4	2	0	1	0	0
	0	1	0				0	1	0	0
2050 - 2055	0	8	2	0	2	6	0	1	0	1
	0	0	1	0	0	4	0	4	1	0
	0	5	2	0	2	3	0	1	1	0
	0	3	2				0	2	1	1
	0	5	3							
2055 - 2100	0	7	3	0	1	0	0	5	1	0
	0	6	2	0	2	0	0	0	0	1
	0	3	1	0	2	1	0	1	0	1
	0	3	2	0	2	1	0	0	0	1
							0	2	4	0
2100 - 2105	0	3	3	0	2	3	0	3	0	2
	0	2	2	0	0	7	0	1	0	0
	0	3	1	0	3	4	0	1	2	1
							0	1	1	0
2105 - 2110	0	2	2	0	3	5	0	1	1	0
	1	4	1	0	1	1	0	2	1	0
	0	3	1	0	1	2	0	0	0	1
	1	6	1				0	1	0	2
							0	1	0	1
							0	0	0	2
2110 - 2115	0	3	2	0	0	1	0	0	0	1
	0	3	2	0	0	2	0	2	1	1
	0	8	3	0	1	1	0	0	0	1
	0	1	1				0	2	1	1
2115 - 2120	0	5	1	0	2	1	0	2	0	0
	0	2	0	0	1	0	0	2	0	0
	0	4	2	0	3	3	0	1	0	0
	0	3	2	0	0	2	0	0	0	1
							0	2	1	0
2120 - 2125	0	3	2	0	0	5	0	1	0	1
	0	3	3	0	2	2	0	1	0	0
	0	3	3	0	1	4	0	1	0	0
	0	7	2	0	1	0	0	0	0	1
							0	0	0	1
2125 - 2130	0	5	4	0	3	2	0	0	0	1
	0	1	1	0	1	3	0	1	0	0
	0	5	2	0	1	1	0	1	0	0
	0	5	1	0	3	6	0	0	0	1
							0	7	3	1
2130 - 2135	0	7	4	0	2	1	0	7	3	1

	0	4	2	0	1	3	0	4	2	0
	0	6	4	0	0	4	0	0	0	1
	0	4	0	0	1	2	0	0	0	0
2135 - 2140	0	0	1	0	5	4	0	0	0	1
	0	6	3	0	2	0	0	0	0	1
	0	4	3	0	2	5	0	0	0	1
	0	0	0	0	1	4	0	0	0	1
							0	1	0	1
2140 - 2145	0	3	5	0	1	6	0	1	0	1
	0	8	2	0	4	3	0	0	0	1
	0	3	1	0	1	4	0	2	0	0
	0	1	0	0	0	5	0	0	0	2
				0	1	0	0	1	0	0
							0	3	1	0
2145 - 2150	0	7	6	0	3	7	0	2	0	0
	0	8	2	0	3	8	0	0	0	1
	0	6	4							
	0	8	6							
2150 - 2155	0	10	8	0	12	3	0	0	0	6
	0	11	7	0	10	3	0	1	0	2
	0	4	1							
2155 - 2200	0	9	5	0	4	4	0	1	0	2
	0	2	0	0	6	5	0	0	0	2
	0	1	0				0	0	0	1
							0	0	0	2
							0	0	0	6
							0	1	0	2
2200 - 2205	0	1	0	0	12	7	0	4	2	1
	0	1	0	0	2	0	0	0	0	1
	0	9	9	0	11	3	0	1	0	1
2205 - 2210	0	18	20	0	13	4	1	1	0	1
	0	1	2	0	10	5	0	0	0	1
							0	2	1	2
							0	0	0	1
2210 - 2215	0	5	4	0	8	2	0	0	0	2
	0	17	18	0	7	4	0	0	1	0
	0	11	13				0	0	0	2
							0	0	0	1
							0	0	0	1
2215 - 2220	0	11	23	0	6	5	0	3	0	1
	0	16	17	0	8	8	0	0	1	0
	0	14	16							
2220 - 2225	0	15	18	0	8	3	0	0	2	0
	0	17	21	0	6	1	0	0	0	1
							0	4	1	0
2225 - 2230	0	19	15	0	8	1	0	1	0	0
	0	8	7	0	9	1	0	1	0	2
2230 - 2235	0	19	21	0	7	4	0	0	0	1
	0	7	8	0	13	5	0	1	1	0
							0	0	0	3
2235 - 2240	0	17	19	0	9	11	0	2	1	1
	0	7	0				0	0	0	5
							0	0	0	3
							0	0	0	2
							0	0	0	2
							0	2	1	0
2240 - 2245	0	11	3	0	4	6	0	2	1	0
	0	3	1	0	0	2	0	0	0	1
	0	7	3				0	1	0	0
							0	0	0	1
2245 - 2250	0	9	5	0	2	2	0	0	0	1
	0	8	3	0	3	5	0	0	1	0
	0	6	1				0	0	0	1
							0	1	0	0
2250 - 2255	0	8	2	0	6	2	0	1	0	0
	0	6	3	0	0	4	0	6	1	1
	0	1	1				0	0	0	1
2255 - 2300	0	3	3	0	3	1	0	0	0	1
	0	6	1	0	4	3				
	0	3	0							

Man City Surveys - Part 1
Queue Length Survey

Site 2B
Briscoe Lane
A6010 Alan Turing Way
A6010 Hulme Hall Lane



Lat/Long
lat 53.489845° lon -2.201292°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)

TIME	2Ba	2Bb	2Bc	2Bd	2Be	2Bf	2Bg	2Bh
1600 - 1605	5	8	0	0	3	0	11	2
	4	5	1	0	4	0	12	4
	5	3	3	2	3	0	10	4
			1	0	1			
			0	0	4			
			0	0	2			
			2	1	5			
			0	0	3			
1605 - 1610	5	3	0	2	3	0	7	4
	5	1	2	0	5	0	8	3
	2	0	0	0	2	0	10	5
	7	3	2	0	4			
			0	0	6			
			0	0	5			
1610 - 1615	7	3	0	0	4	0	11	1
	6	2	3	2	4	0	9	4
	9	4	0	0	2	0	12	4
	5	6	0	0	2			
			2	1	2			
			0	0	4			
1615 - 1620	5	6	0	0	4	0	9	5
	9	6	1	0	7	0	10	5
	4	2	0	0	2	0	8	2
	0	2	0	1	3			
			0	0	4			
			0	0	4			
1620 - 1625	3	2	0	0	4	0	10	3
	1	0	0	0	1	0	11	2
	6	9	0	0	4	0	12	8
	0	6	0	0	2			
			0	0	3			
			2	0	0			
			0	0	3			
			1	0	5			
1625 - 1630	0	6	0	0	6	1	9	3
	5	7	0	0	4	1	10	3
	3	0	0	0	4	0	11	2
			2	2	5			
			0	0	5			
			0	1	3			
1630 - 1635	9	5	0	0	4	0	9	1
	10	3	0	0	2	0	10	4
	6	6	3	0	4	0	7	3
			0	0	4			
			3	0	4			
			2	2	0			
			0	0	4			
			0	0	1			
1635 - 1640	8	9	0	0	4	0	7	4
	5	2	0	0	5	0	10	1
	6	8	1	1	4	0	11	3
			0	0	4			
			1	0	3			

			0	0	6			
1640 - 1645	6	8	1	1	3	1	11	3
	4	0	1	0	0	1	9	5
	7	2	0	0	4	1	7	1
	0	2	0	0	2			
	5	3	0	2	3			
			1	0	4			
			0	0	2			
			2	3	5			
			0	0	4			
1645 - 1650	6	3	2	3	4	0	8	3
	7	2	2	2	4	0	11	6
	8	1	2	2	5	0	12	2
	5	2	0	0	4			
			0	1	2			
			0	0	7			
1650 - 1655	5	2	0	0	2	0	11	5
	3	4	3	3	6	0	10	2
	4	5	0	2	0	0	9	4
	5	0	0	0	7			
			0	0	2			
			2	1	4			
			0	0	5			
			1	1	2			
1655 - 1700	6	6	0	0	3	0	10	5
	3	5	0	0	5	0	7	4
	7	5	3	1	2	0	7	3
	0	1	0	0	6			
			1	0	3			
			4	0	5			
			3	0	7			
			0	2	0			
1700 - 1705	2	3	5	1	4	0	10	4
	6	6	0	0	6	0	9	1
	2	8	8	4	7	0	6	3
			1	0	2			
			7	4	6			
1705 - 1710	7	3	4	2	5	0	8	3
	6	6	5	4	6	1	10	0
	6	0	5	0	6	0	7	3
			0	0	7			
1710 - 1715	10	8	0	0	6	0	8	4
	10	2	0	0	5	0	9	5
	10	0	0	0	4	0	8	5
			1	2	4	0	4	1
			0	0	3			
			2	1	4			
1715 - 1720	9	3	3	2	5	0	12	2
	9	1	0	0	5	0	11	3
	8	6	4	2	6	0	10	2
			0	0	4			
			0	2	3			
			0	0	5			
1720 - 1725	8	6	3	0	4	0	10	5
	5	2	0	2	6	0	12	6
	7	3	0	0	5	0	13	4
			4	2	6			
			0	0	5			
1725 - 1730	8	3	4	2	6	1	10	5
	6	4	0	0	5	1	8	4
	8	0	1	2	4	0	10	2
	5	0	0	0	4			
			1	1	5			
			0	0	6			
1730 - 1735	5	2	0	0	6	0	14	5
	6	4	1	0	7	0	11	3
	5	2	0	0	4	0	12	9
	3	0	0	0	5			
			0	0	5			
			3	3	7			
			0	3	6			
1735 - 1740	6	0	0	0	7	0	10	4
	8	5	2	0	8	0	15	7
	4	2	0	0	4	0	13	7
	1	0	0	1	4			

			0	0	5			
			2	2	6			
1740 - 1745	1	1	0	0	4	0	12	3
	4	2	4	2	6	0	14	3
	8	3	0	0	5	0	12	0
			3	2	5			
			2	0	6			
1745 - 1750	4	3	0	0	7	0	12	0
	6	3	2	1	5	0	13	4
	4	4	0	0	4	0	6	5
			1	1	3	0	8	2
			2	2	2			
1750 - 1755	8	3	0	0	1	0	10	4
	6	5	0	2	4	0	8	1
	3	1	0	0	7	0	11	2
			0	0	3	0	0	4
			0	0	6			
			2	1	4			
1755 - 1800	6	4	3	1	5	0	8	1
	6	1	0	0	4	0	10	5
	6	2	1	0	3	0	11	2
			0	0	1			
			2	2	4			
			0	0	6			
1800 - 1805	15	3	3	0	0	0	5	0
	13	3	0	0	4	0	8	2
	7	3	2	2	4	0	7	1
	11	3	0	0	4			
	7	3	9	4	4			
1805 - 1810	9	3	7	4	4	0	8	3
	9	4	0	0	4	0	6	3
	5	6	4	1	5	0	11	2
	3	0	0	0	5			
			4	4	3			
			0	0	3			
1810 - 1815	6	0	9	6	6	0	6	3
	12	3	0	0	3	0	5	3
	4	4	10	6	7	0	7	3
	0	2	0	0	6			
			7	4	5			
			0	0	2			
1815 - 1820	0	3	6	3	5	0	8	3
	3	4	0	0	4	0	7	2
	6	5	6	4	4	0	2	0
			0	0	4			
			7	3	3			
			0	0	4			
1820 - 1825	7	1	0	0	5	0	6	3
	8	0	8	9	2	0	8	2
	7	3	0	0	6	0	9	2
			0	0	4			
			0	0	3			
			1	0	1			
1825 - 1830	7	1	0	0	4	0	9	3
	6	0	3	3	3	0	7	3
	5	0	0	0	4	0	5	2
			0	0	3			
			1	0	4			
			0	0	2			
1830 - 1835	7	3	0	0	5	0	8	2
	5	2	0	0	2	0	7	3
	8	2	1	0	4	0	5	2
			0	0	3			
			2	2	0			
			0	0	1			
1835 - 1840	8	4	0	0	3	0	4	2
	6	2	5	5	4	0	8	1
	4	2	0	0	4	0	9	0
			0	0	3			
			5	3	3			
			0	0	2			
1840 - 1845	6	3	6	5	4	1	3	3
	5	6	0	0	2	0	8	3
	6	1	6	4	4	0	8	2

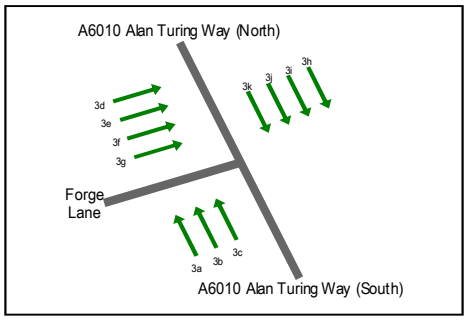
	2	2	0	0	3			
			0	0	4			
			0	0	2			
1845 - 1850	3	2	3	1	1	0	5	4
	7	4	0	0	1	0	4	0
	8	2	0	0	2	0	8	3
	6	4	1	1	2			
			0	0	3			
			1	2	2			
1850 - 1855	7	6	0	0	4	0	1	0
	8	2	3	0	4	0	6	2
	4	4	0	0	4	0	6	3
	3	3	1	0	3			
			0	0	2			
			0	1	3			
1855 - 1900	4	5	0	0	2	0	9	4
	9	5	1	1	2	0	2	5
	8	4	0	0	2	0	7	2
			0	0	2			
1900 - 1905	6	3	4	4	5	0	5	4
	4	4	3	1	5	0	6	5
	6	4	4	2	6	0	3	4
	1	0	0	0	1			
1905 - 1910	7	2	0	0	1	0	4	3
	5	4	1	0	1	0	7	3
	4	0	1	0	4	0	10	6
			0	2	3			
1910 - 1915	5	6	1	2	2	0	5	4
	6	5	4	0	4	0	9	5
	7	5	2	0	0	0	3	1
1915 - 1920	7	3	0	0	1	0	7	4
	9	3	0	0	1	0	7	7
	4	1				0	3	0
						0	2	2
1920 - 1925	4	5	2	0	0	0	8	7
	4	0	0	0	1	0	8	6
	8	1	0	0	1	1	9	7
			0	0	2	0	1	2
			0	0	1			
1925 - 1930	6	3	0	1	4	0	7	6
	9	3	1	0	6	0	4	5
	5	2	1	0	1	0	7	7
1930 - 1935	8	2	0	1	2	0	5	2
	7	7	2	3	4	0	7	6
	3	5	0	0	1	0	9	6
	4	1	1	1	4			
1935 - 1940	7	1	4	0	5	0	7	4
	7	4	3	1	2	0	6	5
	4	6	0	2	3	0	4	4
	2	1						
1940 - 1945	5	3	3	2	2	0	6	5
	5	3	0	0	3	0	5	3
	4	1	7	2	3	0	7	6
	1	0	4	2	4			
1945 - 1950	0	3	2	1	2	0	7	5
	0	3	2	2	2	0	7	5
	3	3	2	1	4	0	7	3
	0	1						
1950 - 1955	1	4	0	0	1	0	4	1
	4	3	1	1	6	0	10	1
	3	0	0	0	2	0	1	1
			3	4	4			
1955 - 2000	1	1	0	0	1	0	1	1
	4	4	3	2	7	0	7	4
	1	2	2	1	0	0	5	3
			1	0	1	0	0	2
2000 - 2005	5	0	2	0	1	0	3	2
	0	2	3	1	3	0	3	2
	0	1	2	0	1	0	4	2
			0	0	2	0	0	2
			1	0	3	0	3	4

			0	0	1	0	2	1
			0	0	1			
2005 - 2010	0	1	1	0	0	0	5	1
	3	1	1	2	4	0	2	1
	1	1	0	0	2	0	4	2
	3	0	1	0	0	0	5	2
	1	1	0	0	3	0	4	2
	0	1	0	1	0	0	4	0
						0	0	1
2010 - 2015	2	0	2	1	2	0	2	1
	3	2	2	0	3	0	1	0
			2	1	1	0	5	2
						0	2	0
2015 - 2020	3	2	2	1	2	0	2	0
	4	0	0	0	3	0	4	1
	2	0	0	0	1	0	2	1
	1	0	3	2	3	0	4	1
2020 - 2025	1	0	5	2	1	0	3	2
	1	3	0	0	2	0	3	0
	2	2	4	2	3	0	3	1
	4	2	0	0	5	0	1	1
			1	1	2			
2025 - 2030	4	1	2	1	3	0	4	2
	1	1	3	2	4	0	5	3
	2	0	0	0	1	0	2	1
			2	0	1	0	1	0
			0	0	5			
2030 - 2035	4	1	0	0	2	0	1	1
	1	1	0	0	3	0	5	1
	3	2	0	0	1	0	4	3
			0	0	1			
			0	1	3			
			0	0	1			
2035 - 2040	3	3	1	1	1	0	7	2
	3	2	1	1	2	0	5	2
	0	2	0	0	1	0	2	1
	1	2	2	1	1	0	1	2
2040 - 2045	3	1	2	1	2	0	2	2
	1	2	0	0	1	0	4	1
	1	1	0	0	1	0	2	0
			3	1	0	0	3	1
2045 - 2050	2	0	2	0	2	0	5	1
	3	1	0	0	1	0	3	0
	1	1	1	2	2	0	4	3
	1	4	1	1	2			
2050 - 2055	1	4	1	2	3	0	0	2
	9	0	3	1	2	0	3	2
	1	0	2	1	3	0	3	2
2055 - 2100	2	1	2	0	2	0	1	0
	1	1	0	0	2	0	0	2
	1	0	0	0	2	0	2	0
	1	0	1	1	0			
2100 - 2105	1	0	2	1	0	0	1	2
	6	0	3	1	2	0	1	5
	2	3				0	1	3
	2	4						
2105 - 2110	0	2	0	0	1	0	2	3
	2	1	0	1	1	0	4	6
	1	0	0	0	2	0	1	2
			5	0	5	0	1	6
2110 - 2115	1	0	5	3	1	0	1	3
	2	3	1	2	3	0	0	1
	5	2	5	1	4	0	4	1
						0	2	0
2115 - 2120	5	0	4	3	2	0	2	4
	5	1	2	4	7	0	3	7
	0	3	3	2	6	0	0	6
			1	1	0			
2120 - 2125	3	0	1	2	1	0	3	6
	1	1	0	1	3	0	2	1
	3	3	4	2	2	0	4	0

	3	0						
2125 - 2130	3	1	2	1	2	0	2	2
	5	4	1	1	0	0	2	3
	0	6	1	1	0	0	1	3
			1	1	1			
2130 - 2135	0	2	2	1	2	0	5	7
	0	3	5	2	1	0	1	2
			1	0	0	0	2	6
						0	0	4
2135 - 2140	0	8	3	0	0	0	0	3
	0	3	2	1	0	0	3	6
	0	5						
2140 - 2145	0	5	4	1	3	0	1	7
	0	4	10	3	1	0	3	4
	0	1				0	1	4
						0	0	3
2145 - 2150	0	3	11	7	7	0	4	5
	0	7	4	3	1	0	3	6
2150 - 2155	0	1	10	8	1	0	2	9
	0	4	2	2	5	0	2	3
			6	5	6	0	0	1
2155 - 2200	0	7	8	6	6	0	1	6
	0	2	2	2	3	0	1	4
						0	0	3
2200 - 2205	0	1	16	20	2	2	1	5
			28	29	3	4	2	2
2205 - 2210	0	1	15	16	4	5	2	2
	0	5	15	26	2	3	3	2
			20	27	1	0	1	0
2210 - 2215	0	10	29	32	1	3	6	3
	0	2	33	28	7	0	3	3
2215 - 2220	0	9	10	8	3	0	0	2
	0	5	3	1	3	0	6	3
2220 - 2225	0	10	4	4	3	6	9	3
			4	6	2	3	0	0
			0	0	3	1	4	4
			0	0	3			
2225 - 2230	0	6	0	0	3	1	2	13
	0	5	9	10	3	0	3	6
2230 - 2235	0	5	5	10	5	2	4	5
	4	8	0	0	2	0	3	2
	0	2	0	0	2			
			3	2	13			
2235 - 2240	3	10	0	0	3	4	2	9
	0	3	0	0	3	0	1	3
			3	4	1			
			0	0	1			
2240 - 2245	0	5	0	0	4	2	1	0
	0	1	3	1	4	3	1	3
	0	1	2	2	2	2	2	2
			4	1	3			
2245 - 2250	3	4	1	0	0	3	3	2
	4	3	4	4	0	0	3	0
			1	0	0	0	1	2
2250 - 2255	3	6	1	1	0	4	2	2
	2	3	2	1	1	1	4	0
						0	1	0
2255 - 2300	2	3	1	2	1	1	3	2
	4	2				1	1	0
						0	1	0

Man City Surveys - Part 1
Queue Length Survey

Site 3
A6010 Alan Turing Way (South)
Forge Lane
A6010 Alan Turing Way (North)



Lat/Long
lat 53.487241° lon -2.199148°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)

TIME	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k
1600 - 1605	1	7	5	0	1	0	0	0	0	0	1
	1	5	3	0	0	1	1	0	0	1	1
	0	13	10	0	0	1	0	0	0	0	4
				0	1	1	0	0	7	3	1
								0	0	0	3
1605 - 1610	0	13	10	1	2	0	1	0	6	3	1
	1	8	14	0	0	1	1	0	2	1	2
	0	16	11	0	0	2	1	0	0	0	4
	0	7	7					0	9	0	1
								0	0	0	2
								0	5	3	1
								0	0	0	3
1610 - 1615	0	9	8	0	2	1	0	0	7	4	0
	1	5	5	1	1	1	1	0	1	0	0
				1	0	0	0	0	7	4	0
				1	1	0	2	0	7	4	4
								0	0	0	7
1615 - 1620	1	16	16	0	0	0	2	0	8	4	2
	0	12	11	1	0	0	0	0	3	0	2
	1	13	11	1	0	0	0	0	0	0	3
				1	0	0	0	0	7	4	0
								0	5	0	2
								0	9	6	1
								0	1	0	4
1620 - 1625	0	7	6	1	0	0	0	0	0	0	1
	1	5	7	3	0	2	1	0	6	3	1
	1	7	8	1	0	0	3	0	9	7	0
								0	0	0	1
1625 - 1630	1	12	11	0	0	2	0	0	0	0	1
	1	3	5	1	0	0	2	0	7	4	0
				1	0	0	0	0	10	8	3
								0	0	0	5
								0	6	3	1
1630 - 1635	1	6	4	0	0	0	1	0	0	0	4
	1	11	7	3	0	0	0	0	7	4	2
	1	8	7	1	1	1	0	0	0	0	4
				0	1	0	0	0	7	5	0
								0	0	0	3
								0	9	7	3
1635 - 1640	0	9	13	0	2	1	1	0	0	0	7
	1	8	9	1	2	0	1	0	9	10	1
	0	6	2	2	0	0	0	0	0	0	3
								0	9	6	1
								0	6	0	3
								0	0	0	5
1640 - 1645	0	11	2	0	1	2	0	0	6	7	2
	2	18	6	1	0	0	0	0	3	0	0
	0	8	6	0	0	3	0	0	0	0	3
	2	0	0					0	8	6	2
								0	0	0	6
								0	8	2	3
								0	0	0	4
1645 - 1650	2	3	3	0	0	3	0	0	10	9	0
	0	7	6	1	1	1	0	1	7	5	4
	1	5	8	0	1	3	2	0	8	1	0
				1	0	0	0	0	6	3	3
								0	0	0	4
								0	6	5	0
								0	8	6	7
1650 - 1655	2	0	5	1	0	0	0	0	1	2	1
	1	9	5	1	0	2	2	0	5	1	1
	1	3	1	2	0	0	1	0	5	0	2
								0	0	0	3
								0	4	1	1
1655 - 1700	0	5	2	2	2	1	1	0	0	0	3
	1	3	3	1	0	0	0	0	1	1	1
	3	2	1					0	3	0	2
								0	3	2	0
								0	7	3	2
								0	2	0	0
								0	0	0	2
1700 - 1705	0	9	5	0	1	0	1	0	1	2	3
	0	6	2	0	0	0	1	0	3	5	2

	1	6	8	2	1	0	0	0	0	0	2
				0	0	0	1	0	6	4	5
				1	0	0	0	0	0	0	5
								0	6	3	0
1705 - 1710	2	2	2	0	1	0	1	0	0	3	0
	0	8	6	2	0	0	1	0	2	1	0
	0	0	7	1	0	1	0	0	2	3	1
	1	3	6					0	3	3	1
								0	1	0	2
								0	7	4	0
1710 - 1715	1	3	6	0	0	0	1	0	1	1	4
	0	9	2	1	0	0	1	0	4	8	2
	0	3	2	2	1	0	1	0	3	5	2
	1	3	6					0	5	9	1
								0	4	5	1
1715 - 1720	1	5	3	1	0	1	0	0	3	4	7
	3	4	6	0	0	1	1	0	5	6	9
	2	5	4	1	1	0	2	0	6	8	7
	1	0	0	0	0	0	2	0	0	4	2
				1	1	0	0				
1720 - 1725	0	1	2	0	1	2	0	0	3	10	2
	0	5	3	0	0	2	0	0	7	5	4
	0	2	7	1	0	1	0	0	9	5	2
	0	1	4	0	0	1	0	0	12	6	6
1725 - 1730	2	3	7	0	0	1	0	0	6	12	3
	2	4	6	2	0	0	0	0	3	8	2
	0	5	8	1	0	0	0	0	10	6	2
								0	0	0	2
1730 - 1735	3	2	1	1	1	0	0	0	0	2	2
	0	7	8	1	0	1	0	0	5	11	2
	1	4	7	0	0	1	0	0	9	2	1
				0	0	1	1	0	2	1	2
								0	8	4	0
1735 - 1740	1	3	9	0	1	1	1	0	0	0	6
	0	8	10	0	0	1	1	0	3	2	2
	0	6	9					0	0	0	3
								0	4	3	0
								0	0	0	1
								0	2	0	0
1740 - 1745	0	7	10	1	0	1	1	0	2	0	1
	0	1	0	0	0	1	1	0	0	0	3
	0	8	9					0	0	0	3
	0	2	0					0	0	0	2
								0	0	0	1
								0	2	1	0
1745 - 1750	0	3	7	0	1	0	0	0	4	1	1
	1	1	5	0	0	1	0	0	0	0	1
	1	4	7	0	0	1	0	0	0	0	1
								0	3	1	0
								0	0	0	3
1750 - 1755	0	3	8	0	0	1	0	0	3	1	0
	0	6	8	0	1	0	0	0	0	0	3
	0	7	9	2	0	1	0	0	2	1	2
				0	0	1	0	0	0	0	3
				1	1	0	0	0	2	0	1
								0	0	0	2
1755 - 1800	0	7	8	1	1	0	0	0	5	0	2
	0	7	9	1	0	1	0	0	8	0	1
	0	0	0	0	0	1	0	0	3	2	0
				1	0	0	0	0	3	2	1
								0	7	5	4
								0	10	8	0
								0	0	0	1
1800 - 1805	2	2	4	1	0	0	0	0	15	10	1
	3	4	8	1	1	2	1	0	0	8	1
	0	5	7	0	0	1	0	0	14	10	1
								0	8	16	1
1805 - 1810	0	1	6	0	2	1	0	0	17	8	4
	2	3	8	2	0	0	0	0	9	7	4
	0	8	9	1	2	1	2	0	12	8	1
								0	14	12	3
								0	0	0	1
1810 - 1815	2	7	10	0	1	0	0	0	0	2	2
	0	8	10	0	1	1	1	0	2	4	0
	3	1	7	1	1	1	0	0	5	5	0
								0	0	0	3
								0	2	1	0
1815 - 1820	3	0	8	0	0	0	0	0	2	2	0
	0	4	9					0	0	0	3
	0	11	10					0	1	1	1
	1	2	5					0	1	2	3
1820 - 1825	1	5	9	0	0	0	1	0	0	0	3
	1	2	5					0	0	0	4
	0	4	7					0	2	0	6
	0	2	5								
1825 - 1830	0	4	7	0	0	0	1	0	0	0	4
	4	0	2	1	0	0	0	0	0	0	6
	0	4	4	0	0	0	1	0	0	0	5
1830 - 1835	3	3	6	0	0	0	1	0	0	0	6
	0	3	5	0	0	0	2	0	0	1	4
	1	0	3	0	0	0	1	0	0	0	3
								0	1	0	5

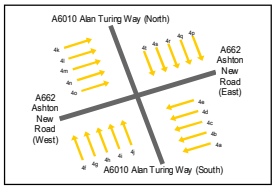
1835 - 1840	1	4	11	0	0	1	1	0	0	0	9
	1	5	8					0	0	0	8
	0	9	12					0	0	0	5
								0	1	0	7
1840 - 1845	6	3	6	1	0	0	0	0	0	0	7
	5	4	8	0	0	0	1	0	2	0	4
	3	6	8	0	1	0	0	0	1	1	10
								0	2	2	0
								0	0	0	2
1845 - 1850	2	4	8	0	1	0	0	0	0	0	7
	0	4	10	0	0	0	1	0	0	0	9
	5	0	9	1	0	0	0	0	4	5	11
								0	1	2	2
								0	0	2	0
1850 - 1855	3	5	8	1	0	0	0	0	0	0	11
	0	4	6					0	2	1	2
	2	2	3					0	0	0	10
								0	4	5	11
								0	1	2	1
1855 - 1900	2	3	2	0	1	0	0	0	0	0	3
	3	0	4					0	1	2	5
	5	0	8					0	1	0	14
								0	1	4	0
1900 - 1905	3	0	0	0	0	1	1	0	0	0	6
	3	4	5	0	0	0	2	0	1	0	0
	2	7	4					0	0	0	10
	0	4	3					0	0	0	9
								0	1	0	7
1905 - 1910	0	4	3	0	1	1	4	0	1	0	10
	1	2	4	0	0	2	0	0	2	1	2
	2	8	6	0	0	1	0	0	0	0	8
	4	4	3					1	2	1	1
								0	0	0	5
1910 - 1915	4	8	5	0	0	3	1	0	3	0	15
	5	9	8	1	0	0	0	0	1	3	12
	5	10	11					0	0	0	7
	5	3	1					0	0	0	6
								0	0	0	3
1915 - 1920	8	7	4	0	0	1	0	0	4	0	8
	5	4	6	0	0	0	1	0	0	0	12
	5	9	2					0	6	4	13
	4	3	1					0	3	2	11
1920 - 1925	6	8	7	0	0	0	1	0	3	2	12
	4	10	9	1	0	0	0	0	0	0	10
	5	11	13	1	0	0	0	0	1	0	5
	0	0	1					0	0	0	16
1925 - 1930	4	9	10	0	0	0	0	0	3	1	13
	7	10	8					0	2	0	18
	6	11	10					0	2	0	14
	0	1	0								
1930 - 1935	6	10	8	2	0	0	0	0	0	0	14
	7	12	11	1	0	0	0	0	0	0	18
	10	8	9	1	0	0	0	0	1	3	18
				1	0	0	0	0	6	1	22
								0	8	9	15
1935 - 1940	10	10	8	1	0	0	0	0	0	0	20
	9	10	11					0	8	0	0
	7	9	8					0	6	4	15
								0	25	8	4
								0	20	15	7
1940 - 1945	7	10	11	0	0	0	0	0	25	15	6
	2	11	10					0	20	14	6
	4	9	10					0	19	17	5
								0	8	6	0
1945 - 1950	4	9	8	0	0	0	0	0	12	8	0
	3	10	7					0	10	4	2
	1	1	0					0	1	0	0
								0	2	0	1
1950 - 1955	1	1	1	0	0	1	0	0	2	0	1
	1	0	0					0	0	0	2
	0	13	12					0	0	0	2
	0	14	12								
1955 - 2000	0	8	7	2	0	0	0	0	2	1	0
	0	7	6	0	0	1	0	0	0	0	2
	0	10	5	1	0	0	0	0	3	2	0
	0	1	0					0	0	0	1
2000 - 2005	0	6	4	0	0	0	1	0	3	2	0
	0	4	1	4	0	2	1				
2005 - 2010	0	7	5	1	0	0	1	0	0	0	1
	0	4	3	0	0	3	0				
				1	0	0	0				
2010 - 2015	1	5	4	1	0	1	0	0	1	0	0
	0	4	1	0	0	2	1	1	2	1	0
				0	0	1	0	0	0	0	1
2015 - 2020	0	2	2	0	0	1	0	0	1	1	0
	0	4	2	0	0	2	1	0	2	2	0
2020 - 2025	0	1	2	1	0	0	0	0	0	0	1
	0	1	2	1	0	1	1	0	2	0	0
	0	4	3	0	0	2	0				

2025 - 2030	0	3	1	1	0	0	1	0	3	1	0
	0	4	0	1	0	0	2	0	2	0	0
	0	0	1	1	2	1	0	0	0	2	0
2030 - 2035	0	3	1	2	4	1	0	0	2	2	0
	0	2	1	1	0	0	0	0	0	0	1
	0	1	0	1	1	1	0	0	1	1	0
				1	0	0	1				
2035 - 2040	0	5	2	1	0	0	1	0	0	0	0
	0	2	1	2	0	0	0				
				0	0	0	1				
2040 - 2045	0	0	1	0	0	1	0	0	3	0	0
	0	1	0	0	0	0	1	0	0	2	0
	0	1	1	1	0	1	0	0	0	1	0
								0	0	5	0
2045 - 2050	0	1	2	2	1	0	0	0	3	0	0
	0	2	1	1	0	0	0	0	2	0	0
	0	3	0	0	1	0	0				
2050 - 2055	0	1	0	0	0	0	2	0	2	1	0
	0	2	1	0	0	0	1	0	3	3	0
	0	1	1	1	0	1	0	0	0	0	1
2055 - 2100	0	4	2	1	0	0	0	0	0	0	1
	0	3	1	0	0	0	1	0	0	2	0
				0	0	1	0				
				1	0	0	0				
2100 - 2105	0	1	1	1	0	0	0	0	1	2	0
	1	0	0	0	0	2	2	0	1	0	0
	0	3	6	0	0	2	0				
2105 - 2110	0	0	2	0	0	1	0	0	1	1	0
				1	0	0	0	0	2	1	0
2110 - 2115	0	1	0	0	0	1	2	0	1	0	0
				1	1	0	0	0	0	1	0
2115 - 2120	1	1	1	0	0	1	0	0	2	0	0
	0	0	2	1	1	0	0				
	0	3	3	1	0	0	1				
2120 - 2125	0	4	3	1	2	0	0	0	1	2	0
				0	0	3	0	0	0	1	0
				2	0	1	0	0	0	0	1
				0	0	0	1	0	1	3	0
				2	0	0	0				
2125 - 2130	0	4	5	3	1	0	0	0	1	2	0
	0	1	0	0	0	1	0	0	2	2	0
	1	1	1	0	0	0	1				
				0	0	0	3				
2130 - 2135	1	1	2	0	0	1	0	0	0	1	0
	1	3	2	2	0	1	0				
	0	2	2	0	0	1	2				
	0	1	0	1	0	1	0				
2135 - 2140	0	3	2	1	0	2	0	0	0	1	0
	0	3	3	1	0	1	1	0	0	1	0
	0	3	1	2	2	1	1	0	0	2	0
	0	1	0								
2140 - 2145	0	1	1	2	1	1	2	0	2	2	0
	0	4	3	0	0	1	4	0	0	1	0
	0	2	1	1	0	1	1	0	1	1	0
				8	2	2	0				
				2	0	1	0				
2145 - 2150	0	4	4	2	1	2	0	0	5	2	0
	0	5	5	3	2	1	0	0	3	0	0
	0	9	7	5	3	3	2				
	0	6	9	2	3	0	0				
				3	1	0	0				
2150 - 2155	0	9	8	3	1	0	0	0	2	0	0
	0	11	10	8	2	0	0	0	0	2	0
	0	16	9	8	3	0	0	0	1	0	0
	0	8	6	2	2	1	1				
2155 - 2200	0	8	6	4	2	1	0	0	1	0	0
	0	2	5	2	1	2	0	0	3	2	0
	0	8	6	4	2	1	0	0	1	1	0
	0	1	1	0	0	1	0				
	0	3	3								
2200 - 2205	0	3	2	2	2	0	0	0	1	0	0
	0	4	5	3	2	0	0	0	0	0	1
	0	2	0	0	0	1	1				
	0	5	7	7	3	0	0				
	0	6	1	4	1	3	0				
2205 - 2210	0	2	2	7	1	2	0	0	1	3	0
	0	5	5	1	0	1	1	0	0	0	2
	0	6	8	5	0	0	0	0	4	2	3
	0	5	4	5	5	0	1				
2210 - 2215	0	7	10	5	0	0	0	0	5	3	1
	0	9	9	6	5	0	2	0	3	2	0
	0	9	10	5	0	3	2	0	0	0	2
2215 - 2220	0	9	10	5	1	1	3	0	2	1	2
	1	8	10	3	4	0	0	0	4	0	1
	0	4	7	7	2	2	5				
	0	6	7								
2220 - 2225	0	6	7	10	5	1	4	0	0	0	1

	0	5	8	0	0	3	0	0	7	4	2
	0	7	8	6	0	2	5				
				8	2	4	7				
2225 - 2230	0	10	9	8	3	4	7	0	0	0	2
	0	7	8	2	1	4	7	0	0	0	4
	0	8	10	1	0	4	7				
				0	0	4	7				
2230 - 2235	0	7	8	4	2	2	3	0	9	8	5
	0	12	13	9	5	2	3	0	10	9	6
	0	11	12	8	0	4	7	0	11	10	2
2235 - 2240	0	12	4	6	3	4	8	0	9	10	4
	1	10	10	10	2	6	5	0	10	8	0
	0	3	2	6	3	4	7	0	7	8	0
2240 - 2245	0	9	10	12	0	7	8	0	9	6	1
	0	4	4	8	1	5	9	0	8	9	3
	0	5	6	4	2	3	1	0	7	8	1
								0	8	6	0
2245 - 2250	0	0	1	4	2	6	2	0	14	12	0
	0	2	2	0	3	2	3	0	0	2	2
	0	2	3	2	3	2	1	0	6	2	1
	0	1	2	1	0	0	1	0	7	4	0
	0	4	2					0	3	0	2
								0	0	1	0
2250 - 2255	0	0	2	2	0	0	1	0	7	4	0
	0	2	1	1	3	0	0	0	2	0	0
	0	3	3	5	2	1	0	0	1	0	1
	0	1	1	2	1	1	0	0	1	2	0
				2	3	2	0	0	0	0	1
								0	1	3	1
2255 - 2300	0	2	1	0	0	2	0	0	0	0	1
	0	0	1	2	1	0	0	0	1	0	0
	1	0	0	3	1	0	1	0	0	1	0
	0	0	1	4	1	2	0	0	1	0	0
	0	1	1	2	0	2	0				

Man City Surveys - Part 1
Queue Length Survey

Site 4
A662 Ashton New Road (East)
A6010 Alan Turing Way (South)
A662 Ashton New Road (West)
A6010 Alan Turing Way (North)



Lat/Long
lat 53.481602° lon -2.195124°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)

TIME	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n	4o	4p	4q	4r	4s	4t
1600 - 1605	6	0	4	2	9	1	0	11	17	7	4	0	5	3	2	0	0	12	10	4
	5	0	2	2	8	1	0	18	13	6	2	0	5	9	6	9	0	4	9	6
	0	0	0	0	3	1	0	8	13	14	2	0	4	5	2	5	0	6	5	3
	1	0	1	1	3											3	0	3	3	1
	0	0	0	0	1															
1605 - 1610	0	0	0	0	2	1	0	17	19	6	0	1	0	10	7	5	0	5	5	2
	4	0	7	7	4	0	0	17	16	11	2	0	4	7	2	1	0	8	7	4
	0	0	0	0	1	0	0	16	19	6	3	1	5	11	0	6	0	8	10	4
	5	0	4	3	3	0	0	10	11	8	0	1	0	0	0	2	0	1	1	3
	2	0	3	4	1															
	0	0	0	0	2															
1610 - 1615	0	0	1	0	3	0	0	17	13	8	4	0	5	9	5	4	0	4	3	4
	2	0	4	3	3	0	0	14	18	8	3	0	5	7	3	5	0	5	5	4
	3	0	1	1	0	0	0	16	17	6	1	1	6	8	4	7	0	4	7	4
	1	0	0	0	0											0	0	1	4	0
1615 - 1620	1	0	6	3	9	0	0	18	15	7	4	1	6	10	2	2	0	10	10	7
	0	0	0	0	8	0	0	12	12	7	3	1	9	8	3	0	0	9	8	2
	1	0	2	2	10	0	0	14	14	8	1	0	4	10	4	0	0	11	11	5
	0	0	0	0	8															
	0	0	2	5	7															
1620 - 1625	0	0	3	5	8	1	0	5	4	9	3	0	10	9	4	0	0	9	12	5
	0	0	0	0	8	1	0	17	14	10	4	0	5	6	4	4	0	6	9	3
	0	0	2	1	6	0	0	16	16	10	4	0	5	10	0	3	1	6	5	3
	0	0	0	0	4	0	0	16	17	8	1	0	2	0	0					
	0	0	1	1	4	0	0	0	1	4										
	0	0	1	1	3															
	2	0	2	2	3															
1625 - 1630	4	0	3	2	5	0	0	15	18	10	2	0	2	10	1	6	0	4	7	1
	1	1	3	1	5	0	0	16	17	10	1	0	2	9	5	6	0	2	6	5
	0	0	0	0	2	0	0	17	18	8	4	0	7	10	3	5	0	7	9	0
	0	0	8	0	3						0	0	1	9	0					
	0	0	2	1	0															
1630 - 1635	0	0	3	1	2	1	0	14	20	10	2	1	8	12	0	0	1	11	8	3
	2	0	3	2	2	0	0	17	15	8	2	0	2	11	5	1	0	9	11	5
	1	0	3	1	1	1	0	18	13	10	1	0	6	13	1	5	0	8	10	3
	1	0	0	0	1						0	0	2	1	2					
1635 - 1640	4	0	5	2	4	0	0	18	17	7	3	0	5	10	4	6	0	9	11	5
	0	0	0	0	2	0	0	19	20	12	3	0	3	8	4	4	0	7	8	1
	3	1	2	3	4	0	0	9	5	6	2	0	9	9	6	6	0	4	9	5
	3	0	3	3	2											4	0	4	6	5
	0	0	0	0	2															
1640 - 1645	2	0	3	0	4	0	0	16	18	6	3	0	8	12	4	6	0	6	8	5
	0	0	0	0	4	1	0	18	19	10	2	0	4	6	0	6	0	10	11	4
	2	0	2	3	7	1	0	19	10	10	1	0	6	8	0	2	0	10	10	1
	0	0	0	0	7	2	0	10	9	8						3	0	5	4	0
	2	1	2	1	4															
1645 - 1650	2	0	3	5	3	2	0	11	24	14	2	0	3	7	2	4	0	9	8	1
	2	0	3	2	3	1	0	22	20	17	0	0	6	11	2	0	0	10	11	1
	0	0	0	0	1	0	0	18	17	10	1	0	5	10	2	6	0	5	11	1
	3	0	2	3	1	0	0	10	8	7						4	0	3	4	2
1650 - 1655	1	0	5	7	7	0	0	19	22	6	4	0	8	12	0	7	0	4	7	7
	0	0	0	0	3	0	0	19	21	10	4	0	4	9	1	3	0	10	11	8
	7	1	1	4	2	0	0	21	22	14	1	0	3	7	4	2	0	9	10	7
	0	0	4	1	6	0	0	6	4	7										
1655 - 1700	0	0	6	1	6	0	0	18	22	12	1	0	9	8	4	1	0	10	11	6
	5	1	3	1	4	2	1	23	19	13	2	1	7	11	7	0	1	9	10	5
	3	0	0	2	0	0	0	14	17	12	2	0	6	4	2	3	0	6	10	0
	2	0	2	2	1						1	0	5	9	3					
1700 - 1705	5	0	2	2	1	1	1	12	21	11	4	1	8	10	6	2	0	5	10	2
	0	0	0	0	1	1	0	10	14	9	1	0	6	4	1	0	0	6	8	3
	3	0	0	1	1	2	1	13	22	11	4	0	5	7	5	1	0	4	5	0
	0	0	0	0	1						1	0	3	5	2					
	3	0	3	4	4															
	0	0	0	0	3															
	1	0	0	1	2															
1705 - 1710	5	0	6	3	4	1	1	19	18	10	1	0	7	6	3	0	0	0	0	1
	0	0	0	0	2	2	0	18	16	8	4	0	3	5	2	3	0	7	10	1
	4	1	1	5	4	3	0	17	14	10	4	0	4	4	4	2	0	0	0	0
	0	0	0	0	2						2	0	2	3	1	1	0	6	10	2
	0	0	0	1	1											4	0	4	5	3
	6	0	2	2	5															
	0	0	0	0	2															
	0	0	0	0	1															
	1	0	1	0	1															
1710 - 1715	3	0	1	3	1	1	0	18	12	9	4	0	9	9	3	6	0	3	12	3
	0	0	2	1	2	1	0	15	15	8	0	0	7	9	5	4	0	4	1	1
	3	0	3	4	3	1	0	9	7	5	0	0	5	8	3	0	0	0	0	2
											0	0	1	1	0	0	0	6	4	3
																2	0	2	3	2
1715 - 1720	3	0	3	1	2	1	0	11	10	8	1	0	9	8	3	3	0	7	13	0
	0	0	0	0	1	1	0	16	18	6	4	0	6	10	3	0	0	12	11	6
	3	0	4	5	8	2	0	18	17	10	4	2	4	7	3	4	0	6	10	3
	0	0	0	0	4											5	0	4	6	3
	5	0	3	2	9											5	0	5	6	4
	0	0	0	0	3															
1720 - 1725	0	0	0	0	2	2	0	13	10	7	2	0	6	5	4	6	0	8	13	6
	0	0	4	6	7	2	0	8	10	7	0	1	5	4	4	2	0	5	9	6
	0	0	0	0	2	2	0	8	8	5	2	0	4	5	1	2	0	5	9	6
	0	0	0	0	2											3	0	6	5	2
	2	0	0	0	4															
	0	0	0	0	0															
	4	0	1	3	3															
	0	0	0	0	1															
1725 - 1730	3	0	1	1	3	1	2	12	15	7	1	1	7	9	4	3	0	8	12	5
	0	0	0	0	1	0	0	9	12	8	2	0	4	4	2	3	0	7	4	3
	2	0	2	2	1	0	0	18	11	8	3	0	9	11	2	3	0	10	11	5
	1	0	2	2	2															
1730 - 1735	0	0	0	0	2	1	0	14	11	6	4	0	5	10	3	2	0	7	7	5
	4	0	0	2	5	2	0	12	13	8	0	0	10	1	5	1	0	6	11	3
	0	0	0	0	3	2	2	15	15	11	3	0	2	7	4	1	0	12	16	6
	0	0	1	0	3	2	0	4	5	5										
	0	0	0	0	1															
	4	0	1	0	0															
1735 - 1740	4	0	1	0	0	2	0	14	12	7	4	0	4	7	6	2	0	6	11	5
	0	0	3	0	3	2	0	12	11	6	3	0	7	12	0	4	0	8	13	4
	0	0	0	0	1	2	1	12	10	3	2	0	4	9	1	1	1	6	4	5
	4	0	2	1	1						2	0	5	10	2					
	0	0	0	0	1															
	0	0	1	0	4															
1740 - 1745	0	0	1	0	4	1	1	13	14	7	2	0	7	11	3	6	0	5	10	4
	0	0	0	0	2	2	0	12	5	4	1	0	8	10	3	0	0	10	7	5
	0	0	2	2	4	1	0	9	8	4	0	0	9	11	3	1	0	11	10	4
	0	0	0	0	2						2	1	5	4	0					
	5	0	5	4	4															
	2	0	1	0	0															
1745 - 1750	2	0	1	2	1	1	0	10	12	8	2	1	8	8	0	1	0	7	9	6
	0	0	0	0	1	0	0	12	13	4	1	0	6	7	4	1	0	3	3	1
	4	0	1	0	2	1	0	13	10	6	1	0	5	9	5	2	1	1	1	3
	0	0	0	0	2						1	1	3	3	2					
	1	0	0	0	1															
	0	0	1	0	1															
1750 - 1755	2	0	2	1	1	2	0	12	13	10	1	1	6	12	4	2	1	1	1	3
	1	0	2	2	0	1	1	3	14	13	3	0	6	5	3	1	0	8	11	5
	3	0	2	1	2	1	0	7	8	5	4	0	7	7	4	6	0	4	10	5
																3	0	1	1	1
1755 - 1800	0	0	3	3	3	1	0	15	13	7	3	0	10	7	4	2	0	2	1	4
	1	0	0	0	0	3	0	11	11	8	4	2	4	8	4	0	0	0	2	5
	1	0	0	0	0	4	0	9	14	8	4	0	6	2	7	0	0	1	1	6
	1	0	1	1	1	2	0	4	3	3						1	0	3	2	1
	0	0	0	0	2															
1800 - 1805	2	0	2	1	2	2	0	9	7	7	0	0	4	3	7	2	0	6	2	3
	0	0	0	0	1	1	0	8	9	7	3	1	4	4	2	4	0	7	4	2
	2	0	3	3	3	4	0	8	6	7	4	0	3	3	5	2	0	2	3	1
	1	0	1	3	0	1	0	8	8	6						2	0	7	6	3
1805 - 1810	3	0	3	6	3	1	0	11	11	6	0	0	4	4	5	2	0	7	8	9
	0	0	0	0	2	0	1	12	7	6	4	0	3	4	9	1	0	8	9	7
	0	0	0	0	2	1	0	10	9	7	4	0	7	5	2	0	0	10	9	8
	1	0	2	2	0											0	0	3	1	2
	3	0	1	4	6															
	0	0	0	0	1															

1810 - 1815	0	0	0	0	6	1	0	12	11	7	2	0	7	9	4	0	0	5	3	4
	2	0	2	0	4	2	0	9	7	7	0	0	0	0	3	5	0	3	8	6
	0	0	0	0	1	0	0	9	14	10	1	0	3	2	2	2	0	10	11	0
	2	0	3	1	5	0	0	10	10	5	2	1	3	8	3					
	0	0	0	0	2															
	0	0	0	0	1															
	2	0	3	3	1															
1815 - 1820	2	0	3	4	0	0	0	12	12	7	4	1	7	0	3	2	0	11	10	5
	0	0	0	0	1	2	0	14	9	7	0	0	0	10	4	0	1	12	13	5
	1	0	0	0	1	0	0	1	9	7	3	0	8	0	2	2	0	10	9	1
	0	0	0	0	2	2	0	6	8	4	3	0	5	4	3					
	4	0	2	1	6						0	0	6	10	4					
	0	0	0	0	1															
	0	0	2	5	1															
1820 - 1825	0	0	4	5	1	2	0	10	12	6	0	0	6	10	4	0	0	0	3	4
	0	0	0	0	1	1	1	8	9	7	3	0	5	2	4	3	0	2	4	6
	2	0	4	5	6	0	0	5	8	6	4	0	6	3	4	1	0	2	0	3
	0	0	0	0	4	2	0	5	3	4	1	0	3	6	5	0	0	0	0	3
	0	0	1	0	2															
	0	0	2	1	1															
1825 - 1830	0	0	2	1	1	3	0	8	9	7	1	0	3	0	5	6	0	2	2	3
	0	0	0	0	1	0	0	7	10	4	4	1	3	0	4	2	0	3	4	0
	4	0	1	1	2	0	0	11	11	6	4	0	2	6	4	2	0	3	3	1
	0	0	1	2	2						2	0	2	2	4					
	0	0	0	0	1									6	1					
	2	0	3	2	4															
1830 - 1835	2	0	2	4	4	1	1	9	10	2	4	0	3	11	2	0	0	0	0	1
	0	0	0	0	3	3	0	12	11	2	1	1	5	2	2	3	0	3	1	5
	2	0	0	2	4	0	0	8	6	4	4	0	2	1	2	1	0	2	3	5
	2	0	3	2	4						0	0	0	0	1	1	0	3	2	3
	0	0	0	0	2						3	0	1	1	2					
1835 - 1840	0	0	1	0	0	1	0	8	11	7	4	1	2	4	6	0	0	0	0	4
	0	0	0	0	1	2	0	8	9	8	4	0	2	3	2	3	1	4	4	4
	1	0	5	4	1	6	0	9	9	6	3	0	2	3	3	4	0	4	2	4
	2	0	3	4	1						0	0	0	1	1	0	1	4	5	3
	1	0	0	0	0						0	0	1	0	1					
1840 - 1845	1	0	1	1	1	1	0	11	7	7	4	0	3	1	2	4	1	5	6	3
	1	0	2	3	1	3	1	10	11	6	0	0	0	0	2	5	0	4	4	2
	2	0	0	1	3	3	0	7	10	7	4	0	1	2	3	5	0	3	6	5
	0	0	0	0	1						4	0	2	0	2	0	0	4	2	3
											0	0	2	4	3					
														0	2					
1845 - 1850	1	0	5	2	3	2	0	7	10	7	4	1	3	3	2	0	0	4	2	3
	0	0	0	0	2	2	0	8	8	8	0	0	4	6	4	0	0	3	0	6
	0	0	0	0	1	1	0	12	11	9	4	0	4	2	1	2	0	3	5	4
	6	0	5	3	3									0	0	1	0	0	1	1
	1	0	1	3	2															
1850 - 1855	0	0	1	0	1	0	0	14	11	9	4	0	1	2	2	1	0	1	1	8
	5	0	4	5	7	2	0	10	9	10	4	0	4	4	5	2	0	1	0	8
	0	0	0	0	4	1	1	10	13	0	4	0	2	4	5	0	0	3	2	9
	2	0	2	2	6	1	0	5	6	3										
1855 - 1900	0	0	0	0	4	1	0	7	8	4	4	0	1	1	9	1	0	3	3	3
	2	0	1	4	5	0	0	8	7	7	2	0	2	0	3	4	0	5	2	5
	0	0	4	3	5	2	1	7	6	4	1	0	1	0	1	1	0	4	2	2
	1	0	1	7	4	0	0	2	2	2										
1900 - 1905	5	0	0	9	4	2	0	6	5	4	2	0	3	0	2	0	0	2	0	0
	0	0	0	7	5	2	0	4	4	3	0	0	0	2	1	0	0	0	0	3
	1	0	3	0	5	1	0	6	5	6	4	0	3	1	3	1	0	4	3	1
	0	0	0	0	3	0	0	0	0	2	2	0	3	1	0	0	0	0	0	1
											1	0	1			2	0	1	0	4
1905 - 1910	2	0	3	6	5	1	0	8	8	5	2	0	3	1	4	0	0	0	0	4
	3	0	4	4	4	1	0	9	8	6	4	0	5	4	3	1	0	4	3	3
	0	0	7	2	5	3	0	9	5	5	3	0	2	2	2	0	0	0	0	4
						0	0	0	0	1	1	0	0	0	1	0	0	4	2	5
																0	0	1	1	4
1910 - 1915	3	0	3	3	5	2	0	3	3	2	3	0	1	0	5	0	0	1	1	4
	0	0	0	0	1	1	0	6	7	5	4	0	2	3	3	3	0	3	3	5
	1	0	4	4	7	2	0	9	8	2	3	0	2	1	1	0	0	0	0	5
	2	0	5	0	4						0	0	0	1	1	2	0	2	1	6
	0	0	1	1	1											1	0	0	1	1
1915 - 1920	2	0	5	2	3	7	0	5	6	5	4	0	2	1	2	1	0	0	1	1
	0	0	0	0	3	2	0	10	9	5	4	0	1	1	2	0	0	0	0	4
	0	0	3	2	4	2	0	7	9	6	4	0	2	1	4	1	0	5	6	6
	0	0	0	0	3						1	0	1	1	0	0	0	0	0	6
	1	0	3	2	6											1	0	4	2	3
	0	0	0	0	4											0	0	0	0	4
																1	0	3	1	5
1920 - 1925	3	0	5	0	5	5	0	6	9	1	4	0	3	4	4	1	0	3	1	5
	0	0	0	0	2	2	0	7	13	7	3	0	0	0	4	0	0	0	0	5
	0	0	0	0	3	1	0	9	11	3	4	0	2	5	4	0	0	4	5	2
	0	0	5	0	4						4	0	5	1	3	0	0	0	0	3
	0	0	0	0	2						0	0	0	0	4	0	0	3	1	1
	4	0	3	2	3											0	0	0	0	1
	0	0	0	0	4															
1925 - 1930	1	0	0	0	4	2	0	9	12	5	1	0	0	0	3	2	0	1	1	2
	1	0	5	0	3	2	0	10	14	3	2	0	1	1	6	0	0	0	0	3
	0	0	0	0	2	1	0	11	12	8	3	0	3	4	3	0	0	2	3	3
	1	0	4	1	3	1	0	5	10	2	1	0	4	2	0	0	0	0	0	3
																1	0	0	1	2
																0	0	0	0	2
																0	0	1	1	2
1930 - 1935	0	0	0	0	1	1	0	5	13	2	1	0	2	0	3	0	0	6	1	2
	5	0	3	4	6	1	1	9	4	4	2	0	1	4	6	0	0	0	0	2
	0	0	0	0	2	3	0	3	4	3	0	0	0	0	6	2	0	2	0	1
	4	0	4	2	5						4	0	1			0	0	0	0	3
											4	0	3			1	0	1	1	2
																0	0	0	1	0
1935 - 1940	1	0	3	2	4	4	0	10	9	4	4	0	2	5	4	0	0	1	1	3
	3	0	6	2	5	4	0	7	10	3	4	0	2	2	1	0	0	0	0	3
	1	0	3	1	4	0	0	9	11	5	1	0	2	1	2	0	0	2	2	3
	1	0	3	3	3	0	0	2	2	3						0	0	0	0	3
																3	0	1	0	2
																0	0	0	0	3
																2	0	1	3	2
																0	0	0	0	3
1940 - 1945	0	0	2	4	6	2	0	11	13	6	3	0	3	3	2	0	0	0	0	3
	3	0	5	4	4	3	0	8	10	6	3	0	4	2	4	3	0	2	1	5
	0	0	0	0	4	1	0	7	9	5	4	0	0	1	5	4	0	0	1	5
	0	0	2	0	2						2	0	2	0	4	0	0	0	0	5
	2	0	4	3	4											6	0	0	1	5
	0	0	0	0	2											4	0	7	7	2
																0	0	0	0	2
1945 - 1950	2	0	2	0	4	6	0	6	8	6	4	0	2	1	5	0	0	0	0	2
	1	0	3	0	3	1	0	13	15	5	3	1	4	4	7	0	0	2	2	1
	2	0	2	0	2	3	0	8	9	6	3	0	4	1	4	0	0	0	0	1
	4	0	2	0	0									0	1	0	0	1	2	0
																0	0	0	1	0
																3	0	2	4	2
1950 - 1955	0	0	1	2	0	0	0	7	10	4	4	0	0	0	1	0	0	0	0	2
	2	0	4	1	3	0	0	10	9	7	4	0	4	4	4	1	0	3	1	0
	2	0	0	1	1	0	0	5	7	5	4	0	1	0	2	1	0	3	0	1
														0	0	1	0	2	3	1
1955 - 2000	0	0	1	2	1	0	0	4	0	2	4	0	3	3	1	1	0	2	3	1
	4	0	2	3	3	5	0	3	3	2	3	0	3	1	4	0	0	0	0	3
	2	0	1	1	2	0	0	3	3	4	4	0	2	1	4	2	0	2	1	2
																0	0	0	0	4
																2	0	1	0	3
																0	0	0	0	3
																1	0	3	2	2
2000 - 2005	3	0	1	1	2	0	0	5	4	4	3	0	2	1	1	2	0	11	10	4
	0	0	2	2	0	0	0	2	3	3	4	0	1	0	1	3	0	5	6	3
	0	0	3	2	1	2	0	4	3	6	3	0	2	2	2	2	0	2	2	4
																0	0	1	2	3
2005 - 2010	1	0	4	1	2	0	0	4	2	3	0	0	0	0	1	0	0	1	3	4
	2	0	0	0	0	1	0	2	3	2	4	0	2	0	1	2	0	2	9	2
	0	0	2	1	0	0	0	6	1	1	1	0	6	5	3	2	0	3	1	1
						0	0	1	0	3						0	0	1	0	2
2010 - 2015	1	0	1	0	0	0	0	2	0	3	4	0	4	5	1	0	0	7	4	6
	1	0	3	1	1	1	0	1	4	0	3	0	4	1	1	2	0	3	2	3
						0	0	4	2	5	4	0	1	3	4	0	0	1	1	1
						0	0	4	3	1	0	0	1	0	0	0	1	2	2	2
2015 - 2020	2	0	2	2	0	0	0	6	8	5	2	0	5	3	2	0	1	11	7	3
	0	0	1	0	1	0	0	5	6	8	3	0	0	0	1	6	0	4	1	3
	0	0	2	0	2	0	0	3	1	1	3	0	3	2	0	2	0	1	0	2
	2	0	2	1	1						0	1	2	2	3	3	0	2	5	2
2020 - 2025	2	0	2	0	2	0	0	4	2	2	2	1	4	2	3	0	0	2	2	5
	3	0	3	0	0	1	0	5	3	4	1	0	3	1	2	1	0	2	2	2
	3	0	0	0	2	0	0	0	0	2	2	0	6	2	0	1	0	4	3	6
						0	0	0	0	3	4	0	3	1	1	0	0	0	0	1
											0	0	0	0	2					
2025 - 2030	0	0	1	1	2	0	0	1	0	4	3	0	2	1	3	0	0	1	0	4
	0	0	0	0	1	1	0	1	0	1	0	0	4	1	2	0	0	2	1	3
	2	0	1	0	3	0	0	2	4	3	2	0	6	3	2	0	0	4	4	2
	3	0	1	3	0	0	0	2	0	5	0	0	0	0	2	4	1	4	2	1
	2	0	1	1	0															
2030 - 2035	3	0	3	2	0	0	0	2	3	0	2	0	0	1	2	0	0	1	0	1
	0	0	1	1	1	0	0	4	2	2	1	0	5	1	0	2	0	2	1	5
	1	0	0	0	0	0	0	3	3	0	1	0	1	1	1	3	0	3	3	3
	4	0	2	0	0	0	0	0	1	0	2	0	2	1	0					
2035 - 2040	4	0	2	0	0	0	0	2	2	0	2	0	3	1	1	0	0	2	0	2
	0	0	1	0	0	0	0	1	2	1	4	0	1	1	1	0	0	4	2	5
	0	0	1	1	1	0	0	2	3	2	1	0	1	5	1	2	0	4	5	2

	1	0	0	0	0	0	0	2	0	1	1	0	1	0	1	2	0	1	0	0
	0	0	0	1	0									0	0					
2040 - 2045	1	0	2	1	0	0	0	3	0	1	4	0	4	2	1	3	0	1	0	0
	1	0	2	1	0	0	0	1	1	2	4	0	3	2	0	3	0	1	0	2
	3	0	2	1	2	0	0	0	0	1	0	0	0	0	2	0	0	2	0	0
	0	0	0	0	1	0	0	1	0	3	1	0	0	0	0	1	0	14	0	1
	0	0	0	2	0															
2045 - 2050	0	0	1	3	0	0	0	1	1	3	3	0	3	0	0	0	0	0	0	1
	2	0	1	0	0	0	0	0	0	3	4	0	0	2	0	0	0	3	1	3
	0	0	0	2	0	0	0	0	0	1	1	0	4	0	2	0	0	2	4	4
	0	0	2	1	1	1	0	3	1	4	2	0	1	0	0	0	0	3	1	3
	0	0	0	0	1											0	0	1	0	1
2050 - 2055	3	0	4	2	3	1	0	1	3	6	1	0	4	4	0	0	0	4	1	1
	1	0	1	1	0	0	0	1	3	2	0	0	1	0	3	1	0	1	2	2
	2	0	1	0	0	0	0	2	2	2	0	0	1	2	0	0	0	2	1	3
	0	0	2	0	0	0	0	0	0	2	1	0	1	3	1	4	0	5	3	5
2055 - 2100	0	0	5	1	0	0	0	1	1	2	4	0	2	3	1	0	0	0	0	7
	2	0	1	1	1	1	0	2	2	1	2	0	3	1	1	1	0	3	5	1
	2	0	0	1	3	0	0	1	0	2	3	0	1	1	2	1	0	2	1	1
	1	0	0	0	1						0	0	1	1	2	0	0	3	1	2
2100 - 2105	1	0	0	1	1	1	0	3	1	2	2	0	4	0	0	2	0	1	1	1
	1	0	2	3	0	0	0	0	0	7	1	0	5	3	2	0	0	0	0	1
	1	0	1	2	1	0	0	0	0	2	1	0	3	0	1	1	0	1	1	0
						0	0	1	0	0						3	0	3	4	8
																0	0	0	2	0
2105 - 2110	2	0	0	0	1	0	0	1	2	0	0	0	2	0	1	0	1	2	0	0
	1	0	1	1	1	0	0	0	0	2	2	0	1	0	0	0	0	1	1	0
	1	0	1	0	1	0	0	2	1	1	1	0	4	1	1	5	0	2	4	5
	0	0	0	0	1	0	0	3	1	1	0	0	2	1	1	2	0	3	6	7
						0	0	1	1	2										
2110 - 2115	0	0	1	2	1	0	0	1	3	2	0	0	3	1	1	0	0	3	4	1
	0	0	0	0	1	0	0	3	2	3	0	0	2	1	0	0	0	0	0	4
	2	0	1	2	4	0	0	1	3	2	2	0	1	0	4	1	0	6	8	0
	0	0	0	0	3	0	0	1	3	2	1	1	3	4	2	4	0	2	4	4
																0	0	1	1	1
2115 - 2120	4	0	0	1	3	0	0	1	6	2	1	0	2	0	2	0	0	1	2	1
	1	1	0	0	2	0	0	1	1	3	1	0	0	1	1	0	0	0	0	2
	1	0	1	3	1	0	0	0	1	2	1	0	4	1	1	0	3	2	0	0
						1	0	1	1	2						2	0	4	4	4
																2	0	2	2	0
2120 - 2125	0	0	0	1	3	1	0	6	4	4	0	0	0	0	1	2	0	4	4	0
	1	0	0	0	1	0	0	0	0	4	1	0	4	3	1	1	0	1	0	0
	1	0	1	1	0	0	0	3	4	6	1	0	4	2	3	0	0	3	0	0
	1	0	1	0	3	0	0	0	0	1			2			0	0	0	0	2
																2	0	5	4	5
																0	0	1	0	0
2125 - 2130	1	0	3	0	3	0	0	0	1	2	0	0	1	0	2	1	0	2	0	0
	1	0	3	0	2	0	0	2	4	4	3	0	1	0	1	0	0	0	0	1
	1	0	1	0	1	1	0	4	4	4	1	0	1	0	2	1	0	1	2	1
	1	0	1	0	0	0	0	2	3	1	1	0	0			5	0	2	2	0
2130 - 2135	5	0	0	0	0	0	0	2	3	1	1	0	0	0	0	2	0	2	1	0
	6	0	0	0	1	0	0	4	5	4	0	0	0	0	1	1	0	6	7	0
	0	0	0	0	1	0	0	4	2	3	1	0	1	0	2	3	0	8	6	0
						0	0	2	2	5						3	0	1	2	0
2135 - 2140	4	0	0	0	1	0	0	2	0	1	0	0	1	0	1	3	0	2	2	0
	3	0	0	0	3	0	0	1	2	0	1	0	1	0	1	2	0	2	5	0
	0	0	0	0	1	0	0	4	3	3	0	0	0	0	1	1	0	3	3	0
	1	0	0	0	1	0	0	0	0	4	1	0	0	0	0	3	0	4	6	0
2140 - 2145	2	0	0	0	3	0	0	4	4	4	2	0	0	0	0	5	0	1	2	0
	0	0	1	0	0	0	0	1	0	4	1	0	0	1	0	3	0	4	9	0
	0	0	0	0	2	0	0	1	1	5						4	0	5	5	0
						0	0	1	0	4						0	0	1	3	0
2145 - 2150	7	0	0	0	2	0	0	1	0	4	0	0	1	0	0	2	0	11	13	0
	2	0	0	0	1	0	0	2	1	2						4	0	7	12	0
						0	0	1	0	6										
						0	0	1	0	2										
2150 - 2155	3	0	0	0	2	0	0	1	0	3	1	0	1	0	0	1	0	2	3	0
	2	0	0	0	1	0	0	2	2	10				0	0	4	0	9	14	0
	0	0	0	0	3	0	0	1	2	5						0	0	3	2	0
2155 - 2200	2	0	1	0	3	0	0	9	11	18	0	0	0	0	0	0	0	10	13	0
2200 - 2205	0	0	3	1	1	0	0	20	18	12	1	0	0	0	1	2	0	11	10	0
	3	0	4	3	1						0	0	0							
	0	0	2	1	1															
2205 - 2210	0	0	2	0	5	0	0	21	19	21	0	0	0	0	5	1	0	9	11	0
	1	0	1	0	0	0	1	15	13	12	0	0	5	2	6	1	0	12	10	0
	0	0	3	0	2															
	0	0	3	0	1															
2210 - 2215	0	0	5	1	1	0	0	16	12	14	0	0	2	2	3	1	0	11	10	0
	0	0	0	0	1	0	0	1	1	0	3	0	8	2	12	0	0	8	7	0
	1	0	1	1	1															
	1	0	1	1	2															
2215 - 2220	0	0	3	0	1	0	0	1	1	19	3	0	8	5	14	5	0	12	10	7
	0	0	1	0	0	1	0	15	12	18	2	0	15	5	13	0	0	13	12	0
	1	0	1	1	0															
2220 - 2225	0	0	1	1	0	1	0	17	12	19	2	0	16	5	14	0	0	10	12	0
	1	0	0	0	0						0	0	0	0	9					
	0	0	2	0	1						0	0	0	4	6					
	0	0	3	1	0						3	0	3							
2225 - 2230	1	0	0	0	1	0	0	0	0	2	4	0	8	6	9	0	0	11	10	0
	1	0	5	0	0	2	0	6	8	6	2	0	4	1	8	0	0	0	0	4
	0	0	0	1	0											1	0	10	9	2
2230 - 2235	2	0	1	0	0	1	0	0	0	3	2	0	8	2	11	0	0	10	9	3
	0	0	1	0	0											0	0	8	7	0
																0	0	9	6	0
																0	0	0	0	10
2235 - 2240	1	0	0	0	0	2	0	2	3	6	4	0	8	5	10	7	0	3	5	12
	0	0	0	0	1	2	0	4	2	4	0	0	0	3	3	5	0	9	7	7
	0	0	1	0	0						2	0	2							
2240 - 2245	0	0	2	0	1	3	0	6	7	8	3	0	2	6	6	0	0	0	0	10
	1	0	0	0	0											0	0	10	0	0
																0	0	7	0	6
																2	0	9	8	5
2245 - 2250	1	0	0	0	0	3	0	8	9	12	2	0	2	6	6	2	0	12	10	9
	1	0	0	0	0	1	0	2	3	7	4	0	4	3	5	0	0	10	9	9
	0	0	1	0	0	0	0	0	0	1	4	0	6	3	3	4	0	12	10	8
	2	0	0	1	1						1	0	2	4	6					
														0	0					
2250 - 2255	0	0	1	0	0	1	0	2	2	2	2	0	3	5	7	2	0	11	9	9
						1	0	1	0	0	3	0	2	3	5	0	0	5	6	5
											4	0	5	2	7	0	0	3	1	8
											0	0	1	0	2					
2255 - 2300	1	0	1	0	0	3	0	3	4	4	3	0	5	1	3	0	0	0	0	3
	1	0	1	0	0	1	0	1	1	4	2	0	3	2	5	4	0	2	2	3
	1	0	0	0	0	0	0	1	0	0	0	0	4	1	2	0	0	4	3	4
						0	0	0	0	1										

Man City Surveys - Part 1
Queue Length Survey

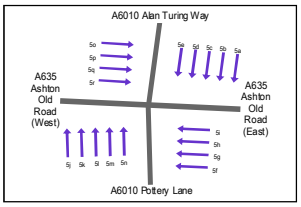
Site 5
A6010 Alan Turing Way
A635 Ashton Old Road (East)
A6010 Pottery Lane
A635 Ashton Old Road (West)

Lat/Long
lat:53.474192° lon -2.194445°

Date
Wednesday 27 February 2019

Weather
Sunny Intervals
Temp: 9°C

1600 - 2300 (Wednesday 7H Session)



TIME	5a	5b	5c	5d	5e	5f	5g	5h	5i	5j	5k	5l	5m	5n	5o	5p	5q	5r
1600 - 1605	0	0	8	12	2	1	2	2	5	1	0	5	6	5	5	1	8	9
	1	0	7	5	2	0	0	0	4	0	0	5	7	1	5	2	10	4
	0	0	11	7	0	2	6	4	6	0	0	3	2	2	7	2	5	3
	0	0	4	3	1	1	7	4	5									
						0	0	0	2									
						0	0	0	3									
1605 - 1610	0	1	7	8	2	0	0	0	2	0	0	4	4	2	5	2	11	8
	0	0	8	11	3	1	5	4	8	0	0	6	8	1	5	1	5	1
	3	0	10	12	5	0	0	0	3	0	0	9	11	3	5	3	8	3
	0	1	4	2	1	1	2	3	6	1	0	2	3	2				
						0	0	0	4									
						1	4	6	6									
						0	0	0	2									
1610 - 1615	0	1	12	14	4	0	0	0	4	1	0	5	9	4	0	3	6	5
	2	0	9	12	1	1	4	9	6	0	0	9	6	7	2	3	7	8
	1	0	7	10	3	1	3	5	6	0	0	3	8	2	2	1	3	1
						0	0	0	4	0	0	3	2	1				
1615 - 1620	0	0	12	11	3	2	1	0	6	0	0	5	4	1	3	4	5	2
	1	1	10	14	3	0	0	0	2	1	0	9	10	4	6	2	5	3
	2	1	8	12	5	1	1	2	5	2	0	5	6	3	4	2	7	5
						0	0	0	3	0	0	1	3	0	4	0	3	3
						2	3	2	5									
						0	0	0	4									
						1	0	0	2									
1620 - 1625	0	0	12	8	2	2	4	0	6	0	0	6	4	2	8	0	11	4
	3	0	6	15	1	0	0	0	2	0	0	7	8	4	5	1	10	1
	0	0	6	14	2	2	5	8	6	0	0	8	12	4	7	2	6	2
						0	0	0	3						2	1	3	2
						2	2	4	6									
						0	0	0	3									
						2	2	0	1									
1625 - 1630	1	0	7	8	1	3	1	0	2	0	1	7	12	4	5	1	4	5
	0	1	9	9	6	2	2	3	3	2	0	11	10	4	3	1	5	2
	1	1	9	7	3	3	4	4	2						6	3	9	6
						0	0	0	1						2	1	3	1
						3	2	0	0									
1630 - 1635	2	0	10	11	2	3	4	0	2	0	0	16	17	4	2	1	4	6
	0	0	10	12	1	0	0	0	3	0	0	10	9	3	8	2	9	6
	3	0	10	9	2	2	2	0	5	2	0	15	8	4	8	2	8	7
						0	0	0	3						3	1	4	3
						3	3	4	6									
						0	0	0	1									
						0	2	0	0									
1635 - 1640	1	0	14	15	3	3	4	3	6	0	0	12	14	2	5	4	11	8
	1	0	7	4	2	0	0	0	3	2	0	11	14	4	3	3	10	9
	2	0	2	2	1	3	6	5	5	0	0	6	9	7	11	3	11	5
						0	0	0	4						0	3	3	3
						3	5	4	7									
						0	0	0	1									
1640 - 1645	2	2	7	10	1	1	2	3	4	0	0	15	7	9	0	4	9	6
	1	1	10	11	2	0	0	0	3	0	0	6	7	6	4	4	19	4
	2	0	6	10	3	2	1	2	3	0	1	2	2	3	0	7	8	5
	0	0	1	1	2	0	1	0	5									
						2	2	4	7									
						0	0	0	3									
1645 - 1650	0	1	7	9	3	2	4	7	6	0	1	10	11	4	7	4	14	3
	1	0	9	10	2	0	0	0	3	0	0	8	6	10	0	4	15	2
	2	0	3	5	4	3	5	2	8	1	0	7	3	5	11	3	12	5
	1	0	0	0	0	0	0	0	3	0	1	2	3	2				
						2	7	8	6									
1650 - 1655	3	0	6	11	4	0	0	0	3	0	1	11	8	7	3	5	6	4
	1	0	7	10	1	2	2	4	7	0	0	6	12	6	0	8	6	1
	1	0	7	9	3	4	6	6	2	2	2	14	10	5	1	4	6	2
	0	0	1	0	0	2	0	0	2	0	0	3	3	2				
1655 - 1700	0	0	7	5	0	0	0	0	2	0	0	10	12	5	1	6	14	8
	1	0	6	9	4	1	4	3	2	0	0	8	6	3	3	5	13	5
	2	0	10	11	5	4	5	4	5	0	0	7	7	6	7	2	9	7
						0	0	0	3	0	0	3	4	2	3	2	5	4
						0	0	0	1									
1700 - 1705	2	0	8	9	1	0	0	0	4	0	0	15	15	6	16	5	14	11
	0	0	12	11	7	0	0	0	4	2	0	17	19	6	15	5	19	14
	1	0	9	11	1	3	3	2	7	0	1	20	15	5	16	5	14	9
						0	0	0	4						5	1	1	1
						1	5	4	6									
						1	2	1	3									
1705 - 1710	0	0	0	0	1	1	6	4	7	1	0	18	19	6	14	10	20	3
	0	0	10	11	4	0	0	0	5	0	0	14	15	5	12	9	15	4
	0	0	14	10	4	4	5	6	5	0	0	14	15	2	13	9	18	1
	2	2	9	10	3	0	0	0	2									
						4	5	4	5									
						0	0	0	4									
1710 - 1715	2	1	12	12	3	6	4	3	6	0	0	14	18	6	7	6	14	3
	1	1	10	11	2	0	3	2	2	0	0	16	17	5	4	10	8	5
	0	0	10	9	5	4	3	2	2	1	0	6	6	4	14	9	16	3
	0	1	6	5	3	0	0	0	3						0	1	0	0
1715 - 1720	0	1	10	9	4	1	1	5	5	1	0	16	21	4	6	7	12	14
	0	0	15	14	5	4	4	5	5	0	0	16	13	4	11	9	10	10
	0	0	10	9	5	3	7	6	6	3	0	13	16	6	16	8	14	3
	0	1	9	4	1	0	0	0	3	0	0	6	4	5				
1720 - 1725	0	1	8	7	4	0	0	0	3	0	0	14	16	6	4	5	15	5
	1	0	7	9	3	1	2	0	6	1	1	12	14	2	10	4	10	3
	0	1	13	12	1	0	0	0	2	1	0	15	18	4	7	8	10	2
	0	0	1	1	0	3	5	2	5	0	1	5	8	1				
						0	0	0	3									
						0	4	4	4									
1725 - 1730	3	0	11	12	1	3	5	6	2	0	1	15	17	7	8	8	10	3
	2	1	10	10	6	0	0	0	2	0	1	17	21	5	12	8	18	6
	1	1	9	7	0	1	0	1	0	0	0	7	4	0	13	7	13	3
	0	0	0	0	1	0	0	0	2						2	13	12	7
						0	1	0	0									
1730 - 1735	1	0	11	12	5	0	1	0	0	0	0	13	14	5	1	20	14	8
	0	1	15	10	2	0	0	0	4	0	0	24	22	7	6	5	14	4
	2	0	17	10	0	2	2	1	2	0	0	27	26	6	7	6	15	1
						1	2	3	3						3	0	3	3
						0	0	0	3									
						1	1	1	1									
1735 - 1740	0	0	14	11	1	2	4	4	4	0	0	19	13	7	6	5	13	7
	0	0	14	13	5	0	4	6	0	0	0	4	6	10	11	8	15	4
	0	1	12	10	1	8	1	4	6	0	0	14	3	6	9	10	10	10
	0	0	0	0	1	0	0	0	2						1	3	0	6
						1	0	0	0									
1740 - 1745	0	0	0	0	1	2	2	0	2	0	0	15	17	5	15	4	17	13
	1	1	13	9	0	3	1	2	4	1	0	11	12	7	10	10	18	13
	2	1	14	9	1	0	0	0	3	0	0	22	21	6	8	6	10	6
	3	0	12	11	0	0	3	1	3						0	0	0	1
						0	0	0	1									
1745 - 1750	3	0	14	13	0	0	0	1	3	0	0	18	17	8	8	5	12	5
	3	2	16	12	3	0	0	0	1	0	0	15	16	7	14	3	13	8
	2	0	10	9	1	0	3	0	2	0	0	10	7	6	11	7	19	6
	3	0	12	9	1	0	0	0	4									
						0	2	3	2									
						0	0	0	4									
1750 - 1755	3	0	16	14	1	0	0	0	4	0	0	18	17	8	9	4	10	4

	1	1	12	7	0	2	5	4	6	1	0	16	15	9	9	7	15	8
	0	0	17	12	1	0	0	0	5	1	0	17	17	11	8	8	15	1
	2	1	9	6	3	2	2	0	4	1	2	18	10	6				
						0	0	0	2									
						5	3	4	4									
1755 - 1800	2	1	15	11	4	0	0	0	3	1	2	15	19	6	6	7	9	7
	0	0	16	14	5	3	2	3	5	2	0	17	19	3	10	3	14	5
	1	0	10	7	0	0	0	0	3	0	0	16	17	3	3	2	3	0
	0	0	2	2	0	0	0	3	1	2	0	12	21	4				
						0	0	0	3									
						3	3	0	4									
1800 - 1805	0	0	5	6	2	1	5	4	3	1	0	8	9	4	7	2	8	0
	0	1	15	17	1	3	6	4	4	3	1	9	8	4	5	4	8	1
	0	0	14	0	0	0	0	0	2	0	1	9	9	3	0	4	8	3
	0	0	19	14	4	1	1	1	0						6	2	9	1
1805 - 1810	0	2	11	7	3	1	2	2	0	1	0	7	6	2	7	2	10	3
	2	0	10	10	3	3	2	4	4	0	0	10	9	2	8	5	9	3
	5	0	6	7	5	5	6	3	6	0	0	11	9	6				
						0	0	0	4									
						1	1	0	3									
1810 - 1815	0	0	0	0	5	2	2	3	6	0	0	9	8	2	9	2	8	6
	1	0	6	6	4	0	0	0	5	0	1	8	8	4	10	1	9	9
	0	0	6	8	4	1	1	1	1	0	0	10	9	6	9	1	10	8
	1	0	11	7	1	0	0	0	3									
						0	7	8	7									
						0	0	0	6									
						0	1	0	2									
1815 - 1820	1	0	12	8	1	1	2	2	5	1	0	10	9	3	3	4	9	7
	0	0	3	3	4	0	0	0	3	0	0	8	9	5	3	5	9	5
	3	0	8	7	3	1	2	3	5	0	0	5	6	6	2	5	5	5
	0	1	13	11	2	0	0	0	2									
						3	5	6	4									
1820 - 1825	0	1	14	10	2	1	4	3	5	1	0	6	8	5	4	5	8	7
	3	0	9	7	1	0	0	0	4	0	0	9	8	4	9	3	10	5
	2	0	8	10	1	1	4	5	4						3	4	11	1
	0	0	3	4	1	0	0	0	5									
						1	2	1	3									
						0	0	0	3									
1825 - 1830	1	0	6	6	2	0	0	0	4	0	0	10	9	4	4	3	8	2
	0	0	5	6	2	2	1	0	3	0	0	9	8	5	5	5	7	3
	0	0	6	2	3	0	0	0	2	1	0	7	6	2	7	6	8	5
	0	0	1	0	1	2	2	3	1									
						0	0	0	2									
						1	2	3	4									
						0	0	0	2									
1830 - 1835	2	0	3	2	5	2	0	0	3	0	0	10	8	4	5	4	8	4
	2	0	4	2	3	2	2	1	2	1	0	10	9	7	10	2	9	6
	2	0	7	5	5	2	0	0	1	0	0	8	9	5				
						2	7	6	5									
						0	0	0	5									
						0	1	0	1									
						2	3	2	3									
1835 - 1840	2	0	7	5	2	3	2	4	3	0	0	9	7	4	5	3	8	3
	1	0	5	4	1	0	0	0	3	1	0	11	9	4	7	2	9	0
	0	0	10	9	3	2	3	2	3	1	1	10	6	5	2	4	10	3
						2	0	0	3									
						1	2	0	5									
						0	0	0	4									
						0	0	0	2									
1840 - 1845	1	0	9	8	2	6	2	3	4	1	0	7	8	7	2	5	4	6
	0	1	8	4	3	0	0	0	3	2	0	8	7	8	4	5	4	7
			8	7	2	3	4	5	5	3	1	9	6	7	1	6	4	5
						2	3	0	4									
						2	4	2	5									
						1	0	0	2									
						0	0	0	1									
1845 - 1850	0	0	9	6	5	1	1	0	5	0	0	7	6	2	4	4	10	1
	0	0	8	4	2	0	0	0	7	0	0	6	8	7	1	4	7	2
	2	0	14	9	3	2	3	4	5	1	0	7	8	5	5	2	6	2
						0	0	0	3									
						2	3	4	6									
						0	0	0	4									
						1	0	1	2									
1850 - 1855	2	0	16	12	5	2	4	4	6	0	0	8	7	3	8	1	7	2
	1	0	6	6	0	0	0	0	3	0	0	10	5	5	6	2	11	4
	1	0	3	1	0	2	2	2	5	0	0	1	2	5	8	3	9	2
	1	0	5	4	2	0	0	0	3									
						4	3	4	4									
						0	0	0	3									
1855 - 1900	2	0	6	4	2	2	3	3	4	0	0	8	6	5	2	4	9	3
	3	0	2	1	5	0	0	0	3	1	0	3	6	1	8	2	5	3
	0	0	12	8	4	1	2	3	5	0	0	0	1	1	5	2	6	4
	0	0	1	1	0	0	0	0	3									
						4	1	3	5									
						0	0	0	3									
1900 - 1905	0	0	7	5	3	0	0	0	3	0	0	2	2	5	4	5	4	3
	3	0	3	4	1	4	3	5	5	0	0	5	7	6	3	3	5	4
	2	0	4	0	0	0	3	2	6	0	1	6	5	2	3	5	4	4
						0	0	0	3									
						3	6	3	5									
1905 - 1910	1	0	6	4	0	0	0	0	3	1	0	5	8	1	3	2	3	2
	0	0	5	9	6	3	4	5	6	0	0	8	6	3	3	1	4	1
	0	0	2	2	0	0	0	0	1	1	0	7	6	0	3	2	4	4
	0	0	0	0	3	5	3	7	6	1	0	4	5	2				
						0	0	0	3									
						7	6	3	6									
1910 - 1915	0	0	8	9	4	0	2	2	3	1	0	7	8	2	4	2	4	5
	0	0	0	0	4	2	5	2	6	0	0	9	7	2	3	5	4	2
	2	0	7	5	5	0	0	0	2	0	0	10	8	3	4	2	4	1
	1	0	3	3	3	1	5	4	4	0	0	6	7	3	3	3	1	0
	0	0	0	0	3	0	0	0	3	1	0	4	5	2				
						2	5	5	7									
1915 - 1920	1	1	6	8	3	2	2	4	7	2	1	10	8	7	4	2	3	1
	0	0	0	0	3	0	0	0	3	0	1	11	10	3	4	3	4	2
	2	0	6	8	3	2	5	4	7	1	2	12	10	4	3	3	1	3
	0	0	2	3	1	0	0	0	3	0	0	3	1	2	3	3	1	0
						5	4	4	8									
						0	0	0	3									
1920 - 1925	1	0	1	0	0	1	4	4	7	1	0	8	7	3	4	2	6	0
	0	0	0	0	1	0	0	0	5	1	0	9	8	6	4	2	5	0
	0	0	7	9	0	1	3	1	9	0	1	10	11	6	4	2	3	4
	2	0	6	7	0	0	0	0	3						3	1	2	0
						1	4	4	10								1	
						0	0	0	2									
						1	1	2	0									
1925 - 1930	3	0	4	5	1	3	4	2	8	0	0	7	8	3	3	1	5	1
	0	0	0	0	2	4	2	5	6	2	1	10	9	4	4	1	4	1
	1	0	5	8	2	0	0	0	1	0	2	10	6	5	2	3	5	5
	0	0	4	2	2	0	7	4	3						2	0	0	0
						0	0	0	4									
1930 - 1935	0	0	0	0	2	5	6	4	4	0	0	11	10	5	2	2	2	2
	2	0	5	6	2	0	0	0	2	1	3	12	8	3	3	2	3	1
	0	0	8	4	1	3	4	4	5	0	0	11	7	5	3	2	2	1
	1	1	4	1	0	0	0	0	3						2	0	0	0
						2	2	0	3									
						2	6	4	1									
						0	0	0	2									
1935 - 1940	1	1	5	5	0	2	5	5	3	1	1	10	9	3	4	2	5	1
	1	0	5	3	3	0	0	0	3	0	0	6	8	3	2	3	4	3
	2	0	3	6	3	2	1	3	5	0	0	9	6	3	1	2	3	2
	2	0	1	0	1	0	0	0	3									
						1	3	2	4									
						0	0	0	5									
1940 - 1945	2	0	1	1	1	0	3	3	6	0	0	11	8	2	3	1	2	4
	1	0	6	5	1	0	0	0	5	0	0	12	10	2	3	2	4	2
	1	0	3	1	1	2	4	5	4	1	0	10	8	3	4	2	2	4
	0	0	0	0	5	0	0	0	1	1	0	11	9	5				
	2	0	2	1	2	4	3	5	6									
1945 - 1950	2	0	10	9	5	0	0	0	4	1	0	10	11	6	3	1	3	1
	0	0	5	4	2	3	4	4	6	0	0	6	7	5	3	4	5	2
	0	0	7	6	4	4	1	0	1	1	0	9	10	6	2	1	3	3
	0	0	1	2	0	1	2	2	4	0	0	0	0	4				
1950 - 1955	0	0	4	7	0	0	0	0	1	1	0	0	0	4	2	1	4	4
	1	0	7	3	3	1	1	0	0	0	0	1	0	2	0	3	3	1
	0	0	8	7	3	0	0	0	1	0	0	1	2	2	3	1	4	2
						1	3	2	3	0	0	0	1	0	2	1	5	2
						0	0	0	1									
						3	4	5	1									
1955 - 2000	0	0	8	7	1	6	4	5	1	0	0	2	1	0	2	1	5	2

	1	0	6	7	2	4	3	3	1	0	0	2	3	5	0	3	6	2
	0	0	6	5	2	1	4	1	3	0	0	2	0	1	2	4	4	0
						2	2	3	1						1	2	4	0
2000 - 2005	0	0	0	1	0	2	4	4	4	0	0	3	4	1	1	3	5	1
	0	0	0	0	2	0	0	0	1	0	0	0	0	1	0	4	5	3
	3	0	3	4	3	3	2	2	2	0	0	2	4	3	3	2	3	5
	0	0	0	0	4	1	0	0	0						2	3	3	2
	1	0	3	3	1													
2005 - 2010	0	0	0	0	3	1	2	1	2	0	0	1	0	5	4	1	6	2
	1	0	4	3	1	0	0	0	1	0	0	1	0	1	2	2	1	0
	0	0	0	0	1	1	0	1	0	0	0	4	2	0	3	3	4	3
	1	0	6	6	2	2	0	0	0						1	1	1	0
	0	0	0	0	2													
	1	0	7	2	1													
	0	0	0	0	1													
2010 - 2015	0	0	0	0	1	2	0	0	0	0	0	1	0	3	1	5	2	0
	2	0	6	7	1	2	3	1	2	0	0	0	2	1	0	2	3	1
	0	0	3	3	2	3	3	2	1	0	0	1	0	2	1	4	5	0
	0	0	0	0	2	1	7	2	3	0	0	0	0	2	1	2	2	1
	0	0	6	3	0													
2015 - 2020	1	0	4	2	2	1	7	2	3	0	0	0	0	2	1	3	3	3
	0	0	0	0	2	1	4	3	1	0	0	0	1	0	2	3	1	1
	1	0	3	4	1					0	0	1	1	0	1	2	4	1
	0	0	0	0	1					0	0	0	0	1	5	2	2	0
	0	0	2	4	0													
	0	0	0	0	3													
2020 - 2025	0	0	6	5	2	1	3	1	3	0	0	5	1	3	1	4	6	2
	0	0	0	0	3	0	0	0	1	0	0	1	2	4	1	7	6	1
	0	0	7	5	2	2	2	1	2	0	0	1	1	1	2	4	4	0
	2	0	2	4	2	3	0	1	0	0	0	0	0	2	0	1	0	0
	0	0	0	0	2													
	0	0	6	4	2													
2025 - 2030	1	0	3	0	2	1	1	3	1	0	0	0	0	2	4	3	2	1
	0	0	0	0	2	1	4	4	1	0	0	3	2	2	0	4	2	1
	0	0	4	3	2	1	3	1	1	1	0	0	0	3	0	4	4	2
	0	0	0	0	2	0	2	1	0	0	0	1	0	0	3	2	2	1
	0	0	4	0	3													
	0	0	0	0	3													
2030 - 2035	0	0	1	1	1	0	2	2	2	0	0	1	1	0	3	2	2	1
	1	1	4	5	2	0	1	1	0	0	0	0	0	1	4	3	2	1
	0	0	0	0	2	0	1	1	2	0	0	2	6	1	1	5	3	1
	3	0	1	1	0					0	0	3	0	0	0	5	1	0
	1	0	1	0	2										0	0	0	1
	0	0	0	0	2													
2035 - 2040	0	0	0	0	2	2	1	0	2	0	0	0	0	1	3	2	2	2
	0	0	1	0	4	2	1	0	2	0	0	1	0	1	1	2	4	1
	0	0	0	0	4	0	1	0	0	0	1	1	1	1	1	6	2	0
	0	0	2	4	1	1	1	1	0							1	0	0
	0	0	0	0	1	1	0	0	1									
	0	0	2	1	3													
	0	0	0	0	3													
2040 - 2045	0	0	5	2	0	1	0	0	1	0	0	0	0	2	4	1	1	2
	1	0	0	0	2	0	2	0	0	0	0	1	1	1	0	3	2	0
	1	0	1	2	0	1	2	2	2						1	3	3	0
	0	0	3	0	2	0	4	3	2						2	2	2	0
	0	0	0	0	2													
	0	0	0	1	0													
2045 - 2050	1	0	1	3	1	1	0	0	4	0	0	4	1	1	0	4	3	0
	0	0	0	0	1	0	3	1	0	0	0	0	0	1	4	1	5	1
	0	0	2	4	4	1	2	2	1	0	0	0	3	1	1	3	7	0
	0	0	0	0	4													
	1	0	4	4	6													
	0	0	0	0	6													
2050 - 2055	0	0	0	0	2	0	2	1	1	0	0	0	0	1	1	4	3	0
	1	0	2	1	2	1	1	1	4	0	0	1	1	1	1	2	0	2
	1	0	2	0	1	1	1	2	0	0	0	1	0	0	2	3	1	3
	0	0	0	0	1										1	2	2	1
	0	0	4	2	0													
	1	0	3	2	4													
	0	0	0	0	4													
2055 - 2100	1	0	1	0	2	0	4	3	0	0	0	2	1	0	1	2	3	1
	0	0	0	0	2	1	0	1	2	0	0	6	3	4	2	4	5	1
	1	0	3	3	1	1	2	0	4	1	0	0	0	1	3	4	2	0
	0	0	0	0	1										1	2	3	1
	1	0	2	2	1													
	0	0	0	0	1													
	0	0	2	1	2													
2100 - 2105	0	0	5	5	4	0	3	1	2	1	0	0	0	1	1	2	0	0
	1	0	9	0	0	2	2	2	2	0	0	0	1	0	0	4	2	1
	1	0	2	4	1	0	3	0	0	0	0	0	0	1	0	3	4	4
2105 - 2110	0	0	0	0	1	1	1	1	1	0	0	0	2	0	0	2	2	0
	0	0	3	2	0	1	3	0	0	0	0	0	0	1	2	1	2	3
	0	0	1	0	0	1	1	1	2	0	0	2	0	0	0	2	2	1
	0	0	0	0	1	0	3	2	2	0	0	1	1	0	2	1	1	1
2110 - 2115	0	0	0	0	3	0	1	0	0	0	0	1	1	0	2	1	1	1
	1	0	2	2	0	1	1	0	2	0	0	2	0	0	3	2	2	1
	1	0	5	7	2	3	4	2	3	0	0	0	1	1	1	2	1	0
	0	0	1	1	0					0	0	2	2	0	0	4	5	2
2115 - 2120	2	0	3	4	0	0	3	0	0	0	0	1	1	3	1	4	5	1
	0	0	4	6	1	0	4	0	0	0	0	0	2	0	1	5	1	0
	0	0	5	3	5	0	0	0	0	0	0	0	0	1	0	4	3	1
	0	0	4	0	0					0	0	0	0	1	1	0	1	0
2120 - 2125	1	0	7	5	1	0	3	1	0	0	0	1	2	1	6	1	1	1
	0	0	0	0	3	0	2	2	1	0	0	0	1	0	2	0	0	0
	0	0	0	1	1	1	3	3	1	0	0	0	0	0	0	7	5	2
															1	2	6	1
2125 - 2130	0	0	1	1	2	0	1	0	4	0	0	1	2	1	3	1	3	0
	1	0	2	0	0	1	2	3	0	0	0	0	0	2	1	2	4	2
	0	0	2	3	2	0	3	2	0	0	0	1	1	3	2	3	2	0
	0	0	2	1	0										0	1	0	0
2130 - 2135	0	0	2	1	1	1	2	1	0	0	0	0	1	1	1	1	2	1
	0	0	4	4	4	0	1	1	1	0	0	1	0	1	0	3	2	0
	0	0	3	3	4	0	1	0	0	0	0	1	1	1	0	5	3	1
	2	0	8	4	10	0	1	0	1						4	2	3	3
2135 - 2140	2	0	2	3	5	0	1	0	1	0	0	2	1	1	5	2	4	3
	0	0	2	3	5	0	4	3	2	0	0	2	2	2	0	2	2	0
	0	0	1	3	5	1	1	0	1	0	0	0	1	1	2	2	2	1
	0	0	0	1	0	0	0	1	3	0	0	2	1	1	3	2	4	3
2140 - 2145	0	0	1	1	6	0	1	0	0	0	0	2	1	1	1	2	1	0
	0	0	2	4	1	0	2	0	2	0	0	1	0	2	5	1	1	0
	2	0	4	4	4	0	2	0	1	0	0	1	0	2	3	4	5	1
										0	0	0	0	1	1	2	1	0
2145 - 2150	0	0	0	0	9	0	0	0	1	0	0	1	0	1	1	6	4	1
	0	1	13	11	10	0	0	2	1	1	0	3	1	1	1	7	6	2
	0	0	2	0	3	1	2	1	0	2	0	2	2	0	1	6	8	1
						1	0	0	0						1	0	0	0
2150 - 2155	0	0	2	0	3	2	3	3	0	1	0	2	3	2	2	6	5	9
	0	1	7	9	6	2	1	0	1	0	0	3	3	0	2	5	5	10
	0	0	2	1	3	1	2	2	1	0	0	0	0	0	2	4	4	9
2155 - 2200	0	0	11	8	9	3	3	3	1	1	0	2	2	0	2	5	6	10
	1	1	2	3	0	2	4	3	3	0	0	2	2	2	0	6	7	8
	1	0	1	0	0	2	4	3	2	0	0	1	3	1	2	8	7	7
															0	2	3	2
2200 - 2205	0	1	5	7	0	2	3	1	2	0	0	4	4	2	1	5	6	10
	6	2	4	5	3	2	4	2	3	0	0	5	4	3	0	5	8	8
						2	1	2	1	0	0	3	2	0	2	6	7	6
2205 - 2210	0	1	6	8	4	2	1	2	1	0	0	5	2	4	2	8	7	8
	1	0	9	7	7	7	4	4	4	0	0	5	6	0	0	7	8	3
	3	1	8	7	8	8	3	2	2	2	0	6	5	0	1	6	6	12
2210 - 2215	1	0	7	10	9	7	5	3	3	0	0	5	3	0	0	8	4	5
	1	0	5	9	7	6	2	3	1	1	0	2	5	3	0	8	6	9
						6	5	3	2						0	7	7	0
2215 - 2220	0	0	15	10	0	6	5	3	2	1	0	3	4	1	0	10	8	2
	0	0	10	6	4	2	2	5	0	2	0	3	2	1	2	6	8	3
	0	0	8	3	0	2	9	7	1	0	0	2	0	1	0	7	8	5
	2	0	0	0	4													
2220 - 2225	0	0	10	7	4	3	4	5	0	1	0	4	3	3	0	9	8	4
	1	0	12	11	1	6	5	4	1	0	0	5	6	0	1	4	5	5
	1	0	11	10	2	3	6	6	3	0	0	5	3	2	1	7	8	3
2225 - 2230	0	0	11	8	0	3	6	6	3	0	0	7	5	4	2	9	10	4
	0	0	13	10	2	4	6	5	2	1	0	4	0	2	1	6	8	6
	2	0	14	9	1					0	0	5	4	2				
	0	0	10	8	2													
2230 - 2235	0	0	14	11	1	4	6	5	2	1	0	6	0	3	1	6	8	7
	4	0	13	9	7	3	4	5	3	0	0	8	5	1	0	6	9	2

	1	0	12	12	5					0	0	1	1	1				
2235 - 2240	0	0	11	10	0	7	3	4	2	1	0	1	1	1	1	7	12	8
	0	0	12	13	1	1	5	1	1	1	0	5	4	1	1	5	6	4
	0	0	10	12	9					1	0	4	2	0				
2240 - 2245	0	0	8	8	0	3	3	4	3	0	0	4	1	1	1	6	5	7
	0	0	11	13	2	3	1	2	0	0	0	3	1	0	2	4	4	5
	3	0	10	11	2					0	0	1	1	1				
2245 - 2250	1	0	12	10	3	3	1	2	0	0	0	3	2	2	2	5	6	6
	2	0	9	13	3	0	0	2	1	0	0	3	2	3	0	5	6	3
	0	0	15	14	2	0	3	4	0	0	0	5	2	1	0	7	5	1
2250 - 2255	0	0	11	10	3	1	3	1	3	0	0	4	0	1	1	8	7	5
	5	0	10	10	1	0	1	0	1	0	0	7	8	0	0	3	4	3
										1	0	0	0	0				
2255 - 2300	0	0	15	13	2	0	2	0	2	1	0	1	1	0	0	5	6	3
	3	0	12	10	3	1	1	0	2	0	0	3	5	1	0	5	4	0
	1	0	5	2	2					1	0	2	2	1				

Non-Matchday Queue Length Surveys

Etihad
Queue Length Survey

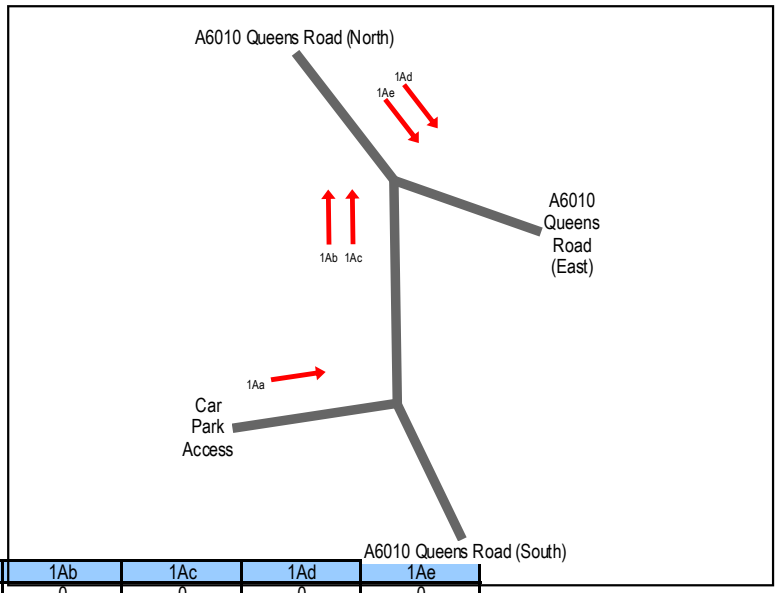
Site 1A
A6010 Queens Road (East)
A6010 Queens Road (South)
Car Park Access
A6010 Queens Road (North)

Lat/Long
lat 53.496055° lon -2.211719°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)



TIME	1Aa	1Ab	1Ac	1Ad	1Ae
16:00	0	0	0	0	0
16:05	0	0	0	0	0
16:10	0	0	0	0	0
16:15	0	0	0	0	10
16:20	0	0	0	0	0
16:25	0	0	0	0	0
16:30	0	0	0	0	0
16:35	0	0	0	0	0
16:40	0	0	0	0	0
16:45	0	0	0	0	0
16:50	0	0	0	0	0
16:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.83**
17:00	0	0	0	0	0
17:05	0	0	0	0	0
17:10	0	0	0	0	0
17:15	0	0	0	0	0
17:20	0	0	0	0	0
17:25	0	0	0	0	0
17:30	0	0	0	0	0
17:35	0	0	0	0	0
17:40	0	0	0	0	0
17:45	0	0	0	0	0
17:50	0	2	0	0	0
17:55	0	0	0	0	0
Hourly Average	**0.00**	**0.17**	**0.00**	**0.00**	**0.00**
18:00	0	0	0	0	0
18:05	0	0	0	0	0
18:10	0	0	0	0	0
18:15	0	0	0	0	0
18:20	0	0	0	0	0
18:25	0	0	0	0	0
18:30	0	0	0	0	3
18:35	0	0	0	0	0
18:40	0	0	0	0	0
18:45	0	0	0	0	0
18:50	0	0	0	0	0
18:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.25**
19:00	0	0	0	0	0
19:05	0	0	0	0	0
19:10	0	0	0	0	0
19:15	0	0	0	0	0
19:20	0	0	0	0	0
19:25	0	0	0	0	0
19:30	0	0	0	0	0
19:35	0	0	0	0	0
19:40	0	0	0	0	0
19:45	0	0	0	0	0
19:50	0	0	0	0	0
19:55	0	0	0	0	0

Hourly Average	0.00	0.00	0.00	0.00	0.00
20:00	0	0	0	0	0
20:05	0	0	0	0	0
20:10	0	0	0	0	0
20:15	0	0	0	0	0
20:20	0	0	0	0	0
20:25	0	0	0	0	0
20:30	0	0	0	0	0
20:35	0	0	0	0	0
20:40	0	0	0	0	0
20:45	0	0	0	0	0
20:50	0	0	0	0	0
20:55	0	0	0	0	0
Hourly Average	0.00	0.00	0.00	0.00	0.00
21:00	0	0	0	0	0
21:05	0	0	0	0	0
21:10	0	0	0	0	0
21:15	0	0	0	0	0
21:20	0	0	0	0	0
21:25	0	0	0	0	0
21:30	0	0	0	0	0
21:35	0	0	0	0	0
21:40	0	0	0	0	0
21:45	0	0	0	0	0
21:50	0	0	0	0	0
21:55	0	0	0	0	0
Hourly Average	0.00	0.00	0.00	0.00	0.00
22:00	0	0	0	0	0
22:05	0	0	0	0	0
22:10	0	0	0	0	0
22:15	0	0	0	0	0
22:20	0	0	0	0	0
22:25	0	0	0	0	0
22:30	0	0	0	0	0
22:35	0	0	0	0	0
22:40	0	0	0	0	0
22:45	0	0	0	0	0
22:50	0	0	0	0	0
22:55	0	0	0	0	0
23:00	0	0	0	0	0
Hourly Average	0.00	0.00	0.00	0.00	0.00

Session Total	0.00	0.02	0.00	0.00	0.15

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

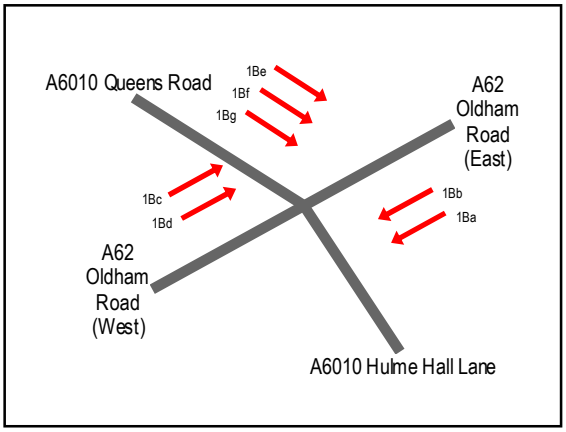
TIME	1Aa	1Ab	1Ac	1Ad	1Ae
10:00	0	0	0	0	0
10:05	0	0	0	0	0
10:10	0	0	0	0	0
10:15	0	0	0	0	0
10:20	0	0	0	0	0
10:25	0	0	0	0	0
10:30	0	0	0	0	0
10:35	0	0	0	0	0
10:40	0	0	0	0	0
10:45	0	0	0	0	0
10:50	0	0	0	0	0
10:55	0	0	0	0	0
Hourly Average	0.00	0.00	0.00	0.00	0.00
11:00	0	0	0	0	0
11:05	0	0	0	0	0
11:10	0	0	0	0	0
11:15	0	0	0	0	0
11:20	0	0	0	0	0
11:25	0	0	0	0	0
11:30	0	0	0	0	0
11:35	0	0	0	0	0
11:40	0	0	0	0	0
11:45	0	0	0	0	0
11:50	0	0	0	0	0
11:55	0	0	0	0	0
Hourly Average	0.00	0.00	0.00	0.00	0.00
12:00	0	0	0	0	0
12:05	0	0	0	0	0
12:10	0	0	0	0	0
12:15	0	0	0	0	0
12:20	0	0	0	0	0
12:25	0	0	0	0	0
12:30	0	0	0	0	0

12:35	0	0	0	0	0
12:40	0	0	0	0	0
12:45	0	0	0	0	0
12:50	0	0	0	0	0
12:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
13:00	0	0	0	0	0
13:05	0	0	0	0	0
13:10	0	0	0	0	0
13:15	0	0	0	0	0
13:20	0	0	0	0	0
13:25	0	0	0	0	0
13:30	0	0	0	0	0
13:35	0	0	0	0	0
13:40	0	0	0	0	0
13:45	0	0	0	0	0
13:50	0	0	0	0	0
13:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
14:00	0	0	0	0	0
14:05	0	0	0	0	0
14:10	0	0	0	0	0
14:15	0	0	0	0	0
14:20	0	0	0	0	0
14:25	0	0	0	0	0
14:30	0	0	0	0	0
14:35	0	0	4	0	0
14:40	0	0	0	0	0
14:45	0	0	0	0	0
14:50	0	0	0	0	0
14:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.33**	**0.00**	**0.00**
15:00	0	0	1	0	0
15:05	0	0	0	0	0
15:10	0	0	0	0	0
15:15	0	0	0	0	0
15:20	0	0	0	0	0
15:25	0	0	0	0	0
15:30	0	0	0	0	0
15:35	0	0	0	0	0
15:40	0	0	0	0	0
15:45	0	0	0	0	2
15:50	0	0	0	0	0
15:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.08**	**0.00**	**0.17**
16:00	0	0	0	0	0
16:05	0	0	0	0	0
16:10	0	0	0	0	0
16:15	0	0	0	0	0
16:20	0	0	0	0	0
16:25	0	0	0	0	0
16:30	0	0	0	0	0
16:35	0	0	0	0	0
16:40	0	0	0	0	0
16:45	0	0	0	0	0
16:50	0	0	0	0	0
16:55	0	0	0	0	0
17:00	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Session Total	**0.00**	**0.00**	**0.06**	**0.00**	**0.02**

Etihad
Queue Length Survey

Site 1B
A62 Oldham Road (East)
A6010 Hulme Hall Lane
A62 Oldham Road (West)
A6010 Queens Road



Lat/Long
lat 53.495883° lon -2.210395°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)

TIME	1Ba	1Bb	1Bc	1Bd	1Be	1Bf	1Bg
1600 - 1605	2	7	0	0	3	5	7
	4	7			2	7	3
	3	3			1	8	5
1605 - 1610	6	7	0	0	3	6	5
	10	8			3	5	4
	5	7					
1610 - 1615	8	6	0	0	6	6	7
	4	5			2	4	7
					3	9	8
1615 - 1620	4	0	0	0	7	9	8
	10	8			5	3	8
	9	9			8	8	9
1620 - 1625	7	9	0	0	5	9	7
	9	9			9	5	5
	6	7			3	2	6
1625 - 1630	9	11	0	0	3	5	2
	7	7			4	8	6
	6	9			6	7	4
1630 - 1635	7	5	0	0	3	4	3
	4	8			8	8	5
	8	10			4	7	7
1635 - 1640	2	3	0	0	5	6	3
	8	9			6	2	4
	11	10			6	7	8
1640 - 1645	8	7	1	0	5	9	7
	4	6			4	3	6
	9	7			3	8	7
1645 - 1650	8	6	0	0	3	11	8
					7	5	6
1650 - 1655	0	1	0	0	1	5	7
	8	6			5	4	6
	10	10					
1655 - 1700	8	10	1	0	5	4	5
	7	7	1	0	2	7	4
	5	12			4	5	6
1700 - 1705	5	9	0	0	1	5	5
					1	10	7
					3	3	5
1705 - 1710	3	2	0	0	5	2	5
	6	7			4	8	4
					10	7	6
1710 - 1715	6	2	2	2	4	2	3
	4	5			2	8	7
	3	4			2	10	11

1715 - 1720	4	10	0	0	11	5	4
	3	2			7	11	4
					6	5	3
					3	7	9
1720 - 1725	5	4	0	0	3	6	4
	8	4			5	9	3
	3	6			2	8	6
1725 - 1730	1	2	0	0	3	2	2
	4	4			3	5	3
1730 - 1735	2	2	0	0	5	8	4
	1	2			4	6	4
					2	9	5
1735 - 1740	2	2	0	0	3	1	0
	2	0			0	3	4
					3	10	9
1740 - 1745	4	4	1	0	2	7	5
	3	4			4	1	6
	7	6			6	7	5
1745 - 1750	4	6	1	0	4	10	4
	2	5			4	6	4
	4	3			1	5	5
1750 - 1755	5	9	1	0	4	2	4
	3	8			4	4	5
					4	5	2
1755 - 1800	7	8	0	0	4	8	8
	6	9			1	6	3
					5	6	2
1800 - 1805	3	11	0	0	1	9	6
	2	8			6	9	8
	3	11					
1805 - 1810	4	13	0	0	5	11	7
	5	3			4	4	3
					4	7	6
1810 - 1815	2	5	1	0	0	6	3
	0	8			5	7	5
	2	10			3	5	4
1815 - 1820	3	9	0	0	4	8	6
	0	7			0	11	9
	2	4			4	3	4
1820 - 1825	3	7	0	0	3	5	5
	3	12			5	7	7
	1	8			3	4	5
1825 - 1830	4	7	0	0	3	8	6
	0	11			1	9	5
					3	1	4
1830 - 1835	1	10	0	0	6	10	9
	2	2			7	3	9
	4	9			2	7	6
1835 - 1840	2	7	0	0	6	8	9
	2	12			3	7	4
	3	4			6	9	7
1840 - 1845	4	7	0	0	4	6	5
	5	5			6	6	5
	5	9			1	7	4
1845 - 1850	1	12	0	0	2	7	4
	4	10			2	9	4
1850 - 1855	0	12	0	0	2	7	4
	2	8			1	10	5
	2	1			4	9	3
1855 - 1900	4	8	0	0	3	9	6
	1	10			3	10	7
	1	7			2	4	5

1900 - 1905	2	7	1	0	0	6	5
	3	7			1	10	2
	1	10			2	11	6
1905 - 1910	4	13	1	0	4	7	6
	3	15			0	5	2
	1	6			1	6	4
	5	8					
1910 - 1915	4	5	1	0	4	6	3
	5	8			5	3	2
	2	13			1	6	5
1915 - 1920	0	10	0	0	9	3	8
	3	11			1	5	6
	0	4			2	8	8
	1	10			3	5	3
1920 - 1925	0	8	0	0	2	6	4
	2	7			3	5	2
	4	6			3	7	1
1925 - 1930	0	13	0	0	2	3	4
	4	7			2	9	6
	2	8			5	5	3
	3	4			1	7	5
1930 - 1935	3	9	0	0	2	4	2
	4	7			1	4	4
	1	8			2	3	2
1935 - 1940	1	4	2	0	3	3	4
	4	10			3	3	2
	0	5			5	1	4
1940 - 1945	1	8	0	0	1	5	2
	0	4			1	3	3
	2	13			3	4	3
	2	3			3	6	4
1945 - 1950	4	6	0	0	5	2	3
	1	8			5	5	5
	3	6			2	3	2
1950 - 1955	2	4	0	0	3	5	2
	1	7			1	8	2
	0	7			0	4	3
	0	9			1	4	0
1955 - 2000	1	4	1	0	2	4	3
	3	6			4	6	0
	2	11			2	3	3
2000 - 2005	5	3	0	0	0	3	2
	6	6			1	5	1
	3	5			1	1	2
	4	4			0	5	1
2005 - 2010	2	1	1	0	0	4	2
	5	4			4	5	5
	5	4			2	4	3
2010 - 2015	2	2	0	0	2	5	4
	1	1			2	6	4
	4	6			0	1	0
2015 - 2020	6	7	0	0	3	5	5
	3	6			0	4	2
	5	5			4	7	5
	5	2			1	4	3
2020 - 2025	2	1	0	0	7	8	2
	3	3			1	4	3
	6	7			2	5	4
2025 - 2030	3	6	1	0	2	5	2
	4	6			1	4	3
	3	0			0	5	3
	2	2			0	2	2
2030 - 2035	6	4	0	1	1	4	3
	6	3			3	4	3
	5	4			0	3	3
2035 - 2040	2	2	0	0	4	5	0
	2	2			0	7	0

	4	4			0	4	4
2040 - 2045	1	1	0	0	4	4	4
	1	1			0	5	1
	3	1			0	3	1
	4	4			1	1	1
2045 - 2050	4	3	0	0	0	4	4
	2	1			0	1	1
	3	1			2	3	2
2050 - 2055	4	2	0	0	1	5	1
	4	3			3	6	3
	2	2			1	0	0
	2	1			2	5	3
2055 - 2100	2	1	0	0	0	2	1
	6	6			1	6	3
	3	3			1	5	2
2100 - 2105	4	4	0	1	1	2	1
	4	2			0	4	2
	1	1			2	1	1
2105 - 2110	2	1	0	0	0	5	2
	2	1			1	4	3
	2	0			0	3	1
	3	2			2	3	1
2110 - 2115	2	0	0	0	3	6	3
	3	2			1	6	3
	1	0			1	2	0
2115 - 2120	1	0	0	0	3	5	4
	3	3			2	4	0
	1	0			2	7	2
2120 - 2125	2	1	0	0	2	4	0
	1	0			0	5	1
	2	5			3	4	2
	1	0			4	2	1
2125 - 2130	2	2	0	0	1	2	1
	3	2			2	2	2
	6	5			3	3	2
2130 - 2135	1	1	0	0	0	2	3
	2	1			1	2	1
	3	3			2	3	1
					2	2	1
2135 - 2140	2	1	0	0	3	0	0
	4	2			0	3	2
	3	4					
	3	5					
2140 - 2145	3	3	0	0	0	4	2
	3	1			1	5	0
	1	5			2	2	1
2145 - 2150	3	2	0	0	1	3	3
	2	3			0	2	1
	2	1			1	3	1
	7	6			0	3	0
2150 - 2155	4	2	0	0	0	1	0
	2	2			0	4	1
	5	4			0	4	2
2155 - 2200	4	5	1	0	0	2	0
	3	6			2	3	1
					1	5	2
2200 - 2205	0	2	0	0	0	1	0
	1	7			0	2	0
	1	4			0	2	0
2205 - 2210	2	0	0	0	2	6	2
	0	3			0	1	0
	3	6			2	4	1
2210 - 2215	1	4	0	0	1	1	1
	1	3			0	2	1

	2	6			0	3	1
2215 - 2220	1	8	0	0	0	5	2
	1	2			0	2	3
	1	5			0	1	0
	0	1			1	2	1
2220 - 2225	1	3	0	1	2	2	2
	1	3			0	4	2
	3	2			2	4	1
	0	4					
2225 - 2230	2	8	0	0	2	1	1
	0	6			3	4	2
	0	1			1	2	0
2230 - 2235	3	0	0	0	1	2	2
	0	4			0	2	0
	0	3			1	0	0
2235 - 2240	0	2	0	0	1	2	0
	1	0			2	0	0
	2	3			2	1	0
					0	4	0
2240 - 2245	1	5	0	0	1	2	1
	3	3			0	3	2
	0	7			0	1	0
					2	0	1
2245 - 2250	1	1	0	0	0	3	1
	1	3			2	0	0
	0	4			0	1	1
2250 - 2255	2	3	0	0	3	2	0
	3	4			0	2	1
	0	3			0	2	2
	1	4					
2255 - 2300	0	4	0	0	0	2	0
	0	1			0	4	1
	0	1			1	0	0

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

TIME	1Ba	1Bb	1Bc	1Bd	1Be	1Bf	1Bg
1000 - 1005	4	6	0	0	1	4	1
	6	7			0	3	2
					1	0	1
1005 - 1010	2	4	0	0	4	4	1
	3	9			4	6	3
	7	3			2	1	0
	7	2			2	4	0
1010 - 1015	3	3	0	0	1	5	1
	2	1			4	5	0
	7	3			2	3	3
1015 - 1020	9	7	1	0	5	9	1
	4	9			0	4	0
	7	5			0	2	0
					1	5	4
1020 - 1025	7	7	0	0	1	4	3
	4	5			2	6	3
	5	8			0	7	1
	8	11					
1025 - 1030	2	3	0	0	1	6	1
	3	2			2	9	5
	4	4			2	3	1
1030 - 1035	10	5	0	0	3	5	1
	7	7			1	0	0
	6	7			0	0	1
	8	11			0	5	5
1035 - 1040	3	2	0	0	1	3	4
	5	4			1	2	1
	7	2			2	6	3

1040 - 1045	3	4	0	0	5	5	4
	6	7			4	0	0
	8	7			1	8	2
1045 - 1050	6	3	0	0	5	4	2
	12	10			1	5	1
	9	8			0	6	4
1050 - 1055	9	10	0	0	0	5	3
	5	9			0	5	2
	4	4			1	1	2
1055 - 1100	10	7	1	0	0	5	3
	6	6			1	4	0
	3	4			2	6	3
1100 - 1105	6	4	0	0	1	4	3
	9	5			1	8	3
	2	6			3	5	0
1105 - 1110	10	11	0	0	2	4	3
	9	10			3	3	3
	8	6			1	8	4
1110 - 1115	3	8	1	0	1	3	0
	2	4			0	6	6
	2	0			4	4	1
	6	6			1	3	1
1115 - 1120	2	5	0	0	2	3	4
	1	2			1	2	1
	4	7			2	5	0
1120 - 1125	11	12	0	0	0	2	0
	10	10			2	8	4
	8	5			4	8	4
1125 - 1130	5	12	0	0	2	5	3
	5	1			0	7	5
	4	6			0	4	2
1130 - 1135	7	5	0	0	0	3	0
	6	4			3	6	3
	7	11			0	5	2
1135 - 1140	10	6	1	0	5	2	2
	3	7			0	4	2
	11	10			2	4	3
1140 - 1145	10	9	0	0	0	7	0
	13	9			2	6	2
	7	10			12	7	4
1145 - 1150	5	5	0	0	1	3	3
	3	5			0	3	0
	6	5			1	8	6
	3	8			0	7	7
1150 - 1155	11	6	0	0	1	7	2
	11	6			5	11	4
	11	10			3	3	3
1155 - 1200	4	3	1	0	2	5	2
	4	2			2	2	1
	9	6			1	7	2
1200 - 1205	9	8	0	0	4	6	3
	9	8			2	4	4
	3	2			2	6	4
1205 - 1210	3	2	0	1	2	7	5
	5	5			0	2	1
	7	3			2	6	2
	5	4			2	6	5
1210 - 1215	8	9	0	0	3	6	4
	4	4			3	4	3
	3	2			2	8	2
1215 - 1220	6	8	0	0	3	3	1
	4	12			1	4	1
	4	6			0	6	2
	6	4			1	5	1
1220 - 1225	6	2	0	0	0	3	2

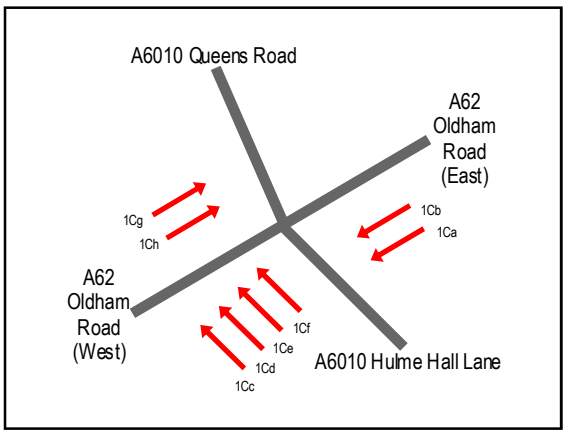
	3	3			3	6	1
	8	8			1	4	2
1225 - 1230	7	7	0	0	0	1	0
	9	2			1	4	2
	2	2			1	3	3
1230 - 1235	8	9	0	0	2	5	1
	8	7			0	9	3
	6	6			2	7	7
1235 - 1240	7	7	0	1	1	7	2
	8	7			0	4	1
	2	2			1	5	1
1240 - 1245	4	1	0	0	3	6	6
	7	4			1	1	1
	8	7			0	1	1
					7	8	6
1245 - 1250	8	7	0	0	2	4	3
	5	4			1	3	1
	5	3			1	4	4
	5	2					
1250 - 1255	4	4	0	0	1	4	4
	6	6			1	3	1
	6	4			0	2	0
1255 - 1300	9	6	0	0	1	8	1
	5	7			0	4	2
	9	1			1	6	2
	8	8			1	8	4
1300 - 1305	9	9	0	0	3	2	1
	6	2			2	7	3
	2	8			1	11	5
	4	5					
1305 - 1310	5	3	0	0	5	5	1
	5	8			3	5	4
	8	8			4	6	4
1310 - 1315	7	9	0	0	3	6	4
	11	14			3	3	3
	7	5			1	7	4
1315 - 1320	4	9	0	0	1	10	4
	5	6			0	5	1
					3	7	2
1320 - 1325	9	8	0	0	1	5	4
	11	10			2	8	3
	3	10			2	7	2
1325 - 1330	6	6	0	0	0	8	3
	6	7			1	7	2
	10	9			0	9	4
1330 - 1335	9	10	0	0	2	11	7
	11	9			0	9	3
	5	7					
1335 - 1340	8	6	0	0	5	9	4
	10	5			2	11	5
	10	11			3	11	3
	5	1			5	8	5
1340 - 1345	10	6	0	0	0	10	8
	9	9			0	6	4
	8	5			4	8	4
1345 - 1350	9	8	0	0	5	5	2
	10	5			1	3	0
	7	8			0	11	5
1350 - 1355	8	9	0	0	1	11	4
	11	7			1	7	4
	7	10			2	6	3
1355 - 1400	7	10	0	0	3	7	6
	5	5			3	11	4
	7	5			0	7	7
1400 - 1405	8	12	0	1	3	7	4

	7	8			2	6	2
	7	8			1	7	3
1405 - 1410	8	9	0	0	1	8	4
	6	6			1	7	6
	11	5			0	4	1
1410 - 1415	5	6	0	0	4	8	6
	5	6			4	9	2
	5	4			5	9	6
1415 - 1420	5	6	0	0	1	6	2
	11	10			0	11	4
	5	6			2	7	1
1420 - 1425	7	9	0	0	6	4	5
	6	6			2	6	2
	5	5			3	5	3
1425 - 1430	8	6	0	0	3	7	5
	6	5			0	7	7
	5	11			1	9	3
1430 - 1435	6	8	0	0	1	5	5
	7	7			3	7	3
	5	3			2	6	4
1435 - 1440	8	6	0	0	9	12	6
	6	9			5	7	4
	6	7			2	8	9
1440 - 1445	3	3	0	0	0	3	2
	5	7			3	7	4
	7	9			2	5	3
1445 - 1450	8	6	0	0	2	4	1
	4	7			3	8	4
	4	4			0	4	4
1450 - 1455	9	7	0	0	2	10	3
	6	4			4	5	2
	5	9			3	9	3
1455 - 1500	4	3	0	0	6	10	7
	2	4			2	5	3
	6	7			4	6	4
1500 - 1505	4	2	0	0	8	9	4
	3	8			5	8	4
	7	6			1	6	4
1505 - 1510	7	8	0	0	2	7	6
	6	7			4	7	5
	2	9			8	3	0
1510 - 1515	2	3	0	0	0	8	6
	7	5			2	10	6
	5	9			5	7	7
1515 - 1520	7	8	1	0	1	6	2
	9	8			1	7	2
	9	4			2	7	2
1520 - 1525	7	9	0	0	3	10	5
	5	6			3	6	3
	5	3			1	7	3
1525 - 1530	7	5	0	0	2	12	4
	9	8			4	9	3
	4	5			7	2	0
1530 - 1535	6	8	0	0	5	8	3
	10	9			3	11	4
	2	4			3	4	1
1535 - 1540	9	6	0	0	3	11	2
	10	5			4	8	4
	8	3			8	6	3
1540 - 1545	9	8	0	0	3	11	2
	8	7			4	8	4
					8	6	3
1545 - 1550	7	6	0	0	3	12	8
	8	8			2	10	5

	6	5			6	5	4
					4	0	0
1550 - 1555	9	7	0	0	3	7	5
	6	7			2	4	3
	10	9			1	7	5
1555 - 1600	9	5	0	0	1	3	2
	12	6			1	10	2
	6	7			2	3	2
1600 - 1605	4	3	0	0	2	6	5
	8	6			0	5	2
	11	8			3	8	6
1605 - 1610	4	2	0	1	6	9	7
	7	7			1	6	3
	10	8			2	1	1
1610 - 1615	6	4	0	0	1	5	4
	8	7			4	8	5
	5	6			5	5	3
	2	4			2	8	5
1615 - 1620	10	9	0	0	6	7	5
	8	6			4	7	3
	6	5			4	7	3
1620 - 1625	2	3	0	0	1	4	1
	9	5			2	4	2
	7	5			5	2	3
	4	7			1	8	1
1625 - 1630	5	6	0	0	5	4	5
	7	6			0	8	2
	1	3			1	6	5
1630 - 1635	4	7	0	0	4	5	5
	8	6			1	7	2
	7	6			0	9	5
1635 - 1640	7	5	0	0	2	5	5
	6	4			3	6	4
	6	2			6	3	3
	9	7			3	3	2
1640 - 1645	7	9	1	0	3	7	6
	5	2			1	9	2
	7	4			4	9	2
1645 - 1650	4	3	1	0	3	6	2
	7	6			5	7	4
	4	4			7	6	4
1650 - 1655	7	2	0	0	2	6	4
	4	3			4	2	2
	7	3			2	7	5
					6	7	4
1655 - 1700	3	2	0	0	0	8	3
	6	4			6	4	6
	7	6			3	6	2
					0	5	1

Etihad
Queue Length Survey

Site 1C
A62 Oldham Road (East)
A6010 Hulme Hall Lane
A62 Oldham Road (West)
A6010 Queens Road



Lat/Long
lat 53.495554° lon -2.211378°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)

TIME	1Ca	1Cb	1Cc	1Cd	1Ce	1Cf	1Cg	1Ch
1600 - 1605	0	0	1	1	16	4	4	8
			0	3	17	1	6	14
			2	5	14	0	7	11
1605 - 1610	0	0	0	3	8	0	6	13
			0	3	18	0	4	10
			2	4	19	1	9	13
1610 - 1615	0	0	0	0	22	8	9	10
			1	0	19	4	6	9
			1	0	16	6	3	10
1615 - 1620	0	0	1	0	22	8	6	10
			0	0	26	3	7	6
							5	9
1620 - 1625	0	0	0	0	17	6	7	11
			1	2	14	5	8	10
			1	1	16	2	6	9
1625 - 1630	0	0	1	0	24	10	8	11
			0	0	26	13	5	9
			0	0	30	16	7	10
1630 - 1635	0	0	0	0	23	15	5	7
			0	0	21	12	3	13
			0	0	26	15	8	10
1635 - 1640	0	0	0	0	25	13	6	11
			1	0	26	10	6	10
			0	0	17	6		
1640 - 1645	0	0	1	1	11	0	7	10
			0	1	18	3	4	9
			0	0	17	3	8	10
1645 - 1650	0	0	1	1	16	3	6	12
			0	1	19	2	2	8
			1	1	13	3	5	11
1650 - 1655	0	0	0	0	18	1	6	13
			0	1	15	5	5	11
							6	12
1655 - 1700	0	0	2	0	18	4	1	10
			0	0	17	11	4	6
			3	1	19	2		
1700 - 1705	0	0	0	4	19	0	5	13
			1	9	8	0	9	11
			0	2	4	0	2	6
1705 - 1710	0	0	1	4	22	0	3	9
			1	5	18	0	8	13
			1	5	15	0	3	3
1710 - 1715	0	0	0	2	19	0	7	13
			0	6	20	0	5	4
			0	10	18	0	9	13

1715 - 1720	0	0	1	10	16	0	9	15
			2	0	15	1	8	18
			0	11	21	0	12	19
1720 - 1725	0	0	2	9	18	0	7	23
			1	0	13	0	11	19
			0	5	12	0	10	21
1725 - 1730	0	0	0	8	17	0	8	20
			0	2	15	0	9	14
			1	8	13	0	11	19
1730 - 1735	0	0	0	10	18	0	14	20
			0	9	13	0	17	23
			0	10	12	0	11	19
1735 - 1740	0	0	0	9	16	0	8	21
			1	4	11	0	14	16
			0	2	15	0		
1740 - 1745	0	0	0	5	13	0	10	18
			1	5	11	0	4	4
			1	0	13	0	8	21
1745 - 1750	0	3	4	3	15	0	8	25
	2	2	0	5	9	0	8	21
			2	4	6	0	15	22
1750 - 1755	0	0	0	3	14	0	6	6
			0	2	16	0	5	12
			2	2	14	0	3	18
1755 - 1800	0	0	0	5	18	0	9	22
			1	2	12	0	7	12
			1	5	11	0	8	12
1800 - 1805	1	0	2	8	13	0	6	6
			0	2	18	0	4	3
			1	4	17	0		
1805 - 1810	0	0	1	10	12	0	6	5
			0	5	18	0	3	5
			0	2	0	0		
1810 - 1815	0	0	0	9	21	0	3	2
			0	2	17	0	4	3
			0	0	19	0	2	4
			0	0	17	0		
1815 - 1820	0	0	0	5	21	0	4	6
			0	4	19	0	2	3
			0	8	18	0	4	6
			0	6	0	0		
1820 - 1825	0	0	0	8	11	0	2	3
			0	5	13	0	3	5
			0	0	4	0	5	7
1825 - 1830	0	0	1	3	8	0	3	5
			0	1	12	0	4	5
			0	0	14	0	6	6
			0	0	10	0		
1830 - 1835	0	0	0	2	17	0	4	3
			1	9	19	0	4	2
			0	0	22	0		
1835 - 1840	0	0	0	5	18	0	4	3
			0	11	21	0		
			0	0	23	0		
1840 - 1845	0	0	1	4	22	0	4	3
			2	0	12	0	5	5
			0	0	13	0	3	2
1845 - 1850	0	0	0	3	13	0	3	2
			0	1	7	0	2	1
			0	3	15	0		
1850 - 1855	0	0	0	0	9	0	2	4
			0	4	15	0	4	3
							5	4

1855 - 1900	0	0	1	2	18	0	4	3
			1	2	12	0	5	4
			0	5	12	0	3	2
							3	3
1900 - 1905	0	0	6	3	12	0	2	0
			0	2	11	0	1	1
			0	0	6	0	2	2
1905 - 1910	0	0	0	0	2	0	3	4
			1	1	0	0	1	1
			0	0	5	0	1	1
1910 - 1915	0	0	1	4	3	0	2	4
			1	2	11	0	2	3
			0	6	13	0		
1915 - 1920	0	0	0	0	11	0	1	4
			0	0	15	0	1	2
			0	2	6	0	2	3
			0	1	6	0	2	3
1920 - 1925	0	0	0	2	10	0	2	3
			0	0	2	0	5	4
			0	1	1	0	2	2
1925 - 1930	1	0	0	2	11	0	2	3
			0	0	3	0	4	3
			1	2	8	0	3	3
			0	0	4	0		
1930 - 1935	0	0	0	2	3	0	4	3
			0	0	3	0	2	2
			0	0	2	0	0	1
							4	4
1935 - 1940	0	0	0	1	2	0	2	2
			0	2	17	0	2	1
			0	0	5	0	1	3
			0	1	4	0		
1940 - 1945	0	0	1	0	14	0	1	4
			0	0	3	0	2	5
			0	0	8	0	4	3
1945 - 1950	0	0	0	1	3	0	3	2
			1	0	6	0	5	4
			1	1	1	0	3	2
1950 - 1955	0	0	1	0	5	0	4	1
			0	0	5	0	2	1
			0	0	3	0	2	2
			0	3	4	0	2	0
1955 - 2000	0	0	1	0	5	0	3	1
			1	2	4	0	2	3
			0	0	3	0	3	4
			1	1	2	0		
2000 - 2005	0	0	0	0	6	0	8	10
			0	0	2	0	3	5
			1	2	8	0	4	0
2005 - 2010	0	0	0	0	5	0	1	3
			1	1	6	0	1	1
			0	0	6	0	1	6
							4	5
2010 - 2015	0	0	0	1	2	0	3	3
			0	3	6	0	4	8
			0	1	5	0	2	4
			1	2	8	0		
2015 - 2020	0	0	2	2	5	0	3	7
			1	2	6	0	5	8
			2	0	2	0	3	5
2020 - 2025	0	1	1	1	5	0	7	10
			0	0	5	0	3	4
			0	0	2	0	4	6
							2	5
2025 - 2030	0	0	0	1	3	0	5	6
			0	0	3	0	8	4
			0	1	2	0	7	5
			0	0	6	0		

2030 - 2035	1	0	0	1	5	0	6	3
			0	0	8	0	2	5
			0	1	2	0	2	4
2035 - 2040	0	0	1	0	1	0	9	8
			0	0	3	0	3	7
			0	1	5	0	3	4
			1	0	4	0	5	3
2040 - 2045	0	0	1	0	4	0	6	4
			0	3	3	0	3	7
			1	2	2	0	1	1
2045 - 2050	0	0	1	2	2	0	2	3
			0	0	6	0	2	2
			0	2	5	0	4	6
2050 - 2055	0	0	1	1	1	0	4	3
			0	0	2	0	1	1
			1	0	4	0	2	0
			0	0	1	0		
2055 - 2100	0	0	0	1	4	0	5	6
			0	0	5	0	2	2
			0	0	2	0	1	4
2100 - 2105	0	0	0	1	1	0	2	0
			0	1	4	0	0	1
			0	0	2	0	5	7
			1	0	5	0		
2105 - 2110	0	0	1	0	6	0	2	2
			0	1	1	0	1	0
			0	1	1	0	0	1
			0	0	2	0		
2110 - 2115	0	0	1	1	5	0	1	2
			0	0	5	0	4	5
			1	0	2	0	5	7
							2	1
2115 - 2120	0	0	2	1	5	0	4	5
			1	1	3	0	4	4
			0	3	4	0	3	2
2120 - 2125	1	0	0	2	1	0	4	6
	2	0	0	0	2	0	5	6
			0	1	6	0	2	2
2125 - 2130	0	0	0	0	4	0	3	1
			0	1	3	0	3	5
			0	3	6	0	1	2
2130 - 2135	0	0	0	0	4	0	2	3
			0	1	5	0	2	0
			2	1	4	0	9	4
			0	0	1	0		
2135 - 2140	0	0	0	0	2	0	3	0
			1	1	11	0	2	2
			0	0	1	0	4	4
2140 - 2145	0	0	0	0	1	0	3	3
			1	0	2	0	3	2
			1	1	11	0	0	1
			0	0	1	0		
2145 - 2150	0	0	1	1	8	0	1	2
			0	1	2	0	2	2
							1	1
2150 - 2155	0	0	0	0	3	0	4	3
			0	0	3	0	3	4
			0	2	2	0	4	2
2155 - 2200	0	0	0	1	5	0	6	4
			0	1	1	0	2	1
			1	3	5	0	1	1
2200 - 2205	0	0	0	0	4	0	4	2
			0	0	4	0	2	2
			0	0	4	0	3	3
			1	0	5	0		
2205 - 2210	0	0	0	1	7	0	2	2

			0	1	2	0	1	0
							5	4
							1	0
2210 - 2215	0	1	1	2	5	0	3	4
			0	1	4	0	2	3
			0	1	7	0	4	6
2215 - 2220	0	0	0	0	6	0	2	5
			1	1	4	0		
			0	2	2	0		
			0	2	2	0		
2220 - 2225	0	0	0	1	2	0	4	0
			1	0	0	0	3	1
			0	0	2	0	4	6
2225 - 2230	0	0	0	2	1	0	2	2
			1	0	3	0	4	7
			0	0	5	0	5	7
			0	0	1	0		
2230 - 2235	0	0	1	0	5	0	3	2
			2	2	3	0	6	11
			0	1	3	0	9	3
							4	4
2235 - 2240	0	0	0	1	6	0	3	7
			0	1	4	0	1	1
			0	0	1	0	5	1
			0	2	1	0		
2240 - 2245	0	0	0	1	2	0	1	4
			1	0	3	0	3	6
			0	0	3	0		
2245 - 2250	0	0	0	1	4	0	1	1
			0	1	2	0	0	1
			0	1	0	0	1	1
2250 - 2255	0	0	0	1	0	0	2	3
			0	0	3	0	2	2
			0	0	2	0	6	3
			0	0	0	0		
2255 - 2300	0	0	0	2	1	0	3	4
			0	0	1	0	2	4
			0	1	2	0	1	6
							4	5

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

TIME	1Ca	1Cb	1Cc	1Cd	1Ce	1Cf	1Cg	1Ch
1000 - 1005	0	0	0	0	1	0	5	4
			0	1	0	0	1	0
			0	2	0	0	2	0
							3	1
1005 - 1010	0	0	0	0	6	4	2	0
			0	0	3	0	2	2
			0	0	4	0	0	1
			0	0	5	0		
1010 - 1015	1	0	1	2	1	0	3	2
			0	0	5	0	3	2
			0	0	4	0	1	1
1015 - 1020	0	0	1	0	7	0	3	4
			0	0	2	0	2	0
			0	1	4	0	2	1
			0	2	6	0		
1020 - 1025	0	0	1	0	1	0	3	0
			0	2	3	0	3	1
			0	2	1	0		
1025 - 1030	0	0	1	2	4	0	1	3
			0	0	8	0	4	6
			0	4	2	0	0	2

							1	2
1030 - 1035	0	0	1	0	7	0	3	2
			0	0	6	0	2	1
			0	0	9	0	4	5
			1	1	6	1		
1035 - 1040	0	0	0	2	6	0	4	2
			0	2	2	0	2	5
			1	7	7	0	3	3
1040 - 1045	0	0	1	2	5	0	2	3
			2	2	5	0	1	2
			0	3	9	0	3	4
1045 - 1050	1	0	0	0	8	1	5	3
			0	1	4	0	2	0
							3	6
1050 - 1055	0	0	3	1	11	0	4	2
			0	0	7	0	3	4
			1	1	8	0	2	1
							3	8
1055 - 1100	0	0	2	1	3	0	3	3
			0	1	9	0	2	3
			1	3	9	0	3	3
1100 - 1105	1	0	1	3	4	0	2	3
			0	1	8	0	0	4
			1	0	3	0	2	4
1105 - 1110	0	0	2	2	8	0	2	1
			0	0	7	0	4	3
			1	2	7	0	3	1
1110 - 1115	0	0	1	1	6	0	4	7
			1	1	7	0	3	7
			0	0	5	0	1	3
			0	1	5	0		
1115 - 1120	0	1	1	2	2	0	4	6
			0	1	9	0	3	2
			1	1	8	0	3	5
1120 - 1125	0	0	0	2	8	0	2	4
			1	0	6	0	2	1
			1	2	14	0	2	4
							5	6
1125 - 1130	0	0	1	2	6	0	4	3
			2	3	6	0	2	2
			1	0	7	0	3	3
1130 - 1135	0	0	0	0	6	0	6	3
			4	2	4	0	4	5
			1	5	5	0	5	5
1135 - 1140	0	0	1	1	3	0	2	4
			0	0	10	0	1	4
			1	3	11	0	4	1
1140 - 1145	0	0	1	1	6	0	1	0
			1	5	11	0	4	5
			0	0	8	0	3	2
			0	2	10	0		
1145 - 1150	0	0	0	2	8	0	3	2
			0	1	5	0	3	4
			0	4	9	0	2	4
1150 - 1155	0	0	0	1	10	0	4	4
			1	2	8	0	2	4
			2	2	7	0		
			0	0	8	0		
1155 - 1200	0	0	0	4	8	0	3	2
			0	2	6	0	2	3
			0	3	9	0	1	1
							5	7
1200 - 1205	0	0	1	2	6	0	5	4
			2	1	7	0	4	4
			2	2	10	0	3	1

1205 - 1210	0	0	2	1	5	0	2	2
			0	2	3	0	4	3
			0	2	3	0		
			1	6	12	0		
1210 - 1215	0	0	1	2	7	0	2	2
			1	2	9	0	5	8
			0	2	9	0	5	3
							5	2
1215 - 1220	0	0	0	3	10	0	5	3
			1	2	6	0	7	7
			1	2	4	0	2	5
			0	2	9	0		
1220 - 1225	0	0	0	4	9	0	3	5
			0	1	6	0	2	1
			1	2	14	0	1	3
1225 - 1230	0	0	0	5	12	0	2	3
			0	2	10	0	5	4
			2	0	10	0	3	2
							3	4
1230 - 1235	0	0	2	2	2	0	7	7
			2	5	8	0	3	3
			1	1	13	0		
1235 - 1240	0	0	3	4	13	0	2	3
			3	1	8	0	3	3
			0	3	7	0	2	2
							2	2
1240 - 1245	0	0	2	0	11	0	3	4
			1	1	8	0	3	1
			0	2	4	0	3	3
			0	6	18	0		
1245 - 1250	0	0	2	0	2	0	2	2
			0	4	7	0	1	1
			1	3	6	0	4	10
							3	2
1250 - 1255	0	0	2	0	8	0	4	5
			1	1	11	0	3	2
			1	3	12	0	2	0
			1	1	5	0	2	3
1255 - 1300	1	1	1	1	5	0	2	1
			1	4	9	0	3	1
			0	1	4	0		
			0	2	7	0		
1300 - 1305	0	0	2	3	5	0	1	2
			0	6	9	0	2	2
			3	2	4	0	5	1
							7	4
1305 - 1310	0	0	1	1	9	0	5	2
			0	0	10	0	3	4
			0	3	12	0	4	1
1310 - 1315	1	6	0	1	11	0	4	2
	1	0	0	3	19	0	2	3
			1	3	6	0	5	4
1315 - 1320	0	0	1	3	9	0	7	5
			1	2	18	0	2	6
			1	2	7	0	7	11
1320 - 1325	0	0	1	1	6	0	4	7
			2	1	9	0	2	3
			1	2	11	0	2	3
1325 - 1330	0	0	2	0	7	0	7	6
			2	3	10	0	7	7
			1	0	10	0		
1330 - 1335	0	1	1	3	14	0	8	9
			3	4	6	0	10	9
			4	1	12	0	3	1
1335 - 1340	0	0	2	0	2	0	3	3
			0	1	10	0	1	1
			0	2	8	0	7	4
1340 - 1345	1	0	1	1	7	0	7	3

			0	4	6	0	5	4
							3	2
1345 - 1350	0	0	0	1	7	0	5	4
			1	3	13	0	4	4
			1	1	6	0	3	2
							5	3
1350 - 1355	0	0	2	2	11	0	9	5
			1	3	10	0	5	2
							5	5
1355 - 1400	1	0	1	2	8	0	4	3
			0	3	11	0	2	5
			0	2	8	0	3	2
1400 - 1405	0	0	1	1	6	0	7	3
			0	1	13	0	3	3
			1	1	8	0	1	3
1405 - 1410	0	0	2	2	7	0	4	4
			2	0	6	0	4	1
			2	2	4	0	3	5
1410 - 1415	0	0	1	2	10	0	1	1
			0	5	11	0	6	3
			0	6	9	0	6	8
1415 - 1420	0	0	1	4	15	0	5	6
			0	2	12	0	5	6
			1	3	12	0	2	3
1420 - 1425	0	0	1	2	8	0	8	9
			0	9	25	0	4	6
			2	7	17	0	3	3
1425 - 1430	0	0	0	3	8	0	4	4
			1	3	12	0	5	10
			3	2	11	0		
1430 - 1435	0	0	2	3	12	0	5	3
			0	1	6	0	4	5
			0	5	11	0	2	3
1435 - 1440	0	0	3	2	10	0	7	11
			0	2	11	0	6	4
			1	2	7	0	4	8
1440 - 1445	0	0	0	4	12	0	9	6
			0	1	8	0	4	4
			0	3	5	0	2	2
1445 - 1450	0	0	1	4	9	0	2	3
			2	5	12	0	5	6
			0	1	10	0	4	4
1450 - 1455	0	0	1	5	7	0	5	9
			0	2	13	0	2	2
			0	1	8	0	7	9
1455 - 1500	0	0	0	3	6	0	3	1
			1	5	10	0	7	6
			1	5	13	0	6	7
1500 - 1505	0	0	2	2	11	0	3	3
			3	0	10	0	6	6
			0	4	16	0	3	2
1505 - 1510	0	0	0	1	6	0	7	5
			0	4	24	0	4	7
			3	1	9	0	1	2
1510 - 1515	0	0	4	3	7	0	3	3
			2	1	6	0	2	7
			1	3	9	0	1	4
1515 - 1520	0	0	0	3	9	0	5	5
			1	2	17	0	2	4
			0	3	9	0	3	2
1520 - 1525	0	0	2	4	8	0	4	2
			0	1	9	0	3	2
			0	3	8	0	3	7
1525 - 1530	0	1	0	2	4	0	2	3
			0	2	9	0	3	3

			1	5	6	0	2	3
1530 - 1535	0	0	2	3	9	0	3	0
			3	2	9	0	7	8
			0	0	7	0	6	3
1535 - 1540	0	0	1	3	11	0	3	4
			0	2	10	0	4	5
			1	8	9	0	2	3
1540 - 1545	0	0	2	0	10	0	3	1
			1	3	11	0	2	8
			2	3	10	0	3	2
1545 - 1550	0	0	2	3	11	0	2	1
			1	3	9	0	1	1
							5	2
1550 - 1555	0	0	1	8	18	0	0	1
			1	6	10	0	5	6
			0	2	9	0	5	4
1555 - 1600	1	0	1	3	10	0	3	0
			0	1	10	0	4	3
			0	2	9	0	4	3
1600 - 1605	1	0	0	2	10	0	0	5
			2	0	7	0	5	3
			1	1	7	0		
1605 - 1610	0	0	0	2	11	0	1	1
			0	4	11	0	2	5
			0	2	5	0	1	0
1610 - 1615	0	0	1	5	9	0	6	2
			0	2	6	0	2	0
			0	1	8	0	1	5
			2	4	8	0		
1615 - 1620	0	0	0	3	7	0	3	2
			0	5	8	0	2	3
			0	2	7	0	3	4
							1	1
1620 - 1625	0	0	1	1	16	0	2	7
			0	3	13	0	2	2
			0	2	8	0	3	1
			0	1	9	0		
1625 - 1630	0	0	0	0	10	0	2	2
			0	0	12	0	3	2
			1	4	8	0	1	1
							1	2
1630 - 1635	0	0	1	1	1	0	1	0
			0	0	2	0	2	1
			0	1	13	0	2	1
1635 - 1640	0	0	0	5	12	0	3	4
			0	5	12	0	3	4
			0	4	13	0	4	3
			0	2	3	0	2	3
1640 - 1645	1	0	0	3	7	2	3	1
			0	2	9	0	3	3
			1	2	11	0		
1645 - 1650	0	0	0	3	8	0	3	3
			0	1	5	0	2	4
			1	2	6	0	5	4
							3	2
1650 - 1655	0	0	0	1	13	0	3	1
			0	1	9	0		
			0	1	5	0		
			0	0	4	0		
1655 - 1700	0	0	0	6	17	0	3	3
			1	4	8	0	3	0
			2	2	9	0	1	1

Etihad
Queue Length Survey

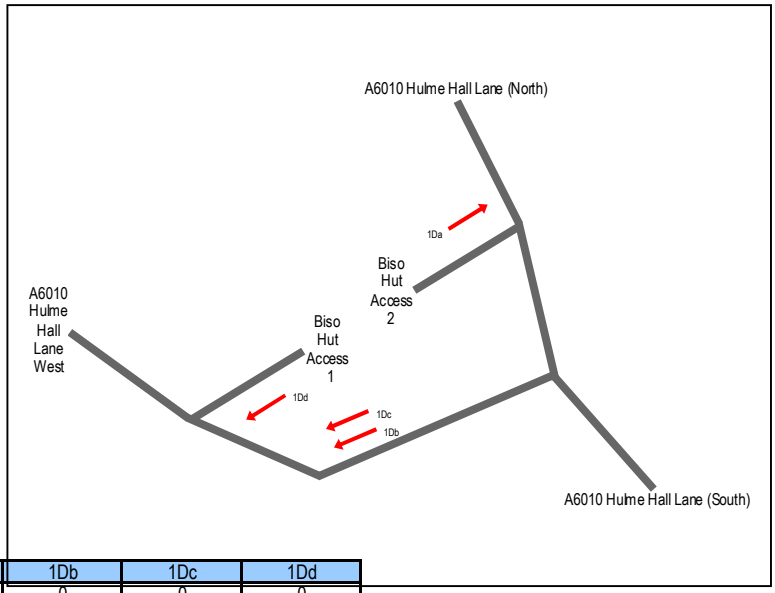
Site 1D
A6010 Hulme Hall Lane (North)
Biso Hut Access 2
A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane (West)
Biso Hut Access 1

Lat/Long
lat 53.495284° lon -2.210156°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)



TIME	1Da	1Db	1Dc	1Dd
16:00	0	0	0	0
16:05	0	0	0	0
16:10	0	0	0	0
16:15	0	0	0	0
16:20	0	0	0	0
16:25	0	0	0	0
16:30	0	0	0	0
16:35	0	0	0	0
16:40	0	0	0	0
16:45	0	0	0	0
16:50	1	0	0	0
16:55	0	0	0	0
Hourly Average	**0.08**	**0.00**	**0.00**	**0.00**
17:00	0	0	0	0
17:05	0	0	0	0
17:10	0	0	0	0
17:15	0	0	0	0
17:20	0	0	0	0
17:25	0	0	0	0
17:30	0	0	0	0
17:35	0	0	0	0
17:40	0	0	0	0
17:45	0	0	0	0
17:50	0	0	0	0
17:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
18:00	0	0	0	0
18:05	0	0	0	0
18:10	0	0	0	0
18:15	0	0	0	0
18:20	0	0	0	0
18:25	0	0	0	0
18:30	0	0	0	0
18:35	0	0	0	0
18:40	0	0	0	0
18:45	0	0	0	0
18:50	0	0	0	0
18:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
19:00	0	0	0	0
19:05	0	0	0	0
19:10	0	0	0	0
19:15	0	0	0	0
19:20	0	0	0	0
19:25	0	0	0	0
19:30	0	0	0	0
19:35	0	0	0	0
19:40	0	0	0	0
19:45	0	0	0	0
19:50	0	0	0	0
19:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
20:00	0	0	0	0
20:05	0	0	0	0
20:10	0	0	0	0
20:15	0	0	0	0
20:20	0	0	0	0
20:25	0	0	0	0
20:30	0	0	0	0
20:35	0	0	0	0
20:40	0	0	0	0

20:45	0	0	0	0
20:50	0	0	0	0
20:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
21:00	0	0	0	0
21:05	0	0	0	0
21:10	0	0	0	0
21:15	0	0	0	0
21:20	0	0	0	0
21:25	0	0	0	0
21:30	0	0	0	0
21:35	0	0	0	0
21:40	0	0	0	0
21:45	0	0	0	0
21:50	0	0	0	0
21:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
22:00	0	0	0	0
22:05	0	0	0	0
22:10	0	0	0	0
22:15	0	0	0	0
22:20	0	0	0	0
22:25	0	0	0	0
22:30	0	0	0	0
22:35	0	0	0	0
22:40	0	0	0	0
22:45	0	0	0	0
22:50	0	0	0	0
22:55	0	0	0	0
23:00	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**

Session Total	**0.01**	**0.00**	**0.00**	**0.00**

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

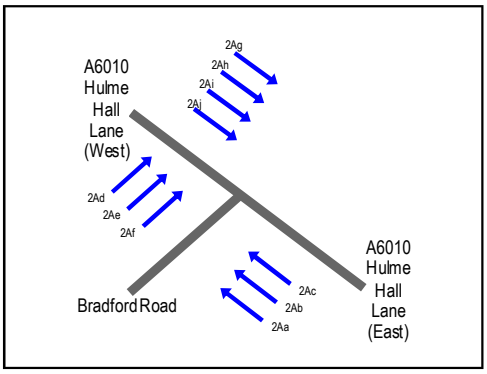
TIME	1Da	1Db	1Dc	1Dd
10:00	0	0	0	0
10:05	0	0	0	0
10:10	0	0	0	0
10:15	0	0	0	0
10:20	0	0	0	0
10:25	0	0	0	0
10:30	0	0	0	0
10:35	0	0	0	0
10:40	0	0	0	0
10:45	0	0	0	0
10:50	0	0	0	0
10:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
11:00	0	0	0	0
11:05	0	0	0	0
11:10	0	0	0	0
11:15	0	0	0	0
11:20	0	0	0	0
11:25	0	0	0	0
11:30	0	0	0	0
11:35	0	0	0	0
11:40	0	0	0	0
11:45	0	0	0	0
11:50	0	0	0	0
11:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
12:00	0	0	0	0
12:05	0	0	0	0
12:10	0	0	0	0
12:15	0	0	0	0
12:20	0	0	0	0
12:25	0	0	0	0
12:30	0	0	0	0
12:35	0	0	0	0
12:40	0	0	0	0
12:45	0	0	0	0
12:50	0	0	0	0
12:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
13:00	0	0	0	0
13:05	0	0	0	0
13:10	0	0	0	0
13:15	0	0	0	0

13:20	0	0	0	0
13:25	0	0	0	0
13:30	0	0	0	0
13:35	0	0	0	0
13:40	0	0	0	0
13:45	0	0	0	0
13:50	0	0	0	1
13:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.08**
14:00	0	0	0	0
14:05	0	0	0	0
14:10	0	1	1	1
14:15	0	0	0	1
14:20	0	0	0	0
14:25	0	0	0	0
14:30	0	0	0	0
14:35	0	0	0	0
14:40	0	0	0	0
14:45	0	0	0	0
14:50	0	0	0	0
14:55	0	0	0	0
Hourly Average	**0.00**	**0.08**	**0.08**	**0.17**
15:00	0	0	0	0
15:05	0	0	0	0
15:10	0	0	0	1
15:15	0	0	0	0
15:20	0	0	0	1
15:25	0	0	0	0
15:30	0	0	0	0
15:35	0	0	0	0
15:40	0	0	0	0
15:45	0	0	0	0
15:50	0	0	0	0
15:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.17**
16:00	0	0	0	0
16:05	0	0	0	0
16:10	0	0	0	0
16:15	0	0	0	0
16:20	0	0	0	0
16:25	0	0	0	1
16:30	0	0	0	0
16:35	0	0	0	0
16:40	0	0	0	0
16:45	0	0	0	0
16:50	0	0	0	0
16:55	0	0	0	0
17:00	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.08**

Session Total	**0.00**	**0.01**	**0.01**	**0.07**

Etihad
Queue Length Survey

Site 2A
A6010 Hulme Hall Lane (East)
Bradford Road
A6010 Hulme Hall Lane (West)



Lat/Long
lat 53.490485° lon -2.203280°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)

TIME	2Aa	2Ab	2Ac	2Ad	2Ae	2Af	2Ag	2Ah	2Ai	2Aj
1600 - 1605	0	10	9	0	15	7	0	7	10	1
	0	15	8	0	10	10	0	2	4	0
	0	4	6	0	5	7	0	4	2	0
1605 - 1610	0	5	6	0	9	11	0	6	6	0
	0	10	5	0	6	13	0	7	8	2
				0	8	11				
1610 - 1615	0	12	8	0	3	7	0	7	8	3
	0	10	7	0	7	10	0	0	0	3
	0	12	10	0	2	11	0	6	8	3
1615 - 1620	0	8	10	0	9	12	0	7	10	2
	0	7	8	0	8	10	0	11	7	2
	0	9	7	0	10	11	0	9	11	1
1620 - 1625	0	12	5	0	1	14	0	10	5	8
	0	16	13	0	1	11	0	11	4	7
	0	10	5	0	6	12	0	7	8	9
1625 - 1630	0	14	12	0	5	11	0	12	2	12
	0	13	10	0	9	11	0	7	7	10
	0	16	13				0	9	2	8
1630 - 1635	0	12	9	0	6	10	0	9	6	11
	0	10	5	0	5	11	0	10	5	8
	0	12	7	0	11	10	0	8	4	6
1635 - 1640	0	11	6	0	5	14	0	8	9	11
	0	12	7	0	8	12	0	11	10	7
	0	13	6	0	3	11	0	4	4	9
1640 - 1645	0	13	8	0	9	14	0	8	10	8
	0	14	7	0	8	11	0	5	11	9
	0	14	10	0	2	12	0	9	8	5
1645 - 1650	0	13	8	0	10	9	0	7	8	5
	0	12	11	0	8	12	0	9	7	1
				0	10	13	0	7	6	1
1650 - 1655	0	15	12	0	6	13	0	9	7	1
	0	14	10	0	8	12	0	10	8	2
	0	13	12	0	8	11				
1655 - 1700	0	13	8	0	6	9	0	7	8	1
	0	12	7	0	10	9	0	6	3	5
	0	14	8	0	5	14	0	9	8	10
1700 - 1705	0	14	9	0	9	6	0	10	8	6
	0	15	8	0	9	5	0	9	5	2
	0	14	9	0	7	8	0	11	7	2
1705 - 1710	0	16	10	0	8	11	0	7	3	7
	0	16	9	0	6	8	0	8	10	9
	0	15	12	0	0	5	0	7	6	10
1710 - 1715	0	13	10	0	8	15	0	7	3	9
	0	15	7	0	11	6	0	1	2	11
	0	14	8	0	4	14	0	8	8	9
1715 - 1720	0	16	13	0	7	13	0	9	4	11
	0	18	14	0	5	14	0	13	4	11
	0	17	9	0	4	12	0	9	3	10
1720 - 1725	0	15	10	0	6	11	0	9	4	9
	0	12	8	0	5	13	0	9	5	8
				0	11	9	0	7	3	7
1725 - 1730	0	20	7	0	5	13	0	6	6	7
	0	15	9	0	6	10	0	3	6	9
	0	14	15	0	6	9				

1730 - 1735	0	15	13	0	2	12	0	9	10	8
	0	17	10	0	11	10	0	12	8	13
	0	14	8	0	8	14	0	9	8	12
1735 - 1740	0	18	10	0	10	9	0	8	10	14
	0	14	11	0	9	11	0	6	5	13
	0	16	13	0	4	9	0	11	6	12
1740 - 1745	0	16	13	0	9	12	0	13	8	14
	0	15	10	0	10	13	0	12	7	13
	0	14	9				0	11	0	15
1745 - 1750	0	15	8	0	2	10	0	13	8	14
	0	13	5	0	8	11	0	12	9	13
	0	12	6	0	1	10	0	8	7	12
1750 - 1755	0	11	6	0	3	9	0	6	7	12
	0	13	7	0	3	10	0	12	0	13
	0	8	5	0	6	10	0	8	5	14
1755 - 1800	1	9	5	0	7	11	0	9	5	7
	0	10	6	0	6	7	0	4	5	8
				0	8	11				
1800 - 1805	0	11	7	0	9	7	0	6	5	8
	0	13	5	0	3	8	0	9	3	8
	0	14	8	0	12	9	0	8	7	10
1805 - 1810	0	15	10	0	4	2	0	8	8	11
	0	14	9	0	6	11	0	13	7	12
	0	11	10	0	10	11	0	3	4	10
1810 - 1815	0	13	11	0	6	9	0	6	7	5
	0	12	10	0	11	12	0	8	5	6
	0	14	9	0	6	9	0	8	6	6
1815 - 1820	0	16	11	0	9	7	0	3	1	5
	0	10	5	0	5	12	0	4	9	4
	0	13	7	0	0	10	0	10	11	6
1820 - 1825	0	14	10	0	7	11	0	6	6	5
	0	13	9	0	5	10	0	8	6	8
	0	15	8				0	10	5	10
1825 - 1830	0	13	9	0	5	9	0	6	2	12
	0	12	7	0	4	7	0	5	3	8
	0	14	8	0	9	2	0	4	6	3
1830 - 1835	0	10	6	0	9	9	0	7	4	0
	0	11	7	0	7	12	0	8	5	1
	0	14	9	0	7	5	0	7	7	6
1835 - 1840	0	5	3	0	8	6	0	8	3	4
	0	10	5	0	7	7	0	7	8	5
	0	14	12	0	3	10	0	0	0	4
							0	4	1	2
1840 - 1845	0	12	5	0	7	9	0	3	4	4
	0	13	9	0	7	8	0	3	0	1
				0	11	8				
1845 - 1850	0	16	9	0	4	7	0	4	1	2
	0	14	6	0	7	8	0	0	0	3
	0	13	7	0	8	10	0	2	1	8
							0	3	2	3
1850 - 1855	0	13	5	0	8	6	0	2	2	3
	0	14	8	0	5	11	0	0	0	5
	0	12	2	0	8	10	0	4	1	1
							0	3	2	4
1855 - 1900	0	3	1	0	5	6	0	3	4	0
	0	12	3	0	6	5	0	3	4	7
	0	8	4				0	2	1	10
1900 - 1905	0	7	3	0	6	9	0	1	0	9
	0	12	3	0	5	4	0	2	0	11
	0	11	0	0	7	5	0	0	0	5
							0	8	3	6
1905 - 1910	0	8	5	0	2	3	0	0	0	5
	0	11	7	0	3	9	0	4	3	3
	0	8	7	0	6	11	0	4	1	7
							0	5	1	3
1910 - 1915	0	3	2	0	2	2	0	3	1	1
	0	5	3	0	7	4	0	6	5	4
	0	8	3	0	5	3	0	1	0	1
	0	10	6	0	5	5	0	2	2	1
	0	10	5	0	1	1	0	6	4	1
	0	6	4	0	0	2				
1915 - 1920	0	3	3	0	0	3	0	2	0	2
	0	8	5	0	2	9	0	3	1	2
	0	10	7	0	2	5	0	5	1	0
	0	6	4	0	5	5				
1920 - 1925	0	10	4	0	6	5	0	5	3	1
	0	11	5	0	2	0	0	8	5	1

	0	4	1	0	1	5	0	4	5	0
				0	4	4				
1925 - 1930	0	12	9	0	5	4	0	6	3	2
	0	8	3	0	2	2	0	6	2	0
	0	5	4	0	2	4	0	6	2	2
	0	2	0				0	2	1	1
1930 - 1935	0	7	6	0	1	2	0	2	1	4
	0	8	4	0	2	4	0	4	4	2
	0	9	10	0	5	1	0	1	0	0
1935 - 1940	0	9	8	0	7	3	0	0	1	0
	0	3	0	0	1	3	0	6	1	0
	0	8	4	0	5	4	0	2	0	2
				0	5	0				
1940 - 1945	0	6	5	0	0	5	0	4	3	0
	0	7	3	0	3	3	0	4	1	0
	0	12	10	0	2	4	0	1	2	0
	0	10	8				0	3	0	0
1945 - 1950	0	13	4	0	2	5	0	1	1	0
	0	7	3	0	4	8	0	3	1	0
	0	3	2	0	2	4	0	2	1	0
1950 - 1955	0	5	3	0	3	1	0	1	0	1
	0	8	5	0	0	1	0	2	0	0
	0	6	4	0	1	3	0	4	0	0
	0	5	3	0	1	3	0	0	0	2
1955 - 2000	0	1	5	0	3	4	0	1	0	0
	0	3	1	0	3	3	0	1	0	0
	0	7	3	0	2	2	0	1	0	3
2000 - 2005	0	6	0	0	1	0	0	1	1	1
	0	4	2	0	0	2	0	0	0	2
	0	5	0	0	0	2	0	0	0	1
				0	1	2				
2005 - 2010	0	6	5	0	2	5	0	0	0	1
	0	5	4	0	2	1	0	0	0	1
	0	2	2	0	4	1	0	0	0	1
	0	8	4				0	0	0	1
							0	1	0	0
2010 - 2015	0	6	4	0	2	5	0	1	0	0
	0	8	1	0	2	3	0	2	0	1
	0	10	1	0	3	3	0	0	0	4
2015 - 2020	0	10	8	0	1	2	0	0	1	1
	0	4	3	0	4	5	0	1	0	0
	0	10	3	0	3	1	0	1	0	1
				0	3	3				
2020 - 2025	0	12	3	0	1	6	0	2	0	1
	0	5	1	0	1	2	0	0	0	2
	0	4	2	0	1	8				
	0	8	3							
2025 - 2030	0	3	4	0	3	4	0	2	1	0
	0	9	5	0	6	3	0	1	1	2
	0	3	0	0	1	2	0	2	0	0
				0	2	4				
2030 - 2035	0	4	2	0	3	2	0	3	1	1
	0	4	0	0	2	2	0	1	2	1
	0	3	2	0	1	3	0	0	0	3
	0	3	3							
2035 - 2040	0	8	5	0	2	2	0	1	0	2
	0	3	2	0	2	8	0	1	0	3
	0	2	3	0	4	2	0	1	0	1
2040 - 2045	0	4	0	0	2	1	0	1	0	0
	0	6	1	0	1	0	0	2	0	0
	0	1	5	0	3	1				
				0	3	4				
2045 - 2050	0	6	3	0	1	1	0	0	0	1
	0	8	4	0	1	2	0	0	1	0
	0	6	4	0	1	1	0	0	0	3
	0	3	4							
2050 - 2055	0	5	4	0	1	2	0	1	0	3
	0	1	0	0	3	3	0	0	0	2
	0	5	1	0	2	0				
2055 - 2100	0	5	6	0	2	2	0	1	0	1
	0	4	2	0	1	1	0	0	0	1
	0	2	2	0	3	3	0	0	0	2
				0	0	4				
2100 - 2105	0	4	9	0	1	3	0	0	0	1
	0	5	1	0	1	1	0	0	0	3
	0	7	3	0	2	1	0	0	0	2
	0	3	2							

2105 - 2110	0	1	1	0	2	3	0	0	1	0
	0	6	3	0	2	1	0	0	0	1
	0	5	3	0	4	1				
				0	3	6				
2110 - 2115	0	2	2	0	4	1	0	1	0	1
	0	7	5	0	1	3	0	1	0	0
	0	10	6	0	3	2	0	0	1	2
	0	8	5				0	0	0	1
							0	1	0	1
2115 - 2120	0	5	5	0	3	3	0	4	2	1
	0	2	4	0	2	1	0	7	0	0
	0	3	2	0	4	2				
2120 - 2125	0	3	1	0	2	0	0	2	0	0
	0	6	4	0	1	1	0	1	0	0
	0	3	3	0	5	5	0	4	2	1
				0	5	3				
2125 - 2130	0	3	1	0	4	2	0	4	0	2
	0	5	3	0	2	4	0	0	0	1
	0	8	3	0	0	5	0	1	2	0
	0	4	3	0	4	4				
2130 - 2135	0	5	4	0	1	4	0	0	1	0
	0	5	3	0	1	4	0	1	0	0
	0	2	1	0	1	2	0	2	0	0
2135 - 2140	0	8	5	0	1	1	0	2	1	0
	0	3	3	0	1	2	0	0	0	1
	0	4	2				0	3	0	2
	0	2	3				0	1	2	1
2140 - 2145	0	9	4	0	1	4	0	3	1	3
	0	4	3	0	3	5	0	1	0	2
	0	6	5	0	1	1	0	2	2	0
2145 - 2150	0	2	3	0	2	2	0	2	0	0
	0	2	3	0	1	2	0	1	0	0
	0	3	4	0	1	3	0	1	1	2
				0	0	2	0	0	0	1
2150 - 2155	0	5	3	0	1	0	0	5	1	1
	0	4	4	0	1	3	0	4	0	2
	0	8	6	0	3	1	0	1	0	0
	0	1	2							
2155 - 2200	0	4	1	0	1	1	0	4	0	3
	0	3	3	0	2	2	0	1	0	1
	0	7	4	0	2	2	0	1	1	3
				0	4	0	0	2	0	2
2200 - 2205	0	2	2	0	1	1	0	0	0	1
	0	2	0	0	1	2	0	2	0	1
	0	4	2	0	4	3	0	3	1	0
	0	0	2							
2205 - 2210	0	1	0	0	1	2	0	3	1	2
	0	1	0	0	3	2	0	6	5	1
	0	3	6	0	4	5				
2210 - 2215	0	1	0	0	4	6	0	4	0	3
	0	4	1	0	2	4	0	0	0	1
	0	5	2	0	2	4	0	2	3	0
				0	5	4				
2215 - 2220	0	3	2	0	1	1	0	2	0	2
	0	0	3	0	3	3	0	5	2	3
	0	6	2	0	0	3	0	2	1	1
	0	4	3							
2220 - 2225	0	2	0	0	1	1	0	2	1	0
	0	2	1	0	1	0	0	2	0	1
	0	1	2	0	0	4	0	4	1	1
				0	2	2				
2225 - 2230	0	2	1	0	0	2	0	3	2	0
	0	5	2	0	2	3	0	2	2	0
	0	3	1	0	4	1	0	2	1	2
							0	2	3	0
2230 - 2235	0	3	3	0	3	0	0	3	0	2
	0	3	1	0	3	0	0	0	0	2
	0	3	4	0	3	2	0	1	0	1
	0	4	3							
2235 - 2240	0	3	2	0	2	1	0	2	0	2
	0	1	2	0	5	5	0	2	0	0
	0	2	2	0	2	3	0	0	0	1
							0	1	0	0
2240 - 2245	0	3	3	0	2	3	0	1	0	0
	0	0	1	0	1	2	0	2	0	0
	0	2	1	0	2	1	0	2	0	1
	0	2	0							
2245 - 2250	0	2	0	0	1	3	0	1	0	0
	0	1	0	0	1	1	0	1	0	0
	0	5	1	0	1	2				

2250 - 2255	0	1	0	0	2	0	0	1	0	0
	0	2	0	0	0	1	0	1	0	0
	0	1	0	0	3	2	0	1	0	0
	0	2	2							
2255 - 2300	0	2	1	0	0	2	0	1	0	0
	0	2	2	0	1	1	0	1	0	0
	0	2	0	0	3	1	0	2	0	0
				0	2	0				

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

TIME	2Aa	2Ab	2Ac	2Ad	2Ae	2Af	2Ag	2Ah	2Ai	2Aj
1000 - 1005	0	4	4	0	1	3	0	3	2	0
	0	2	3	0	2	6	0	3	1	0
	0	8	8	0	2	1	0	1	0	0
	0	9	0				0	0	0	2
1005 - 1010	0	3	1	0	2	1	0	3	3	0
	0	9	6	0	2	2	0	1	0	2
	0	12	5	0	2	4	0	2	0	1
				0	4	4				
1010 - 1015	0	8	4	0	0	2	0	1	1	3
	0	6	3	0	0	2	0	0	0	3
	0	5	4	0	1	1	0	1	0	1
	0	13	4				0	1	0	0
1015 - 1020	0	7	3	0	4	4	0	1	1	0
	0	7	3	0	1	3	0	1	0	2
	0	4	0	0	3	3	0	2	0	1
1020 - 1025	0	8	5	0	1	2	0	1	0	0
	0	5	1	0	3	2	0	0	0	2
	0	4	3	0	0	6	0	0	0	3
				0	1	4	0	1	0	0
1025 - 1030	0	8	7	0	2	2	0	1	0	0
	0	7	4	0	2	3	0	1	1	2
	0	12	4	0	1	3	0	2	0	5
	0	6	2							
1030 - 1035	0	8	5	0	0	4	0	0	0	2
	0	11	7	0	3	2	0	1	0	1
	0	3	1	0	2	2	0	1	3	2
	0	4	8							
1035 - 1040	0	2	1	0	3	1	0	6	5	0
	0	1	1	0	1	0	0	1	0	0
	0	6	0	0	0	2	0	5	4	2
	0	6	6	0	2	2				
	0	7	4	0	1	1				
	0	5	2	0	0	5				
				0	1	1				
1040 - 1045	0	9	7	0	3	2	0	4	1	1
	0	7	5	0	0	2	0	2	0	1
	0	2	4	0	0	4	0	2	2	0
	0	2	3	0	1	2	0	1	0	0
	0	5	4	0	3	2	0	8	2	1
	0	3	3	0	1	0	0	0	1	0
	0	4	4							
1045 - 1050	0	2	1	0	0	4	0	2	4	0
	0	8	4	0	2	4	0	3	3	0
	0	2	2	0	4	1	0	3	0	0
	0	6	6	0	1	3	0	0	0	2
	0	2	0	0	1	2				
	0	7	2	0	1	0				
1050 - 1055	0	1	1	0	2	0	0	3	4	0
	0	8	4	0	6	1	0	2	0	2
	0	5	4	0	1	4	0	6	3	0
	0	8	3	0	2	2	0	2	1	2
	0	2	0	0	0	7	0	4	3	1
	0	8	6	0	3	6	0	2	0	0
1055 - 1100	0	7	1	0	0	4	0	2	2	0
	0	12	7	0	1	3	0	0	0	5
	0	8	2	0	3	2	0	0	0	2
	0	9	4	0	3	4	0	0	1	2
							0	0	0	2
1100 - 1105	0	3	3	0	4	2	0	2	2	0
	0	3	0	0	2	3	0	1	0	1
	0	5	2	0	3	4	0	2	2	0
	0	1	1	0	0	1	0	1	0	0
	0	5	4	0	0	3				
1105 - 1110	0	2	0	0	2	4	0	4	3	2
	0	5	0	0	0	2	0	1	0	0
	0	4	0	0	3	0	0	4	2	0

	0	8	4	0	3	6	0	2	0	0
	0	1	0	0	1	2	0	4	1	6
	0	9	3	0	0	3	0	0	0	1
							0	6	8	1
1110 - 1115	0	7	0	0	1	2	0	1	0	1
	0	3	3	0	4	3	0	1	0	0
	0	11	3	0	3	1	0	2	0	0
	0	8	6	0	1	2				
1115 - 1120	0	4	4	0	3	8	0	2	0	0
	0	3	1	0	0	1	0	1	0	2
	0	5	3	0	1	2	0	5	1	0
	0	9	2	0	1	2	0	1	0	0
	0	7	4	0	2	3	0	1	2	0
	0	7	4	0	2	1				
1120 - 1125	0	9	5	0	2	2	0	0	1	1
	0	10	2	0	0	1	0	2	2	0
	0	9	4	0	2	4	0	0	0	1
	0	2	2	0	2	1	0	1	0	1
	0	8	6	0	5	1	0	6	1	0
	0	3	1				0	0	0	4
	0	6	2							
1125 - 1130	0	3	4	0	2	1	0	5	0	1
	0	4	1	0	1	1	0	0	0	1
	0	4	0	0	1	0	0	2	2	0
	0	7	4				0	2	0	2
	0	6	0				0	1	1	1
	0	9	8				0	0	0	2
							0	1	0	1
1130 - 1135	0	5	0	1	0	1	0	1	1	2
	0	4	5	1	0	3	0	0	0	1
	0	3	3	0	0	2	0	1	0	6
	0	3	3	0	2	3	0	5	1	2
	0	6	4	0	0	3				
				0	1	3				
				0	1	2				
1135 - 1140	0	4	0	1	0	1	0	9	3	1
	0	1	3	1	0	3	0	3	0	1
	0	5	5	0	3	1	0	2	0	2
	0	8	4	0	1	2	0	0	0	2
	0	0	2	0	2	0	0	3	2	1
	0	8	4	0	2	3	0	0	0	2
	0	2	1							
1140 - 1145	0	6	4	0	6	4	0	3	0	0
	0	2	1	1	0	3	0	1	0	0
	0	9	2	0	2	1	0	4	1	2
	0	3	4	0	1	2	0	2	0	0
	0	9	4	0	3	7	0	6	2	5
				0	1	3	0	2	3	0
1145 - 1150	0	3	3	0	3	4	0	3	1	1
	0	5	2	0	2	1	0	4	2	1
	0	5	1	0	4	0	0	0	0	2
	0	6	2				0	0	1	0
	0	2	1				0	4	2	0
	0	5	3				0	8	2	0
	0	3	2							
1150 - 1155	0	5	3	0	3	3	0	0	0	1
	0	2	0	0	1	1	0	8	6	1
	0	7	3	0	3	0	0	3	1	1
	0	3	0	0	3	5	0	9	4	2
	0	4	3	0	2	8				
	0	6	5	0	2	4				
1155 - 1200	0	3	4	0	0	6	0	0	0	1
	0	4	2	0	1	6	0	3	1	0
	0	4	0	0	0	3	0	0	0	5
	0	7	0	0	3	2	0	5	1	4
							0	3	2	2
							0	0	0	4
1200 - 1205	0	8	3	0	3	4	0	8	1	6
	0	5	2	0	0	1	0	12	7	1
	0	4	3	0	5	9	0	9	5	5
				0	4	3	0	6	6	2
1205 - 1210	0	4	2	0	7	5	0	4	4	3
	0	8	3	0	0	3	0	4	2	0
	0	2	1	0	3	4	0	8	5	2
	0	5	1							
1210 - 1215	0	7	1	0	4	6	0	5	3	5
	0	8	1	0	4	2	0	6	3	5
	0	13	3	0	5	3	0	7	3	0
				0	5	1				
1215 - 1220	0	12	2	0	3	7	0	11	2	0
	0	10	8	0	6	4	0	8	3	1
	0	10	2	0	4	2	0	2	3	3
	0	3	0	0	1	2	0	5	3	1

	0	2	1							
1220 - 1225	0	4	2	0	4	3	0	2	2	2
	0	3	1	0	2	4	0	6	2	1
	0	7	5	0	0	3	0	0	1	0
	0	3	3	0	3	3				
	0	6	2	0	5	2				
	0	1	1	0	2	8				
1225 - 1230	0	5	3	0	1	10	0	3	1	1
	0	2	3	0	4	10	0	4	3	0
	0	7	1	0	0	5	0	5	1	0
	0	5	1	0	2	1				
	0	6	3	0	2	3				
	0	5	3	0	4	1				
1230 - 1235	0	4	4	0	4	0	0	1	1	0
	0	5	6	0	3	1	0	1	0	0
	0	4	6	0	0	5	0	3	2	0
	0	3	2	0	2	5	0	7	1	0
	0	5	3							
	0	2	3							
1235 - 1240	0	7	2	0	5	6	0	2	0	1
	0	4	5	0	1	5	0	2	0	0
	0	12	5	0	4	3	0	4	0	1
	0	5	2	0	1	5	0	5	1	0
				0	1	6				
1240 - 1245	0	9	3	0	3	10	0	7	3	3
	0	4	6	0	6	0	0	4	2	3
	0	7	2	0	3	6	0	0	0	2
	0	13	3				0	4	0	0
							0	4	1	0
1245 - 1250	0	4	1	0	7	3	0	0	0	2
	0	5	3	0	5	4	0	8	2	2
	0	6	2	0	2	5	0	0	1	0
							0	2	1	0
1250 - 1255	0	3	1	0	2	6	0	2	0	1
	0	4	3	0	5	3	0	5	3	1
	0	4	2	0	7	5	0	5	1	2
				0	4	4				
1255 - 1300	0	6	5	0	3	2	0	2	3	2
	0	11	1	0	7	8	0	8	2	0
	0	2	1	0	6	3	0	1	2	3
	0	6	2				0	3	3	0
1300 - 1305	0	3	2	0	2	5	0	7	5	0
	0	7	2	0	4	6	0	3	0	0
	0	8	2	0	5	4	0	1	0	3
	0	3	4	0	5	4				
1305 - 1310	0	2	4	0	3	2	0	7	2	2
	0	6	2	0	1	6	0	0	1	3
	0	5	1	0	0	2	0	3	1	1
	0	11	6	0	2	5	0	1	0	3
	0	6	2	0	4	4	0	4	2	1
	0	4	3	0	0	1	0	2	0	1
1310 - 1315	0	6	2	0	2	7	0	2	1	2
	0	7	5	0	6	4	0	7	3	0
	0	4	3	0	2	2	0	0	0	6
	0	8	4	0	4	8	0	3	2	1
	0	7	1	0	1	2	0	1	0	2
				0	4	3				
1315 - 1320	0	1	0	0	1	2	0	8	2	2
	0	8	6	0	0	3	0	0	0	1
	0	10	4	0	0	3	0	10	1	0
	0	7	2	0	3	1	0	2	0	1
	0	12	3	0	2	6	0	5	0	1
	0	8	1							
1320 - 1325	0	9	0	0	2	5	0	7	1	0
	0	6	2	0	4	3	0	0	0	1
	0	9	9	0	2	2	0	5	0	2
	0	4	4	0	1	2	0	0	0	3
	0	5	8	0	1	3	0	4	0	1
	0	10	2	0	2	5				
1325 - 1330	0	9	4	0	1	3	0	1	0	6
	0	6	5	0	0	2	0	3	1	0
	0	3	5	0	2	4	0	0	0	2
	0	10	1	0	2	3	0	4	1	0
	0	11	0	0	1	2	0	1	0	0
	0	10	7				0	2	0	2
1330 - 1335	0	12	3	0	5	3	0	3	0	0
	0	6	3	0	8	1	0	0	0	3
	0	2	1	0	8	2	0	5	4	2
	0	5	3	0	2	2	0	0	0	2
	0	1	0	0	0	4	0	8	2	0
	0	4	0							
1335 - 1340	0	14	4	0	1	0	0	0	0	2
	0	7	6	0	3	5	0	5	3	1
	0	8	4	0	2	1	0	2	1	0

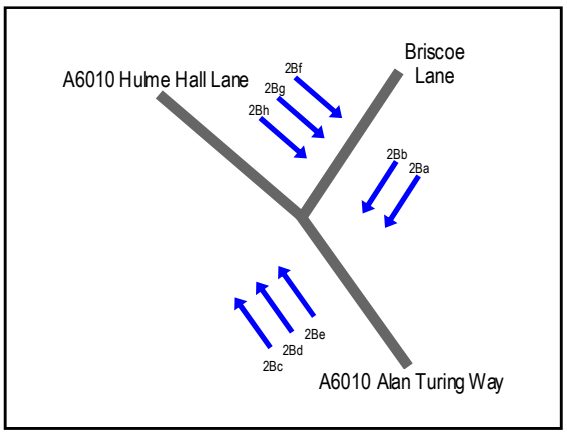
	0	9	2	0	3	1	0	3	0	2
	0	5	3	0	1	9	0	2	0	0
	0	7	2	0	3	4				
1340 - 1345	0	3	0	0	0	11	0	0	0	3
	0	4	2	0	6	10	0	2	0	0
	0	7	4	0	5	7	0	2	2	1
	0	15	6	0	3	2	0	0	0	1
1345 - 1350	0	10	4	0	6	5	0	4	4	3
	0	10	3	0	1	3	0	7	3	3
	0	7	0	0	4	4	0	2	1	0
	0	7	0	0	1	0				
				0	2	2				
1350 - 1355	0	5	2	0	4	2	0	8	1	0
	0	3	1	0	3	3	0	1	1	1
	0	5	4	0	0	5	0	8	1	1
	0	3	0	0	4	2	0	0	0	1
	0	13	1				0	4	3	1
	0	11	2				0	1	0	0
1355 - 1400	0	7	3	0	1	4	0	1	1	0
	0	5	4	0	1	2	0	1	2	3
	0	8	4	0	0	3	0	1	0	0
	0	6	3	0	5	5	0	0	0	1
	0	4	2	0	1	3	0	7	4	0
	0	12	5	0	5	4	0	2	0	2
1400 - 1405	0	8	6	0	2	6	0	6	4	1
	0	7	4	0	4	4	0	2	0	4
	0	7	2	0	3	3	0	6	3	1
	0	2	1	0	2	3	0	0	0	3
	0	5	4	0	5	1	0	7	3	1
	0	3	0	0	1	4	0	2	0	3
1405 - 1410	0	11	6	0	2	5	0	4	2	1
	0	4	3	0	4	1	0	8	1	1
	0	9	7	0	4	2	0	6	7	1
				0	3	3	0	7	3	5
1410 - 1415	0	12	8	0	4	5	0	4	1	3
	0	13	10	0	2	3	0	1	1	4
	0	15	4	0	2	1	0	0	2	1
	0	13	1	0	6	1	0	1	1	1
	0	8	0	0	5	2				
	0	7	1							
1415 - 1420	0	5	1	0	3	3	0	1	0	1
	0	2	0	0	1	3	0	0	0	2
	0	12	7	0	1	7	0	10	4	3
	0	6	3	0	3	1	0	2	0	1
	0	6	2	0	4	1	0	2	1	0
	0	7	18	0	3	5				
1420 - 1425	0	8	6	0	3	5	0	2	1	0
	0	12	3	0	4	3	0	0	1	0
	0	6	5	0	4	7	0	3	0	0
	0	7	3	0	2	3	0	2	0	0
				0	4	8				
1425 - 1430	0	7	1	0	2	6	0	0	0	1
	0	8	4	0	4	1	0	1	1	2
	0	9	4	0	6	5	0	0	0	2
	0	5	3	0	2	1	0	0	2	1
	0	8	6	0	4	0	0	3	0	0
	0	8	3							
1430 - 1435	0	12	4	0	3	3	0	1	2	0
	0	7	1	0	1	3	0	1	0	0
	0	1	0	0	3	3	0	3	5	2
	0	8	1	0	3	5	0	1	0	2
	0	9	2	0	0	3	0	1	2	0
	0	5	2	0	2	6				
1435 - 1440	0	3	0	0	2	4	0	1	0	5
	0	7	1	0	0	6	0	2	1	2
	0	1	2	0	1	2	0	2	0	0
	0	7	4	0	1	4	0	4	1	1
	0	12	11	0	4	2	0	0	0	4
	0	10	1	0	2	6				
1440 - 1445	0	8	3	0	2	3	0	3	1	2
	0	2	1	0	1	1	0	0	0	1
	0	7	3	0	1	0	0	2	0	3
	0	2	1	0	1	7	0	4	0	5
	0	12	7	0	1	3	0	2	2	0
	0	13	6							
1445 - 1450	0	12	4	0	4	2	0	0	2	0
	0	9	5	0	0	3	0	0	2	1
	0	13	2	0	1	1	0	2	0	1
	0	9	6	0	0	1	0	2	1	0
	0	9	2	0	3	2	0	1	0	0
	0	6	4				0	5	3	1
1450 - 1455	0	6	5	0	3	2	0	1	0	2
	0	7	4	0	3	5	0	2	1	0
	0	5	2	0	0	5	0	1	0	1
	0	5	2	0	1	9	0	3	0	0

	0	8	2				0	5	3	5
1455 - 1500	0	8	9	0	0	1	0	5	1	0
	0	8	3	0	3	6	0	2	0	1
	0	7	7	0	4	1	0	4	2	2
	0	1	1	0	3	3	0	1	1	0
	0	10	5	0	1	8	0	4	2	1
				0	1	3				
1500 - 1505	0	10	12	0	0	3	0	4	3	1
	0	6	2	0	3	6	0	0	0	3
	0	7	4	0	1	5	0	2	2	3
	0	10	3	0	1	8	0	2	0	2
	0	9	5	0	1	5	0	2	4	0
	0	6	4	0	1	3	0	1	0	0
1505 - 1510	0	9	0	0	4	7	0	1	1	2
	0	6	2	0	0	2	0	2	0	0
	0	10	4	0	2	7	0	1	2	0
	0	10	1	0	0	11	0	3	2	0
	0	10	2	0	1	10	0	3	0	2
	0	8	0	0	2	4				
	0	5	3							
1510 - 1515	0	6	3	0	1	1	0	0	0	1
	0	4	2	0	0	1	0	3	3	0
	0	9	2	0	2	1	0	3	2	3
	0	8	3	0	2	2	0	4	4	0
	0	2	0	0	4	1	0	0	0	1
	0	2	2	0	0	6				
1515 - 1520	0	1	1	0	2	4	0	1	1	1
	0	3	5	0	0	4	0	4	0	2
	0	4	6	0	2	4	0	4	1	2
	0	4	2	0	5	2	0	5	1	0
	0	3	0	0	1	3				
	0	6	4	0	4	1				
1520 - 1525	0	7	0	0	1	2	0	2	3	3
	0	2	1	0	0	6	0	1	1	2
	0	7	5	0	0	9	0	6	1	1
	0	4	1	0	1	3	0	1	1	1
	0	3	0	0	6	3	0	1	0	0
	0	7	2	0	3	1				
1525 - 1530	0	11	4	0	6	2	0	1	0	1
	0	7	1	0	6	2	0	3	0	1
	0	3	2	0	3	4	0	4	3	1
	0	2	1	0	7	4	0	0	1	1
	0	6	2				0	4	3	1
1530 - 1535	0	3	0	0	2	1	0	1	0	1
	0	5	2	0	0	3	0	1	1	0
	0	6	4	0	2	2	0	1	0	1
	0	7	1	0	4	3	0	2	3	1
	0	8	2	0	5	2	0	0	0	1
	0	2	1	0	4	2	0	1	0	0
1535 - 1540	0	3	1	0	3	5	0	4	2	1
	0	4	0	0	0	2	0	5	4	3
	0	3	3	0	2	3	0	2	1	0
	0	8	3	0	3	0	0	3	5	1
	0	6	3	0	5	8				
	0	3	3	0	3	3				
1540 - 1545	0	1	7	0	2	8	0	2	1	2
	0	6	5	0	0	2	0	2	0	1
	0	6	2	0	3	2	0	2	3	2
	0	8	5	0	3	2	0	1	0	3
	0	2	1	0	1	1				
				0	3	4				
1545 - 1550	0	3	2	0	1	2	0	0	0	2
	0	6	1	0	2	5	0	0	1	1
	0	5	1	0	1	7	0	6	2	2
	0	9	6	0	2	2	0	0	0	2
	0	8	4	0	0	3	0	3	0	4
	0	10	5				0	2	0	2
1550 - 1555	0	4	0	0	0	1	0	1	1	0
	0	1	2	0	3	8	0	1	0	0
	0	3	3	0	3	13	0	2	0	1
	0	3	0	0	4	5	0	0	0	3
	0	5	5	0	3	3	0	2	0	0
	0	5	1	0	1	5	0	3	4	2
1555 - 1600	0	4	2	0	1	4	0	3	0	0
	0	7	5	0	0	1	0	2	2	1
	0	3	3	0	1	0	0	6	1	6
	0	9	5	0	1	1	0	3	0	1
	0	6	3	0	3	3				
				0	1	2				
1600 - 1605	0	11	7	0	1	5	0	1	4	3
	0	6	3	0	4	2	0	2	1	2
	0	2	2	0	1	0	0	0	2	0
	0	10	4	0	0	1	0	1	0	1
	0	5	4	0	3	2				
	0	6	2							

1605 - 1610	0	7	5	0	1	0	0	4	3	0
	0	6	0	0	1	9	0	0	0	3
	0	10	8	0	4	4	0	6	3	7
	0	9	7	0	3	2	0	7	1	1
1610 - 1615	0	10	6	0	5	5	0	0	3	1
	0	10	5	0	3	3	0	3	1	0
	0	12	2	0	2	7	0	7	0	2
	0	10	6				0	5	3	0
1615 - 1620	0	4	3	0	3	10	0	11	7	2
	0	5	0	0	3	4	0	5	2	3
	0	12	3	0	3	5	0	6	3	1
1620 - 1625	0	6	4	0	2	5	0	4	2	4
	0	6	2	0	6	6	0	2	3	2
	0	10	3	0	4	3	0	4	0	3
				0	7	5				
				0	4	4				
1625 - 1630	0	7	3	0	6	4	0	1	2	0
	0	5	3	0	4	5	0	7	3	1
	0	6	2	0	4	9	0	4	1	3
	0	3	0				0	3	2	1
1630 - 1635	0	5	3	0	3	2	0	6	2	2
	0	7	1	0	2	3	0	3	3	2
	0	10	5	0	5	2	0	1	1	0
				0	5	5				
1635 - 1640	0	3	1	0	4	2	0	12	6	3
	0	3	2	0	5	6	0	1	1	0
	0	8	7	0	5	9				
1640 - 1645	0	12	5	0	3	11	0	1	0	4
	0	10	8	0	2	8				
	0	9	8	0	5	10				
1645 - 1650	0	5	3	0	2	9	0	11	2	2
	0	5	4	0	7	9	0	5	3	0
	0	10	4	0	3	3	0	5	2	0
1650 - 1655	0	7	1	0	5	4	0	1	0	2
	0	3	0	0	5	3	0	2	2	0
	0	8	4	0	2	5	0	3	0	1
							0	0	1	1
1655 - 1700	0	10	6	0	3	9	0	0	0	3
	0	7	4	0	1	5	0	3	0	0
	0	9	6							

Etihad
Queue Length Survey

Site 2B
Briscoe Lane
A6010 Alan Turing Way
A6010 Hulme Hall Lane



Lat/Long
lat 53.489845° lon -2.201292°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)

TIME	2Ba	2Bb	2Bc	2Bd	2Be	2Bf	2Bg	2Bh
1600 - 1605	3	6	0	0	8	0	9	3
	5	6	0	0	4	0	7	6
	5	2	0	0	5	0	9	2
			0	0	4			
			0	0	1			
			1	0	0			
1605 - 1610	3	7	0	0	2	0	9	3
	10	4	0	0	2	0	14	4
	2	3	0	0	3	0	15	1
			0	0	2			
			0	0	6			
			0	0	5			
			0	0	12			
			0	0	7			
1610 - 1615	4	1	0	0	6	0	7	5
	5	8	0	0	6	0	12	4
	7	5	0	0	5	0	14	2
			1	0	7			
			0	0	5			
			0	0	8			
1615 - 1620	3	5	0	0	5	0	16	2
	7	6	1	0	6	0	14	2
	5	7	0	0	5			
			4	0	5			
			0	0	6			
1620 - 1625	4	7	1	0	3	0	15	1
	6	2	9	2	7	0	14	4
	5	7	0	0	5	0	14	2
			2	0	5			
			3	0	5			
			0	0	4			
1625 - 1630	6	4	0	0	2	0	14	2
	3	0	0	1	6	0	11	2
	3	6	9	0	6	0	12	4
			1	0	8			
			0	4	6			
			0	0	8			
			3	0	1			
			0	0	1			
1630 - 1635	6	5	1	1	5	0	13	1
	4	4	0	0	6	0	9	2
	2	3	4	1	6	0	8	2
			0	0	5			
			9	0	10			
1635 - 1640	4	3	0	0	4	0	13	1
	5	2	0	0	2	0	11	1
	2	4	7	6	5	0	12	1
			0	0	2			
			0	0	8			
			3	0	4			
			0	0	2			
			0	0	8			
1640 - 1645	4	3	0	0	2	0	14	1

	4	5	0	0	3	0	13	3
	5	3	6	1	10	0	13	5
			2	0	5			
			4	3	8			
			4	3	7			
			3	0	5			
1645 - 1650	8	5	2	0	13	0	13	0
	5	6	0	0	7	0	12	5
	8	7	0	0	8	0	14	0
			6	1	9			
			9	0	4			
1650 - 1655	3	4	3	2	5	0	14	4
	4	6	9	0	5	0	13	4
	4	6	5	2	7	0	9	1
			5	0	6			
			2	0	8			
			5	0	4			
1655 - 1700	5	5	3	0	6	0	16	2
	6	7	2	0	2	0	14	2
	1	5	0	0	7			
			0	0	2			
			0	0	6			
			3	0	6			
			0	0	3			
1700 - 1705	4	7	6	3	8	1	12	3
	5	8	6	0	4	0	11	2
	7	8	5	4	7	0	9	1
			9	0	4			
			3	0	8			
			11	0	8			
1705 - 1710	5	6	9	0	4	0	9	1
	4	4	13	0	7	0	11	3
			6	4	6	0	14	2
1710 - 1715	5	1	7	0	4	0	14	2
	9	4	3	0	9	0	11	2
	8	2	9	0	2	1	16	4
			6	0	8			
1715 - 1720	5	5	0	0	5	0	13	2
	1	3	3	0	11	0	15	4
	1	6	12	0	4	0	10	3
			5	0	11			
			15	0	4			
			5	0	8			
			2	7	3			
			2	1	7			
1720 - 1725	9	7	3	2	7	0	14	2
	6	0	2	0	9	0	16	2
	2	6	4	0	2	0	13	1
			0	0	2			
			0	0	5			
			0	0	2			
			3	1	9			
1725 - 1730	5	8	3	4	0	0	16	3
	8	5	0	0	5	0	15	0
	6	2	13	0	3	0	12	3
			0	0	3			
			8	0	1			
			0	0	1			
			0	0	4			
1730 - 1735	6	7	9	0	1	0	11	0
	8	5	0	0	4	0	11	1
	7	4	1	0	8	0	14	3
			2	0	3			
			6	0	10			
			7	0	1			
			0	0	2			
1735 - 1740	3	4	5	0	9	0	11	2
	7	6	3	0	3	0	10	3
	6	4	3	0	7			
			0	0	6			
			0	0	9			
			5	0	1			
			0	0	1			
1740 - 1745	4	7	3	0	6	0	15	3
	4	3	6	6	0	0	11	2

			0	0	2	0	9	5
			4	0	5			
			6	0	0			
			0	0	2			
			0	0	3			
			0	0	8			
			5	0	0			
1745 - 1750	6	5	0	0	3	0	11	4
	3	7	3	2	9	0	12	4
	6	4	3	0	3	0	14	2
			6	0	8			
			5	0	0			
			0	0	6			
			2	0	8			
1750 - 1755	5	7	0	0	7	0	10	4
	3	4	0	0	4	0	11	3
	3	2	2	1	5	0	12	3
			0	0	7			
			0	0	2			
			0	0	9			
			0	0	4			
			2	0	5			
1755 - 1800	5	0	0	0	7	0	10	4
	5	4	0	0	1	0	11	1
	5	3	0	0	7	0	12	2
			0	0	5			
			0	0	9			
			0	0	10			
			0	0	2			
			4	2	8			
1800 - 1805	4	5	0	0	8	0	8	2
	5	7	3	0	7	0	17	2
	7	6	3	0	5	0	13	3
			1	0	12			
			3	0	3			
			3	0	12			
1805 - 1810	5	2	2	0	10	0	2	2
	6	2	0	0	4	0	13	2
	6	9	0	0	8			
			0	0	8			
			0	0	4			
1810 - 1815	6	3	0	0	10	0	15	2
	5	2	2	0	0	0	10	1
	4	3	0	0	5	0	13	2
			3	0	10			
			0	0	3			
			0	0	5			
			0	0	6			
			0	0	6			
1815 - 1820	9	0	0	0	4	0	7	1
	3	2	8	0	6	0	10	1
	2	0	3	0	5	1	17	1
	3	5	0	0	4			
1820 - 1825	8	3	1	0	8	0	16	6
	6	7	0	0	4	0	11	3
			0	0	5	0	13	3
			3	0	9			
			3	0	9			
			0	0	5			
			7	0	0			
1825 - 1830	3	1	0	0	5	0	9	1
	6	3	0	0	6	0	2	4
	5	0	0	0	12	0	4	1
			0	0	6			
			0	0	10			
			0	0	5			
			2	0	1			
			0	0	9			
1830 - 1835	6	5	0	0	2	0	9	1
	7	1	1	0	0	0	8	2
	12	7	0	0	4	0	5	2
			0	0	1			
			1	0	0			
			0	0	5			
			3	2	5			
1835 - 1840	9	1	2	0	7	0	7	1

	5	5	0	0	2	0	9	1
	7	6	4	0	6	0	10	1
			0	0	3			
			0	0	3			
			0	0	4			
			0	0	5			
			0	0	2			
			0	0	6			
1840 - 1845	6	2	0	0	3	0	15	2
	5	4	0	0	2	0	6	3
	7	9	3	0	9	0	8	5
			0	0	3			
			0	0	3			
			2	0	3			
			0	0	1			
			5	0	5			
1845 - 1850	2	4	0	0	12	0	8	5
	8	9	0	0	2	0	7	4
	6	4	2	0	8	0	9	4
			0	0	2			
			0	0	6			
			3	1	4			
			0	0	2			
			0	0	5			
1850 - 1855	6	8	0	0	4	0	5	1
	4	6	0	0	1	0	11	2
	7	0	0	0	2			
			5	0	5			
			0	0	3			
			0	0	2			
			1	0	6			
			0	0	2			
			0	0	4			
1855 - 1900	6	3	1	0	2	1	9	4
	7	1	0	0	5	0	6	1
	5	4	0	0	1	0	8	5
			2	2	2			
			0	0	4			
			0	0	4			
			0	0	1			
			0	0	2			
1900 - 1905	7	4	0	0	9	0	5	4
	4	1	0	0	5	0	6	0
	6	3	3	2	0	0	6	4
			0	0	10			
1905 - 1910	7	0	0	0	3	0	10	6
	6	1	3	0	7	0	12	3
	9	0	0	0	3	0	10	4
			0	0	3			
			2	0	0			
			0	0	3			
1910 - 1915	0	2	1	0	1	0	5	3
	6	1	0	0	2	0	3	2
	3	3	6	0	5	0	7	7
	2	0	0	0	2	0	6	3
	1	1	2	0	1	0	3	4
			3	0	2	0	4	4
			0	0	3			
			0	0	3			
			4	0	7			
1915 - 1920	2	2	0	0	1	0	4	3
	6	2	4	0	9	0	6	7
	2	2	0	0	1	0	9	4
			3	1	7			
			0	0	3			
			1	0	2			
			0	0	1			
1920 - 1925	2	6	4	0	1	0	9	3
	5	4	0	0	3	0	2	1
	2	0	3	0	5	0	3	0
	5	3	2	0	1	0	3	1
			0	0	6			
1925 - 1930	2	2	4	0	6	0	5	3
	5	2	0	0	4	0	5	4
	3	0	3	1	3	0	5	1
			0	0	2			
			0	0	7			

1930 - 1935	4	1	0	0	5	0	6	4
	0	3	3	1	3	0	4	2
	6	3	0	0	2	0	2	1
	3	2	0	0	3			
			1	1	3			
			0	0	2			
			0	0	2			
1935 - 1940	1	0	0	0	2	0	5	0
	2	2	0	0	3	0	4	2
	4	3	0	0	3	0	4	0
			2	1	1	0	0	1
			0	0	2			
			3	0	1			
			0	0	1			
			0	0	1			
1940 - 1945	3	1	0	0	3	0	9	2
	2	3	0	0	5	0	4	3
	2	2	0	0	3	0	4	3
			1	0	6			
			0	0	1			
			4	0	3			
			7	0	6			
			0	0	2			
1945 - 1950	1	2	6	1	1	0	7	3
	1	2	0	0	3	0	10	3
	1	0	0	0	1	0	7	6
	8	4	0	0	2			
1950 - 1955	4	2	3	0	2	0	2	0
	2	1	0	0	2	0	3	4
	3	5	2	1	1	0	4	4
			0	0	3	0	5	4
			0	0	2			
			1	0	1			
1955 - 2000	3	1	0	0	1	0	4	1
	4	1	1	0	1	0	4	2
	2	1	0	0	1	0	4	1
	5	4	1	0	1			
			0	0	2			
			4	0	3			
			0	0	2			
2000 - 2005	3	2	1	0	0	0	5	3
	0	2	3	0	3	0	3	2
	4	3	1	0	4	0	5	1
						0	6	2
2005 - 2010	4	3	0	0	1	0	7	1
	3	1	3	0	1	0	5	1
	3	3	0	0	2	0	4	2
			0	0	2			
			2	1	0			
			0	0	8			
			0	0	1			
			2	0	5			
2010 - 2015	5	4	0	0	3	0	4	1
	2	1	3	0	6	0	4	1
	4	3	0	0	5	0	3	0
	3	2	0	0	3			
			1	0	4			
			0	0	6			
			6	0	7			
2015 - 2020	2	0	0	0	1	0	5	1
	0	1	1	0	2	0	6	1
	2	3	1	1	0	0	3	0
			0	0	1	0	1	1
			4	0	2			
2020 - 2025	3	0	0	0	1	0	3	0
	2	3	0	0	1	0	6	2
			0	0	3			
			1	0	0			
2025 - 2030	4	2	0	0	1	0	4	1
	0	2	3	0	5	0	4	0
	5	2	0	0	2	0	6	1
	5	0	1	0	1			
			0	0	2			
			0	0	2			

2030 - 2035	0	2	1	1	1	0	5	0
	4	1	2	0	3	0	3	0
	4	1	0	0	2	0	2	1
			0	0	1	0	6	1
			0	0	1			
2035 - 2040	3	3	5	1	4	0	3	1
	3	1	0	0	5	0	5	1
	1	1	1	0	0	0	4	0
			0	0	7			
			0	0	1			
			1	0	1			
2040 - 2045	3	2	2	0	0	0	2	0
	6	1	0	0	2	0	3	0
	5	6	0	0	3	0	4	1
			3	2	2	0	9	1
			2	0	2			
2045 - 2050	3	1	0	0	5	0	1	0
	1	2	5	0	7	0	3	1
	6	2	0	0	1			
			1	0	8			
2050 - 2055	1	4	1	0	0	0	2	1
	3	3	0	0	5	0	3	1
			0	0	3	0	5	2
			0	0	2	0	2	0
			1	0	1			
2055 - 2100	1	0	10	0	2	0	1	2
	2	1	0	0	3	0	3	1
			1	0	5	0	8	1
			0	0	3			
			2	0	1			
2100 - 2105	1	0	3	0	3	0	3	1
	0	1	0	0	2	0	3	0
	2	0	0	0	2	0	3	1
			6	0	2			
			2	1	1			
2105 - 2110	2	0	3	0	3	0	8	3
	4	1	5	1	4	0	5	1
			1	0	3	0	5	3
2110 - 2115	1	3	7	0	4	0	3	2
	2	1	9	0	6	0	2	1
	1	1	0	0	2	0	13	3
	0	3	6	0	4			
2115 - 2120	3	2	2	1	5	0	3	0
	1	2	0	0	8	0	2	1
			0	0	3	0	3	0
2120 - 2125	1	4	3	0	4	0	4	0
	2	1	2	0	1	0	7	0
	2	2				0	3	0
2125 - 2130	1	2	2	0	3	0	2	0
	1	1	0	0	4	0	5	0
	2	0	2	0	5	0	6	1
	1	2	0	0	1			
			2	0	1			
			0	0	4			
			0	0	3			
2130 - 2135	2	2	4	0	3	0	6	0
	1	0	0	0	4	0	4	2
	5	2	0	0	6	0	4	2
						0	2	0
2135 - 2140	1	2	1	1	0	0	2	1
	2	2	3	0	1	0	1	0
			0	0	1			
2140 - 2145	0	2	3	0	1	0	3	2
	3	1	0	0	1	0	5	1
	0	3	1	0	0	0	5	0
	4	1	0	0	1			
2145 - 2150	2	1	1	0	4	0	3	0
	3	1	1	0	0	0	2	0
	2	1	1	0	2	0	5	0
			0	0	2	0	3	1

			1	1	2			
2150 - 2155	1	4	3	1	4	0	2	2
	1	2	5	2	2	0	3	0
	1	0	0	0	1			
2155 - 2200	0	2	1	0	2	0	1	0
	2	3	0	0	1	1	3	1
	3	0	3	0	1	0	3	2
			0	0	1	0	1	1
			2	0	4			
			0	0	4			
2200 - 2205	4	1	1	0	0	0	2	1
	1	0	0	0	1	0	2	0
	1	0				0	4	2
2205 - 2210	3	1	0	0	2	0	4	0
	1	1	1	0	1	0	4	2
	1	1	0	0	2	0	3	2
			4	0	3			
			0	0	2			
2210 - 2215	2	1	0	0	1	0	4	1
	2	2	0	0	1	0	5	0
	0	1	0	0	1	0	2	2
	1	1	1	0	0			
2215 - 2220	2	0	0	0	4	0	2	0
	2	3	1	0	0	0	4	0
	2	2	0	0	1	0	4	0
	2	2	3	0	3			
2220 - 2225	3	1	0	0	2	0	2	1
	1	1	2	0	3	0	4	0
			0	0	1	0	6	1
			1	1	1	0	3	0
			0	0	4			
2225 - 2230	0	1	1	0	1	0	2	0
	2	0	3	0	1	0	7	1
			0	0	3	0	1	0
			1	0	2			
2230 - 2235	1	1	1	0	0	0	3	0
	3	0	0	0	1	0	2	0
	1	2				1	2	0
2235 - 2240	0	1	1	0	0	0	5	0
	3	0	0	0	3	0	2	2
	3	2	1	0	0	0	3	1
			0	0	3			
			0	0	3			
			2	0	0			
			1	1	0			
2240 - 2245	1	0	0	0	2	0	5	0
	0	1	0	0	1	0	4	0
	1	0	0	0	2	0	3	0
	1	2	1	1	0			
			2	0	1			
2245 - 2250	4	0	0	0	3	0	4	0
	2	2	0	0	1	0	1	1
						0	3	0
						0	3	0
2250 - 2255	3	0	0	0	1	0	3	1
	3	1	0	0	1	0	4	0
			0	0	1			
			0	0	1			
			0	0	2			
2255 - 2300	1	0	1	0	0	0	4	0
	3	1	0	0	2	0	3	0
	2	1	1	0	1	0	1	0
			0	0	3			
			0	0	1			

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

TIME	2Ba	2Bb	2Bc	2Bd	2Be	2Bf	2Bg	2Bh
1000 - 1005	2	2	0	0	2	0	12	9
	2	2	7	6	6	0	3	1
	3	2	0	0	7			
			4	0	0			
			0	0	1			
			0	0	1			
1005 - 1010	5	3	1	0	0	0	3	1
	7	4	0	0	1	0	2	1
	6	0	3	1	0	0	7	2
			0	0	2	0	3	2
			2	1	1			
			0	0	2			
			7	2	2			
1010 - 1015	1	4	0	0	1	0	3	0
	0	2	0	0	2	0	3	1
	7	3	1	0	6	0	6	1
	3	2	0	0	1			
			4	1	1			
			6	4	4			
1015 - 1020	11	1	2	0	2	0	7	2
	7	1	0	0	1	0	9	0
	5	5	0	0	2	0	6	2
			4	3	6	0	8	1
			0	0	1			
			0	0	2			
			1	0	5			
1020 - 1025	2	4	4	3	4	0	6	2
	3	1	2	0	0	0	7	1
	1	4	3	2	5	0	5	0
			0	0	1			
			0	0	1			
			3	1	4			
1025 - 1030	1	4	0	0	1	0	4	1
	3	7	0	0	2	0	2	2
	1	1	5	2	5	0	5	2
	5	3	0	0	1			
			7	1	3			
			0	0	1			
			5	1	4			
			0	0	1			
1030 - 1035	3	4	3	0	0	0	6	1
	3	1	0	0	2	0	2	0
	1	0	0	0	2	0	3	1
	1	1	8	2	2	0	3	1
			2	1	2			
			1	0	0			
			0	1	0			
1035 - 1040	1	0	0	1	0	0	1	2
	2	0	6	0	1	0	12	7
	6	4	0	0	1	0	6	5
	1	1	0	0	2	0	6	2
	2	2	3	2	0	0	4	1
	0	3	0	0	1	0	5	5
	3	2	5	5	4			
1040 - 1045	3	2	0	0	1	0	2	1
	5	2	1	0	1	0	6	4
	0	2	0	0	4	0	4	4
	5	1	0	0	1	0	7	2
	5	2	4	0	5	0	3	0
	1	1	0	0	1	0	8	6
			2	0	0			
			0	0	2			
			7	2	2			
1045 - 1050	0	4	0	0	1	0	4	3
	0	2	2	0	3	0	5	3
	0	2	1	0	0	0	4	0
	1	0	0	0	2	0	5	3
	3	2	2	0	0	0	3	3
	0	2	1	1	1	0	3	1
						0	2	3
1050 - 1055	0	1	4	4	0	0	5	3

	1	2	0	0	1	0	1	3
	0	3	0	2	3	0	6	3
	3	3	5	1	3	0	5	4
	6	3	6	3	1	0	4	4
	1	0				0	5	2
1055 - 1100	2	6	0	0	1	0	8	3
	9	3	3	3	4	0	4	1
	9	5	0	0	1	0	4	1
	5	2	2	1	3			
			3	0	3			
1100 - 1105	0	3	3	2	5	0	5	2
	3	0	0	0	1	0	6	1
	5	1	1	0	1	0	8	6
	2	2	0	0	3	1	4	4
	3	2	1	3	4	0	4	5
	5	1				0	2	1
1105 - 1110	0	3	0	0	2	0	5	5
	2	3	1	0	2	0	2	1
	3	0	0	0	1	0	5	2
	5	1	1	0	1	0	3	3
	3	1	0	0	1	0	8	5
	3	5	3	3	1	0	3	3
			0	0	1			
			3	3	5			
			0	0	3			
			0	0	1			
1110 - 1115	1	1	0	0	2	0	10	11
	0	1	0	0	5	0	5	5
	5	5	0	0	1	0	4	4
			0	0	1	0	3	4
			0	0	3			
			0	0	1			
1115 - 1120	3	1	1	0	2	0	3	4
	0	2	0	0	2	0	3	1
	7	3	2	1	2	0	4	4
	1	0	0	0	1	0	4	1
	1	5	3	1	0	0	5	2
			4	2	2	0	2	3
			0	0	1			
			0	0	2			
			3	4	3			
1120 - 1125	5	4	4	2	3	1	5	2
	5	2	3	2	1	0	2	4
	5	4	3	4	3	0	5	3
	2	2	0	0	1	0	6	2
			0	0	1			
			2	1	4			
			0	0	1			
1125 - 1130	1	1	1	1	0	0	6	4
	6	2	0	0	2	0	2	6
	1	0	1	0	3	0	7	5
	6	1	2	0	0	1	3	3
	3	4	0	0	2	0	7	6
	1	2	4	2	5	0	8	3
			0	0	3	0	5	3
			1	0	1			
			0	0	2			
			2	1	5			
			0	0	2			
1130 - 1135	3	0	0	0	4	0	2	0
	1	1	0	0	2	0	4	1
	3	1	5	4	4	0	3	1
	5	3	3	4	2	0	1	3
	6	1	0	2	0	0	7	0
	0	1	2	1	4	0	2	1
			1	0	0			
1135 - 1140	3	0	0	0	2	0	7	5
	3	2	3	0	4	0	9	2
	2	0	0	0	2	0	2	2
	0	4	3	1	1	0	3	1
	0	3	0	0	1	0	4	3
	7	4	3	1	5	0	5	5
			0	0	1			
			5	2	1			
1140 - 1145	1	1	0	0	2	0	5	0
	1	4	1	3	4	0	2	2
	2	2	0	0	1	0	2	5

	0	3	1	0	2	0	5	6
	3	0	0	0	2	1	9	2
	4	0	2	0	2	0	5	5
			0	0	1			
			8	1	7			
1145 - 1150	1	5	0	0	1	0	3	4
	2	1	0	2	3	0	6	4
	4	4	0	0	4	0	7	2
	2	1	0	0	1	0	4	2
			1	2	4	0	5	5
			0	0	1	0	4	4
			0	0	3	0	5	4
			4	1	2			
			2	2	0			
1150 - 1155	1	1	0	0	1	0	2	0
	5	1	0	0	2	0	7	6
	0	3	4	3	1	0	4	3
	8	4	0	0	3	0	16	4
			0	0	2	0	9	4
			3	3	5	0	14	5
			0	0	2			
1155 - 1200	4	2	1	2	1	0	16	1
	7	2	0	0	1	0	4	1
	5	6	0	0	2	0	2	0
	2	7	3	2	2			
			0	0	7			
			0	0	1			
1200 - 1205	7	0	1	0	1	0	5	3
	3	4	0	0	6	0	4	1
	1	3	1	1	4	0	8	1
			0	0	2	0	6	1
			0	0	4			
			0	1	2			
1205 - 1210	11	2	0	0	3	0	3	3
	5	1	3	1	0	0	2	1
	10	0	0	0	7	0	4	0
	5	6	1	0	2			
			0	0	4			
1210 - 1215	4	2	0	0	6	0	7	5
	2	4	1	1	8	0	4	1
	11	8	0	0	2	0	3	1
			3	0	0	0	1	0
			0	0	2			
			0	0	8			
			7	2	3			
1215 - 1220	1	3	3	0	2	0	5	2
	8	4	0	0	5	0	3	1
	7	1	4	2	0	0	5	2
	5	0	0	0	7	0	4	1
	4	3	3	2	2			
			0	0	1			
			2	1	4			
			0	0	2			
			2	1	1			
1220 - 1225	3	3	2	1	1	0	10	3
	1	2	1	0	3	0	2	0
	3	1	8	2	3	0	5	2
	2	0	0	0	2	0	0	1
	2	2	0	0	3	0	10	6
			0	0	2	0	11	4
			3	1	1	0	8	1
			0	0	2			
1225 - 1230	1	0	2	2	5	0	3	3
	1	0	0	0	2	0	3	4
	3	6	1	0	0	0	3	2
	1	4	0	0	3	0	3	3
	7	2	0	0	1	0	3	2
	3	5	0	0	2	0	7	3
			3	0	3			
			1	0	0			
			2	1	2			
1230 - 1235	0	3	0	0	2	0	7	3
	2	0	0	0	2	0	1	1
	4	0	0	3	1	0	1	4
	3	5	0	0	2	0	4	2
	2	1	2	1	2	0	4	5
	0	3	0	0	2	0	8	3

	0	3	4	3	3			
1235 - 1240	5	8	0	0	2	0	9	6
	7	5	0	0	2	0	3	5
	4	5	0	0	5	0	8	2
			5	2	3	0	8	1
			0	0	1			
			2	0	3			
			0	0	8			
1240 - 1245	4	2	1	0	1	0	11	2
	6	3	0	0	6	0	3	1
	5	10	1	2	0	0	10	3
			0	0	5			
			0	0	1			
			3	0	0			
1245 - 1250	2	0	0	0	4	0	3	3
	4	3	3	0	0	0	4	4
	3	1	0	0	2	0	6	1
	7	1	0	0	2			
			2	2	1			
			0	0	2			
			1	2	3			
			0	0	4			
			0	0	6			
1250 - 1255	6	3	0	0	6	0	8	3
	7	2	3	0	0	0	5	1
	7	5	0	0	2	0	4	2
			2	2	0	0	6	0
			0	0	7			
			3	0	2			
1255 - 1300	1	8	0	0	4	0	3	0
	8	3	3	0	0	0	6	3
	7	3	0	0	9	0	6	0
	8	3	0	0	6			
			0	0	7			
			4	1	0			
1300 - 1305	5	4	0	0	6	0	4	4
	2	4	1	0	3	0	4	0
	3	1	0	0	8	0	2	2
			2	0	3	0	1	2
			3	0	2	0	5	5
			2	1	5			
			0	0	3			
1305 - 1310	6	1	0	0	1	0	11	4
	3	1	6	3	5	0	4	2
	7	2	0	0	2	0	1	0
	0	3	3	1	2	0	3	3
	2	2	0	0	2	0	2	2
	7	1	2	2	7			
			0	0	1			
1310 - 1315	0	1	0	0	2	0	2	2
	6	4	5	0	1	0	3	2
	2	1	0	0	1	0	2	1
	3	1	1	0	0	0	7	0
	0	1	0	0	3	0	2	3
	4	1	1	1	6	0	2	0
			0	0	1			
			4	1	3			
			0	0	1			
1315 - 1320	6	3	6	3	4	0	3	3
	1	2	0	0	2	0	7	1
	0	4	4	0	5	0	7	5
	3	0	0	0	2	0	11	5
	2	1	5	0	3	0	3	2
			0	0	2	0	5	1
			0	0	3			
1320 - 1325	3	2	11	0	8	0	4	2
	3	1	0	0	1	0	5	2
	6	2	0	0	1	0	4	2
	3	2	5	2	6	0	7	1
	0	7	0	0	1	0	12	2
	5	3	0	0	2	0	6	2
			2	0	8			
1325 - 1330	2	4	0	0	1	0	4	4
	2	1	1	2	3	0	1	0
	5	1	0	0	3	0	7	3

	3	2	0	0	2	0	4	2
	1	5	0	0	1	0	4	2
	2	2	8	1	2			
			0	0	2			
			3	5	6			
1330 - 1335	2	4	0	0	1	0	3	0
	5	0	0	0	1	0	10	4
	3	3	2	0	1	0	5	1
	2	1	0	0	1	0	4	2
	0	1	0	0	4	0	6	3
	0	2	0	0	2	0	6	4
			2	0	0			
1335 - 1340	0	1	7	0	1	0	8	4
	1	2	5	1	2	0	7	5
	1	3	0	0	3	0	6	5
	2	4	0	0	2	0	8	8
	1	2	7	2	2	0	4	5
	2	1	0	1	2	0	10	7
1340 - 1345	2	1	0	0	4	0	7	4
	4	1	4	1	2	0	10	6
	6	4	4	4	5	0	8	7
	9	5	5	4	6	0	7	6
			0	0	3			
1345 - 1350	0	4	1	0	1	0	3	6
	5	4	0	0	1	0	6	1
	1	5	0	0	3	0	6	5
	1	3	5	2	4	0	4	0
	2	1	0	0	2	0	5	3
			1	0	1			
			1	0	0			
			0	0	3			
1350 - 1355	0	1	4	1	5	0	8	6
	0	3	1	0	1	0	3	2
	2	4	0	0	3	0	5	4
	3	1	2	2	4	0	9	6
	2	2	0	0	2	0	4	2
			7	0	6	0	4	4
			0	0	2			
1355 - 1400	1	2	2	2	1	0	2	0
	3	0	0	0	1	0	7	4
	2	5	2	1	0	0	5	5
	2	2	4	1	0	0	8	3
	4	0	2	2	1			
	4	4	0	0	1			
	0	4	1	0	1			
			5	3	4			
1400 - 1405	1	5	0	0	2	0	9	10
	1	3	2	3	6	0	11	5
	2	0	0	0	2	0	7	7
	1	1	1	1	0	0	9	2
	4	0	0	0	2	0	5	4
	2	3	5	0	6	0	14	4
			0	0	2			
			1	0	1			
			0	0	3			
			4	1	3			
			3	0	0			
1405 - 1410	1	2	4	1	1	0	6	4
	5	5	0	0	1	0	7	3
	2	2	10	0	4	0	5	3
			0	0	1			
			0	0	4			
			0	0	3			
			0	0	1			
			0	0	1			
			0	0	2			
1410 - 1415	3	3	0	0	1	0	1	1
	7	2	0	0	1	0	9	4
	0	6	7	2	3	0	5	1
	3	0	0	0	2	0	10	3
	3	2	2	0	2	0	3	3
			0	0	1			
			3	0	2			
1415 - 1420	4	1	0	0	2	0	12	2
	1	2	2	0	4	0	5	2
	3	2	0	0	2	0	8	3
	8	0	0	0	5	0	3	1
	1	5	0	0	4	0	11	5

	1	4	9	5	4	0	11	0
			0	0	2			
			0	0	6			
1420 - 1425	1	0	0	0	2	0	15	7
	0	1	3	3	4	0	7	1
	3	3	1	0	2	0	14	8
	4	4	1	2	2	0	6	4
	2	0	0	0	2	0	10	2
	0	3	2	0	1	0	11	1
			0	0	1			
1425 - 1430	0	1	0	0	1	0	7	4
	2	1	0	0	2	0	1	0
	2	3	2	0	6	0	11	2
	0	3	0	0	2	0	4	0
	11	0	0	0	1	0	3	2
			0	0	5			
			0	0	4			
			0	0	1			
1430 - 1435	1	5	0	0	1	0	8	6
	6	1	0	0	3	0	2	0
	3	3	2	0	4	0	8	5
	3	4	1	0	1	0	2	0
	2	0	0	0	2	0	5	4
	1	1	2	0	0	0	3	3
1435 - 1440	1	0	0	0	2	0	6	4
	1	0	7	0	3	0	2	2
	5	4	1	0	1	0	11	10
	4	2	0	0	1	0	9	6
	0	1	5	0	0	0	9	7
	2	4	0	0	1			
			0	0	2			
			9	1	5			
1440 - 1445	1	0	0	0	2	0	5	1
	0	1	0	0	2	0	12	10
	5	0	1	1	6	0	7	2
	5	3	0	0	1	0	9	4
	1	3	1	0	1	0	3	1
			0	0	2	0	11	8
			3	2	2			
			0	0	1			
			5	2	2			
1445 - 1450	4	1	3	2	2	0	9	4
	2	2	12	4	6	0	10	9
	0	1	0	0	1	0	7	4
	2	5	0	1	0	0	6	2
	2	5	0	0	2	0	4	4
	1	2	6	4	6	0	5	6
			0	0	2	0	13	4
			2	2	5			
1450 - 1455	1	4	0	0	3	0	10	8
	1	2	3	2	4	0	5	4
	1	3	1	0	0	0	9	5
	6	4	0	0	2	0	5	5
			4	1	2	0	1	0
			1	0	0			
			0	0	2			
1455 - 1500	0	3	5	5	4	0	6	2
	1	1	0	0	2	0	4	0
	1	1	2	1	1	0	11	6
	4	3	0	0	3	0	2	1
	0	3	3	2	0	0	5	0
	0	1	1	1	0			
			5	4	0			
			0	0	3			
			6	2	3			
1500 - 1505	0	1	0	0	2	0	1	1
	0	6	2	0	1	0	6	0
	1	0	0	0	3	0	1	3
	1	1	3	1	2	0	5	4
	3	0	0	0	2	0	3	3
			6	0	3	0	12	9
			3	1	4			
			0	0	3			
			5	0	0			
1505 - 1510	0	2	0	0	1	0	5	1

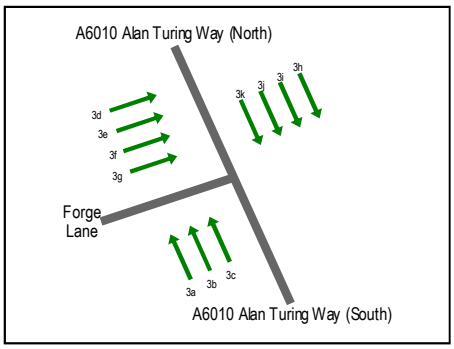
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	1	2	2	0	0	0	3	1
	1	1	0	0	3	0	5	4
	1	2	7	0	4	0	7	1
	5	0	0	0	2	0	7	4
			0	0	1			
			0	0	2			
			2	2	4			
1510 - 1515	0	2	0	0	2	0	1	0
	5	7	2	2	2	0	5	2
	0	3	0	0	1	0	2	2
	1	0	0	0	2	0	7	2
	4	1	3	0	3	0	4	3
			0	0	1	0	8	5
			0	0	3	0	8	4
			1	1	4			
			0	0	1			
			0	0	2			
			2	1	1			
1515 - 1520	6	1	0	0	2	0	8	6
	2	2	1	1	5	0	8	5
	1	2	0	0	11	0	3	1
	1	3	0	0	2	0	7	2
			0	1	1	0	5	1
			0	0	1			
			2	0	0			
			0	0	1			
1520 - 1525	2	2	2	0	3	0	5	1
	2	2	0	0	1	1	6	4
	3	1	2	2	2	0	3	1
	2	2	0	0	2	0	8	4
	2	3	2	0	5	0	8	2
	3	4	0	0	1	0	6	2
			5	3	0			
1525 - 1530	4	0	10	0	6	0	1	0
	1	0	1	1	4	0	5	4
	4	1	0	0	1	0	6	1
	3	0	0	0	2	0	7	8
	1	3	4	1	5	0	10	9
			2	0	1	0	15	4
			0	0	1	0	8	9
			2	0	2			
1530 - 1535	1	2	1	0	0	0	9	6
	3	2	0	0	2	0	7	3
	2	1	5	1	6	0	8	5
	3	0	0	0	2	0	2	2
	4	1	2	1	5	0	5	4
	0	2	0	0	2	0	7	1
			5	0	5			
			0	0	3			
			0	0	3			
			0	0	2			
			0	0	1			
			1	0	0			
1535 - 1540	1	2	0	0	2	0	7	2
	2	0	0	0	4	0	2	2
	4	1	0	0	1	0	3	5
	1	4	0	0	1	0	6	3
	0	1	9	0	7	0	14	10
			0	0	1			
			1	0	1			
			0	0	2			
			2	2	4			
1540 - 1545	0	4	0	0	1	0	5	5
	3	0	4	0	1	0	8	5
	1	3	4	2	5	0	1	0
	5	2	0	0	1	0	5	2
	1	0	0	0	2	0	4	2
			0	0	4	0	12	6
			0	0	3			
1545 - 1550	2	3	1	0	3	0	5	1
	6	5	0	0	2	0	10	4
	0	2	0	0	4	0	13	7
	1	1	0	0	2	0	13	8
	1	2	2	1	5	0	8	3
	3	1	0	0	2	0	8	4
			3	2	6			
			0	0	2			

			4	0	5			
1550 - 1555	0	1	0	0	1	0	2	2
	6	2	0	0	3	0	4	2
	8	0	0	0	2	0	8	0
	5	0	1	1	5	0	8	7
	1	1	1	0	0	0	2	0
	1	2	0	0	2			
			9	2	4			
			0	0	3			
			0	0	1			
1555 - 1600	1	3	0	0	2	0	16	6
	5	1	0	0	5	0	9	2
	1	2	0	0	2	0	7	5
	4	0	2	0	0	0	3	0
	3	5	0	0	2	0	8	4
			0	0	2	0	7	0
			0	0	2			
			1	0	0			
1600 - 1605	0	3	0	0	2	0	4	5
	6	5	1	0	0	0	3	2
	6	0	0	0	1	0	4	4
	4	0	1	1	4	0	2	1
	0	1	0	0	1	0	7	4
			6	3	6	0	3	1
			0	0	3			
			2	2	6			
			0	0	2			
			4	0	6			
			0	0	3			
			1	0	2			
1605 - 1610	8	2	0	0	2	0	5	6
	3	2	0	0	3	0	1	0
	3	6	3	3	2	0	6	1
			0	0	9	0	5	1
			8	5	4			
			0	0	3			
			2	2	0			
1610 - 1615	2	5	0	0	1	0	5	4
	5	3	2	3	4	0	5	2
	3	3	0	0	1	0	5	4
			0	0	2			
			4	1	5			
			3	2	1			
1615 - 1620	4	0	0	0	1	0	9	0
	2	1	3	0	0	0	5	4
	0	3	0	0	3	0	5	1
	6	3	0	0	1			
			0	0	2			
			0	0	2			
			2	0	1			
			0	0	6			
			0	0	2			
1620 - 1625	3	1	3	2	0	0	6	2
	4	2	0	0	4	0	9	1
	8	4	3	2	3	0	6	2
			0	0	4	0	8	4
			0	0	4			
			1	0	2			
			0	0	4			
			4	2	0			
1625 - 1630	4	1	0	0	2	0	5	2
	6	4	3	2	3	0	3	2
	1	2	0	0	7	0	8	2
			1	0	2			
			0	0	5			
			0	0	5			
1630 - 1635	3	1	1	0	3	0	3	2
	3	7	0	0	10	0	7	1
	6	2	1	0	0	0	8	3
	5	1	0	0	2	0	6	3
			0	0	4			
			2	2	4			
			0	0	2			
			0	0	3			
			0	0	2			

1635 - 1640	0	3	1	0	0	0	4	2
	9	1	0	0	5	0	11	2
	7	5	0	0	2	0	2	2
			0	0	2			
			0	0	1			
			0	0	6			
			4	2	2			
			0	0	3			
			4	1	0			
1640 - 1645	10	3	0	0	5	0	1	1
	3	1	0	0	3	0	2	0
	2	0	2	0	4	0	4	4
	3	3	0	0	4			
	1	0	2	0	4			
			0	0	4			
1645 - 1650	3	3	0	0	1	0	10	4
	1	3	0	0	4	0	6	3
	5	4	0	0	2	0	9	1
			0	0	3	0	8	2
			0	0	1			
			1	0	2			
			0	0	3			
			0	0	3			
			1	0	2			
1650 - 1655	5	0	0	0	2	0	9	4
	4	0	1	0	1	0	3	3
	3	2	0	0	4	0	5	2
			3	0	4			
			0	0	2			
			3	0	3			
1655 - 1700	3	3	0	0	3	0	8	2
	2	4	6	1	1	0	5	3
	3	1	0	0	2	0	5	4
	5	3	0	0	1			
			4	1	1			
			1	1	0			
			0	0	4			

Etihad
Queue Length Survey

Site 3
A6010 Alan Turing Way (South)
Forge Lane
A6010 Alan Turing Way (North)



Lat/Long
lat 53.487241° lon -2.199148°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)

TIME	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k
1600 - 1605	0	3	3	0	0	0	0	0	1	4	1
	0	3	2	1	0	0	0	0	0	0	1
	0	2	2	0	0	1	0	0	4	7	0
				0	0	1	0	0	3	3	1
1605 - 1610	0	2	6	0	0	0	1	0	2	2	3
	1	0	0	2	1	1	1	0	3	7	0
	0	3	0	0	1	1	0	0	2	5	0
1610 - 1615	0	3	1	0	0	2	1	0	4	4	0
	0	5	7	1	0	0	0	0	2	4	0
	0	4	7	0	0	0	0	0	0	1	1
								0	6	9	2
1615 - 1620	0	6	3	1	0	0	0	0	4	6	0
	0	4	6	0	0	3	2	0	5	2	0
				0	1	0	0				
				0	0	0	1				
1620 - 1625	0	9	8	0	0	1	0	0	0	0	1
	0	6	12	1	0	0	2	0	0	7	3
				0	0	0	1				
1625 - 1630	0	4	4	0	1	0	1	0	0	7	2
	0	0	1	1	0	0	0	0	1	6	2
	0	1	0	0	2	0	0	0	0	8	3
	0	3	4								
1630 - 1635	0	0	2	1	0	0	0	0	2	5	0
	0	5	1					0	0	3	3
								0	5	0	0
1635 - 1640	0	3	2	0	0	0	1	0	0	0	1
	0	4	7	0	0	1	0	0	3	9	0
1640 - 1645	0	3	5	1	0	0	0	0	1	4	0
	0	0	0								
1645 - 1650	0	3	5	0	1	1	0	0	2	6	0
	0	4	2	0	1	1	0	0	2	2	0
1650 - 1655	0	0	0	0	1	0	0	0	0	1	0
1655 - 1700	0	1	0	0	1	0	1	0	0	0	2
	0	2	1	2	0	0	0	0	2	0	0
	0	2	2					0	1	1	0
								0	0	3	0
1700 - 1705	0	1	1	0	1	0	0	0	0	1	0
1705 - 1710	1	2	3	1	1	0	0	0	1	0	0
	0	4	3	0	1	0	0	0	1	2	0
	0	2	2								
1710 - 1715	0	7	2	0	1	0	0	0	3	1	0
	0	1	1	0	0	0	4	0	0	0	1
	0	1	2	1	0	1	0	0	1	4	0
								0	0	5	0
1715 - 1720	0	1	1	1	1	0	0	0	3	0	0
	0	1	4	0	1	0	0	0	4	6	0
				3	0	0	0	0	11	15	0
1720 - 1725	0	4	2	0	0	0	1	0	10	19	0
	0	4	3					0	2	5	0
								0	7	12	5
								0	5	15	0
1725 - 1730	0	3	3	0	0	0	1	0	3	4	1
				1	0	0	0	0	1	0	0
1730 - 1735	0	1	6	0	0	0	0	0	0	0	0
1735 - 1740	0	0	2	0	0	0	1	0	0	5	0
	0	7	5								
	0	0	1								
1740 - 1745	0	4	2	0	0	0	1	0	1	2	0
1745 - 1750	0	7	6	0	1	0	0	0	3	5	0
				0	0	0	2	0	0	0	1
1750 - 1755	0	1	5	0	0	1	0	0	1	3	0
	0	3	3	1	0	0	0				

1755 - 1800	0	1	2	0	1	0	0	0	2	2	0
	0	3	7	0	0	1	0	0	0	0	1
								0	2	4	0
1800 - 1805	0	4	2	0	0	1	0	0	1	3	0
	0	1	5								
1805 - 1810	0	4	3	0	0	1	0	0	2	7	0
	0	2	2	2	1	0	0	0	3	6	0
				0	1	3	2				
1810 - 1815	0	3	1	0	0	0	1	0	1	3	0
								0	2	5	0
1815 - 1820	0	2	4	1	1	0	0	0	1	1	0
1820 - 1825	0	2	1	0	0	0	0	0	0	0	1
	0	4	3								
1825 - 1830	0	3	5	0	1	0	0	0	0	9	0
	0	2	5	0	0	1	0	0	2	2	0
1830 - 1835	0	1	2	0	0	1	0	0	3	0	0
								0	2	2	0
1835 - 1840	0	6	3	0	0	1	0	0	2	5	0
	0	3	5	0	2	1	0	0	2	3	0
1840 - 1845	1	2	3	1	0	0	0	0	0	0	0
	0	1	0								
1845 - 1850	0	2	3	0	1	0	1	0	0	2	1
	0	0	1	0	1	0	0	0	2	1	0
1850 - 1855	0	8	6	0	0	2	0	0	3	0	0
								0	0	0	3
1855 - 1900	0	0	2	1	0	0	0	0	0	0	1
1900 - 1905	0	8	1	0	0	1	0	0	1	3	0
	0	2	2	1	0	0	2	0	0	2	1
1905 - 1910	0	1	0	1	0	1	3	0	0	5	2
	0	2	3	1	0	1	1	0	2	6	0
	0	4	2					0	1	1	0
1910 - 1915	0	3	3	1	0	0	1	0	0	3	0
	0	5	4	1	0	0	0	0	1	1	0
	0	3	0	1	0	1	0				
1915 - 1920	0	4	3	0	0	0	1	0	1	1	0
1920 - 1925	0	2	6	1	0	1	0	0	1	1	0
	0	3	0					0	0	0	1
1925 - 1930	0	0	0	0	0	0	0	0	0	0	0
1930 - 1935	0	1	1	0	1	0	0	0	1	0	0
1935 - 1940	0	0	0	0	1	0	0	0	0	3	0
1940 - 1945	0	0	0	0	0	0	0	0	0	0	0
1945 - 1950	0	0	0	0	0	0	0	0	0	0	0
1950 - 1955	0	3	1	1	0	0	0	0	0	2	0
1955 - 2000	0	1	3	0	0	0	0	0	0	0	0
2000 - 2005	0	1	1	0	0	1	0	0	1	0	0
	1	5	5					0	0	0	1
2005 - 2010	0	2	1	1	0	0	2	0	0	1	0
	0	1	4	0	0	1	2	0	0	0	1
	0	1	1	1	0	0	2	0	0	2	0
								0	0	4	0
2010 - 2015	0	1	1	2	0	1	1	0	0	3	0
	0	2	0	1	0	0	1	0	0	0	1
				1	0	0	1	0	0	3	0
2015 - 2020	0	1	3	1	0	3	0	0	0	2	0
				0	0	2	0				
2020 - 2025	0	3	1	0	0	2	0	0	1	2	0
				0	1	0	0				
2025 - 2030	0	1	3	0	1	0	0	0	0	0	3
	0	6	2					0	1	5	0
2030 - 2035	0	4	6	0	0	1	0	0	2	6	0
2035 - 2040	0	1	3	1	0	0	0	0	1	0	0
				1	0	0	0				
				0	0	1	1				
2040 - 2045	0	0	1	0	0	1	1	0	1	1	0
	0	0	1								
2045 - 2050	0	0	0	0	0	0	0	0	1	2	0
2050 - 2055	0	1	3	0	0	0	1	0	0	0	0
	0	1	1								
2055 - 2100	0	2	2	0	0	0	0	0	0	0	1
2100 - 2105	0	0	0	0	0	0	0	0	0	0	0
2105 - 2110	0	0	0	0	1	1	1	0	1	1	0

				0	0	1	1				
2110 - 2115	0	1	3	1	0	0	0	0	1	1	0
	0	3	1	0	0	2	0	0	0	3	0
	0	1	2	1	0	0	0				
2115 - 2120	0	0	2	1	0	0	0	0	1	0	0
2120 - 2125	0	0	0	0	0	0	0	0	0	0	0
2125 - 2130	0	0	0	0	0	0	1	0	0	0	0
2130 - 2135	0	0	0	0	0	0	0	0	0	0	0
2135 - 2140	0	0	0	0	0	0	0	0	0	0	0
2140 - 2145	0	0	0	0	0	0	0	0	0	0	0
2145 - 2150	0	0	0	0	0	1	0	0	0	0	0
2150 - 2155	0	0	0	0	0	0	0	0	0	0	0
2155 - 2200	0	0	0	0	0	0	0	0	0	0	0
2200 - 2205	0	1	0	0	0	1	1	0	0	3	0
	0	0	1	1	0	1	0				
2205 - 2210	0	0	1	0	0	1	1	0	0	1	0
	0	1	0	0	0	0	1	0	1	0	0
				1	0	1	1				
2210 - 2215	0	1	1	1	0	0	0	0	1	1	0
	0	5	2	0	0	1	0				
	0	1	0	1	0	0	0				
2215 - 2220	0	0	0	0	0	0	0	0	0	0	0
2220 - 2225	0	1	0	0	0	1	0	0	0	0	0
2225 - 2230	0	0	1	1	0	0	0	0	0	3	0
2230 - 2235	0	0	0	0	0	0	0	0	0	0	0
2235 - 2240	0	0	1	0	0	0	0	0	0	0	0
2240 - 2245	0	0	0	0	0	0	0	0	0	0	0
2245 - 2250	0	0	0	0	0	0	0	0	0	0	0
2250 - 2255	0	0	0	0	0	0	0	0	0	0	0
2255 - 2300	0	0	0	0	0	0	0	0	0	0	0

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

TIME	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k
1000 - 1005	1	0	0	0	0	0	2	0	2	2	0
								0	1	0	0
1005 - 1010	1	5	4	0	0	0	0	0	5	0	0
	0	2	3								
1010 - 1015	1	5	2	0	0	0	1	0	0	0	1
1015 - 1020	2	3	10	0	1	1	1	0	1	0	0
				0	0	0	1	0	4	5	0
1020 - 1025	2	0	0	1	0	0	0	0	0	0	1
	0	2	3	1	0	0	0	0	2	0	0
	1	0	0					0	0	0	1
	1	0	0								
1025 - 1030	0	1	2	0	0	1	0	0	1	1	1
	1	2	1	0	0	0	1	0	0	0	2
	1	1	2	0	0	0	1	0	2	0	0
	2	1	3					0	2	1	0
								0	0	0	3
								0	1	0	0
1030 - 1035	1	1	4	1	0	1	0	0	3	2	0
	1	2	5	1	0	1	2	0	1	0	0
				0	0	0	1	0	0	0	1
1035 - 1040	0	1	0	0	0	0	2	0	4	4	0
	0	2	2	0	0	0	1				
1040 - 1045	0	0	3	1	0	1	0	0	2	2	0
	0	2	1					0	0	0	1
	0	4	3					0	0	0	1
	0	4	3					0	1	0	0
								0	0	0	1
1045 - 1050	0	4	3	1	0	0	0	0	1	2	1
	2	2	3	0	0	0	1	0	2	2	0
	0	2	1	1	0	1	0	0	0	0	2
	2	1	0					0	1	1	0
1050 - 1055	2	1	0	0	0	0	1	0	5	0	1
	0	1	1	0	0	1	1	0	0	0	2
	0	4	2					0	4	2	1

1055 - 1100	1	1	0	0	0	0	3	0	5	5	0
	0	4	2	1	0	0	2	0	5	2	2
	0	2	0	1	0	0	0				
1100 - 1105	1	2	2	1	0	0	1	0	1	1	0
	0	3	2	0	0	1	0	0	0	0	1
								0	0	0	1
1105 - 1110	0	4	4	0	1	0	0	0	0	0	1
	0	7	6	0	0	0	1	0	0	0	3
	0	0	1	1	0	2	2	0	2	2	0
				2	0	0	1	0	2	0	0
				2	0	0	0				
1110 - 1115	0	4	3	2	0	0	0	0	1	1	0
	0	4	5	0	0	0	1	0	5	0	0
	0	3	4	0	0	1	0				
1115 - 1120	0	6	3	1	0	1	0	0	2	0	0
	0	2	0	1	0	2	0	0	2	0	0
	0	3	3	0	0	1	2	0	2	2	0
1120 - 1125	0	9	8	0	0	1	1	0	0	0	1
	0	4	5	1	0	0	1	1	0	0	0
	0	2	0					0	0	0	2
								0	1	0	0
								0	0	0	1
1125 - 1130	0	5	5	1	0	0	0	0	0	4	0
	1	5	5					0	0	0	1
	0	5	2					0	0	1	1
								0	0	0	2
								0	3	2	0
1130 - 1135	0	0	1	0	0	0	1	0	2	0	0
				3	0	0	0	0	3	2	1
1135 - 1140	0	3	1	0	1	0	0	0	0	0	1
	1	1	1	0	0	1	0	0	1	2	0
	0	6	5	0	0	1	0	0	0	0	1
								0	0	1	0
1140 - 1145	0	2	1	1	0	0	0	0	0	0	1
1145 - 1150	0	4	4	1	0	0	0	0	2	1	0
	0	3	2	0	0	2	0	0	0	0	1
1150 - 1155	0	3	0	1	0	0	0	0	2	0	1
	0	1	4	0	0	1	1				
	0	3	3	0	0	1	0				
1155 - 1200	0	3	0	1	0	1	1	0	0	0	4
				0	0	1	1	0	0	0	2
								0	0	1	0
1200 - 1205	4	2	0	1	0	0	0	0	1	1	0
	0	1	0	1	0	0	0	0	4	1	0
	0	5	3	0	0	1	0	0	6	1	2
	0	5	4								
1205 - 1210	0	4	3	1	1	0	1	0	6	2	0
	0	2	3	1	1	1	1	0	4	1	1
	0	4	4	1	0	1	0	0	0	0	2
				0	0	2	0	0	4	1	0
1210 - 1215	0	2	1	0	0	2	0	0	7	0	0
	2	1	4	0	0	1	0	0	2	1	0
				1	0	1	0	0	4	0	0
1215 - 1220	0	4	3	2	0	1	0	0	5	1	0
				0	0	2	0	0	1	1	0
1220 - 1225	0	1	3	0	0	1	0	0	0	0	2
				1	0	0	0	0	1	2	0
								0	4	0	0
1225 - 1230	0	0	4	0	0	0	1	0	3	2	0
	0	5	7	0	0	0	1	0	1	0	0
	0	4	6	2	0	0	0	0	0	2	0
				1	0	0	0				
1230 - 1235	0	3	3	1	0	0	0	0	3	0	0
	0	3	1	0	0	1	0	0	0	1	0
				0	0	2	0				
1235 - 1240	0	2	2	0	0	2	0	0	1	0	0
								0	0	0	1
1240 - 1245	0	5	4	1	1	0	0	0	5	2	1
	4	3	5	0	0	1	0	0	0	2	0
1245 - 1250	0	3	1	1	0	1	0	0	0	1	0
	1	1	1	0	2	0	0	0	3	2	0
				0	0	1	0	0	3	6	0
1250 - 1255	0	4	3	0	0	1	0	0	1	1	0
	1	2	0	0	0	2	0	0	1	0	0
	1	4	6	0	0	0	1	0	1	0	0
	0	1	3	1	0	0	0	0	1	0	0
1255 - 1300	0	1	1	0	0	2	1	0	1	0	0
	0	4	4	0	0	0	1	0	8	0	0
1300 - 1305	0	4	5	1	1	3	1	0	0	0	1
	1	2	3	1	0	0	1	0	3	1	0
								0	2	1	0
1305 - 1310	0	6	7	0	1	0	0	0	0	0	1

	0	6	5	1	0	3	1	0	2	2	1
								0	0	0	2
								0	1	0	0
1310 - 1315	0	4	6	1	0	0	0	0	0	0	2
	1	6	8	1	0	1	0	0	2	2	0
	1	5	8					0	5	3	1
								0	5	2	1
1315 - 1320	0	5	5	1	0	1	0	0	4	1	1
	0	3	3					0	7	3	1
	1	1	2					0	0	0	2
								0	1	1	0
								0	8	7	0
1320 - 1325	0	3	2	0	0	2	0	0	1	2	1
	0	3	4	0	1	0	0	0	0	0	2
	0	3	1					0	4	4	0
1325 - 1330	1	0	0	0	0	1	0	0	1	0	0
	0	0	3					0	2	0	0
								0	0	0	1
								0	3	4	0
1330 - 1335	0	1	0	0	0	2	1	0	2	1	0
	0	1	0					0	3	5	0
1335 - 1340	1	1	2	0	0	0	1	0	1	1	0
				0	0	1	0	0	5	1	0
								0	3	1	0
1340 - 1345	0	4	7	0	0	0	1	0	5	1	2
	0	4	3	1	0	1	0	0	3	0	3
	1	1	0	0	1	0	0	0	9	4	0
								0	9	7	0
								0	1	0	2
								0	9	4	0
1345 - 1350	0	6	2	0	1	0	0	0	5	3	1
	0	5	5	0	0	3	2	0	1	1	1
	1	5	6	2	0	0	1	0	5	3	0
								0	5	4	1
1350 - 1355	0	5	3	2	0	0	1	0	3	1	0
	0	4	6	1	0	0	0	0	0	0	1
								0	1	0	0
								0	0	0	1
1355 - 1400	0	2	0	0	0	0	0	0	0	0	1
	0	0	1					0	0	0	1
1400 - 1405	0	1	1	2	0	3	0	0	0	0	1
	0	1	0					0	0	0	1
								0	1	3	0
1405 - 1410	0	4	3	2	0	2	0	0	0	0	1
	0	4	6					0	2	1	0
								0	2	0	0
								0	0	0	1
1410 - 1415	0	4	5	0	0	2	1	0	5	2	0
	0	5	7	0	0	1	0	0	0	0	1
	0	2	0	1	0	2	0	0	3	4	0
								0	6	0	1
1415 - 1420	0	4	2	2	0	2	0	0	4	2	0
	0	2	1	1	0	0	1	0	1	0	0
	0	2	2	0	0	1	2	0	4	2	0
1420 - 1425	0	1	1	1	0	0	0	0	1	2	0
	0	2	5	2	0	1	0	0	2	3	0
				2	0	1	1	0	2	2	0
1425 - 1430	1	5	3	1	0	0	0	0	1	2	0
	0	2	3	0	0	2	0	0	1	0	0
	0	1	0	0	0	2	0	0	7	2	0
1430 - 1435	0	4	4	0	0	1	0	0	0	0	1
	0	1	1	0	0	1	0	0	2	1	0
	1	2	2					0	2	1	0
								0	0	0	1
1435 - 1440	1	4	5	0	2	0	0	0	0	0	1
	1	2	6	1	0	0	0	0	2	3	0
								0	6	0	0
1440 - 1445	0	5	2	1	0	0	2	0	0	0	1
	0	3	2	2	1	1	1	0	2	2	0
	0	3	4	1	0	0	1	0	1	2	0
1445 - 1450	0	4	7	2	0	0	0	0	3	5	0
	0	3	7	1	0	0	1	0	6	4	0
	0	3	1					0	0	0	1
	0	5	2					0	0	0	1
								0	2	1	0
1450 - 1455	0	5	9	0	0	1	0	0	0	0	1
								0	4	7	0
1455 - 1500	0	3	0	1	0	0	0	0	1	0	0
	0	5	7	1	0	0	1	0	2	0	0
	0	8	6	1	0	0	1	0	2	3	0
1500 - 1505	1	5	8	0	0	1	0	0	3	1	1
	0	1	2	3	0	1	0	0	0	0	1
1505 - 1510	0	3	3	2	0	1	0	0	1	5	0
	0	3	3	0	0	2	0	0	1	0	0

	1	5	7					0	0	0	1
								0	1	1	0
1510 - 1515	0	6	7	1	0	0	0	0	4	1	0
	0	3	1	1	0	1	1	0	3	2	0
	0	2	3					0	1	0	0
								0	7	0	0
								0	2	1	0
1515 - 1520	0	2	2	0	0	0	1	0	2	1	0
	0	7	6	0	0	0	1				
1520 - 1525	0	4	5	4	1	1	0	0	2	1	0
	0	2	2	0	0	2	0	0	5	0	0
1525 - 1530	0	6	2	0	1	1	0	0	0	0	1
	0	3	2	0	0	0	1	0	1	3	0
	0	4	8	1	0	0	1	0	2	3	0
								0	2	0	1
								0	10	2	0
1530 - 1535	0	0	1	1	0	1	0	0	10	7	1
	0	5	4	2	0	1	0	0	9	8	3
	0	5	3					0	8	7	3
1535 - 1540	2	4	5	1	0	0	0	0	9	6	1
	0	5	4	1	0	0	0	0	5	2	1
								0	7	4	0
								0	6	0	1
								0	4	0	1
1540 - 1545	0	2	3	1	0	3	0	0	2	0	0
	0	3	0	0	0	1	0				
1545 - 1550	0	3	5	0	0	1	0	0	1	0	0
				0	0	1	0				
1550 - 1555	0	4	3	0	0	2	0	0	1	1	0
	0	8	8	0	0	2	1	0	0	0	1
	0	7	7	0	1	0	0	0	2	0	1
								0	3	2	0
1555 - 1600	0	5	2	1	0	0	0	0	1	0	0
	0	1	2	0	0	1	0	0	2	1	0
	0	5	4	1	0	1	3	0	2	1	0
1600 - 1605	0	7	8	1	0	4	0	0	3	6	0
	0	3	5	1	0	1	0	0	1	0	0
	0	3	1					0	0	0	1
1605 - 1610	0	6	0	2	0	3	0	0	1	1	0
	0	6	8	0	0	1	0	0	3	3	0
	0	5	6	1	0	1	0	0	2	0	0
				0	0	1	0				
1610 - 1615	0	4	5	0	0	1	1	0	1	2	0
	0	3	6	0	0	1	1	0	1	1	0
	0	1	2	0	0	4	0	0	3	2	0
	0	3	2					0	2	1	0
1615 - 1620	0	2	3	1	0	2	0	0	8	2	0
				1	0	1	2	0	1	0	0
				0	0	1	3				
1620 - 1625	0	2	1	0	0	1	3	0	6	2	0
	0	5	2	1	0	0	0	0	1	0	0
	0	2	1	0	0	1	0	0	2	0	0
1625 - 1630	0	6	8	0	0	1	0	0	1	0	0
	0	1	1	0	0	1	1	0	4	0	1
				2	0	0	0	0	0	0	2
								0	5	2	0
1630 - 1635	0	5	5	2	0	1	0	0	5	1	0
	0	1	3	1	0	2	0	0	0	0	1
	0	5	6	1	0	0	0	0	1	1	0
				0	0	3	0	0	2	1	0
1635 - 1640	0	3	3	0	0	1	0	0	3	1	0
	0	6	8	2	0	1	1	0	0	0	1
				0	0	2	0	0	5	3	0
								0	2	4	0
								0	7	3	0
1640 - 1645	0	3	3	0	0	4	0	0	3	2	0
	0	3	1	0	0	4	0	0	6	5	0
	0	3	4	0	0	1	0	0	11	10	1
				1	0	0	0	0	7	2	0
1645 - 1650	0	5	7	1	0	0	0	0	5	3	0
	1	3	7	1	0	0	0	0	4	3	0
	0	9	8	2	0	0	0	0	2	5	1
	0	7	6	0	0	1	0				
1650 - 1655	0	6	9	2	0	4	0	0	4	3	0
	0	4	4	1	0	2	0	0	2	0	0
	0	1	1	2	0	0	1	0	2	2	0
				0	0	0	1	0	0	0	1
								0	3	0	0
1655 - 1700	0	1	3	1	1	1	1	0	2	1	0
	0	5	5	2	0	1	1	0	3	2	0
	0	1	2	1	0	2	1				

Etihad
Queue Length Survey

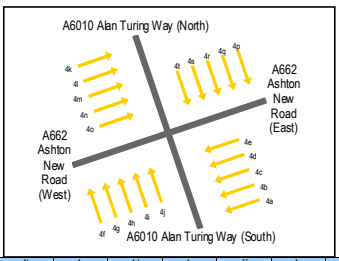
Site 4
A662 Ashton New Road (East)
A6010 Alan Turing Way (South)
A662 Ashton New Road (West)
A6010 Alan Turing Way (North)

Lat/Long
lat 53.481602° lon -2.195124°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)



TIME	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n	4o	4p	4q	4r	4s	4t
1600 - 1605	0	0	2	1	2	0	0	5	10	11	0	0	9	7	5	0	0	12	12	2
	0	0	4	1	0	0	0	2	15	8	0	0	5	5	3	1	0	14	11	4
	0	0	0	0	1	0	0	6	12	8	2	0	8	6	4					
	2	0	1	0	0															
1605 - 1610	1	0	2	2	3	0	0	7	16	7	0	0	11	8	4	3	0	8	8	6
	5	0	3	1	2	2	0	8	17	7	0	1	13	5	0	0	0	12	14	3
	2	1	2	0							3	0	8	7	3	1	0	8	8	8
	0	0	1	2	2															
1610 - 1615	0	0	0	0	3	0	0	9	20	0	2	0	11	2	2	5	0	8	6	9
	1	0	2	2	3	0	0	5	15	4	2	0	13	5	3	1	0	6	8	2
	0	0	0	0	2	1	0	8	17	4	0	0	12	9	1	2	0	8	8	4
	1	0	1	0	3	0	0	10	20	10										
	0	0	0	0	1															
	1	0	1	0	2															
1615 - 1620	0	0	0	0	1	0	0	11	19	5	3	0	12	8	0	2	0	6	7	2
	1	0	2	2	2	1	0	9	20	8	0	0	8	6	0	0	0	9	8	8
	3	0	2	4	4	0	0	8	14	12	2	0	13	11	3	2	0	8	6	5
1620 - 1625	2	0	3	1	1	1	0	6	11	8	0	0	12	9	4	1	0	4	6	8
	1	0	5	4	2	1	0	5	9	9	2	0	14	11	5	2	0	6	8	5
	0	0	0	0	2	0	0	6	15	6						2	0	6	6	2
	2	0	3	2	1															
1625 - 1630	0	0	2	1	3	1	0	8	16	8	0	0	15	11	6	2	0	12	10	4
	3	0	0	0	1	0	0	7	15	3	1	0	11	6	4	2	0	14	16	1
	1	0	2	2	1	0	0	7	16	8						3	0	16	12	1
1630 - 1635	0	0	2	4	0	1	0	7	10	7	3	0	11	8	2	2	0	12	11	4
	0	0	4	0	1	0	0	9	13	3	0	0	12	9	4	3	0	14	12	3
	5	0	2	2	5	1	0	10	17	4	0	0	14	12	2					
1635 - 1640	1	0	3	1	1	0	0	8	16	6	0	0	7	5	2	1	0	15	13	0
	1	0	4	0	1	0	0	9	15	7	2	0	15	8	2	1	0	12	12	3
	4	0	1	3	1	1	0	12	22	8	0	0	13	9	2	0	0	14	12	2
1640 - 1645	2	0	2	2	5	1	0	7	18	9	0	0	7	5	1	1	0	12	11	3
	1	0	5	2	3	0	0	9	15	8	4	0	9	6	1	1	0	15	9	6
	4	0	2	1	1	1	0	10	20	10	0	0	12	10	2	2	0	14	12	7
1645 - 1650	2	0	2	4	2	1	0	6	15	10	0	0	9	6	1	2	0	15	9	5
	0	0	2	0	1	0	0	8	17	5	4	0	16	14	7	0	0	16	11	6
	0	0	3	3	5						0	0	13	9	1	2	0	14	12	4
1650 - 1655	1	0	3	2	3	1	0	9	16	8	0	0	5	4	2	2	0	15	8	2
	0	0	2	3	4	1	0	8	18	10	0	0	9	6	7	4	0	17	8	7
	2	0	1	4	1	0	0	10	15	9	0	0	9	5	1	3	0	15	16	5
1655 - 1700	0	0	4	2	3	0	0	9	25	6	0	0	14	11	2	3	0	15	12	5
	5	0	3	2	1	1	0	8	20	8	0	0	12	9	2	2	0	13	14	3
						0	0	9	18	10	2	0	8	6	3	1	0	15	9	7
1700 - 1705	2	0	3	3	3	2	0	10	15	10	0	1	14	11	2	5	0	0	0	5
	1	0	1	3	1	0	0	9	19	8	0	0	16	12	4	1	0	11	13	3
	2	0	3	2	0	1	0	10	25	9	1	0	11	7	0	1	0	12	0	5
1705 - 1710	4	0	2	0	4	1	0	12	17	10	0	0	15	11	4	1	0	8	9	4
	0	0	2	1	2	0	0	10	19	8	0	0	13	10	5	3	0	9	10	3
	0	0	3	3	2	0	0	12	20	10	0	0	12	9	4					
1710 - 1715	2	0	3	1	4	1	0	12	25	8	0	0	9	7	2	1	0	2	1	2
	2	0	3	3	2	0	0	10	20	9	2	0	7	5	4	2	0	4	2	2
	0	0	0	0	3	1	0	11	21	10						0	0	4	2	2
	2	0	3	0	4											3	0	7	5	4
1715 - 1720	2	0	4	2	1	2	0	13	21	7	2	1	11	8	4	0	0	8	4	3
	0	0	4	2	4	2	0	10	19	7	0	0	14	6	1	3	0	5	4	3
	1	0	1	3	2						0	0	12	8	4					
1720 - 1725	2	0	1	2	2	1	0	8	16	8	1	0	12	9	2	1	0	0	1	1
	0	0	3	0	3	1	0	9	17	6	0	0	0	0	3	2	0	2	3	2
	3	0	4	2	0	1	0	7	14	6	0	0	14	8	5	0	0	5	4	1
1725 - 1730	2	0	3	2	2	0	0	9	15	7	0	0	13	9	2	0	0	8	6	0
	0	0	5	2	2	1	0	6	11	7	0	0	11	7	7	4	0	7	8	4
	3	0	3	2	1	0	0	9	13	6	2	0	14	13	4	2	0	11	9	2
1730 - 1735	4	0	1	3	2	0	0	9	16	7	2	0	14	11	6	1	0	5	8	0
	2	0	2	1	2	0	0	8	18	9	2	0	6	4	1	3	0	11	9	6
						1	0	12	16	10	0	0	10	8	5	1	0	8	8	6
1735 - 1740	4	0	2	2	1	0	0	10	15	10	0	1	15	12	6	1	0	8	6	5
	0	0	5	1	4	1	0	11	20	7	0	1	13	11	4	1	0	5	6	4
	3	0	3	2	0	0	0	9	17	8	0	0	10	8	2	3	0	4	3	2
1740 - 1745	3	0	3	3	2	1	0	7	14	6	0	0	12	6	2	1	0	4	3	3
	0	0	3	2	4	0	0	6	12	6	0	0	14	12	4	2	0	4	4	3
	3	0	3	0	1	1	0	7	14	8	2	0	16	11	8	2	0	4	2	2
1745 - 1750	0	0	0	0	5	1	0	6	12	6	0	0	15	12	7	1	0	4	2	3
	0	0	0	0	2	0	0	8	14	5	0	0	13	10	5	2	0	4	3	2
	0	0	2	2	2	0	0	9	12	6	2	0	11	8	8					
	2	0	2	3	2															
1750 - 1755	2	0	3	1	5	1	0	9	20	6	3	0	16	13	5	2	0	8	4	5
	3	0	2	1	1	0	0	10	15	9	0	0	13	10	1	1	0	12	8	5
	0	0	1	2	1	0	0	8	16	8	2	0	11	9	1	3	0	9	6	6
											0	0	9	6	0					
1755 - 1800	1	0	5	3	1	0	0	10	15	8	0	0	16	11	4	0	0	8	4	5
	3	0	4	2	2	0	0	9	17	14	0	0	18	8	5	0	0	5	4	5
	0	0	2	2	1						0	0	9	0	0	1	0	5	3	3
1800 - 1805	3	0	1	1	0	0	0	9	15	10	0	0	0	0	2	2	0	8	6	5
	0	0	1	1	3	0	0	10	17	9	0	0	8	4	4	5	0	5	6	5
	2	0	3	0	5	1	0	12	18	8	0	0	13	9	2	3	0	12	10	6
1805 - 1810	2	0	3	1	2	0	0	10	19	7	2	0	11	8	3	7	1	11	9	5
	4	0	3	2	3	0	0	9	20	7	0	0	13	10	4	3	0	10	11	3
	3	0	2	0	1						2	0	10	7	2	9	0	12	11	5
1810 - 1815	1	0	4	2	4	1	0	11	21	9	0	0	9	6	4	4	0	13	8	8
	3	0	5	1	4	1	0	10	15	9	0	0	7	5	6	4	0	14	13	5
	0	0	5	2	3	0	0	8	16	10	0	0	9	7	2	6	0	15	9	6
1815 - 1820	2	0	0	0	0	0	0	8	14	5	0	0	8	4	2	3	0	10	11	6
	1	0	2	2	1	0	0	10	15	8	0	0	9	6	4	6	0	8	2	7
						1	0	8	12	7						5	0	8	11	7
1820 - 1825	0	0	5	2	2	0	0	7	12	7	0	0	8	5	2	3	0	13	7	6
	2	0	4	1	5	1	0	7	10	7	0	1	9	6	5	5	0	7	13	4
	2	0	1	1	2	1	0	9	12	8	0	0	7	5	2	4	0	13	6	6
1825 - 1830	2	0	5	2	2	0	0	9	12	7	0	0	9	5	2	2	0	15	4	6
	2	0	2	4	2	0	0	10	14	7	4	0	10	7	0	2	0	17	5	6
	1	0	2	3	3						0	0	6	4	0	3	0	10	5	5
1830 - 1835	0	0	3	2	3	0	0	8	15	8	0	0	6	4	2	0	0	8	4	7
	0	0	2	4	1	0	0	7	10	5	0	0	9	4	3	2	0	10	9	6
	0	0	2	3	5						0	0	7	5	6	6	0	12	9	5
1835 - 1840	2	0	3	0	3	0	0	8	14	3	0	0	4	3	3	3	0	17	6	5
	2	0	3	2	1	2	0	9	16	9	2	0	7	4	4	1	0	16	5	7
	1	0	2	1	2	0	0	10	12	6										
1840 - 1845	0	0	3	3	3	1	0	9	15	4	0	0	8	3	1	4	0	17	10	4
	1	0	3	4	3	1	0	10	20	6	0	0	5	6	2	6	0	14	9	8
	1	1	3	2	6	0	0	12	25	7	2	0	12	9	6	6	0	15	11	7
1845 - 1850	2	0	3	2	3	1	0	7	20	7	0	0	9	6	5	6	0	14	11	3
	0	0	2	1	2	0	0	9	12	6	0	0	12	8	6	5	0	15	6	4
						1	0	9	15	9	2	0	10	7	4	4	0	14	7	2
1850 - 1855	2	0	3	6	2	0	0	10	20	9	0	0	6	4	1	7	0	13	7	4
	2	0	3	0	2	1	0	12	15	3	1	0	7	2	2	5	0	13	7	6
	1	0	2	3	1	1	0	9	18	5	0	0	9	4	8	3	0	13	3	3
1855 - 1900	0	0	3	3	1	1	0	9	12	9	0	0	9	6	4	3	0	17	8	3
	0	0	5	2	4	1	0	10	15	3	2	0	7	0	0	4	0	10	4	1
	0	0	2	1	3	0	0	5	10	5	0	0	8	5	4					
1900 - 1905	0	0	3	3	1	1	0	5	10	4	3	0	3	2	3	1	0	13	6	11
	0	0	3	2	1	0	0	3	5	1	4	0	6	4	2	4	0	14	2	9
	2	0	1	2	1	1	0	5	9	3	1	0	10	6	3					
1905 - 1910	1	0	2	1	0	0	0	4	10	5	3	0	7	5	3	5	0	13	5	4
	2	0	0	0	0	0	0	3	9	4	0	0	9	4	4	3	0	14	5	6
	0	0	1	1	3	0	0	4	10	5	4	0	7	3	5	1	0	18	7	3
1910 - 1915	2	0	1	1	0	1	0	4	10	5	4	0	7	4	3	2	0	14	10	7
	2	0	2	4	3	0	0	5	9	3	0	0	4	2	2	5	0	13	3	8
	2	0	2	0	6	0	0	4	8	3	2	0	5	3	3	5	0	11	7	3

1915 - 1920	0	0	1	0	2	1	0	9	10	2	3	0	1	3	0	1	0	14	8	3
	1	0	2	3	2	0	0	2	8	5	0	0	4	4	4	0	0	13	4	3
	0	0	1	1	1	0	0	5	11	6	4	0	5	3	4	3	0	9	0	4
	4	0	2	1	3															
1920 - 1925	2	0	2	1	2	0	0	5	9	3	0	0	5	3	1	2	0	16	5	4
	0	0	1	0	1	0	0	1	5	1	2	0	5	3	0	4	0	13	6	6
	0	0	4	2	1	0	0	4	9	4	0	0	4	3	1	6	0	15	7	7
											1	0	2	1	2					
1925 - 1930	1	0	4	1	3	0	0	3	7	4	1	0	3	2	2	1	0	8	5	5
	1	0	2	1	1	0	0	3	8	3	3	0	3	1	1	1	0	11	7	5
	2	0	0	1	4	1	0	5	7	3	0	0	5	4	4	1	0	9	1	5
1930 - 1935	2	0	1	2	1	0	0	2	3	3	0	0	4	2	0	4	0	12	5	4
	3	0	1	0	1	1	0	3	7	3	1	0	6	4	0	3	0	5	3	3
	2	0	2	1	2	1	0	3	5	6	0	0	7	5	2	2	0	6	2	3
	4	0	1	4	1						1	0	5	4	1					
1935 - 1940	1	0	2	2	2	1	0	4	9	3	2	0	4	3	3	1	0	7	3	7
	0	0	2	3	2	0	0	3	4	5	2	0	4	2	2	3	0	9	4	5
	1	0	1	1	3	0	0	4	8	5						2	0	5	2	4
						1	0	3	7	4										
1940 - 1945	0	0	2	3	2	0	0	5	10	4	2	0	5	1	0	3	0	5	2	2
	1	0	2	1	3	1	0	4	11	3	1	0	7	2	1	4	0	9	4	6
	0	0	1	4	0	0	0	5	10	4	0	0	4	3	3	2	0	7	3	8
	0	0	4	0	1															
1945 - 1950	0	0	3	0	0	0	0	2	3	3	4	0	3	2	3	1	0	8	2	4
	0	0	3	1	3	0	0	0	3	2	1	0	4	2	0	1	0	12	5	1
	0	0	1	4	2	1	0	2	3	4	2	0	0	0	3	1	0	4	2	3
						0	0	3	3	3	1	0	5	4	2					
1950 - 1955	0	0	3	2	3	1	0	5	6	3	3	0	4	3	1	1	0	5	1	2
	2	0	1	1	1	0	0	0	4	3	2	0	6	4	1	0	0	8	5	2
	0	0	1	2	1	0	0	0	3	1	2	0	2	0	1	0	3	7	4	6
1955 - 2000	1	0	3	1	0	0	0	1	2	1	1	0	2	1	0	0	0	2	1	4
	4	0	1	0	2	1	0	3	5	4	2	0	8	5	1	1	0	8	2	7
	1	0	4	0	2	0	0	1	1	1	2	0	7	6	2	0	0	9	0	4
	0	0	3	2	1	0	0	0	2	2						0	0	5	1	3
2000 - 2005	2	0	2	3	1	0	0	3	4	3	0	0	4	2	1	0	0	1	2	1
	1	0	3	2	3	0	0	2	4	2	1	0	4	1	0	1	0	3	2	4
	0	0	1	2	1	0	0	2	1	1	3	0	3	0	2	0	0	1	2	2
																0	0	1	2	1
2005 - 2010	1	0	1	0	3	0	0	3	5	3	2	0	3	2	4	0	0	2	4	4
	2	0	4	1	3	0	0	4	5	3	1	0	4	0	3	0	0	2	3	4
	0	0	0	0	1	1	0	4	4	6	3	0	8	4	2	1	0	3	4	5
	0	0	2	1	0															
2010 - 2015	1	0	2	2	3	1	0	5	5	3	1	0	3	2	1	0	0	3	4	5
	2	0	0	1	1	0	0	4	8	4	1	0	3	0	2	0	0	3	6	4
	4	0	1	1	1	2	0	5	8	6	1	0	11	5	3	1	0	4	7	5
											0	0	0	0	3	0	0	4	8	5
2015 - 2020	1	0	2	2	2	0	0	7	9	5	1	0	9	5	1	1	0	3	4	5
	0	0	1	0	3	1	0	2	3	3	4	0	8	4	3	0	0	4	3	3
	0	0	1	0	0	0	0	4	9	4	2	0	7	0	1	0	0	2	4	4
						0	0	4	5	3						0	0	2	4	4
2020 - 2025	1	0	3	1	2	1	0	2	4	3	2	0	4	3	1	1	0	1	3	3
	1	0	2	2	2	0	0	1	5	3	0	0	6	5	2	0	0	1	4	4
	1	0	1	2	1	0	0	4	6	1	3	0	10	7	2	0	0	2	5	2
2025 - 2030	1	0	2	2	1	0	0	3	5	1	2	0	12	8	0	0	0	3	4	2
	0	0	2	0	1	0	0	1	3	1	0	0	3	1	1	0	0	1	2	3
						1	0	3	10	5	2	0	4	3	0	1	0	4	5	4
											0	0	6	4	0					
2030 - 2035	0	0	4	2	3	0	0	2	4	3	0	0	7	4	2	0	0	0	2	1
	1	0	1	0	1	1	0	4	10	3	1	0	5	3	1	1	0	2	4	1
						0	0	2	8	4	4	0	0	0	0	0	0	1	1	3
2035 - 2040	1	0	1	0	3	0	0	4	5	4	0	0	5	4	4	0	0	2	5	0
	1	0	1	1	0	0	0	3	1	3	3	0	1	1	0	0	0	3	4	3
	0	0	1	0	1						2	0	3	0	1					
2040 - 2045	0	0	1	1	1	0	0	2	6	2	3	0	3	0	2	0	0	4	5	0
	2	0	1	0	1	1	0	3	5	4	0	0	6	0	4	2	0	2	3	6
	0	0	3	1	2	0	0	3	7	0	2	0	0	0	2	0	0	1	6	4
	0	0	1	2	0															
2045 - 2050	3	0	1	0	0	0	0	4	7	3	3	0	2	0	0	0	0	0	8	4
	1	0	0	3	0	1	0	2	7	3	3	0	3	4	0	0	0	3	6	2
	1	0	1	1	1	0	0	2	6	4	2	0	2	2	1	0	0	0	1	1
						0	0	1	2	1	3	0	4	2	2					
2050 - 2055	0	0	2	3	0	0	0	2	3	2	1	0	5	0	0	0	0	0	3	5
	1	0	3	1	4	0	0	4	6	4	2	0	4	0	2	0	0	2	5	0
	0	0	1	0	0	0	0	3	7	3	0	0	2	0	2	0	0	2	3	4
2055 - 2100	1	0	2	2	1	0	0	4	6	3	0	0	1	1	4	0	0	2	4	2
	0	0	2	0	0	0	0	3	3	3	4	0	2	3	0	0	0	2	4	2
						0	0	0	2	0	1	0	4	2	2	0	0	0	1	1
						0	0	1	3	1	0	0	3	2	2	0	0	0	2	0
2100 - 2105	2	0	2	0	3	0	0	2	2	2	2	0	1	0	2	0	0	1	0	1
	1	0	2	1	1	0	0	1	1	1	2	0	3	1	3	0	0	0	1	3
	5	0	2	0	2	0	0	1	1	2	1	0	1	0	1					
2105 - 2110	0	0	4	3	0	0	0	1	3	4	1	0	7	4	2	0	0	1	2	3
	0	0	0	0	1	0	0	1	1	3	4	0	6	3	2	0	0	1	1	4
	0	0	3	0	2	0	0	2	2	0	2	0	7	2	0	0	0	1	4	0
	0	0	1	0	0						1	0	4	0	1					
2110 - 2115	0	0	1	1	2	0	0	3	3	0	2	0	2	0	1	0	0	2	5	0
	1	0	1	1	1	0	0	0	0	1	0	0	4	3	2	0	0	0	0	1
						0	0	1	2	1	0	0	1	1	0	0	0	1	1	1
						0	0	1	2	1						0	0	0	2	2
2115 - 2120	1	0	1	0	1	0	0	2	3	2	2	0	2	0	0	0	0	2	2	0
	3	0	2	1	2	0	0	1	1	1	0	0	0	1	0	0	0	1	0	1
	0	0	2	0	2	0	0	0	1	4	0	0	4	2	1	0	0	0	1	3
	0	0	2	3	1															
2120 - 2125	0	0	2	3	0	0	0	2	4	2	1	0	1	1	1	0	0	0	4	2
	3	0	2	1	0	0	0	0	3	2	0	0	4	3	0	0	0	0	5	1
											0	0	3	1	1	1	0	0	6	0
											4	0	2	4	2					
2125 - 2130	2	0	0	1	0	0	0	2	3	3	1	0	0	0	0	0	0	0	1	1
	0	0	0	1	0	0	0	0	2	2	2	0	1	0	1	0	0	2	2	5
						0	0	0	1	1	0	0	4	0	1					
						0	0	2	3	4										
2130 - 2135	1	0	0	2	2	1	0	3	5	3	0	0	0	0	1	0	0	3	5	4
	1	0	1	1	1	0	0	1	3	2	1	0	3	2	2	0	0	0	1	1
	0	0	2	0	0	1	0	2	3	2	2	0	4	0	0	1	0	1	2	3
	2	0	0	0	0						0	0	1	0	1					
2135 - 2140	0	0	0	1	1	0	0	0	0	2	0	0	7	3	2	1	0	2	1	1
	0	0	0	1	0	1	0	0	1	2	2	0	3	0	0	0	0	3	1	1
						0	0	0	3	1	1	0	4	0	1	1	0	3	2	2
						1	0	0	5	3										
2140 - 2145	4	0	1	0	1	0	0	1	2	3	0	0	3	3	1	0	0	0	3	2
	2	0	1	1	0	0	0	1	2	3	1	0	2	1	0	0	0	2	2	1
						0	0	0	5	1	3	0	2	0	1	0	0	1	3	3
2145 - 2150	0	0	1	0	3	0	0	1	2	3	0	0	5	2	0	0	0	2	2	2
	2	0	0	1	0	0	0	1	5	2	2	0	1	0	3	0	0	0	3	2
	0	0	2	0	0	0	0	2	4	3	0	0	3	0	1	0	0	2	2	1
	2	0	1	1	1															
2150 - 2155	1	0	1	1	2	0	0	3	1	2	1	0	6	2	0	0	0	2	3	2
	1	0	0	0	0	1	0	2	4	3	0	0	2	0	0	0	0	0	2	1
	1	0	2	2	0	0	0	1	5	3	1	0	5	2	1	0	0	0	2	3
2155 - 2200	0	0	0	1	0	0	0	0	4	2	1	0	2	0	0	0	0	1	2	0
	1	0	1	0	2	0	0	1	3	2	2	0	2	1	0	0	0	2	0	4
	3	0	0	0	0	0	0	2	5	3	1	0	3	1	1	0	0	0	0	1
2200 - 2205	1	0	1	0	1	1	0	3	4	2	2	0	2	0	1	0	0	3	2	0
	1	0	0	0	0	0	0	2	2	0	2	0	3	3	4	0	0	0	1	0
	1	0	1	0	0	0	0	0	2	2	0	0	5	1	1	1	0	2	2	2
																1	0	2	1	2
2205 - 2210	1	0	1	1	2	0	0	0	2	3	2	0	3	0	2	0	0	2	1	0
	1	0	1	3	3	0	0	3	2	0	1	0	4	4	2	1	0	5	2	4
						0	0	1	4	2	1	0	1	0	3	0	0	4	3	3
																1	0	6	3	2
2210 - 2215	1	0	1	0	0	1	0	2	4	2	1	0	5	2	1	2	0	2	0	0
	0	0	1	1	0	0	0	1	1	3	2	0	4	2	3	0	0	0	0	2
	0	0	2	1	0	0	0	3	3	1	2	0	6	3	2	2	0	3	2	2
	2	0	1	0	0											0	0	3	1	0
2215 - 2220	0	0	0	1	1	0	0	2	3	3	2	0	5	3	2	2	0	3	3	0
	2	0	1	0	1	0	0	2	3	2	1	0	6	1	1	2	0	0	0	3
	2	0	1	1	1	0	0	0	5	2	1	0	4	5	1	2	0	5	4	3
						0	0	0	2	1	1	0	2	1	0					
2220 - 2225	0	0	0	0	1	0	0	1	1	1	1	0	5	7	0	2	0	4	3	2
	0	0	1	0	0	0	0	2	3	1	0	0	3	1	1	1	0	3	1	0
	1	0	1	1	2	0	0	3	4	2	1	0	3	0	2	1	0	3	3	1
																2	0	1	0	4
2225 - 2230	0	0	1	0	0	1	0	3	4	0	1	0	3	1	1	0	0	1	1	0
	1	0	0	0	0	0	0	0	0	5	0	0	1	1	0	1	0	2	1	2
	0	0	1	0	2	0	0	1	2	0	1	0	5	0	2	1	0	2	2	1
											2	0	3	1	1					

2230 - 2235	0	0	0	0	1	0	0	0	0	2	3	0	2	1	0	3	0	3	0	1
	1	0	1	1	0	0	0	1	1	5	3	0	3	0	0	0	0	5	2	3
						1	0	1	1	2	0	0	3	5	0	1	0	2	1	1
																0	0	2	0	0
2235 - 2240	1	0	2	0	0	0	0	0	2	2	2	0	2	4	1	0	0	0	0	3
	0	0	1	1	0	0	0	0	3	2	1	0	4	1	0	0	0	3	1	0
	3	0	0	1	0	0	0	2	2	0	0	0	4	4	2	0	0	2	0	2
	0	0	1	0	1											0	0	2	0	1
2240 - 2245	0	0	0	1	0	0	0	0	2	2	1	0	2	1	0	0	0	3	1	3
	1	0	0	0	0	1	0	1	2	0	1	0	2	2	0	0	0	5	3	0
						1	0	0	2	2	1	0	4	2	1	0	0	0	0	1
						0	0	0	2	0	1	0	4	2	1	3	0	3	1	0
2245 - 2250	0	0	0	0	1	0	0	1	2	0	3	0	2	0	0	2	0	3	1	0
	0	0	2	3	1	0	0	1	2	0	3	0	1	1	0	2	0	1	0	0
	0	0	1	2	0	0	0	0	2	3	1	0	0	1	0	0	0	0	0	1
																0	0	0	0	2
																0	0	3	2	0
2250 - 2255	1	0	0	0	1	1	0	1	2	1	0	0	2	2	0	0	0	0	0	2
	1	0	1	2	1						1	0	1	0	0	0	0	1	1	0
	0	0	0	2	0						1	0	2	1	1	0	0	0	0	3
											1	0	0	0	1					
2255 - 2300	0	0	0	2	1	0	0	1	2	1	2	0	1	1	1	1	0	1	1	2
	1	0	3	2	1	0	0	1	1	1	2	0	2	0	0	1	0	2	1	2
	1	0	0	0	0	0	0	0	2	1	0	0	1	0	0	1	0	2	1	2
	0	0	0	0	1	0	0	0	2	0						0	0	3	0	1

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

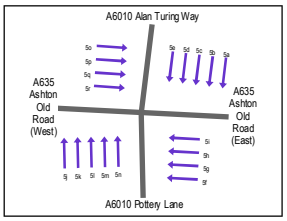
TIME	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	4l	4m	4n	4o	4p	4q	4r	4s	4t
1000 - 1005	6	0	1	2	0	0	0	3	2	3	2	0	3	3	2	2	0	1	1	0
	1	0	3	3	4	0	0	4	2	6	5	0	1	0	2	0	0	0	0	3
	1	0	1	0	1	1	0	4	0	2	6	0	4	1	1	0	0	0	0	2
	4	0	6	5	3											0	0	2	0	0
																0	0	0	0	3
1005 - 1010	2	0	3	1	3	0	0	11	4	1	2	0	3	1	2	1	0	2	2	0
	1	0	0	0	1	0	0	6	5	4	4	0	4	1	1	0	0	0	0	2
	2	0	4	2	2	0	0	2	0	2	1	0	4	2	1	0	0	2	1	5
																0	0	0	1	0
																1	0	4	2	4
1010 - 1015	4	0	2	4	1	0	0	5	2	3	3	0	3	1	3	0	0	2	4	5
	0	0	3	0	2	1	0	11	4	3	4	0	4	2	3	1	0	6	3	3
	0	0	6	2	0	2	0	7	3	0	6	0	1	1	2	0	0	4	1	2
	1	0	5	4	4											0	0	10	4	5
1015 - 1020	1	0	4	1	1	0	0	5	3	4	5	0	3	3	0	1	0	8	5	5
	2	0	3	1	2	0	0	9	5	6	4	0	2	2	3	1	0	6	3	4
	3	0	2	1	2	0	0	6	4	2	3	0	4	3	0					
						0	0	8	3	4	3	0	0	0	1					
1020 - 1025	0	0	6	1	5	0	0	8	4	2	2	0	5	3	2	1	0	9	3	4
	0	0	0	0	2	1	0	9	5	5	5	0	5	4	1	0	0	5	4	5
	3	0	1	6	2	0	0	5	3	0	5	0	4	3	2	1	0	9	3	5
	8	0	4	6	4											0	0	5	1	1
1025 - 1030	0	0	4	3	3	0	0	6	4	0	3	0	5	2	0	0	0	11	1	1
	0	0	6	4	3	1	0	8	6	7	1	0	3	2	2	1	0	8	3	2
	3	0	5	4	3	0	0	6	5	5	5	0	4	3	2	0	0	5	2	4
	0	0	3	2	0															
1030 - 1035	2	0	1	1	3	0	0	5	3	2	3	0	2	3	2	0	0	4	2	3
	5	0	1	4	4	0	0	7	2	2	2	0	3	1	2	0	0	6	2	4
	2	0	1	0	0	0	0	8	4	3	3	0	3	2	3	1	0	3	1	7
											4	0	1	1	5					
1035 - 1040	4	0	4	1	1	0	0	9	5	7	5	0	1	0	1	4	0	2	0	4
	2	0	5	1	1	1	0	12	6	9	2	0	4	3	2	2	0	3	2	5
	0	0	0	1	2	0	0	7	4	5	1	0	3	4	3	0	0	5	3	4
1040 - 1045	4	0	3	2	1	1	0	10	7	4	1	0	4	3	1	3	0	1	1	1
	4	0	4	2	4	0	0	8	4	5	2	0	1	0	2	1	0	8	2	2
	4	0	2	1	2	0	0	6	3	6	4	0	3	1	2	1	0	2	1	2
1045 - 1050	0	0	5	5	9	0	0	5	3	3	4	0	0	0	2	3	0	1	0	3
	6	0	2	3	3	1	0	3	3	0	2	0	4	0	2	1	0	6	2	8
	4	0	2	2	1	0	0	3	4	4	2	0	3	2	1	3	0	3	1	0
																2	0	6	3	4
1050 - 1055	1	1	1	1	2	1	0	4	1	1	6	0	3	2	2	1	0	7	4	3
	1	1	6	4	3	1	0	2	1	1	5	0	2	2	3	0	0	4	1	5
	6	0	4	5	3	1	0	2	0	2	4	0	5	2	3	0	0	8	5	5
1055 - 1100	3	0	2	0	1	0	0	3	0	4	1	0	2	0	5	1	0	6	2	4
	4	0	1	3	1	0	0	5	3	6	2	0	4	3	3	2	0	8	2	3
	1	0	5	3	3	0	0	9	4	8	3	0	2	5	4	0	0	4	3	5
1100 - 1105	2	0	2	3	3	1	0	9	4	4	3	0	1	1	0	0	0	1	0	3
	0	0	0	0	1	0	0	8	6	7	2	0	3	2	7	0	0	2	0	1
	1	0	4	3	0	0	0	3	2	2	5	0	2	1	2	3	0	8	2	3
	1	0	5	2	2															
1105 - 1110	3	0	3	2	4	0	0	3	1	2	2	0	2	1	1	0	0	3	2	3
	5	0	1	0	5	0	0	4	2	4	2	0	2	4	5	3	0	1	1	5
	4	0	3	1	0	2	0	5	3	5	2	0	4	2	8	2	0	2	2	0
	1	0	4	2	2															
1110 - 1115	5	0	2	2	3	2	0	10	5	7	1	0	1	0	3	0	0	7	6	5
	2	0	4	5	3	0	0	8	6	9	0	0	5	2	5	0	0	6	3	3
	1	0	1	0	0	1	0	5	4	2	2	0	2	1	3	3	0	2	1	1
											3	0	2	1	1					
1115 - 1120	0	0	3	3	4	0	0	7	3	6	9	0	2	3	7	3	0	5	4	3
	4	0	2	0	4	0	0	11	5	4	4	0	2	3	2	4	0	3	1	1
	2	0	4	3	4	0	0	8	3	6	4	0	3	1	1	0	0	1	1	5
1120 - 1125	2	1	0	1	0	1	0	11	8	5	3	0	6	3	4	1	0	6	3	6
	0	0	0	0	1	0	0	7	3	1	4	0	2	1	2	2	0	3	1	6
	1	0	3	4	7	1	0	7	2	2	3	0	4	2	3	2	0	4	2	3
	2	0	5	2	3	0	0	5	3	3						2	0	1	0	0
1125 - 1130	1	0	4	4	7	1	0	11	5	4	8	0	3	1	4	2	0	1	0	5
	0	0	0	0	3	1	0	10	6	4	3	0	4	3	5	0	0	7	2	6
	1	0	2	1	2	1	0	8	4	2	3	0	5	1	2	2	0	6	1	2
	1	0	5	6	5											1	0	4	1	0
1130 - 1135	5	0	2	1	1	1	0	6	4	3	2	0	1	1	4	0	0	0	0	5
	1	0	4	1	4	0	0	9	5	3	3	0	2	1	4	0	0	2	1	3
	5	0	2	3	1	0	0	5	4	6	4	0	2	3	2	2	0	3	1	5
																2	0	7	1	1
1135 - 1140	4	0	5	3	5	1	0	7	4	5	6	0	3	2	2	1	0	10	2	3
	0	0	1	3	2	0	0	8	5	4	5	0	2	1	2	1	0	1	0	2
	1	0	3	3	6	1	0	11	6	6	7	0	3	2	1	0	0	0	0	3
																1	0	1	1	5
1140 - 1145	5	1	3	7	5	0	0	9	5	3	7	0	2	2	1	1	0	6	2	2
	3	0	2	1	0	1	0	12	7	1	6	0	2	3	1	0	0	4	1	0
	5	0	3	2	2	0	0	13	9	7						1	0	1	0	4
1145 - 1150	5	0	4	2	8	1	0	6	3	3	4	0	5	3	2	1	0	1	1	3
	2	0	5	2	7	0	0	10	4	4	5	0	4	1	5	0	0	1	0	0
	3	0	4	2	2	0	0	6	3	3	1	0	4	2	4	0	0	0	0	2
	2	0	1	3	4											1	0	3	1	5
1150 - 1155	3	0	4	5	6	0	0	10	7	1	3	0	4	3	0	1	0	1	1	3
	3	0	3	2	2	0	0	8	4	2	2	0	3	2	2	1	0	3	1	2
	0	0	2	7	2	0	0	13	11	5	2	0	6	1	4	1	0	4	2	4
1155 - 1200	0	0	3	1	5	1	0	14	8	6	5	0	3	2	5	1	0	2	0	0
	3	0	4	1	1	0	0	10	4	4	3	0	2	1	3	0	0	0	0	1
	3	0	3	2	2	0	0	9	3	6	6	0	1	2	3	0	0	0	0	0
						0	0	8	2	4	3	0	7	2	1	1	0	1	0	3
																1	0	4	2	1
1200 - 1205	2	0	4	3	3	1	0	3	0	2	0	0	2	3	1	0	0	11	4	2
	4	0	2	3	2	0	0	0	0	1	1	0	4	2	2	1	0	4	3	2
	2	0	3	1	3	1	0	11	7	1	3	0	4	2	0	0	0	6	3	4
											2	0	3	2	2	0	0	4	1	0
1205 - 1210	4	0	2	1	0	0	0	4	1	1	3	0	3	3	1	1	0	5	1	0
	2	0	7	3	3	0	0	8	3	3	3	0	4	2	2	1	0	5	3	5
	0	0	3	0	2	0	0	9	5	5	2	0	3	1	2	6	0	1	1	4
	3	0	3	3	0															
1210 - 1215	3	0	2	3	4	1	0	5	4	4	3	0	0	1	1	4	0	6	3	2
	1	0	6	1	9	0	0	8	3	4	5	0	3	3	1	1	0	3	3	5
	4	0	0	1	2	1	0	6	4	1	6	0	2	3	0	5	0	6	4	4
																2	0	6	4	4
1215 - 1220	3	0	5	2	2	1	0	5	3	6	3	0	2	1	1	1	0	8	2	2
	1	0	1	0	4	1	0	9	6	8	5	0	3	2	3	1	0	6	1	5
	4	0	4	6	4	0	0	4	2	2	0	0	7	4	3	1	0	2	1	1
1220 - 1225	2	0	1	0	1	0	0	6	4	7	1	0	4	3	3	1	0	8	2	4
	4	0	2	2	3	0	0	8	6	4	4	0	1	3	3	2	0	6	3	7
	0	0	0	0	2	0	0	8	5	2	2	0	8	4	1	2	0	2	0	3
	2	0	9	5	2															
	1	0	2	1	3															
1225 - 1230	3	0	4	3	0	0	0	9	7	2	4	0	2	3	2	2	0	1	1	5
	1	0	1	1	3	0	0	5	3	7	3	0	4	1	0	0	0	1	1	5
	3	0	3	2	3	1	0	2	0	2	2	0	3	1	2	1	0	3	1	5

1230 - 1235	4	0	3	1	0	0	0	8	5	4	2	0	2	3	1	1	0	2	1	6
	3	0	2	2	9	1	0	5	3	6	0	0	2	6	1	3	0	4	2	6
	3	0	0	1	4	0	0	7	4	5	5	0	2	1	3	2	0	4	3	3
											3	0	3	0	1					
1235 - 1240	2	0	3	2	1	0	0	5	3	5	1	0	4	4	4	0	0	5	1	4
	6	0	2	3	0	0	0	6	3	4	1	0	4	4	2	3	0	5	2	6
	1	0	4	3	1	1	0	11	4	5	2	0	6	3	1	1	0	5	2	4
						0	0	9	6	6						4	0	7	1	5
1240 - 1245	3	0	1	2	5	1	0	12	7	4	5	0	4	5	6	2	0	6	1	3
	7	0	5	3	4	0	0	9	5	8	0	0	5	2	3	3	0	3	1	5
	6	0	5	1	1	0	0	5	4	2	0	0	3	2	0	1	0	4	1	3
	4	0	3	1	0															
1245 - 1250	3	0	0	0	1	1	0	4	1	1	2	0	4	1	3	2	0	7	1	5
	1	0	8	7	4	1	0	8	5	4	4	0	2	2	2	2	0	5	2	3
	1	0	5	4	3	0	0	11	6	5	2	0	5	2	2	2	0	5	1	2
						0	0	6	5	3	2	0	2	3	3					
1250 - 1255	1	0	4	1	3	0	0	8	4	7	2	0	6	5	2	3	0	6	1	1
	3	0	3	2	2	0	0	6	5	3	6	0	2	4	2	2	0	5	1	1
	1	0	2	3	0	0	0	11	8	1	4	0	4	1	3	3	0	1	0	2
1255 - 1300	3	0	2	3	4	0	0	9	6	4	3	0	5	2	2	1	0	8	1	5
	0	0	4	0	5	1	0	11	5	4	2	0	5	2	0	2	0	5	1	2
	1	0	0	1	2	1	0	12	4	1	2	0	4	4	1	2	0	4	0	5
	1	0	5	4	1						4	0	1	2	2	1	0	6	2	2
1300 - 1305	2	0	3	2	5	0	0	11	5	3	2	0	2	2	1	2	0	7	2	6
	0	0	4	0	1	1	0	8	4	4	6	0	3	2	4	2	0	11	10	4
	3	0	1	3	2	0	0	7	5	5	1	0	4	0	4	3	0	10	9	5
																6	0	9	6	8
1305 - 1310	3	0	3	1	1	0	0	8	4	7	4	0	4	2	5	2	0	7	4	4
	0	0	5	3	1	1	0	11	6	3	3	0	6	2	3	3	0	10	5	5
	0	0	2	0	4	0	0	12	5	5	2	0	6	3	2	0	0	7	4	4
1310 - 1315	2	0	0	1	1	0	0	13	6	2	4	0	2	4	3	2	0	9	3	6
	2	0	4	4	6	0	0	9	4	6	3	0	6	4	0	2	0	13	4	8
	2	0	6	5	2	0	0	14	6	2	3	0	2	2	1	4	0	7	4	8
1315 - 1320	3	0	2	4	3	1	0	14	11	4	4	0	4	2	4	2	0	11	4	6
	0	0	4	4	5	0	0	13	8	6	2	0	4	3	6	2	0	11	6	3
						2	0	12	10	2	7	0	5	5	7	1	0	9	3	2
																0	0	8	5	5
1320 - 1325	2	0	5	3	3	0	0	11	5	7	6	0	5	3	2	5	0	5	2	3
	1	0	1	0	3	1	0	9	4	0	1	0	5	2	3	2	0	7	6	4
	2	0	6	8	6	0	0	7	5	1	4	0	2	3	0	2	0	2	3	3
	2	0	4	1	1															
1325 - 1330	5	0	5	6	2	0	0	11	5	6	2	0	6	3	0	3	0	11	9	5
	1	0	3	2	6	0	0	9	3	3	2	0	3	1	0	0	0	14	8	3
						0	0	13	6	1	0	0	6	2	2	1	0	12	7	8
1330 - 1335	1	0	3	3	3	1	0	8	6	4	1	0	4	2	3	0	0	9	5	5
	1	0	3	2	4	1	0	12	4	7	1	0	5	5	2	3	0	11	9	5
	1	0	6	2	5	0	0	4	3	2						4	0	12	8	3
1335 - 1340	5	0	5	3	4	0	0	11	4	2	0	0	1	2	4	2	0	11	9	2
	2	0	3	2	3	1	0	13	6	6	1	0	6	2	2	3	0	8	4	6
	3	0	4	4	1	0	0	8	4	1	5	0	4	2	3	1	0	9	6	4
1340 - 1345	4	0	3	7	6	0	0	7	4	3	5	0	4	0	3	1	0	9	4	4
	6	0	2	5	5	0	0	11	5	2	3	0	5	1	1	2	0	11	8	4
	2	0	3	1	4	0	0	4	1	4	1	0	2	1	2	3	0	12	5	5
	2	0	4	2	5															
1345 - 1350	0	0	3	4	7	1	0	8	4	8	1	0	6	3	2	1	0	13	9	7
	0	0	2	5	1	0	0	5	3	4	1	0	6	4	2	1	0	11	7	6
	3	0	3	3	4	0	0	7	4	4	3	0	3	2	2	1	0	9	5	5
											2	0	4	3	1					
1350 - 1355	3	0	2	1	1	0	0	8	4	4	4	0	2	2	5	2	0	13	8	6
	8	0	2	3	5	0	0	10	5	4	3	0	6	2	1	7	0	8	5	5
	0	0	4	3	5	0	0	5	1	1	5	0	3	4	5	1	0	9	4	7
1355 - 1400	2	0	4	2	5	0	0	11	4	2	4	0	4	1	0	1	0	13	11	4
	5	0	3	6	2	1	0	14	5	6	4	0	7	2	3	4	0	11	9	7
	6	0	3	4	2	1	0	8	3	4	5	0	3	3	2	0	0	10	5	2
1400 - 1405	3	0	2	0	1	0	0	9	5	3	3	0	2	1	0	2	0	11	2	2
	3	0	2	3	5	1	0	11	7	6	4	0	3	2	1	2	0	8	5	5
	3	0	5	3	4	1	0	13	6	4	3	0	1	3	3	1	0	5	3	6
1405 - 1410	1	0	3	0	5	0	0	9	5	2	5	0	2	3	2	4	0	7	4	4
	2	0	2	2	2	1	0	7	7	3	0	0	3	2	0	1	0	5	3	2
	5	0	1	3	4	0	0	8	4	6	5	0	1	3	4	2	0	6	4	5
											5	0	4	5	4					
1410 - 1415	0	0	3	2	4	1	0	9	5	3	2	0	4	4	1	0	0	9	5	7
	5	0	1	2	0	0	0	8	4	7	4	0	4	4	2	4	0	11	9	7
	0	0	2	4	4	1	0	10	8	1	0	0	4	3	4	2	0	9	5	6
1415 - 1420	2	0	3	1	4	1	0	9	5	5	3	0	3	1	5	2	0	9	5	3
	4	0	1	1	1	0	0	11	7	2	2	0	7	5	2	1	0	11	6	6
	1	0	1	0	1	0	0	9	5	6	1	0	5	2	0	2	0	9	5	6
1420 - 1425	4	0	4	2	2	1	0	8	5	7	1	0	0	1	1	1	0	7	4	4
	3	0	2	3	1	0	0	6	3	7	4	0	2	4	4	2	0	9	6	4
						0	0	9	4	3	1	0	7	2	1	4	0	11	4	4
1425 - 1430	4	0	4	7	3	1	0	6	4	2	5	0	2	2	0	2	0	9	5	4
	1	0	1	2	2	0	0	11	9	1	4	0	2	5	4	2	0	11	6	9
	0	0	1	2	4	1	0	13	6	2	4	0	6	0	4	3	0	10	7	6
1430 - 1435	5	0	3	2	6	0	0	9	4	6	6	0	4	4	1	3	0	12	8	6
	2	0	2	2	7	0	0	7	3	5	4	0	4	2	3	1	0	8	4	2
	3	0	2	3	3	0	0	6	4	2	2	0	4	5	3	2	0	5	4	2
1435 - 1440	1	0	4	4	1	1	0	12	9	4	2	0	4	3	2	1	0	5	6	6
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	2	0	4	2	3	0	0	8	5	4	0	0	5	3	3	1	0	9	6	9
1440 - 1445	2	0	4	2	2	1	0	7	5	7	4	0	2	3	2	2	0	11	7	7
	3	0	2	2	7	1	0	11	7	4	4	0	2	2	2	3	0	13	9	6
	3	0	7	11	3	0	0	9	5	6						0	0	9	5	4
1445 - 1450	1	0	4	1	2	0	0	13	5	2	2	0	4	3	1	1	0	9	6	5
	4	0	6	4	1	0	0	11	4	4	2	0	7	4	4	2	0	11	5	4
	2	0	5	2	3	0	0	8	3	3	4	0	5	3	2	2	0	9	7	5
1450 - 1455	2	0	3	2	3	1	0	6	4	7	3	0	3	0	5	2	0	8	5	4
	1	0	5	8	4	0	0	9	3	3	1	0	2	2	4	4	0	7	5	3
	2	0	1	1	1	1	0	5	2	0	3	0	3	1	1	3	0	5	3	4
1455 - 1500	1	0	3	2	2	1	0	10	5	0	2	0	4	1	4	3	0	8	5	3
	1	0	1	0	0	1	0	6	4	3	6	0	2	2	2	1	0	6	4	6
	2	0	3	2	8	1	0	7	3	2	5	0	3	1	2	2	0	9	5	3
1500 - 1505	0	0	1	0	4	1	0	11	5	7	0	0	5	4	1	3	1	14	8	6
	4	0	2	2	1	0	0	13	9	3	2	0	5	3	1	2	0	9	5	8
	0	0	2	2	7	1	0	12	8	3	3	0	5	6	1	5	0	8	6	3
1505 - 1510	1	0	5	2	1	1	0	10	6	3	2	0	4	3	2	2	0	6	4	5
	4	0	2	4	1	0	0	12	4	3	5	0	3	3	1	2	0	14	8	0
	3	0	5	3	1	0	0	14	6	5	6	0	2	5	2	6	0	9	5	2
1510 - 1515	4	0	0	1	0	0	0	7	4	4	2	0	4	2	2	3	0	9	6	6
	1	0	3	4	2	0	0	9	6	6	2	0	4	3	2	8	0	13	9	5
	1	0	4	1	3	0	0	7	4	1	5	0	1	1	2	4	0	10	7	2
1515 - 1520	4	0	7	8	5	0	0	6	4	7	2	0	5	0	6	3	0	9	6	6
	6	0	2	1	4	1	0	9	6	1	5	0	2	3	0	1	0	15	12	7
	3	0	3	0	5	1	0	8	4	2	2	1	5	5	0	5	0	13	9	8
1520 - 1525	4	0	5	4	2	0	0	11	9	4	2	0	7	2	3	7	0	12	8	4
	0	0	2	0	0	0	0	10	6	8	2	0	8	6	3	4	0	8	5	4
	1	0	7	5	1	1	0	9	5	4	3	0	1	1	2	5	0	9	5	4
1525 - 1530	2	0	5	8	3	0	0	7	5	5	1	0	4	4	0	4	0	8	5	3
	3	0	2	0	4	1	0	8	4	2	0	0	6	3	1	4	0	5	4	3
	0	0	2	1	3	0	0	9	6	2	4	0	4	2	3	8	0	7	5	5
1530 - 1535	2	0	2	2	3	0	0	11	6	5	3	0	3	1	1	4	0	9	5	9
	1	0	2	2	2	0	0	6	4	2	2	0	4	4	0	5	0	7	4	5
	2	0	3	3	4	1	0	9	5	1	4	0	3	2	1	6	0	14	12	8
1535 - 1540	4	0	2	1	2	0	0	12	7	8	2	0	3	3	1	5	0	13	11	2
	2	0	1	1	1	0	0	8	5	2	0	0	5	4	2	4	0	15	12	4
	1	0	2	1	1	0	0	5	3	4	4	0	3	3	1	1	0	14	11	6
1540 - 1545	4	0	6	5	7	0	0	8	5	1	2	0	2	3	2	7	0	13	10	5
	1	0	2	3	4	0	0	7	4	4	3	0	5	2	4	4	0	11	9	9
	3	0	2	3	5	1	0	9	6	1	5	0	4	5	1	6	0	16	12	8
1545 - 1550	2	0	3	3	0	0	0	10	8	8	1	0	3	1	3	4	0	8	5	3
	2	0	5	3	5	0	0	6	4	4	3	1	4	2	0	1	0	11	7	5
	5	0	3	2	2	1	0	8	4	0	1	0	9	1	4	8	0	13	9	6
1550 - 1555	2	0	2	1	0	1	0	11	8	8	3	0	3	4	1	11	0	14	11	6
	3	0	1	2	4	1	0	9	5	7	0	0	4	3	2	4	0	10	8	5
	3	0	3	3	2	0	0	8	6	9	2	0	8	2	3					
1555 - 1600	4	0	2	7	1	2	0	5	4	0	4	0	2	2	3	5	0	9	5	4
	1	0	2	2	3	1	0	7	3	4	3	0	6	4	2	4	0	14	9	4
	0	0	1	2	2	0	0	0	0	0	3	0	5	2	2	1	0	11	5	3
1600 - 1605	2	0	2	2	2	0	0	12	9	1	6	0	3	1	1	2	0	11	8	8
	1	0	5	4	5	0	0	9	6	2	7	0	1	3	3	8	0	14	11	5
	1	0	6	4	3	0	0	6	4	4	4	0	7	2	0	0	0	11	9	7
1605 - 1610	0	0	3	0	4	0	0	10	9	7	5	0	2	6	1	5	0	13	9	5
	1	0	3	1	0	1	0	9	5	9	1	0	6	4	4	3	0	11	7	3
						0	0	8	4	8	2	0	2	2	3	4	0	10	6	5
						0	0	5	4	5										
1610 - 1615	2	0	5	2	3	0	0	9	4	3	4	0	1	3	5	5	0	11	10	5
	0	0	2	0	2	2	0	11	5	2	2	0	4	4	1	4	0	9	5	2
	2	0	1	0	1	0	0	9	6	1	1	0	5	4	1	2	0	8	6	6
	0	0	3	0	0											2	0	11	9	5

1615 - 1620	2	0	2	5	3	0	0	7	4	5	0	0	5	5	3	0	0	13	9	5
	0	0	4	3	1	0	0	9	6	4	0	0	7	3	2	5	0	11	7	0
	0	0	1	4	2	0	0	7	5	2	0	0	5	3	0	1	0	6	4	4
						1	0	11	9	0	2	0	6	5	2					
1620 - 1625	0	0	2	1	2	0	0	12	8	2	0	0	4	4	1	2	0	11	9	4
	1	0	2	3	3	0	0	5	6	4	5	0	4	2	0	2	0	13	7	6
	4	0	2	1	2	1	0	7	4	4	1	0	3	3	0	1	0	9	5	2
1625 - 1630	1	0	3	3	3	0	0	8	5	2	2	0	2	0	2	5	0	14	12	4
	0	0	5	2	4	0	0	9	4	5	4	0	3	2	0	2	0	11	8	4
	2	0	1	2	2	1	0	1	0	3	1	0	4	3	2	3	0	9	5	1
	0	0	1	1	7						3	0	3	1	1					
1630 - 1635	1	0	3	3	1	1	0	5	2	4	3	0	3	2	0	1	0	12	8	5
	2	0	1	1	3	0	0	8	5	3	3	0	4	3	1	2	0	10	6	5
	1	0	1	4	0	1	0	9	6	0	3	0	4	1	2	3	0	14	7	5
						0	0	11	7	1										
1635 - 1640	4	0	3	1	2	0	0	5	2	2	2	0	5	4	3	1	0	9	6	3
	1	0	2	1	2	2	0	2	1	1	3	0	2	1	2	2	0	11	5	2
	1	0	1	2	2	1	0	7	4	1	3	0	2	1	0	4	0	13	9	4
1640 - 1645	1	0	4	3	2	0	0	8	5	7	2	0	5	3	2	7	0	14	12	6
	1	0	4	2	4	0	0	7	4	2	3	0	3	3	2	1	0	11	7	6
	2	0	5	2	2	0	0	6	5	0	2	0	4	2	0	2	0	10	5	6
1645 - 1650	0	0	3	4	1	1	0	7	4	3	1	0	2	0	2	1	0	12	9	5
	0	0	0	0	6	0	0	9	6	6	2	0	1	0	0	3	0	9	5	4
	2	0	3	2	1	0	0	4	0	0	2	0	4	1	0	2	0	11	7	5
	3	0	4	0	2						1	0	4	3	2					
1650 - 1655	3	0	5	1	1	1	0	2	1	0	1	0	1	0	4	2	0	9	6	2
	2	0	3	2	1	0	0	6	3	3	2	0	1	1	3	1	0	11	5	4
	4	0	6	3	2	0	0	2	1	1	0	0	1	0	1	4	0	7	4	7
1655 - 1700	0	0	2	2	2	0	0	2	0	2	0	0	5	0	2	2	0	10	3	3
	3	0	3	3	4	0	0	5	4	6	3	0	1	1	1	2	0	13	7	3
	0	0	5	3	2	1	0	7	3	2	3	0	5	3	4	4	0	14	6	5
	2	0	3	2	1						2	0	3	2	3	8	0	6	3	2

Etihad
Queue Length Survey

Site 5
A6010 Alan Turing Way
A635 Ashton Old Road (East)
A6010 Pottery Lane
A635 Ashton Old Road (West)



Lat/Long
lat:53.474192° lon -2.194445°

Date
Thursday 07 November 2019

Weather
Cloudy
Temp: 6°C

1600 - 2300 (Thursday 7H Session)

TIME	5a	5b	5c	5d	5e	5f	5g	5h	5i	5j	5k	5l	5m	5n	5o	5p	5q	5r
1600 - 1605	1	0	3	4	3	0	0	0	3	0	0	12	11	3	2	8	6	5
	2	0	7	6	6	2	3	5	3	1	0	5	13	4	3	10	16	5
	0	0	11	3	1	0	0	0	4	0	0	13	18	5	0	8	12	8
						5	5	8	8									
						0	0	0	5									
						7	9	4	10									
1605 - 1610	0	0	11	8	4	0	0	0	4	0	0	8	19	7	0	6	13	5
	2	0	9	11	3	5	3	10	19	0	0	7	20	8	8	3	9	4
	1	1	8	11	4	0	0	0	14	0	0	8	13	6				
						2	5	6	15									
						1	3	2	8									
1610 - 1615	2	0	10	6	4	7	3	5	16	0	0	10	7	6	6	7	13	7
	1	0	13	14	1	0	0	0	9	0	0	8	9	6	6	5	13	8
	3	0	10	11	5	3	3	3	15	0	0	10	9	8	2	7	15	4
						0	0	0	11									
						2	4	3	17									
						0	0	0	14									
1615 - 1620	1	1	15	11	5	7	3	6	16	0	0	8	10	6	0	10	17	0
	0	0	12	13	3	0	0	0	11	0	0	7	7	7	0	6	14	4
						5	4	3	15	0	0	8	10	5	0	9	16	5
						0	0	0	12									
						1	2	3	14									
						0	0	0	9									
1620 - 1625	2	0	11	10	0	0	8	6	15	0	0	13	10	6	7	7	11	4
	0	0	9	13	4	0	0	0	10	0	0	13	14	3	3	8	14	5
	1	1	16	11	5	7	8	9	13	0	0	14	15	6	5	6	10	8
						0	0	0	12									
						3	5	2	11									
						0	0	0	9									
1625 - 1630	2	0	12	14	2	1	5	3	14	0	0	16	18	7	1	6	14	8
	0	0	13	12	2	0	0	0	9	0	0	16	16	7	5	5	13	4
	2	0	14	15	5	5	3	4	11						0	8	16	7
						0	0	0	13									
1630 - 1635	3	0	7	12	6	6	7	7	7	0	0	12	14	5	7	9	14	5
	0	0	16	14	4	0	0	0	0	0	0	15	17	5	4	6	11	3
	0	0	14	15	4	4	8	6	6	0	0	16	16	6	6	7	14	3
						0	0	0	0									
						7	12	14	14									
1635 - 1640	3	0	10	10	6	0	0	0	6	0	0	14	18	6	4	12	13	4
	1	0	14	13	5	2	3	4	6	0	0	17	16	7	0	12	15	4
	1	0	5	8	7	0	0	0	2	0	0	17	17	6				
						0	4	5	3									
						0	0	0	5									
1640 - 1645	1	0	7	8	2	3	7	7	8	0	0	16	15	4	3	6	14	5
	1	0	13	10	3	0	0	0	2	0	0	19	20	1	0	10	15	7
	1	0	14	15	5	3	2	2	2	0	0	15	17	5	0	6	13	3
						2	9	12	2									
						0	0	0	2									
1645 - 1650	1	0	5	14	3	3	3	5	2	0	0	16	20	3	3	9	13	2
	1	0	9	11	6	0	0	0	4	0	0	12	16	4	1	4	15	4
						2	0	2	5	0	0	14	16	5	2	4	5	1
						0	0	0	3									
						1	2	3	2									
1650 - 1655	2	0	11	13	0	3	2	5	5	0	0	15	16	6	5	7	14	6
	0	0	14	12	5	0	0	0	2	0	0	18	16	4	2	6	12	1
	4	0	13	18	5	0	5	7	6	0	0	12	15	1	8	3	11	3
						0	0	0	5									
						3	5	4	9									
						0	0	0	5									
1655 - 1700	1	0	6	6	2	2	7	12	6	0	0	17	18	3	0	5	12	1
	1	0	12	13	2	0	0	0	3	0	0	9	10	3	4	7	15	2
	0	0	8	12	2	0	1	2	6						3	3	6	5
						0	0	0	5									
						0	4	4	5									
1700 - 1705	1	0	8	15	1	0	0	0	7	0	0	16	15	4	5	9	15	3
	2	0	11	14	2	2	10	10	9	0	0	14	14	4	9	6	11	4
	1	0	12	9	4	0	0	0	4	0	0	18	18	6	11	3	13	4
						5	6	5	3									
						0	0	0	1									
						4	7	7	6									
1705 - 1710	0	0	13	8	0	0	0	0	2	0	0	20	20	3	0	9	14	3
	0	0	7	9	3	0	5	8	7	0	0	13	15	5	6	10	19	7
	1	0	6	7	5	0	0	0	4	0	0	15	17	5				
						1	0	0	5									
						0	0	0	3									
1710 - 1715	0	0	11	12	6	0	8	4	2	0	0	10	14	5	7	6	15	1
	0	1	9	8	3	0	0	0	1	0	0	14	14	3	3	8	13	4
	1	0	12	15	2	2	4	6	5	0	0	16	15	6	3	5	14	5
						0	0	0	5									
						1	5	5	2									
						0	0	0	2									
1715 - 1720	1	0	13	14	5	0	3	3	0	0	0	15	19	4	5	6	15	5
	2	1	12	12	3	0	0	0	3	0	0	15	14	3	6	6	11	6
						1	1	2	3	0	0	16	13	5	4	7	12	4
						0	0	0	2									
						0	6	8	3									
1720 - 1725	0	0	10	11	4	3	4	4	7	0	0	17	16	5	0	11	14	5
	0	0	8	14	4	0	0	0	5	0	0	15	17	6	5	6	13	1
	0	0	8	14	3	2	6	7	5						5	10	14	5
						0	0	0	1									
						0	10	8	7									
						0	0	0	1									
1725 - 1730	0	0	9	14	4	2	6	4	7	0	0	16	12	3	3	5	13	3
	0	0	6	12	2	0	0	0	4	0	0	16	17	4	0	9	15	3
	2	0	9	15	4	2	6	9	7	0	0	17	20	5	2	9	13	3
						0	0	0	3									
						3	2	4	4									
1730 - 1735	4	1	9	16	4	0	0	0	2	0	0	15	17	3	3	3	9	4
	1	0	7	11	3	1	6	3	3	0	0	15	15	5	2	12	15	4
	0	0	7	13	0	0	0	0	1	0	1	17	17	5	5	8	8	2
						0	3	4	1									
						0	0	0	5									
						2	9	3	6									
1735 - 1740	0	0	3	7	3	0	0	0	2	0	0	18	19	6	5	7	9	2
	2	1	6	9	1	0	7	7	4	0	0	16	18	7	1	10	9	7
	1	0	7	9	2	0	0	0	1	0	0	14	17	7				
						0	2	1	3									
1740 - 1745	1	0	5	9	2	1	1	7	8	0	0	8	13	4	0	7	13	6
	1	0	7	9	0	0	0	0	5	0	1	13	14	2	2	10	6	5
	2	0	9	13	5	2	6	9	11	0	0	18	20	2	4	7	14	5
						0	0	0	4									
						0	3	3	6									
						0	0	0	4									
1745 - 1750	3	0	6	10	6	0	5	3	7	0	0	15	16	4	2	12	12	4
	0	1	4	8	4	0	4	2	4	0	0	10	11	4	1	10	14	7
						0	6	7	3	0	0	18	17	7	4	9	12	3
1750 - 1755	0	0	4	8	4	0	6	7	2	0	0	18	17	8	3	9	13	7
	4	0	5	8	0	0	0	0	1	0	0	10	11	6	5	7	11	7
	2	0	3	8	3	0	8	6	4	0	0	14	15	5	2	11	14	1
						0	0	0	3									
						0	1	2	3									
						0	0	0	2									
1755 - 1800	2	1	6	9	1	0	4	5	3	0	0	12	14	5	1	7	12	7
	0	0	4	10	4	0	0	0	4	0	0	16	18	5	2	5	13	3

	0	0	3	8	6	0	5	11	5						6	9	12	6
						0	0	0	2									
						0	4	7	7									
1800 - 1805	2	0	6	13	2	0	0	0	3	0	0	11	12	4	4	11	15	4
	6	1	7	11	5	0	4	2	5	0	0	15	16	5	1	11	16	6
	2	0	9	13	2	0	3	4	4	0	0	17	18	5	0	7	12	3
						0	0	0	3									
1805 - 1810	2	0	13	16	6	0	5	2	1	0	0	16	16	4	1	7	15	3
	1	0	16	17	3	0	5	5	2	0	0	14	16	5	2	11	12	3
	0	0	11	15	1	0	0	0	4						5	9	17	4
						0	1	1	1									
1810 - 1815	1	0	13	15	2	0	0	0	2	0	0	12	15	5	6	8	14	8
	0	0	8	10	1	0	6	4	5	0	0	12	12	5	5	8	12	11
	0	0	10	14	2	0	0	0	5	0	0	14	14	4	2	6	14	4
						0	11	8	4									
						0	4	3	0									
1815 - 1820	1	0	12	14	0	0	0	0	4	0	0	21	22	5	3	7	10	4
	4	0	11	16	4	0	8	6	2	0	0	11	14	4	6	5	7	6
	1	0	13	14	1	0	0	0	5	0	0	16	16	6				
						0	8	9	8									
						0	0	0	3									
1820 - 1825	3	0	19	16	4	0	7	3	4	0	0	18	9	4	5	4	12	2
	0	0	13	16	2	0	0	0	2	0	0	4	13	5	1	5	8	1
	1	0	15	15	5	0	7	7	3	0	0	18	18	6	4	6	11	6
						0	0	0	2									
						0	10	6	3									
						0	0	0	1									
1825 - 1830	0	0	12	17	5	0	6	9	1	0	0	15	17	5	1	4	5	3
	0	0	14	19	3	0	9	7	4	0	0	16	15	5	3	3	5	3
	2	0	13	16	6	0	9	8	2	0	0	14	16	4	3	5	9	3
						0	0	0	1									
						0	0	0	1									
1830 - 1835	0	0	12	10	3	0	8	8	3	0	0	13	11	2	7	4	10	3
	1	0	5	3	2	0	9	3	3	0	0	11	14	2	2	2	4	1
						0	6	7	0	0	0	8	11	3	6	7	7	3
1835 - 1840	0	0	9	7	3	0	12	8	2	0	0	9	12	3	2	6	11	6
	0	0	11	13	3	0	0	0	2	0	0	15	15	2	5	8	13	4
	3	0	13	15	6	0	7	8	0						4	12	15	2
						0	0	0	4									
						0	6	9	3									
1840 - 1845	2	0	8	8	7	0	0	0	2	0	1	16	14	4	2	7	9	2
	0	0	14	14	5	0	7	8	3	0	0	11	14	6	1	4	12	6
	1	0	14	15	6	0	5	6	1	0	0	16	17	5	1	11	12	7
						0	9	10	5									
1845 - 1850	3	0	12	9	9	0	0	0	1	0	0	12	14	4	6	7	9	5
	0	0	12	13	9	0	14	8	6	0	0	10	11	2	4	4	10	2
	3	0	15	15	14	0	0	0	4	0	0	11	11	5				
						0	9	11	7									
						0	0	0	4									
						0	5	7	1									
1850 - 1855	5	0	14	14	7	0	9	12	2	0	0	12	14	4	3	6	11	7
	1	0	15	16	4	0	9	8	7	0	0	10	14	5	3	12	9	6
	0	0	7	10	6	0	0	0	2	0	0	13	14	4	4	7	10	4
1855 - 1900	2	0	5	7	3	0	6	8	4	0	0	11	13	2	1	10	10	5
	0	0	10	13	0	0	0	0	2	0	0	17	17	1	1	3	4	8
	2	0	9	7	5	0	6	5	3	0	0	9	9	2	1	7	9	4
						0	10	11	6									
						0	0	0	1									
1900 - 1905	0	0	13	13	4	0	4	0	3	0	0	12	12	4	4	4	8	5
	0	0	8	11	5	0	0	0	2	0	0	11	12	2	0	7	12	8
	2	0	8	11	3	0	6	5	1						4	3	6	1
						0	0	0	1									
1905 - 1910	2	0	11	8	4	0	4	7	3	0	0	11	11	5	1	4	7	5
	0	0	11	10	2	0	9	12	9	0	0	9	10	3	0	3	3	3
	3	0	12	14	1	0	0	0	3	0	0	11	12	3	1	3	7	3
						0	8	11	2									
1910 - 1915	3	0	12	12	5	0	3	6	0	0	0	14	10	1	5	2	1	0
	2	0	4	1	0	0	8	3	6	0	0	12	12	0	4	2	4	2
	0	0	0	0	1	0	0	0	2	0	0	8	11	3				
	2	0	5	3	5	0	2	4	2									
						0	0	0	2									
1915 - 1920	0	0	2	1	3	0	5	2	2	0	0	9	7	0	3	2	1	1
	1	0	4	3	2	0	0	0	3	0	0	10	11	3	1	3	1	1
	0	0	4	3	1	0	3	3	1	0	0	9	9	4	0	4	1	3
						0	0	0	1						2	2	0	0
						0	4	4	1						2	0	0	2
						0	8	5	5									
1920 - 1925	0	0	3	2	0	0	4	3	4	0	0	10	12	3	1	4	2	1
	0	0	5	5	4	0	3	3	2	0	0	8	10	6	0	3	2	2
	0	0	5	6	1	0	7	2	3	0	0	7	6	2	3	2	3	4
	2	0	5	5	3	0	0	0	1	0	0	10	9	4				
1925 - 1930	1	0	2	0	1	0	1	4	3	0	0	7	10	1	6	2	4	3
	1	0	6	5	2	0	0	0	2	0	0	11	6	0	2	3	0	0
	0	0	8	7	1	0	2	6	2	0	0	13	11	1	5	3	0	0
						0	3	5	3									
						0	2	2	5									
1930 - 1935	1	0	9	10	0	0	4	5	1	0	0	9	13	4	4	2	2	1
	1	0	6	6	1	0	7	3	6	0	0	11	14	4	1	2	1	2
	0	0	9	5	2	0	0	0	3	0	0	8	12	4	3	2	3	3
															4	3	4	0
1935 - 1940	0	0	6	8	2	0	3	5	2	0	0	10	10	1	2	2	3	1
	1	0	7	8	0	0	5	7	1	0	1	11	12	1	4	2	3	1
	1	0	6	5	3	0	3	3	1	0	0	6	9	0	1	3	0	2
	0	0	2	3	4	0	0	0	1									
						0	0	0	1									
1940 - 1945	0	0	6	4	2	0	2	2	0	0	0	6	7	0	3	2	3	0
	0	0	1	1	0	0	3	3	1	0	0	9	10	4	3	2	3	0
	0	0	0	0	2	0	0	0	2						4	1	1	0
	1	0	1	0	4	0	3	3	2						1	4	3	3
						0	0	0	2									
						0	4	4	2									
1945 - 1950	0	0	5	7	4	0	3	5	0	0	1	8	9	2	1	2	0	0
	0	0	4	3	3	0	2	3	1	0	0	7	9	0	4	4	2	0
	0	1	5	6	1	0	2	3	4	0	0	6	5	2	1	2	3	2
	1	0	5	4	7					0	0	6	4	2				
1950 - 1955	0	0	4	4	4	0	2	3	4	0	0	10	11	1	2	3	2	1
	0	0	6	6	2	0	0	0	1	0	0	8	6	2	3	1	2	2
	0	0	8	6	3	0	9	4	3	0	0	6	5	0	1	2	2	1
						0	5	4	3									
1955 - 2000	0	0	0	0	2	0	1	2	1	0	0	9	7	1	3	2	0	2
	1	0	5	9	3	0	0	0	4	0	0	9	7	1	4	2	3	1
	0	0	5	5	6	0	3	4	6						1	2	3	1
						0	0	0	3						2	0	0	0
						0	1	1	4									
						0	0	0	1									
2000 - 2005	0	0	4	2	6	0	3	3	1	0	0	3	4	0	2	2	0	1
	1	1	2	3	3	0	5	3	0	0	0	8	6	2	2	1	2	1
	1	0	4	7	7	0	0	0	1	0	0	6	3	1	3	2	0	0
	0	0	5	6	6	0	1	4	0	0	0	7	4	0				
2005 - 2010	0	0	1	1	1	0	3	5	2	0	0	9	9	0	2	0	0	0
	0	0	5	6	2	0	5	6	3	0	0	3	8	1	3	2	0	0
	0	0	6	5	3	0	0	0	1	0	0	9	6	2	4	2	2	3
						0	0	0	1						1	1	2	1
						0	1	1	0									
2010 - 2015	0	0	5	4	4	0	0	0	2	0	0	9	8	2	2	2	1	1
	0	0	0	4	3	0	3	3	3	0	0	10	10	1	3	2	1	1
	0	0	1	0	1	0	3	3	2	0	0	4	10	0	1	2	0	0
						0	0	0	1	0	0	4	6	6				
						0	2	1	2									
2015 - 2020	0	0	6	5	0	0	0	1	1	0	0	1	0	0	3	2	5	0
	1	0	6	5	5	0	2	1	2	0	0	2	2	4	0	2	2	1
	1	0	4	3	1	0	3	2	1	0	0	3	7	1	2	1	1	0
	0	0	5	0	3					0	0	3	6	4				
2020 - 2025	1	0	1	0	1	0	1	2	1	0	0	5	5	3	0	4	3	1
	0	0	0	0	4	0	1	1	1	0	0	8	6	3	3	2	2	2
	1	0	4	3	2	0	2	1	0	0	0	10	8	2	1	2	1	1
	0	0	2	0	0	0	5	4	0						1	2	1	3
	0	0	0	0	1													
2025 - 2030	0	0	1	2	3	0	5	4	1	0	0	6	9	3	2	1	2	0
	0	0	3	2	2	0	4	3	1	0	0	11	6	1	1	2	3	1
	1	0	2	0	2	0	2	1	3	0	0	9	6	5	3	1	2	2
	0	0	4	5	1					0	0	7	10	1				

2030 - 2035	0	0	2	3	1	0	1	3	1	0	0	8	10	1	1	0	0	0
	0	1	6	6	1	0	2	0	1	0	0	4	7	2	3	4	3	2
	3	0	4	3	2	0	0	0	1	0	0	4	4	1	3	2	1	0
						0	5	3	3									
2035 - 2040	0	0	2	1	1	0	0	1	1	0	0	4	5	5	0	1	2	2
	0	0	4	1	1	0	2	3	1	0	0	6	5	3	0	4	4	1
	0	0	3	3	4	0	4	2	1	0	0	9	7	1	2	1	2	0
						0	2	2	1						3	1	2	2
2040 - 2045	2	0	5	4	1	0	4	4	1	0	0	4	5	4	2	3	4	0
	0	0	2	1	2	0	2	2	1	0	1	6	7	5	0	1	2	1
	1	0	3	0	1	0	5	5	0	0	0	7	8	0	2	1	2	0
						0	2	0	1	0	0	7	5	6				
2045 - 2050	0	0	0	0	2	0	4	5	3	0	0	5	3	5	1	3	2	1
	0	0	5	2	3	0	1	1	1	0	0	0	0	1	1	1	2	1
	1	0	3	0	0	0	3	4	3						1	1	1	3
															0	1	1	0
2050 - 2055	1	0	2	2	3	0	2	2	1	0	0	7	7	2	2	2	0	0
	1	0	2	3	1	0	2	4	1	0	0	5	2	1	1	1	2	0
	3	0	4	5	0	0	0	0	1	0	0	6	5	0	2	1	2	1
						0	6	4	3									
2055 - 2100	0	0	3	4	1	0	7	4	0	0	1	10	8	3	0	3	4	2
	0	0	4	4	0	0	2	2	2	0	0	4	7	3	1	3	3	1
	0	0	2	2	1	0	0	0	2	0	0	4	3	4	4	2	3	0
	2	0	3	4	2	0	0	0	2									
2100 - 2105	1	0	2	3	2	0	1	1	3	0	0	2	1	4	0	3	3	1
	1	0	1	0	2	0	4	4	2	0	0	7	3	0	0	1	2	0
	0	0	1	3	1	0	1	1	0	0	0	6	1	3	3	4	3	0
						0	0	2	2						1	2	3	0
2105 - 2110	0	0	2	3	1	0	5	3	1	0	0	4	7	3	1	2	3	3
	0	0	1	3	1	0	0	0	1	0	0	6	6	2	1	0	2	1
	0	0	3	0	2	0	4	4	1	0	0	0	1	1	1	1	3	1
	0	0	3	1	2	0	3	2	2	0	0	2	3	2				
2110 - 2115	2	0	4	2	0	0	3	5	1	0	0	5	3	2	0	2	3	0
	1	0	3	2	5	0	2	2	1	0	0	7	11	3	0	1	2	1
	0	0	1	1	3	0	5	1	0	0	0	7	2	2	0	3	0	0
						0	5	2	0						1	4	3	3
2115 - 2120	1	0	1	2	1	0	4	2	2	0	0	0	0	3	0	1	3	0
	0	0	4	2	2	0	4	3	0	0	0	0	0	1	4	3	0	0
	0	0	1	2	0	0	4	1	2	0	0	2	4	0	0	5	4	0
	0	0	2	1	0					0	0	5	6	2				
2120 - 2125	0	0	5	3	1	0	4	3	5	0	0	0	0	2	1	1	0	1
	2	0	3	2	1	0	3	5	1	0	0	7	5	1	4	5	3	3
						0	1	1	0	0	0	2	9	2	4	4	0	3
2125 - 2130	0	0	2	2	1	0	4	2	2	0	0	6	6	0	0	3	1	0
						0	5	2	2	0	0	6	7	5	1	4	0	2
						0	5	0	0	0	0	3	6	0	1	0	1	1
						0	3	2	2						3	4	0	0
2130 - 2135	0	0	2	2	0	0	1	2	0	0	0	0	0	3	0	2	4	1
	2	0	2	1	1	0	2	1	1	0	0	0	0	2	4	1	2	0
	0	0	2	1	0	0	0	0	1	0	0	3	2	3	1	3	4	1
						0	2	3	2									
2135 - 2140	0	0	1	0	0	0	5	3	0	0	0	3	3	0	1	2	0	0
	1	0	0	0	0	0	3	3	0						1	3	2	0
	0	0	0	0	1	0	2	1	0						0	2	2	0
	1	0	3	2	1	0	0	0	1									
	0	0	0	0	1													
2140 - 2145	0	0	1	0	0	0	3	1	1	0	0	0	0	2	3	3	2	1
	0	0	3	2	0	0	2	1	1	0	0	0	0	2	0	4	2	4
	0	0	1	0	0	0	0	2	1						0	5	8	1
						0	3	1	1						0	4	5	0
2145 - 2150	0	0	3	4	0	0	2	3	0	0	0	0	3	4	0	0	3	2
	0	0	0	0	1	0	4	1	2	0	0	3	4	5	0	2	1	1
	0	0	4	3	2	0	0	0	1	0	0	0	0	1	0	3	4	1
	2	0	1	1	1													
2150 - 2155	0	0	2	1	2	0	2	4	1	0	0	0	0	2	0	3	2	1
	0	0	1	1	1	0	2	1	0						1	2	2	3
						0	2	1	0						2	1	1	1
															2	2	0	1
2155 - 2200	0	0	1	2	0	0	1	4	0	0	0	0	0	3	1	0	2	0
	0	0	0	0	2	0	0	0	0	0	0	0	0	3	2	2	3	0
	0	0	2	3	0					0	0	1	3	2	0	2	2	0
	1	0	0	1	1													
2200 - 2205	0	0	3	4	0	0	3	1	0	0	0	0	0	5	0	3	4	0
	3	0	3	4	2	0	0	0	1						2	1	4	0
	0	0	1	0	2	0	2	1	1						2	2	3	2
	0	0	1	2	1	0	2	3	1									
	2	0	0	3	1													
2205 - 2210	1	0	2	1	0	0	0	2	1	0	0	1	2	2	1	3	4	2
	1	0	2	1	4	0	1	2	3	0	0	1	2	1	0	2	2	1
	1	0	3	3	1	0	1	1	2	0	0	2	2	0	0	1	3	0
						0	3	2	1						1	3	0	1
2210 - 2215	0	0	4	2	1	0	3	2	0	0	0	3	0	2	1	1	1	3
	1	0	4	2	5	0	3	3	0	0	0	1	0	0	0	3	4	2
	0	0	3	2	2	0	0	1	0	0	0	0	0	1	0	4	5	0
						0	3	2	3	0	0	3	3	1				
2215 - 2220	2	0	3	1	3	0	2	4	2	0	0	1	1	0	1	3	4	0
	1	0	1	0	5	0	2	1	1	0	0	0	0	1	2	1	3	0
	1	0	2	2	1	0	4	1	1	0	0	1	1	1	1	3	2	0
	0	0	0	0	2													
2220 - 2225	0	0	6	4	2	0	2	0	0	0	0	2	0	2	0	3	5	0
	1	0	5	4	1	0	2	0	0	0	0	1	0	1	1	5	7	1
	0	0	3	1	2					0	0	1	1	3	3	3	4	0
2225 - 2230	0	1	4	2	3	0	4	2	0	0	0	2	0	0	3	5	6	1
	1	0	2	0	2					0	0	0	0	1	2	1	4	0
	0	0	3	0	1										2	2	5	1
2230 - 2235	1	0	2	0	3	0	7	3	1	0	0	0	0	2	0	5	3	3
	0	0	1	0	1	0	2	2	2	0	0	0	0	3	3	3	4	1
	0	0	3	0	0	0	1	0	3						0	3	5	1
						0	0	0	3						2	1	2	1
2235 - 2240	0	0	3	1	3	0	0	0	1	0	0	0	0	2	3	1	5	1
	1	0	1	0	2	0	2	1	1	0	0	0	0	1	0	3	5	2
	0	0	3	2	1										3	2	2	1
	0	0	1	0	0													
2240 - 2245	0	0	3	1	1	0	0	2	1	0	0	0	0	1	1	2	4	1
	1	0	3	1	0	0	3	2	0	0	0	1	0	1	2	1	2	1
	0	0	4	2	1	0	1	1	0	0	0	1	1	2	0	3	2	1
						0	1	4	0									
2245 - 2250	1	0	3	0	1	0	2	2	0	0	0	0	0	2	0	4	4	1
	1	0	2	1	0	0	2	1	1	0	0	0	0	1	1	2	3	1
	0	0	3	0	1	0	2	1	1	0	0	2	0	1	0	3	4	0
															2	1	3	2
2250 - 2255	0	0	2	1	0	0	2	1	1	0	0	0	0	2	1	2	1	1
	0	0	1	1	0	0	0	0	1	0	0	1	0	2	1	3	4	1
	0	0	0	0	1										1	3	4	0
	0	0	1	0	1													
2255 - 2300	0	0	1	0	0	0	3	1	1	0	0	0	0	2	1	2	1	1
	0	0	1	1	0	0	2	1	0	0	0	2	0	1	0	4	1	2
	0	0	0	1	0	0	2	1	2						0	2	1	0
	0	0	0	0	1	0	3	1	2									

Date
Saturday 09 November 2019

Weather
Cloudy
Temp: 5°C

1000 - 1700 (Saturday 7H Session)

TIME	5a	5b	5c	5d	5e	5f	5g	5h	5i	5j	5k	5l	5m	5n	5o	5p	5q	5r
1000 - 1005	0	0	7	3	0	2	2	1	2	0	0	6	9	0	2	5	4	1
	0	0	5	5	1	4	1	1	2	0	0	6	5	1	0	3	5	1
	3	0	6	1	2	2	7	5	5	1	0	4	6	2	1	1	1	1
										0	0	7	7	2				
1005 - 1010	2	0	6	0	0	0	2	2	3	0	0	5	6	1	1	7	5	1
	0	0	0	0	1	3	3	6	5	0	0	2	3	2	3	5	7	0
	0	0	6	5	6	0	5	4	1	0	0	6	3	2	0	4	1	1
	3	0	2	1	5													
	0	0	3	1	0													
1010 - 1015	2	0	8	7	4	1	3	2	5	0	0	3	4	1	0	4	3	1

	2	0	6	5	3	0	3	2	1	0	0	3	0	1	0	0	0	1
	1	0	4	2	0	0	2	0	0	0	0	2	2	1	3	2	4	0
						0	4	3	4	0	0	1	1	3	2	5	4	0
															1	1	0	0
1015 - 1020	3	0	3	2	1	0	2	5	0	0	0	2	1	3	1	8	7	3
	1	0	1	0	2	0	2	2	1	0	1	0	1	3	4	3	4	1
	3	0	2	2	0	0	1	2	5						0	6	5	5
	0	0	0	0	1	2	5	5	3						0	0	0	3
	2	0	2	3	2													
1020 - 1025	0	0	0	0	3	1	3	1	6	1	0	0	0	0	4	2	2	1
	0	0	5	5	1	3	5	3	1	0	0	2	1	3	1	6	7	0
	2	0	4	4	4	0	3	3	4	0	0	1	0	1	5	4	7	2
															0	8	5	4
1025 - 1030	0	0	3	3	4	3	5	1	3	0	0	2	2	2	3	4	3	1
	2	0	0	1	1	0	5	2	1	0	0	1	0	2	1	5	2	3
	3	0	6	5	1	0	5	6	2	0	0	1	2	1	0	0	0	2
	1	0	2	2	3					0	0	4	0	0	1	5	6	1
1030 - 1035	0	0	0	0	6	0	3	2	3	0	0	2	2	1	5	4	5	1
	4	0	1	3	1	0	3	6	3	0	0	2	1	0	0	3	4	0
	0	0	8	4	2	0	1	0	6	1	0	4	1	2	0	3	4	0
	2	0	4	5	1	0	0	0	1									
1035 - 1040	0	0	5	2	3	0	3	4	2	0	0	4	3	1	5	3	4	2
	1	0	1	0	1	0	0	0	2	1	0	2	3	1	2	4	1	3
	1	0	3	1	2	0	3	6	3	0	0	3	5	1	0	0	0	1
						0	2	1	1						2	2	1	1
						0	0	0	3									
1040 - 1045	1	0	8	4	4	0	4	4	2	0	0	2	1	2	1	1	2	1
	2	0	8	5	1	0	3	9	1	0	0	3	0	2	3	4	6	2
	3	0	3	5	0	0	0	0	3						2	6	3	0
	0	0	0	0	2	0	6	9	3						2	5	1	3
						0	5	5	1									
1045 - 1050	1	0	5	6	0	0	0	0	1	0	0	1	1	3	0	3	2	0
	3	0	3	4	0	0	8	10	3	0	0	0	0	3	1	5	3	1
	1	0	4	4	3	0	9	5	2						4	3	7	2
						0	0	0	6									
						0	5	4	6									
1050 - 1055	1	1	4	4	3	0	0	0	2	0	0	1	1	2	0	5	2	0
	3	0	3	3	3	0	1	1	3	0	0	3	0	3	5	1	5	2
	1	0	5	3	0	0	0	0	1	1	0	0	0	0	6	1	8	4
						2	5	1	2	1	0	0	0	1				
						0	0	0	1									
						3	5	5	2									
1055 - 1100	2	0	4	3	4	0	0	0	1	0	0	2	0	1	7	2	4	2
	4	0	7	10	3	0	3	3	0	0	0	2	1	1	1	6	4	3
	1	0	8	7	2	0	0	0	2	0	0	5	2	4	5	4	6	2
						0	3	7	0									
						0	4	3	3									
1100 - 1105	2	0	6	2	1	0	4	2	3	0	0	1	0	5	3	4	4	0
	0	0	4	2	0	0	0	0	4	0	0	1	1	5	1	2	2	2
	3	0	6	3	3	0	10	3	2	0	0	0	3	0	1	2	1	0
						0	0	0	4	0	0	1	0	2				
						0	6	6	0									
1105 - 1110	2	0	4	2	2	0	5	4	1	0	0	1	2	0	3	4	3	2
	2	0	5	4	2	0	0	0	1	0	0	2	1	2	0	6	3	2
	0	0	0	0	4	2	2	2	1	0	0	1	0	6	8	2	3	3
	1	0	6	5	1	2	2	1	0									
1110 - 1115	0	0	7	4	1	0	5	5	3	0	0	1	2	2	2	7	5	1
	2	0	3	4	4	0	0	0	3	0	0	5	1	2	1	1	0	1
	1	0	5	2	4	0	0	1	1	0	0	0	0	4	1	4	4	4
	1	0	9	5	1	0	0	0	2									
						1	4	2	0									
1115 - 1120	3	0	6	4	3	2	5	6	3	0	0	6	2	4	8	8	10	4
	3	0	5	3	3	0	0	0	1	0	0	5	4	0	7	7	5	2
	0	0	4	3	2	2	3	9	5	0	0	4	6	3	3	3	3	1
						0	0	0	4									
						0	3	3	3									
1120 - 1125	1	0	8	3	2	3	5	8	5	1	0	1	2	1	1	7	4	3
	1	0	11	4	1	0	0	0	1	1	0	2	2	5	1	2	7	2
	1	0	2	2	4	0	5	6	3	1	0	6	3	3	2	6	8	2
						0	0	0	2									
						0	5	7	4									
						0	0	0	3									
1125 - 1130	0	0	3	4	1	0	1	4	3	2	0	3	4	3	2	3	2	3
	3	0	3	4	1	0	0	0	1	0	0	6	7	0	1	2	1	0
	0	0	0	0	4	0	6	7	5	1	0	4	5	2	8	2	0	0
	1	0	6	5	2	0	8	5	3						1	6	3	2
						0	0	2	1									
1130 - 1135	0	0	5	4	5	0	0	0	3	0	0	2	5	0	4	5	5	0
	1	0	7	6	2	0	0	3	2	0	0	2	2	4	2	5	4	2
	1	1	7	2	2	0	0	0	1	0	0	1	2	2	1	4	3	1
						1	5	2	3									
						0	6	3	4									
1135 - 1140	0	0	6	3	2	1	6	6	4	0	0	3	5	3	0	4	5	2
	0	0	4	0	2	2	4	4	1	0	0	1	1	5	3	8	7	2
	2	0	8	4	1	0	0	0	4	0	0	2	3	3	0	0	0	1
						1	2	3	3						3	2	2	2
1140 - 1145	1	0	7	8	0	2	1	1	4	0	0	5	1	3	1	7	8	2
	0	0	8	5	2	0	0	0	2	0	0	0	0	2	1	5	4	0
	3	0	6	5	0	1	11	8	7	0	0	1	1	2	2	7	4	5
						0	3	0	3	0	0	0	1	3				
						0	0	0	1									
1145 - 1150	1	0	5	2	1	0	4	2	0	0	0	1	0	3	4	1	2	2
	4	0	6	5	4	0	5	3	1	0	0	2	2	0	2	6	4	0
	1	0	1	4	5	3	2	7	0	0	0	1	1	4	0	0	0	2
1150 - 1155	1	0	8	7	2	1	3	1	3	1	0	3	4	1	3	5	4	0
	0	0	2	3	5	1	2	0	0	0	0	7	0	2	5	1	3	0
	1	0	1	1	2	2	8	15	5						3	4	1	0
	0	0	0	0	4	0	0	0	3									
1155 - 1200	1	0	7	5	2	1	6	5	6	0	0	1	1	4	3	4	6	4
	1	0	13	5	1	0	0	0	1	1	0	1	1	2	3	0	2	2
	1	1	11	6	1	2	7	7	3	1	0	1	3	0	0	0	0	1
	2	0	2	1	1	0	0	0	1	1					1	4	2	0
						0	0	0	1									
						0	5	3	0									
						0	0	0	1									
1200 - 1205	0	0	8	2	3	2	10	12	5	0	0	1	1	3	0	4	4	2
	2	0	5	2	1	0	0	0	4	0	0	1	0	5	2	4	5	1
	2	0	6	7	0	0	8	1	3	0	0	0	2	3	1	2	2	0
						0	0	0	1						3	5	5	1
						2	1	1	0									
						3	5	7	3									
1205 - 1210	0	0	9	5	4	0	0	0	4	1	0	2	0	0	4	1	1	0
	1	0	8	9	2	2	3	5	2	1	0	2	2	2	2	5	2	3
	1	0	7	4	2	0	0	0	2	0	0	1	0	1	1	5	3	3
						0	4	6	6	1	1	0	0	0				
						3	4	4	4	0	0	3	0	2				
1210 - 1215	3	0	9	7	2	2	8	6	6	0	0	0	1	1	6	1	3	3
	2	0	5	2	4	1	2	0	0	0	0	3	1	4	4	1	6	1
	2	0	7	5	3	0	0	0	2	1	0	3	0	0	0	0	2	0
	1	0	7	3	4	0	5	2	1						3	5	6	0
						0	3	2	4									
1215 - 1220	2	0	9	4	6	0	4	0	3	0	0	3	2	4	3	2	2	2
	2	0	4	5	1	2	5	2	2	0	0	0	0	1	5	2	3	2
	1	0	11	6	2	0	2	3	4	0	0	3	2	1	6	0	3	0
						0	0	0	1						4	3	5	2
1220 - 1225	1	0	6	8	3	3	4	7	8	0	0	3	3	2	6	1	6	1
	2	0	3	4	6	0	0	0	6	1	0	3	2	5	2	7	6	3
	2	0	8	7	6	0	7	4	6	0	0	2	0	5	2	6	3	1
						0	0	0	4	0	0	2	0	0	0	0	0	1
						2	4	4	3									
1225 - 1230	0	0	8	3	0	3	4	5	3	0	0	1	1	2	3	5	6	2
	1	0	8	6	1	0	0	0	1	0	0	4	1	4	1	5	5	2
	0	0	6	4	4	3	5	3	2	0	0	0	0	3	1	0	1	2
						0	0	0	3									
						2	3	3	4									
						0	0	0	4									
1230 - 1235	1	0	4	2	6	0	5	4	2	0	0	2	0	4	2	4	4	0
	3	0	4	2	11	5	5	6	8	0	0	0	1	2	5	0	6	3
	1	0	5	8	2	0	0	0	3	0	0	1	2	1	3	5	7	2
						6	3	5	6									
						0	0	0	1									
1235 - 1240	0	0	8	6	2	1	5	3	7	0	0	5	5	3	6	1	4	2
	1	0	9	7	6	0	0	0	2	0	0	4	2	5	3	8	3	0
	3	0	5	1	5	1	2	0	1	1	1	0	1	3	3	2	3	2
	0	0	4	7	4	1	1	1	5									

						0	0	0	2										
1240 - 1245	3	0	7	3	0	5	5	3	1	0	0	5	0	2	1	4	6	3	
	2	0	4	4	6	0	0	0	1	0	0	2	0	1	4	1	3	4	
	1	0	11	7	5	2	4	1	0	0	0	1	1	3	1	2	3	1	
						1	2	1	2	0	0	7	5	1	4	3	3	0	
						0	0	0	4										
						1	2	2	4										
1245 - 1250	2	0	9	7	6	3	6	6	8	0	0	5	2	4	1	2	4	1	
	0	0	9	3	6	0	0	0	3	1	0	1	1	5	2	1	1	3	
	3	0	7	6	4	1	2	4	5	0	0	0	2	3	3	4	5	3	
	0	0	1	0	11	1	1	2	5										
						0	0	0	1										
1250 - 1255	0	0	4	3	3	3	10	11	3	0	0	3	8	6	2	5	6	2	
	0	0	11	7	0	0	0	0	1	0	0	5	5	8	1	5	3	0	
	4	0	2	1	4	0	0	0	4	0	0	2	1	9	4	3	3	1	
						3	1	0	1										
						1	2	2	1										
1255 - 1300	2	0	9	3	4	0	4	2	3	0	0	4	2	2	3	5	8	3	
	1	0	8	3	5	2	5	7	3	0	0	0	3	3	3	5	6	2	
	1	0	4	4	3	1	4	2	6	0	0	1	0	4	0	8	9	4	
										0	0	0	3	3	6	8	4	3	
1300 - 1305	0	0	8	5	10	2	3	2	0	0	0	3	3	4	4	1	6	1	
	1	0	1	1	11	1	4	5	3	0	0	0	1	2	4	1	6	1	
	1	0	3	1	4	0	0	0	6	1	0	1	3	0	8	2	7	1	
	1	0	7	0	5	2	2	3	7										
						0	0	0	5										
1305 - 1310	1	0	5	6	6	0	3	2	6	0	0	1	3	2	7	1	8	2	
	0	0	9	4	8	2	4	3	4	0	0	4	6	5	8	6	5	2	
	5	0	3	5	6	5	9	7	3	1	0	4	4	6	7	3	5	1	
1310 - 1315	0	0	4	0	9	0	4	5	1	0	0	2	3	1	3	5	9	2	
	1	0	7	6	1	0	0	0	1	0	0	3	4	1	1	8	9	4	
						1	4	5	0	2	0	2	2	5	7	3	10	2	
						0	0	0	2										
						3	8	7	4										
						0	0	0	3										
1315 - 1320	2	0	7	4	4	3	0	2	3	1	0	4	6	4	2	2	5	0	
	1	0	11	8	4	0	0	0	2	3	0	2	5	2	1	5	2	0	
	1	0	12	7	6	1	1	4	1	0	0	4	5	3	2	7	6	5	
						1	5	3	4										
						0	0	0	3										
1320 - 1325	1	0	13	8	4	3	3	1	1	0	0	4	4	1	1	8	9	3	
	1	0	11	9	7	2	5	4	2	0	0	4	5	3	4	7	9	1	
	1	0	9	5	1	0	0	0	3	3	0	4	2	0	9	2	3	5	
						2	2	1	5										
1325 - 1330	2	0	5	2	3	0	0	0	3	0	0	3	4	2	2	7	3	4	
	2	0	1	0	1	2	1	1	3	0	0	1	1	6	0	0	0	2	
	3	0	10	8	4	1	2	2	5						4	7	2	1	
						0	0	0	2						0	6	6	4	
						2	2	3	3										
1330 - 1335	1	0	9	8	4	0	0	0	1	0	0	1	2	1	4	1	5	5	
	3	0	3	1	6	0	5	7	3	0	0	5	6	3	0	0	0	1	
	4	0	6	3	5	2	5	4	2	0	0	6	6	3	3	5	6	2	
						0	0	0	1										
						1	4	5	5										
1335 - 1340	0	0	8	7	2	0	0	0	4	0	0	4	4	1	0	7	6	0	
	2	0	6	3	5	1	1	4	2	0	0	3	4	2	1	6	7	2	
	2	0	5	4	0	0	0	0	1	0	0	1	2	2	3	3	4	0	
						4	3	3	2						5	4	7	3	
						0	0	2	1										
						0	0	0	1										
1340 - 1345	1	0	4	2	0	1	5	5	1	0	0	1	1	2	2	4	5	2	
	0	0	0	0	3	0	0	0	2	0	0	3	2	3	0	0	0	1	
	1	0	2	2	7	3	1	3	2	0	0	5	7	4	4	3	6	0	
	1	0	6	4	1	0	0	0	2	0	0	0	0	7	5	1	10	4	
						0	5	2	5										
						0	0	0	1										
1345 - 1350	2	0	9	8	4	3	3	5	4	0	0	1	4	4	3	6	5	1	
	0	0	11	4	3	3	6	3	4	0	0	2	0	3	5	5	6	2	
	3	0	9	8	0	0	0	0	3	0	0	3	4	4	2	7	2	2	
	2	0	11	6	5	1	4	3	3										
						0	0	0	1										
1350 - 1355	1	0	11	8	5	0	2	0	2	0	0	3	2	4	3	4	4	2	
	1	0	10	6	3	0	0	0	5	0	0	3	1	6	4	4	4	5	
	0	0	8	9	3	1	1	1	5	0	0	4	5	1	1	7	12	1	
						0	0	0	3										
						4	4	5	5										
1355 - 1400	1	0	8	4	5	1	1	2	3	0	0	3	5	3	3	8	6	5	
	1	1	9	6	4	0	1	0	2	0	0	3	4	1	0	0	0	5	
	1	0	7	6	5	2	3	8	2	0	0	2	4	1	1	5	5	1	
						0	0	0	2						1	8	5	5	
1400 - 1405	0	0	6	2	2	0	3	3	3	1	0	2	5	1	0	6	7	5	
	0	0	8	5	4	0	0	0	2	1	0	0	3	4	3	5	3	0	
						0	6	7	2	1	0	1	3	2	4	4	8	5	
						0	1	2	1										
1405 - 1410	2	0	3	4	3	0	5	6	4	0	0	1	2	3	9	1	7	0	
	2	0	7	5	3	0	0	0	1	0	0	3	4	4	1	6	8	0	
	2	0	11	10	3	2	5	3	3	0	0	1	2	2	2	4	6	2	
	1	0	12	9	6	0	0	0	1										
						1	5	7	5										
1410 - 1415	1	1	8	4	4	1	5	4	0	0	0	4	4	5	2	6	6	0	
	0	1	9	7	3	2	5	4	5	2	0	4	1	6	1	7	6	0	
	0	0	10	9	5	0	5	4	3	0	0	4	5	2	5	1	3	4	
						0	0	0	2										
1415 - 1420	1	0	5	8	1	1	3	2	5	0	0	5	6	0	7	2	4	2	
	1	0	11	1	1	0	0	0	3	0	0	4	6	4	7	1	7	1	
	1	0	11	10	6	3	4	5	3	0	0	4	6	2	2	4	1	1	
						0	1	4	0										
						0	0	0	3										
						0	0	0	4										
1420 - 1425	0	0	7	5	2	0	1	2	2	1	0	4	7	3	0	7	6	1	
	2	0	6	5	2	0	3	4	1	1	0	3	3	5	1	6	8	3	
						0	0	0	1	2	0	6	7	2	0	6	6	5	
						2	1	4	2										
						0	0	0	5										
1425 - 1430	0	0	7	2	2	3	4	3	5	1	0	3	4	3	5	1	5	4	
	4	0	5	4	1	0	2	3	4	0	0	3	3	5	1	5	4	1	
	2	0	4	4	1	4	4	8	3						1	4	4	2	
1430 - 1435	0	0	8	9	2	0	3	2	5	0	0	3	3	5	5	3	4	4	
	2	0	4	2	7	0	0	0	5	0	0	4	4	6	0	6	4	0	
	1	0	5	3	0	4	6	5	7	0	0	4	7	0	2	4	3	3	
	0	0	0	0	1	0	0	0	7										
						0	3	2	5										
1435 - 1440	1	0	8	4	2	0	0	0	1	0	0	3	3	5	0	3	2	2	
	1	0	6	9	5	1	5	0	4	2	0	1	4	2	2	6	6	3	
	3	0	4	3	1	0	0	0	1	0	0	3	5	4	2	5	5	1	
						3	3	5	6										
						1	4	6	5										
1440 - 1445	0	0	6	4	1	0	0	0	6	0	0	5	7	1	4	2	5	3	
	1	1	9	4	1	2	5	4	4	1	1	3	4	1	9	1	10	1	
	1	0	9	8	2	0	0	0	2	0	0	3	5	1	10	1	7	1	
						2	2	1	3										
						0	0	0	3										
						2	2	4	5										
1445 - 1450	3	0	6	5	7	0	2	4	3	0	0	1	2	0	4	3	6	3	
	1	0	13	10	5	1	6	3	4	2	0	3	4	2	7	2	5	0	
	3	0	8	7	6	0	0	0	1	1	0	1	3	1	1	7	5	1	
						0	3	6	2										
1450 - 1455	1	0	4	6	4	1	2	1	4	0	0	3	2	3	1	5	8	1	
	1	0	7	4	0	3	4	3	5	1	1	3	5	4	0	6	8	4	
	1	0	2	8	2	0	5	4	5	2	0	1	3	6	1	1	2	0	
1455 - 1500	1	0	6	7	1	0	5	5	8	1	0	3	6	7	3	1	1	1	
	0	0	9	7	5	4	5	4	2	2	0	4	3	6	1	7	6	1	
	0	0	8	4	2	0	0	0	1	2	0	3	3	2	2	6	4	6	
						0	5	5	1										
1500 - 1505	1	0	8	4	0	0	0	0	3	0	0	3	4	2	1	4	5	2	
	0	0	9	6	2	4	7	3	3	2	0	2	3	0	2	7	5	1	
	0	0	10	3	1	0	0	0	6	1	0	4	5	3	3	3	4	1	
						0	5	6	4										
						0	3	1	1										
1505 - 1510	1	0	3	3	0	3	3	4	5	2	0	3	4	0	0	7	9	2	
	0	0	0	0	1	0	0	0	3	0	0	3	3	6	0	0	0	2	
	3	0	3	4	3	0	1	3	2	0	0	2	1	4	1	6	4	0	
	0	0	6	3	3	0	1	2	0						3	6	4	1	

1510 - 1515	1	0	8	5	4	0	2	3	2	1	0	2	0	1	5	2	5	4
	2	1	9	5	2	0	0	0	2	0	0	0	3	1	0	2	4	1
	3	0	6	4	4	2	6	6	5	1	0	1	1	5	3	4	3	2
						1	5	0	3	1	0	1	0	3				
1515 - 1520	2	0	7	8	3	3	4	7	6	1	0	1	3	3	3	7	5	2
	3	0	10	4	5	0	5	5	6	1	0	2	1	3	0	10	8	0
	2	0	8	5	3	1	2	1	3						2	9	8	4
						0	0	0	1									
1520 - 1525	1	0	2	5	0	1	4	3	2	0	0	2	4	7	1	6	1	2
	0	0	0	0	2	2	1	2	2	0	0	2	4	8	0	3	2	1
	1	0	15	10	4	0	0	0	1	2	0	3	1	3	2	2	6	4
	2	0	3	2	5	1	1	0	0									
1525 - 1530	1	0	9	3	5	0	0	0	1	0	0	3	3	2	1	5	4	3
	2	1	6	3	2	1	7	4	4	0	0	2	2	2	6	1	2	1
	2	0	7	6	2	0	0	0	1	1	0	0	0	2	1	5	7	4
						1	4	4	2	0	0	0	2	1				
						1	3	3	1									
						0	0	0	1									
1530 - 1535	1	0	0	2	1	0	2	2	2	1	0	0	0	1	1	1	2	6
	0	0	0	0	3	0	3	2	1	1	0	3	3	0	5	0	6	1
	0	0	7	2	2	3	6	5	3	2	0	0	3	1	1	3	2	1
	1	0	4	3	0					0	0	2	3	4				
	0	0	0	0	2													
1535 - 1540	2	0	6	2	2	0	3	0	2	0	0	4	4	1	6	1	4	1
	1	0	9	4	0	0	0	0	1	0	0	2	1	1	6	5	9	1
	2	0	5	7	3	4	2	3	4						4	4	6	2
						0	0	0	6									
						0	2	2	6									
1540 - 1545	3	0	5	4	4	2	5	2	4	0	0	2	3	3	1	4	4	0
	1	0	9	2	5	3	2	1	4	0	0	2	2	1	2	4	6	2
	3	0	8	4	3	0	0	0	1	1	0	1	2	1	0	1	1	4
						1	1	1	2									
1545 - 1550	0	0	6	7	3	1	3	5	4	0	0	3	4	2	3	4	4	2
	0	0	8	5	5	3	4	3	3	1	0	2	2	1	1	5	3	2
	0	0	4	1	4	0	0	0	5	0	0	2	3	1	4	2	5	0
1550 - 1555	0	0	9	8	1	3	4	2	4	0	0	2	3	2	3	6	5	1
	2	0	7	7	3	0	0	0	1	3	0	2	3	3	5	2	4	3
	1	0	7	8	5	3	3	3	3	0	0	2	3	1				
						0	6	7	5									
						0	0	0	4									
1555 - 1600	1	0	13	9	6	0	4	3	1	0	0	3	3	1	2	4	5	0
	0	0	6	4	1	0	0	0	3	0	0	2	4	1	5	1	5	1
	5	0	6	5	3	2	3	1	2	0	0	2	4	1	6	2	7	2
						0	0	0	1									
						2	0	0	2									
						0	0	0	4									
1600 - 1605	0	0	6	1	0	1	4	4	1	0	0	2	2	3	6	2	3	1
	0	0	0	0	2	0	0	0	2	0	0	3	3	5	4	3	4	1
	1	0	3	4	6	5	6	5	4	0	0	1	3	0	2	5	4	2
	1	0	7	8	3	0	0	0	4									
						0	3	2	3									
						0	0	0	1									
1605 - 1610	2	0	8	6	2	1	5	6	1	0	0	3	2	4	5	2	2	2
	1	0	8	5	0	1	1	0	2	0	0	1	0	0	2	4	3	0
	1	0	9	8	1	2	4	5	2	0	0	0	0	3	4	3	5	1
						0	0	0	1						2	6	4	0
1610 - 1615	2	0	9	5	3	4	6	6	4	0	0	2	2	0	3	5	6	2
	4	0	2	4	1	0	0	0	3	0	0	0	2	0	4	2	1	1
	1	0	2	1	0	1	3	2	4	0	0	3	2	3	1	4	6	3
	1	0	1	1	1	2	4	4	2									
1615 - 1620	0	0	0	0	3	3	3	4	2	0	0	2	1	4	2	6	4	1
	2	0	6	2	3	3	6	5	4	0	0	2	0	1	1	6	4	4
	0	0	13	8	2	1	4	4	1	1	0	1	2	2	0	6	5	1
	1	0	7	4	1	0	0	0	1									
1620 - 1625	0	0	2	1	1	1	4	3	5	1	0	2	2	2	4	2	4	2
	0	0	8	2	3	0	0	0	2	0	0	1	1	2	1	4	4	4
	1	0	8	7	1	0	2	3	1	0	0	1	1	2	1	4	6	1
						2	3	6	4									
						0	5	3	2									
1625 - 1630	1	0	6	2	4	2	6	5	7	2	0	2	2	5	1	2	7	1
	3	0	6	7	2	0	0	0	4	0	0	0	1	4	6	4	4	5
	0	0	8	2	1	0	3	2	1	0	0	2	0	1	4	2	5	1
	0	0	1	3	1	2	3	2	1						0	5	4	3
1630 - 1635	0	0	0	0	2	0	0	2	5	0	0	3	1	1	0	6	7	2
	2	0	2	1	0	0	0	0	2	0	0	2	3	5	1	5	4	2
	1	0	2	1	2	1	1	2	3	0	0	1	1	4	1	5	7	1
	0	0	11	4	1	0	0	0	3	0	0	0	1	5				
						2	3	3	2									
1635 - 1640	2	0	4	3	1	2	1	3	1	0	0	0	0	2	0	4	3	5
	1	0	8	5	2	0	0	0	2	0	0	2	0	2	0	4	3	3
	2	0	4	2	0	2	4	1	6	0	0	1	1	1	5	3	4	1
						0	0	0	3						0	5	4	2
						0	2	2	1									
						2	1	2	2									
1640 - 1645	3	0	7	4	0	0	3	2	2	0	0	1	1	3	1	6	4	3
	1	0	3	0	4	0	2	2	6	0	0	3	4	0	0	3	4	4
	2	0	3	3	1	0	0	0	3	0	0	2	3	0	3	4	2	2
						1	3	5	2	0	0	2	3	1				
						0	0	0	3									
1645 - 1650	0	0	8	6	2	0	0	2	3	0	0	1	2	1	1	0	3	2
	3	0	1	2	2	1	0	3	4	0	0	0	0	2	0	4	3	2
	0	0	5	0	6	0	3	4	4	0	0	0	0	4	2	3	4	0
	2	0	6	5	1													
1650 - 1655	0	0	9	7	4	1	3	3	1	0	0	1	1	2	0	2	4	0
	3	0	7	6	4	0	5	1	3	0	0	1	0	1	1	5	3	0
	1	0	6	11	7	1	5	2	0	0	0	2	1	3	2	6	5	0
						0	7	5	1						2	6	3	2
1655 - 1700	0	0	13	9	7	1	1	1	5	0	0	2	3	1	2	1	3	0
	3	0	8	7	2	0	0	0	2	0	0	3	2	1	0	4	3	3
	1	0	7	6	4	0	5	4	3						1	3	3	3
	0	0	7	5	0	0	3	2	0									

Saturday Matchday Queue Length Surveys

Man City Surveys - Part 2
Queue Length Survey

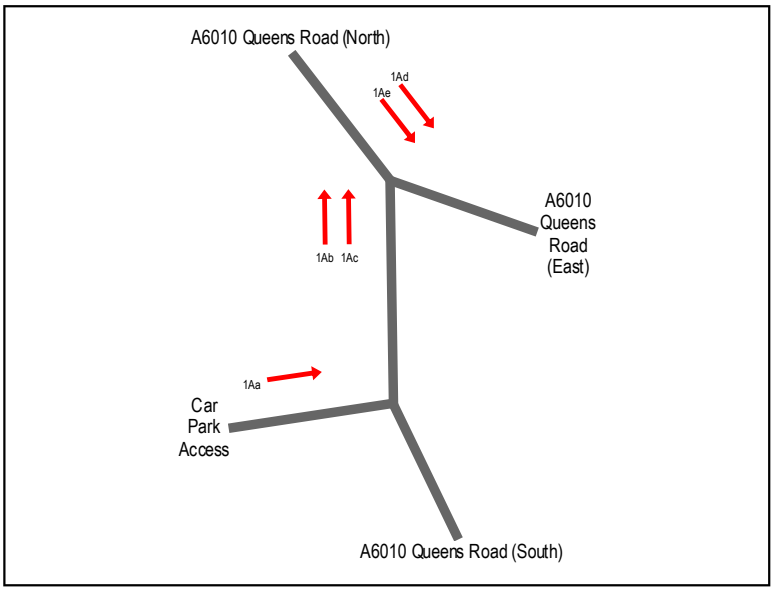
Site 1A
A6010 Queens Road (East)
A6010 Queens Road (South)
Car Park Access
A6010 Queens Road (North)

Lat/Long
lat 53.496055° lon -2.211719°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)



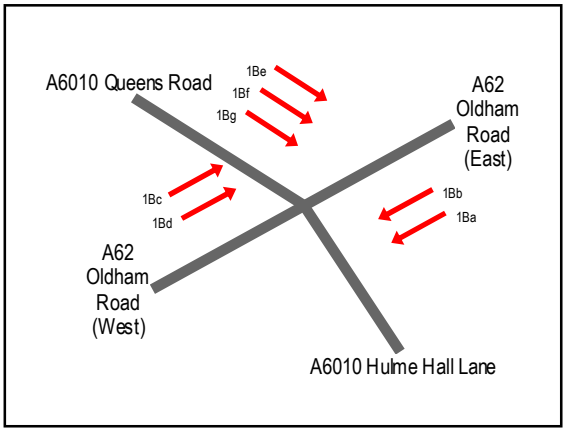
TIME	1Aa	1Ab	1Ac	1Ad	1Ae
10:00	0	0	0	0	0
10:05	0	0	0	0	0
10:10	0	0	0	0	0
10:15	0	0	2	0	0
10:20	0	0	0	0	0
10:25	0	0	0	0	0
10:30	0	0	0	0	0
10:35	0	0	0	0	0
10:40	0	0	0	0	0
10:45	0	0	0	0	0
10:50	0	0	0	0	0
10:55	0	0	0	0	1
Hourly Average	**0.00**	**0.00**	**0.17**	**0.00**	**0.08**
11:00	0	0	0	0	0
11:05	0	0	0	0	0
11:10	0	2	0	0	0
11:15	0	0	0	0	0
11:20	0	0	0	0	0
11:25	0	0	0	0	3
11:30	0	0	0	0	6
11:35	0	0	0	0	0
11:40	0	0	0	0	0
11:45	0	0	0	0	0
11:50	0	0	0	0	0
11:55	0	0	0	0	0
Hourly Average	**0.00**	**0.17**	**0.00**	**0.00**	**0.75**
12:00	0	0	0	0	0
12:05	0	0	0	0	0
12:10	0	0	0	0	0
12:15	0	0	0	0	0
12:20	0	0	0	0	0
12:25	0	0	0	0	0
12:30	0	0	0	0	0
12:35	0	0	0	0	0
12:40	0	0	0	0	0
12:45	0	0	0	0	0
12:50	0	0	0	0	0
12:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
13:00	0	0	0	0	0
13:05	0	0	0	0	0
13:10	0	0	0	0	0
13:15	0	0	0	0	0
13:20	0	0	0	0	0
13:25	0	0	0	0	0
13:30	0	0	0	0	0
13:35	0	0	0	0	0
13:40	0	0	0	0	0
13:45	0	0	0	0	0
13:50	0	0	0	0	0
13:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

14:00	0	0	0	0	0
14:05	0	0	0	0	0
14:10	0	0	0	0	0
14:15	0	0	0	0	0
14:20	0	0	0	0	0
14:25	0	0	0	0	0
14:30	0	0	0	0	0
14:35	0	0	0	0	0
14:40	0	0	0	0	0
14:45	0	0	0	0	0
14:50	0	0	0	0	0
14:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
15:00	0	0	0	0	0
15:05	0	0	0	0	0
15:10	0	0	0	0	0
15:15	0	0	0	0	0
15:20	0	0	0	0	0
15:25	0	0	0	0	0
15:30	0	0	0	0	0
15:35	0	0	0	0	0
15:40	0	0	0	0	0
15:45	0	0	0	0	0
15:50	0	0	0	0	0
15:55	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
16:00	0	0	0	0	0
16:05	0	0	0	0	0
16:10	0	0	0	0	0
16:15	0	0	0	0	0
16:20	0	0	0	0	0
16:25	0	0	0	0	0
16:30	0	0	0	0	0
16:35	0	0	0	0	0
16:40	0	0	0	0	0
16:45	0	0	0	0	0
16:50	0	0	0	0	0
16:55	0	0	0	0	0
17:00	0	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Session Total	**0.00**	**0.02**	**0.02**	**0.00**	**0.12**

Man City Surveys - Part 2
Queue Length Survey

Site 1B
A62 Oldham Road (East)
A6010 Hulme Hall Lane
A62 Oldham Road (West)
A6010 Queens Road



Lat/Long
lat 53.495883° lon -2.210395°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)

TIME	1Ba	1Bb	1Bc	1Bd	1Be	1Bf	1Bg
1000 - 1005	1	10	0	0	0	7	5
	3	4			0	1	0
	7	3			2	5	2
					3	8	3
1005 - 1010	7	2	0	0	3	4	3
	4	3			0	4	2
	4	2			1	6	4
1010 - 1015	3	3	0	0	0	7	4
	5	5			2	7	3
	3	1			3	6	1
1015 - 1020	5	3	0	0	3	7	3
	5	4			5	3	2
	7	5			0	8	4
					0	4	1
1020 - 1025	4	5	0	0	0	4	2
	8	5			1	9	6
	6	6			0	9	1
					0	1	0
1025 - 1030	5	3	0	0	0	3	4
	7	5			1	3	2
	3	4			3	6	0
1030 - 1035	5	6	0	0	0	8	6
	6	5			6	8	5
	7	8			1	7	3
	4	1					
1035 - 1040	9	5	0	0	2	8	1
	11	7			1	8	3
	10	5			0	6	5
1040 - 1045	6	6	0	0	2	4	2
	6	6			0	8	3
	6	4			0	7	4
1045 - 1050	8	6	0	0	3	8	5
	8	5			0	9	7
	6	2			0	7	7
1050 - 1055	9	6	0	0	0	7	7
	5	3			2	10	3
	8	5			1	10	3
					0	10	5
1055 - 1100	6	1	0	0	1	12	5
	6	6			1	11	6
	5	2			0	10	2
					0	7	4
1100 - 1105	5	6	0	0	0	10	5

	8	2			4	4	1
	9	5			3	9	4
1105 - 1110	8	6	0	0	6	10	4
	7	6			3	9	8
	7	6			2	9	6
					0	4	2
1110 - 1115	7	5	0	0	3	11	8
	8	6			2	9	4
	3	3			3	9	5
1115 - 1120	6	4	0	0	1	12	2
	9	3			0	10	5
	8	4			8	12	8
	1	1					
1120 - 1125	9	6	1	0	3	11	7
	10	8			3	9	4
	12	8			4	10	6
1125 - 1130	9	9	0	0	0	10	3
	8	5			5	9	4
	8	3			1	10	5
1130 - 1135	4	3	0	0	3	10	6
	8	10			3	11	7
	9	5			3	7	3
1135 - 1140	5	4	0	1	5	12	3
	5	7			3	10	9
	8	9			3	9	4
1140 - 1145	8	9	0	0	1	11	8
	11	10			2	8	8
	9	6			0	9	5
	5	3					
1145 - 1150	8	3	0	0	2	7	3
	6	3			2	11	4
	7	1			3	9	10
	6	4					
1150 - 1155	9	5	0	0	1	12	11
	10	8			4	11	9
	8	6			2	10	8
	5	2					
1155 - 1200	8	4	0	0	2	10	10
	10	6			5	9	8
	9	4			2	11	9
1200 - 1205	7	6	0	0	2	12	10
	6	7			6	10	5
	4	2			1	8	4
1205 - 1210	5	2	0	0	1	9	3
	2	2			2	8	7
	2	1			3	11	4
1210 - 1215	3	3	0	0	3	2	1
	4	4			1	6	1
	5	3			1	3	1
1215 - 1220	1	4	0	0	1	4	1
	4	6			2	4	4
	6	4			6	9	3
1220 - 1225	7	6	0	0	3	5	1
	7	3			2	4	1
	5	3			3	6	4
	2	0					
1225 - 1230	4	1	0	0	0	2	0
	6	5			3	6	1
	4	9			2	6	3
	0	1					
1230 - 1235	6	8	0	0	2	6	2
	7	8			1	4	2
	5	5			0	1	1

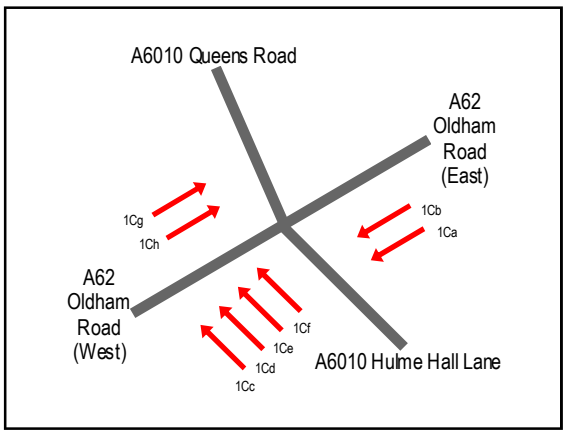
1235 - 1240	5	8	0	0	4	1	0
	6	7			5	4	0
	7	7			2	3	0
1240 - 1245	1	3	0	1	2	3	2
	5	2			5	5	5
	3	2			2	3	1
					1	5	2
1245 - 1250	2	6	0	0	2	6	2
	3	4			1	7	4
	2	6			3	9	2
1250 - 1255	5	1	0	0	0	4	3
	6	4			4	6	4
	5	2			6	4	5
1255 - 1300	6	2	0	0	1	8	3
	7	4			2	6	4
	5	5			3	5	4
	0	1					
1300 - 1305	0	1	0	0	2	4	1
	5	5			1	2	3
	8	5			1	4	0
	0	4					
1305 - 1310	3	7	0	0	1	6	4
	4	6			0	5	5
	3	6			3	7	1
1310 - 1315	4	3	0	0	1	4	2
	4	6			6	2	1
	3	4			2	5	4
1315 - 1320	7	5	0	0	1	5	1
	4	6			2	9	5
	3	7			3	1	2
1320 - 1325	2	5	0	0	4	6	3
	2	4			1	6	3
	1	2			4	7	3
					1	4	2
1325 - 1330	3	3	0	0	1	9	3
	3	4			0	4	0
	4	6			5	9	6
					2	4	5
1330 - 1335	4	4	0	0	4	4	5
	2	6			0	4	2
	5	7			1	4	4
					2	2	3
1335 - 1340	1	2	0	0	2	3	3
	2	3			1	5	3
	2	3			0	4	2
					0	3	2
1340 - 1345	1	2	0	0	2	6	2
	2	5			3	3	2
	2	4			2	6	4
					2	1	0
1345 - 1350	4	7	0	0	4	3	2
	3	5			0	1	2
	3	6			1	6	3
					0	2	1
1350 - 1355	2	4	0	0	0	2	3
	1	3			2	4	3
	1	5			3	4	3
					1	2	0
1355 - 1400	1	3	0	0	1	8	5
	2	3			0	5	2
	3	5			1	4	2
1400 - 1405	10	7	0	0	1	4	0
	6	7			0	5	2
	5	3			3	4	3

					2	1	0
1405 - 1410	3	2	0	0	2	6	2
	6	9			1	2	1
	9	5			2	2	2
	7	8					
1410 - 1415	11	12	0	0	0	2	0
	10	13			0	2	1
	9	13			2	3	1
1415 - 1420	11	14	0	3	2	3	2
	7	11	0	2	1	8	3
	4	9			3	3	2
	4	4			8	2	0
1420 - 1425	7	11	0	0	2	2	0
	9	11			1	2	2
	8	12			3	3	2
1425 - 1430	8	13	0	0	3	5	3
	9	13			6	1	0
	5	10			0	7	3
1430 - 1435	7	12	1	0	1	2	0
	9	14			8	2	0
	8	12			5	2	0
1435 - 1440	8	13	0	1	6	3	0
	8	14			7	0	0
	7	13			0	1	0
					4	4	1
1440 - 1445	9	14	2	1	3	1	0
	7	9			11	0	0
	8	13			10	0	0
	10	14					
1445 - 1450	9	12	1	0	12	0	0
	7	13	6	3	5	5	1
	8	6	2	2	3	0	0
1450 - 1455	11	6	2	2	4	2	0
	7	11	1	0	10	4	3
	9	14	1	0	2	2	0
1455 - 1500	9	13	3	1	3	3	0
	8	13	2	1	3	3	2
	10	10	2	0	4	1	1
					6	0	0
					7	0	0
1500 - 1505	10	10	2	0	9	1	0
	11	12	1	0	9	0	0
	12	13	1	0	7	1	0
					5	3	1
1505 - 1510	12	14	1	1	6	4	2
	13	13	2	3	9	3	2
	14	13			4	2	2
	13	13					
1510 - 1515	12	12	2	3	3	0	1
	10	10	2	0	2	1	0
	11	10	2	0	3	4	2
1515 - 1520	12	12	0	0	5	4	3
	12	12			2	2	1
	13	13			2	2	0
	10	9					
1520 - 1525	10	10	2	0	9	1	0
	12	11	1	1	6	1	0
	12	12					
1525 - 1530	13	13	1	0	1	0	0
	10	10	2	1	0	2	0
	10	9			3	1	1

1530 - 1535	10	10	1	0	1	1	2
	9	9	1	0	1	3	1
	11	11			2	4	2
1535 - 1540	10	10	1	0	3	5	2
	7	6	1	0	4	3	1
	1	1			5	5	5
1540 - 1545	2	1	0	0	4	9	8
	2	4			7	6	4
	6	6			1	1	2
1545 - 1550	3	4	0	0	4	7	3
	7	8			2	6	5
	2	1			2	5	1
1550 - 1555	4	3	0	0	2	5	4
	5	4			1	9	5
	6	3			0	3	4
1555 - 1600	7	5	0	0	1	3	4
	5	4			3	6	5
	6	4			3	8	3
1600 - 1605	3	7	0	0	3	4	2
	6	5			6	11	2
	7	8			0	5	3
1605 - 1610	5	3	0	0	0	6	3
	2	6			5	7	5
					0	7	3
1610 - 1615	2	3	0	0	4	8	6
	2	3			2	5	2
	7	5			2	4	1
1615 - 1620	5	1	1	0	1	10	4
	3	6			0	7	0
	0	5			5	4	0
1620 - 1625	6	4	1	0	2	5	2
	4	5			1	4	1
	8	6			0	1	1
1625 - 1630	5	4	0	0	1	3	1
	7	7			4	4	3
	3	1			0	6	4
					0	4	2
1630 - 1635	5	4	0	0	0	4	2
	6	11			1	4	0
	5	5			1	5	2
	1	2			0	5	1
1635 - 1640	3	5	0	0	1	3	1
	4	5			4	2	1
	5	4			2	10	3
1640 - 1645	8	9	1	0	3	0	0
	7	8			0	5	2
	5	3			1	3	2
	6	3					
1645 - 1650	5	4	0	0	0	7	2
	4	4			1	3	6
	5	5			2	8	2
1650 - 1655	2	3	0	0	2	8	2
	3	6			0	5	2
	2	2			1	5	2
					0	5	4
1655 - 1700	3	5	0	0	4	9	1
	1	1			1	3	1
	2	4			2	6	4

Man City Surveys - Part 2
Queue Length Survey

Site 1C
A62 Oldham Road (East)
A6010 Hulme Hall Lane
A62 Oldham Road (West)
A6010 Queens Road



Lat/Long
lat 53.495554° lon -2.211378°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)

TIME	1Ca	1Cb	1Cc	1Cd	1Ce	1Cf	1Cg	1Ch
1000 - 1005	1	0	0	1	7	3	4	6
			0	1	7	0	3	3
			0	1	6	1		
			0	0	3	0		
1005 - 1010	0	0	0	0	3	0	6	4
			0	0	5	2	2	3
			0	1	3	1	3	3
			0	0	2	0		
1010 - 1015	0	0	0	0	5	1	2	5
			0	2	4	2	1	1
			0	1	6	0	6	3
			0	0	2	0		
1015 - 1020	1	0	0	0	6	3	3	2
			0	0	1	0	2	1
			0	1	2	3	3	4
			0	0	1	0		
1020 - 1025	1	0	0	0	2	1	9	3
			0	0	4	0	6	3
			0	1	5	1	1	3
1025 - 1030	0	1	0	0	7	1	5	6
			0	1	5	3	4	5
			1	1	7	4	1	8
1030 - 1035	0	0	0	3	9	5	1	8
			0	1	3	0	4	1
			0	2	5	3	4	0
1035 - 1040	0	1	0	1	2	0	3	2
			0	0	8	3	6	2
			0	1	10	3	4	2
1040 - 1045	0	0	0	1	10	3	4	2
			0	0	8	4	3	1
			0	0	6	1	3	2
1045 - 1050	0	0	0	0	3	1	8	6
			0	1	6	3	2	3
			0	1	5	0	3	4
1050 - 1055	0	0	0	1	5	0	2	1
			0	0	2	1	4	4
			0	0	4	1	4	3
			0	1	4	0		
1055 - 1100	0	0	0	2	7	0	1	0
			0	0	4	2	3	2
			0	1	5	0	4	4
			0	0	3	2		

1100 - 1105	0	0	0	0	9	2	1	2
			0	2	11	1	4	9
			0	1	13	1	2	0
1105 - 1110	0	0	0	0	9	2	4	1
			0	3	5	2	9	10
			0	1	9	3	3	7
			0	0	2	0		
1110 - 1115	0	0	1	0	12	2	7	6
			0	2	9	2	2	5
			0	0	6	2	3	1
1115 - 1120	0	0	0	1	11	7	3	1
			0	1	6	1	9	7
			0	2	10	3	8	5
							1	2
1120 - 1125	0	0	0	3	7	3	1	3
			0	3	10	5	1	0
			0	1	8	1	2	2
1125 - 1130	0	0	0	1	12	1	2	2
			0	1	8	1	3	3
			0	1	13	1	2	4
			0	0	8	1		
1130 - 1135	0	0	0	2	11	2	3	3
			0	2	5	0	7	5
			0	2	4	3	4	0
			0	1	3	0		
1135 - 1140	0	0	0	2	6	1	6	5
			0	1	3	1	2	4
			0	0	2	0	4	5
1140 - 1145	0	0	0	1	2	0	7	4
			0	0	2	1	2	2
			1	2	2	0	6	4
							4	3
1145 - 1150	0	0	0	0	11	0	4	3
			0	0	4	1	7	7
			0	2	3	2	6	6
							3	2
1150 - 1155	0	0	0	2	14	4	3	2
			0	0	2	2	2	2
			0	0	5	0	4	1
							7	5
1155 - 1200	0	0	2	1	7	4	7	6
			0	1	5	0	3	3
			0	0	1	0	6	4
1200 - 1205	1	0	0	0	4	2	6	0
	1	0	0	2	0	1	7	6
			0	1	4	0	6	5
			0	0	1	0		
1205 - 1210	1	0	0	0	1	0	4	3
			0	1	5	0	8	4
			0	0	1	1	5	7
			0	0	3	3		
1210 - 1215	0	0	0	0	6	3	3	3
			0	0	4	1	1	1
			0	0	3	1	6	4
1215 - 1220	0	0	0	1	5	2	2	1
			0	0	7	3	5	5
			0	0	5	0	2	0
1220 - 1225	0	1	0	0	7	0	3	0
			0	0	2	0	3	2
			0	0	5	1	7	6
							2	1
1225 - 1230	1	0	0	1	4	0	3	1
			0	0	13	5	3	2

			0	2	9	5	2	5
							3	1
1230 - 1235	0	0	0	0	6	1	4	2
			0	0	4	1	1	2
			0	0	4	1	5	2
							0	1
1235 - 1240	0	0	0	0	6	1	1	2
			0	0	14	1	2	4
			0	0	5	1	2	3
1240 - 1245	1	0	0	0	3	2	3	4
			0	0	0	2	3	5
			0	1	10	2	5	6
			0	1	0	1		
1245 - 1250	0	0	0	3	7	2	1	2
			0	0	9	2	5	7
			0	0	3	1	7	9
			0	1	6	1		
1250 - 1255	0	0	0	1	10	0	6	2
			1	3	9	2	2	2
			0	1	9	2	4	3
1255 - 1300	0	0	0	2	6	3	4	3
			0	0	11	4	4	4
			0	1	5	1	4	7
							3	4
1300 - 1305	0	0	0	0	6	0	5	5
			0	1	6	0	6	2
			0	0	6	0	6	3
							1	0
1305 - 1310	0	0	1	0	5	2	3	6
			0	2	10	3	5	3
			0	0	6	2	2	4
							2	1
1310 - 1315	0	0	0	1	7	2	4	2
			0	0	14	2	3	2
			0	0	6	2	2	2
1315 - 1320	0	0	0	0	6	3	2	3
			0	1	8	0	9	10
			0	4	8	1	7	5
			0	0	2	0		
1320 - 1325	1	0	0	2	8	0	3	4
	0	1	0	0	7	4	2	0
			0	0	1	2	4	2
1325 - 1330	1	0	0	1	8	2	2	5
			0	0	5	0	4	3
			0	0	9	2	4	6
1330 - 1335	0	0	0	2	10	4	4	2
			0	1	5	1	6	5
			0	2	15	4	5	3
			0	2	6	1		
1335 - 1340	0	0	0	3	14	6	3	5
			0	2	9	1	6	6
			0	1	2	2	4	4
			0	2	4	0		
1340 - 1345	0	0	0	2	7	4	3	3
			0	1	5	3	7	8
			0	1	7	6	4	4
			0	0	2	0		
1345 - 1350	0	0	0	0	5	1	5	8
			0	1	13	7	3	4
			0	3	14	6	3	5
			0	0	3	2		
1350 - 1355	0	0	0	1	8	3	4	4
			0	0	10	0	2	3
			0	1	8	1	3	1

			0	2	6	0	3	4
1355 - 1400	0	0	0	0	8	2	3	10
			0	0	7	2	2	3
			0	1	13	3	5	4
			0	1	4	0	5	6
1400 - 1405	0	0	0	2	12	2	2	2
			0	0	9	4	4	7
			0	0	5	2	1	2
			0	2	4	1		
1405 - 1410	0	0	0	2	12	1	3	4
			0	2	13	2	1	2
			0	0	11	1	9	8
			0	0	1	0	6	7
1410 - 1415	0	0	0	0	11	2	7	8
							10	11
							11	12
1415 - 1420	0	2	0	2	3	3	13	12
			1	0	13	3	2	4
			0	2	16	14	6	8
			0	3	14	4	1	1
1420 - 1425	0	0	0	0	3	2	2	3
			0	2	2	2	7	7
							8	6
1425 - 1430	1	0	3	1	10	3	10	10
			0	1	6	7	11	10
							10	9
1430 - 1435	1	0	0	1	15	2	13	12
			0	5	2	5	14	12
			0	0	2	1	14	13
1435 - 1440	0	1	0	0	4	1	14	11
			0	2	1	0	14	11
			0	0	14	2	15	15
1440 - 1445	1	0	0	1	19	15	15	15
	1	1	0	1	22	20	16	15
							16	14
1445 - 1450	0	1	0	1	27	12	20	18
			0	0	27	12	22	20
			0	0	10	3	20	20
			0	0	6	3		
1450 - 1455	0	1	0	0	4	2	22	22
	0	2	0	0	14	10	24	24
			0	1	5	1	18	18
			0	0	10	0		
			0	0	16	12		
			0	0	18	0		
1455 - 1500	1	1	0	0	16	13	20	18
			0	0	17	5	20	18
			0	0	20	15	20	19
			0	0	23	10		
			0	0	25	20		
1500 - 1505	0	1	0	0	11	3	22	20
			0	0	12	11	23	22
			0	0	6	2	20	20
			0	2	8	9		
			0	0	9	6		
1505 - 1510	1	0	0	0	18	15	21	23
	0	1	0	3	9	12	23	23
			0	0	13	10	23	23
			0	0	10	6		
1510 - 1515	0	1	0	0	15	14	23	22
	1	0	0	3	14	12	22	23
			0	0	17	11	23	23
1515 - 1520	0	1	0	0	13	17	24	24
			0	1	15	14	23	24
			0	0	14	12	23	23

1520 - 1525	0	1	0	1	15	19	24	24
	0	1	0	3	12	12	24	24
			0	0	13	12	23	24
1525 - 1530	0	1	0	2	19	15	22	20
			0	2	15	17	22	20
			0	0	13	11	23	23
1530 - 1535	0	1	0	2	12	8	18	22
			0	1	15	10	21	17
			0	0	14	12		
1535 - 1540	0	0	0	1	16	11	17	24
			0	1	17	10	1	2
			0	5	16	14	3	3
1540 - 1545	0	0	0	0	17	14	1	1
			0	0	19	16	2	2
			0	1	15	14		
1545 - 1550	0	0	0	1	18	12	5	6
			0	0	14	6	3	0
			0	2	10	4	5	7
1550 - 1555	0	0	0	0	16	2	7	12
	0	0	0	1	15	0	2	1
			0	0	5	1	8	6
1555 - 1600	0	0	0	2	6	1	2	1
			0	1	10	1	6	6
			0	1	9	1	3	5
1600 - 1605	0	0	0	2	14	3	3	5
			0	1	15	4	5	5
			0	1	5	2	2	3
1605 - 1610	0	0	0	2	13	4	0	3
			0	1	11	1	1	2
			0	0	10	4	5	5
1610 - 1615	0	0	0	1	4	0	6	7
			0	2	3	2	3	5
			0	1	7	0	2	2
							0	2
1615 - 1620	0	0	0	0	11	3	4	5
			1	0	5	0	2	6
			0	1	5	3	0	2
							1	0
1620 - 1625	0	1	0	1	15	5	5	4
			0	0	8	5	6	6
			0	1	2	0	5	2
1625 - 1630	0	0	0	1	2	0	1	0
			0	0	10	2	3	2
			0	1	8	2	1	1
1630 - 1635	0	0	0	1	3	0	6	6
			0	0	10	1	0	2
			0	0	8	3	1	1
			0	0	9	2	3	2
1635 - 1640	0	0	0	1	14	6	3	5
			0	0	7	1	2	1
			0	0	10	4	0	1
1640 - 1645	0	0	0	2	9	1	3	1
			0	0	5	3	5	7
			0	0	8	2	2	4
							3	6
1645 - 1650	0	0	0	1	5	2	3	4
			0	0	6	3	7	7
			0	2	5	1	5	8
			0	2	2	0		
1650 - 1655	0	0	0	2	9	4	2	1
			0	0	8	1	4	3
			0	1	2	1	8	9

			0	2	3	2		
1655 - 1700	1	0	0	2	10	4	1	1
			0	0	4	0	4	5
			0	2	3	1	2	0
			0	0	4	1	1	3

Man City Surveys - Part 2
Queue Length Survey

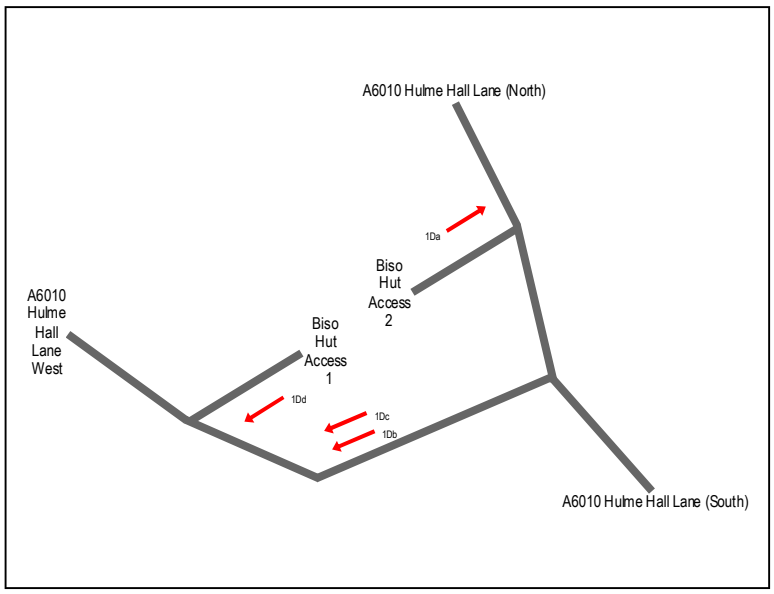
Site 1D
A6010 Hulme Hall Lane (North)
Biso Hut Access 2
A6010 Hulme Hall Lane (South)
A6010 Hulme Hall Lane West
Biso Hut Access 1

Lat/Long
lat 53.495284° lon -2.210156°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)



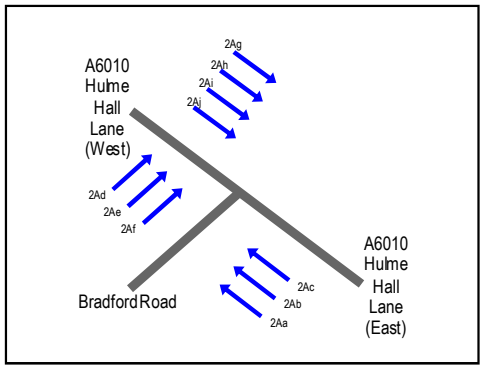
TIME	1Da	1Db	1Dc	1Dd
10:00	0	0	0	0
10:05	0	0	0	0
10:10	0	0	0	0
10:15	0	0	0	0
10:20	0	0	0	0
10:25	0	0	0	0
10:30	0	0	0	0
10:35	0	0	0	0
10:40	0	0	0	0
10:45	0	0	0	0
10:50	0	0	0	0
10:55	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**
11:00	0	0	0	0
11:05	0	0	0	0
11:10	0	0	0	0
11:15	0	0	0	0
11:20	0	0	0	1
11:25	0	0	0	0
11:30	1	1	0	0
11:35	0	0	0	0
11:40	0	0	0	0
11:45	0	0	0	0
11:50	0	0	0	0
11:55	0	0	0	0
Hourly Average	**0.08**	**0.08**	**0.00**	**0.08**
12:00	0	0	0	0
12:05	0	0	0	1
12:10	0	0	0	0
12:15	0	0	0	0
12:20	0	0	0	1
12:25	0	0	0	0
12:30	0	1	0	0
12:35	0	0	0	0
12:40	0	0	0	0
12:45	0	0	0	0
12:50	0	0	0	0
12:55	0	0	0	0
Hourly Average	**0.00**	**0.08**	**0.00**	**0.17**
13:00	0	0	0	0
13:05	0	0	0	0
13:10	0	0	0	0
13:15	0	0	0	0
13:20	0	0	0	0
13:25	0	0	0	0
13:30	0	0	0	0
13:35	0	0	0	0
13:40	1	0	0	0
13:45	0	0	0	0
13:50	0	0	0	0
13:55	0	0	0	0
Hourly Average	**0.08**	**0.00**	**0.00**	**0.00**

14:00	0	0	0	0
14:05	0	0	0	0
14:10	0	0	0	0
14:15	0	0	0	0
14:20	0	0	0	0
14:25	0	0	0	0
14:30	0	0	0	0
14:35	0	0	0	1
14:40	0	0	0	0
14:45	0	1	0	0
14:50	0	0	0	0
14:55	0	0	0	0
Hourly Average	**0.00**	**0.08**	**0.00**	**0.08**
15:00	0	3	0	0
15:05	0	0	0	0
15:10	0	0	0	0
15:15	0	0	0	0
15:20	0	1	0	0
15:25	0	0	0	0
15:30	0	0	0	0
15:35	0	1	1	0
15:40	0	0	0	0
15:45	0	0	0	1
15:50	0	0	0	0
15:55	0	0	0	0
Hourly Average	**0.00**	**0.42**	**0.08**	**0.08**
16:00	0	0	0	0
16:05	0	0	0	0
16:10	0	0	0	0
16:15	0	0	0	0
16:20	0	0	0	0
16:25	0	0	0	0
16:30	0	0	0	0
16:35	0	0	0	0
16:40	0	0	0	0
16:45	0	0	0	0
16:50	0	0	0	0
16:55	0	0	0	0
17:00	0	0	0	0
Hourly Average	**0.00**	**0.00**	**0.00**	**0.00**

Session Total	**0.02**	**0.09**	**0.01**	**0.06**

Man City Surveys - Part 2
Queue Length Survey

Site 2A
A6010 Hulme Hall Lane (East)
Bradford Road
A6010 Hulme Hall Lane (West)



Lat/Long
lat 53.490485° lon -2.203280°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)

TIME	2Aa	2Ab	2Ac	2Ad	2Ae	2Af	2Ag	2Ah	2Ai	2Aj
1000 - 1005	0	4	1	0	2	0	0	1	0	0
	0	2	1	0	1	1	0	0	0	0
	0	2	0	0	0	3	0	0	0	2
	0	3	3	0	1	2	0	0	0	1
	0	2	2	0	0	2	0	0	0	3
				0	1	1	0	2	0	0
				0	1	1				
1005 - 1010	0	4	0	0	1	1	0	1	0	1
	0	2	0	0	0	2	0	0	0	1
	0	3	0	0	2	1	0	0	0	1
	0	1	0	0	0	2	0	4	4	2
	0	2	1	1	3	1	0	0	0	1
	0	1	1				0	2	0	1
							0	0	0	1
							0	1	0	1
							0	2	1	0
1010 - 1015	0	3	2	0	1	3	0	2	0	1
	0	2	0	0	0	1	0	0	0	1
	0	3	1	0	0	1	0	1	0	1
	0	2	1	0	0	2	0	2	1	0
				0	2	2				
				0	2	1				
1015 - 1020	0	4	2	0	1	5	0	0	0	2
	0	1	0	0	0	4	0	1	1	0
	0	4	3	0	2	3	0	0	1	0
	0	1	1	0	2	4	0	4	2	3
	0	2	1				0	2	0	0
	0	1	0				0	2	4	0
	0	1	0							
1020 - 1025	0	1	2	0	1	1	0	2	5	0
	0	3	1	0	3	7	0	0	0	2
	0	2	1	0	0	2	0	1	2	2
	0	3	2	0	1	3	0	0	0	1
	0	0	2	0	1	3	0	2	1	0
	0	5	0	0	0	3	0	3	0	0
							0	1	3	0
							0	0	0	1
							0	1	0	0
1025 - 1030	0	1	3	0	0	4	0	1	1	0
	0	3	3	0	0	5	0	4	2	4
	0	4	3	0	3	3	0	2	2	2
				0	0	5				
1030 - 1035	0	3	2	0	0	7	0	4	5	0
	0	2	0	0	1	6	0	1	0	0
	0	4	2	0	2	2	0	5	2	1
	0	3	4	0	3	4	0	4	3	2
				0	0	2	0	1	0	0
1035 - 1040	0	5	3	0	3	4	0	3	5	0
	0	2	2	0	2	7	0	2	1	3
	0	3	2	0	5	5	0	1	3	1
							0	3	1	1
1040 - 1045	0	4	0	0	0	4	0	3	2	3
	0	4	0	0	2	4	0	1	0	1
	0	4	4	0	0	2				
1045 - 1050	0	2	0	0	5	4	0	1	0	1
	0	3	1	0	1	3	0	1	0	1
	0	1	0	0	2	3	0	2	2	1
	0	2	0				0	1	1	2
1050 - 1055	0	2	1	0	2	4	0	4	5	0
	0	3	0	0	2	0	0	1	0	0
	0	1	0	0	0	3	0	5	6	1

	0	1	0	0	1	2	0	0	0	1
	0	3	0	0	0	2	0	3	3	0
	0	1	0	0	2	4				
1055 - 1100	0	3	0	0	4	5	0	4	1	2
	0	5	3	0	2	3	0	3	5	0
	0	4	2	0	1	1	0	6	3	1
				0	1	2				
1100 - 1105	0	6	0	0	1	2	0	0	0	2
	0	4	4	0	2	3	0	6	7	0
	0	5	1	0	0	5	0	7	3	2
				0	2	7	0	0	0	1
							0	5	4	0
							0	0	0	1
1105 - 1110	0	5	1	0	2	7	0	6	4	0
	0	2	0	0	4	2	0	0	0	1
	0	1	0	0	1	1	0	2	3	2
	0	3	0	0	0	4	0	2	0	0
	0	1	0	0	1	4	0	4	3	1
	0	2	2	0	2	5	0	1	1	1
				0	0	2				
1110 - 1115	0	5	0	0	1	5	0	4	1	1
	0	8	6	0	0	6	0	4	4	2
	0	6	2	0	1	5	0	0	0	2
							0	6	3	2
1115 - 1120	0	2	2	0	4	4	0	5	7	1
	0	5	3	0	5	8	0	6	4	0
	0	4	3	0	0	4	0	5	6	3
1120 - 1125	0	6	4	0	3	4	0	0	0	1
	0	2	1	0	2	5	0	4	6	2
	0	3	1	0	0	6	0	5	4	2
							0	4	5	1
1125 - 1130	0	3	1	0	6	7	0	6	5	6
	0	6	1	0	3	3	0	0	0	4
	0	3	2	0	3	5	0	4	3	1
	0	1	1				0	5	8	1
1130 - 1135	0	4	1	0	2	0	0	5	8	1
	0	2	0	0	2	2	0	4	3	3
	0	1	2	0	3	5	0	3	6	0
	0	2	3	0	1	6	0	5	2	1
	0	6	0							
1135 - 1140	0	3	2	0	1	5	0	8	2	2
	0	2	2	0	2	4	0	4	3	0
	1	2	2	0	4	8	0	3	6	0
1140 - 1145	0	3	0	0	0	3	0	0	0	2
	0	6	4	0	4	5	0	2	0	0
	0	2	0	0	2	4	0	5	3	0
							0	0	1	0
1145 - 1150	0	5	0	0	3	4	0	0	2	0
	0	4	3	0	1	5	0	1	0	1
	0	5	2	0	3	5	0	0	0	2
	0	6	3				0	6	5	3
1150 - 1155	0	6	3	0	2	8	0	4	0	0
	0	4	0	0	2	4	0	0	0	1
	2	5	2	0	3	8	0	6	3	0
							0	4	5	1
1155 - 1200	0	2	1	0	1	8	0	3	1	2
	0	2	2	0	2	4	0	3	1	0
	1	4	0	0	3	6	0	0	1	2
				0	1	7				
1200 - 1205	0	4	1	0	1	7	0	5	0	3
	0	4	4	0	2	5	0	0	6	0
	0	3	3	0	3	4	0	9	10	0
				0	3	8	0	2	2	1
1205 - 1210	0	1	1	0	3	8	0	7	3	1
	0	4	3	0	4	5	0	4	0	0
	1	6	3	0	2	8	0	4	0	1
				0	1	0	0	6	4	1
1210 - 1215	0	5	2	0	6	2	0	0	0	3
	0	6	0	0	2	6	0	5	2	1
	0	8	4	0	4	3	0	1	0	1
				0	1	2				
1215 - 1220	0	6	1	0	4	5	0	0	0	1
	0	7	1	0	1	5	0	0	1	0
	0	4	2	0	6	7	0	1	0	0
							0	0	0	1
1220 - 1225	0	6	0	0	2	7	0	0	0	2
	0	5	4	0	1	5	0	5	2	1
	0	4	1	0	1	3	0	3	0	0
	0	2	2	0	2	1	0	1	2	0

							0	1	0	0
1225 - 1230	0	4	3	0	3	1	0	1	0	0
	0	5	4	0	1	2	0	2	1	0
	0	6	1	0	0	5	0	2	0	1
	0	5	4	0	0	5	0	1	0	0
	0	6	0	0	1	6	0	2	0	0
	0	2	0	0	2	8				
1230 - 1235	0	5	0	0	2	3	0	2	0	0
	0	6	0	0	0	4	0	2	2	0
	0	7	0	0	0	2	0	1	1	0
	0	6	3	0	2	6	0	1	1	0
	0	6	1	0	4	5	0	2	0	3
	0	2	2	0	0	3	0	4	1	0
1235 - 1240	0	7	2	0	0	4	0	1	2	2
	0	6	1	0	0	5	0	0	0	2
	0	3	1	0	1	2	0	3	1	0
	1	3	0	0	2	2	0	1	0	2
	0	3	2	0	2	5				
	0	1	0	0	1	1				
1240 - 1245	0	0	1	0	1	3	0	0	0	1
	0	3	2	0	1	4	0	1	1	2
	0	4	1	0	1	4	0	1	0	0
	0	5	4	0	2	3	0	2	0	0
	0	5	3	0	2	1	0	1	0	0
	0	2	0	0	4	3				
				0	1	1				
1245 - 1250	0	6	0	0	2	5	0	1	0	0
	0	1	0	0	4	5	0	2	0	0
	0	4	6	0	0	3	0	0	0	1
	0	6	0	0	2	4				
	0	3	2	0	2	1				
	0	7	4							
	0	2	0							
1250 - 1255	0	5	1	0	0	6	0	0	0	1
	0	4	4	0	7	2	0	5	1	0
	0	6	6	0	2	6	0	0	1	0
	0	5	4	0	3	7	0	2	0	0
	0	2	0	0	0	7				
	0	6	1	0	0	1				
1255 - 1300	0	6	0	0	0	2	0	1	0	0
	0	8	5	0	1	3	0	0	0	2
	0	8	0	0	0	1	0	0	0	1
	0	2	2	0	1	1	0	2	0	0
	0	3	0	0	0	2	0	2	0	0
				0	1	1				
				0	0	2				
1300 - 1305	0	2	2	0	1	5	0	0	0	2
	0	5	3	0	1	5	0	3	0	1
	0	4	2	0	1	4	0	0	0	1
	1	1	1	0	0	1	0	2	0	1
	0	3	1	0	1	3	0	2	0	0
	0	2	0	0	1	2				
1305 - 1310	0	2	2	0	2	2	0	1	0	0
	0	1	0	0	4	1	0	5	2	0
	0	4	4	0	0	1	0	0	1	0
	0	3	2	0	1	3	0	1	0	0
	0	4	3	0	1	2				
	0	3	2	0	0	3				
1310 - 1315	0	4	1	0	0	3	0	1	1	1
	0	2	2	0	0	3	0	1	1	1
	0	3	1	0	1	3	0	1	2	0
	0	4	3	0	5	2	0	0	1	1
	0	1	3	0	4	3				
	0	3	2	0	2	1				
				0	0	1				
1315 - 1320	0	2	1	0	0	2	0	0	1	0
	0	4	2	0	2	4	0	1	0	0
	0	1	0	0	2	1	0	1	0	0
	0	3	3	0	0	2	0	0	2	2
	0	2	0	0	3	5				
	0	2	1	0	0	2				
1320 - 1325	0	2	2	0	1	3	0	4	3	1
	0	5	2	0	3	4	0	0	0	2
	0	2	1	0	1	2	0	1	1	0
	0	3	1	0	1	5	0	0	0	2
	0	5	1	0	0	2	0	0	2	2
	0	2	2	0	1	2				
	0	2	0							
	0	1	1	0	1	3	0	5	1	1
	0	4	2	0	3	2	0	1	0	0
	0	4	3	0	2	1	0	0	0	1
	0	3	1	0	1	2				
	0	2	2							
	0	4	0							

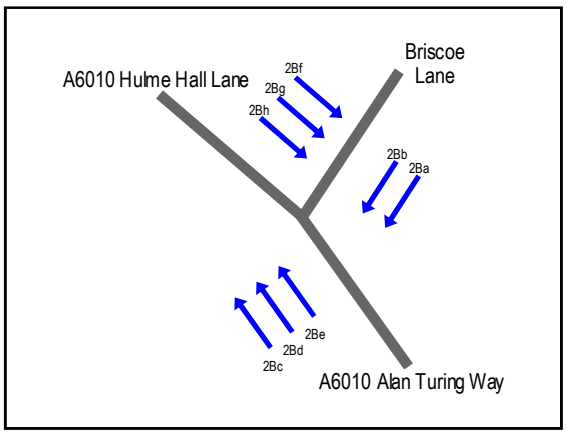
1330 - 1335	0	1	0	0	0	4	0	7	2	1
	0	2	0	0	1	0	0	5	2	0
	0	4	1	0	1	1	0	0	0	2
	0	3	0	0	0	3	0	2	0	0
	0	3	0	0	1	1				
	0	2	0							
1335 - 1340	0	2	3	0	1	4	0	4	1	3
	0	3	3	0	1	5	0	2	3	0
	0	3	1	0	2	3	0	5	1	0
	0	3	1	0	1	1				
	0	2	2	0	0	2				
	0	4	3							
1340 - 1345	0	2	1	0	0	2	0	2	5	1
	0	1	0	0	1	0	0	1	1	0
	0	1	3	0	0	5	0	3	3	1
	0	2	0	0	0	4	0	1	0	0
	0	2	3	0	1	2	0	5	0	1
	0	1	0	0	1	4	0	0	0	1
1345 - 1350	0	4	5	0	2	0	0	7	4	1
	0	5	0	0	1	1	0	1	0	0
	0	3	0	0	1	5	0	4	1	0
	0	4	3	0	0	1	0	1	0	0
	0	0	2	0	3	3	0	1	0	1
	0	1	0	0	0	3				
1350 - 1355	0	4	2	0	0	3	0	2	3	1
	0	1	2	0	1	5	0	3	2	0
	0	2	1	0	1	6	0	3	1	3
	0	2	2	0	2	1	0	2	2	0
				0	0	1				
1355 - 1400	0	2	2	0	2	5	0	1	0	0
	0	2	3	0	2	3	0	4	2	1
	0	4	1	0	2	5	0	0	0	2
	0	0	1	0	1	2	0	4	5	0
1400 - 1405	0	1	1	0	2	2	0	2	1	1
	0	1	1	0	3	3	0	2	1	1
	0	2	3	0	0	4	0	3	2	0
				0	2	4	0	1	0	1
1405 - 1410	0	3	0	0	3	4	0	3	2	1
	0	3	3	0	2	5	0	3	3	0
	0	3	1	0	3	7	0	2	0	1
	0	2	1				0	1	2	6
1410 - 1415	0	4	3	0	0	5	0	0	0	2
	0	5	4	0	4	5	0	1	0	0
	0	5	3	0	1	4	0	1	0	4
				2	0	2	0	0	0	0
							0	1	0	3
1415 - 1420	0	4	3	2	1	5	0	5	3	0
	0	4	1	0	7	8	0	0	0	1
	0	0	1	0	0	10				
1420 - 1425	0	2	1	0	8	9	0	2	0	0
	0	6	7	0	2	7	0	1	0	0
							0	1	0	0
1425 - 1430	0	3	5	0	5	10	0	3	0	2
	0	2	2	0	3	9	0	1	0	2
	0	2	0				0	0	0	1
							0	0	0	1
1430 - 1435	0	2	2	0	3	9	0	2	0	1
	0	3	0	0	7	10	0	5	3	2
	0	4	3				0	0	0	2
	0	1	1							
1435 - 1440	0	6	4	0	11	3	0	4	2	0
	0	4	4	0	12	6	0	10	7	1
							0	2	0	0
1440 - 1445	0	0	4	0	8	9	0	8	3	2
	0	3	4	0	4	10	0	1	0	2
	0	2	3				0	2	0	3
							0	0	0	1
							0	3	0	0
1445 - 1450	0	3	4	0	1	3	0	3	1	1
	0	2	2	0	0	9	0	3	0	0
	0	2	2	0	10	3	0	0	0	1
1450 - 1455	0	3	4	0	4	7	0	0	0	1
	0	5	3	0	1	8	0	1	1	0
	0	4	3				0	0	1	2
	0	2	2							
1455 - 1500	0	3	4	0	4	9	0	3	4	5
	0	5	7	0	2	8	0	2	1	4
	0	1	2				0	1	1	0

1500 - 1505	0	6	4	0	5	7	0	1	1	1
	0	3	3	0	5	8	0	4	1	0
	0	0	4				0	0	1	0
	0	7	6							
	0	0	3							
	0	3	0							
	0	3	2							
1505 - 1510	0	4	3	0	5	0	0	3	3	0
	0	3	4	0	4	8	0	0	0	4
	0	2	1	0	11	3	0	2	2	4
							0	0	0	5
							0	1	0	3
1510 - 1515	0	3	6	0	7	7	0	1	1	3
	0	8	7	0	5	8	0	0	0	5
	0	2	0				0	0	0	6
	0	5	0				0	0	0	5
	0	2	2							
1515 - 1520	0	8	6	0	3	0	0	6	5	1
	0	5	5	0	8	8	0	0	0	3
	0	2	3	0	2	9	0	0	0	2
							0	4	1	3
							0	0	0	4
							0	0	0	6
							0	0	0	5
1520 - 1525	0	6	4	0	7	10	0	1	3	9
	0	5	5	0	6	9	0	0	0	8
							0	0	0	6
							0	3	1	5
							0	0	0	6
							0	0	0	3
1525 - 1530	0	9	2	0	5	9	0	5	2	2
	0	7	3	0	7	8	0	0	0	2
							0	0	0	3
							0	5	1	1
							0	0	0	1
1530 - 1535	0	7	8	0	2	8	0	4	2	0
	1	7	7	0	6	4	0	2	3	1
	0	2	3	0	0	1	0	2	2	2
				0	2	0				
1535 - 1540	0	6	2	0	4	5	0	5	0	2
	0	9	1	0	3	7	0	3	5	1
				0	2	6	0	3	2	2
1540 - 1545	0	6	4	0	2	6	0	3	3	3
	0	6	2	0	4	5	0	3	1	2
	0	4	3	0	0	2	0	2	1	5
1545 - 1550	0	4	4	0	0	8	0	0	0	1
	0	6	3	0	0	1	0	3	2	3
	0	2	0	0	2	4	0	2	1	1
				0	5	8	0	1	1	0
1550 - 1555	0	4	5	0	1	6	0	2	1	1
	0	6	5	0	2	5	0	0	1	3
	0	6	2	0	1	1	0	1	0	2
							0	0	0	1
1555 - 1600	0	4	3	0	2	7	0	0	0	1
	0	5	5	0	1	5	0	5	1	4
	0	4	4	0	0	7	0	0	0	2
	0	3	4	0	2	0	0	3	1	1
				0	1	3	0	5	2	0
							0	4	1	3
1600 - 1605	0	5	3	0	1	2	0	2	1	3
	0	4	5	0	0	1	0	5	3	1
	0	6	5	0	1	5	0	3	0	1
	0	5	5	0	2	2				
	0	2	0	0	1	2				
1605 - 1610	0	1	0	0	4	3	0	6	3	1
	0	3	2	0	1	3	0	0	1	0
	0	2	1	0	3	4	0	5	0	1
	0	1	0	0	1	3	0	0	1	0
	0	6	6	0	1	6	0	4	4	2
	0	1	1							
1610 - 1615	0	2	2	0	2	2	0	3	5	0
	0	4	2	0	3	3	0	2	1	0
	0	3	0	0	2	4	0	3	1	0
	0	5	4	0	2	0	0	2	2	2
	0	3	2	0	0	4	0	1	2	2
	0	5	3							
1615 - 1620	0	7	6	0	1	5	0	0	1	0
	0	6	4	0	2	1	0	1	0	0
	0	1	0	0	1	5	0	4	1	0
	0	8	4	0	1	0	0	2	0	0
	0	3	1	0	1	1	0	1	2	0
	0	7	6				0	0	1	0

1620 - 1625	0	5	3	0	2	2	0	0	0	1
	0	2	3	0	3	3	0	4	4	0
	0	4	3	0	1	4	0	1	0	0
	0	3	2	0	2	4	0	4	5	0
	0	0	2	0	0	2				
	0	3	3	0	0	2				
				0	1	0				
1625 - 1630	0	3	0	0	1	1	0	1	0	0
	0	4	3	0	1	2	0	1	0	0
	0	4	0	0	1	1	0	0	0	1
	0	3	4	0	2	5	0	1	1	0
	0	1	1	0	1	4	0	0	0	2
	0	5	4	0	0	2				
1630 - 1635	0	3	3	0	3	5	0	0	0	1
	0	3	0	0	1	6	0	3	0	0
	0	4	2	0	1	1	0	1	0	1
	0	4	3				0	1	1	0
1635 - 1640	0	5	0	0	1	0	0	1	0	2
	0	4	2	0	0	1	0	0	1	0
	0	3	0	0	2	1	0	1	0	0
	0	1	2	0	1	1	0	1	1	0
	0	2	0	0	2	3	0	1	1	0
	0	3	3	0	1	1	0	0	5	0
				0	2	1				
1640 - 1645	0	3	0	0	2	1	0	1	1	0
	1	5	2	0	0	1	0	0	1	0
	0	3	3	0	1	0	0	1	0	0
	0	5	3	0	1	1	0	2	0	3
	0	3	3	0	1	7	0	3	3	0
				0	0	5				
1645 - 1650	0	2	5	0	1	8	0	0	6	1
	0	2	3	0	1	2	0	0	0	2
	0	2	1	0	1	2	0	6	6	0
	0	3	2	0	0	5				
	0	2	2	0	1	2				
1650 - 1655	0	2	3	0	0	2	0	1	1	2
	0	1	2	0	0	4	0	1	0	0
	0	3	1	0	2	2	0	3	1	0
	0	1	1	0	0	1	0	2	0	0
	0	3	3	0	2	2				
	0	1	3	0	0	2				
	0	4	3							
1655 - 1700	0	4	5	0	1	7	0	1	0	0
	0	5	5	0	0	8	0	0	0	1
	0	3	4	0	1	1	0	0	1	0
				0	1	3	0	0	0	1

Man City Surveys - Part 2
Queue Length Survey

Site 2B
Briscoe Lane
A6010 Alan Turing Way
A6010 Hulme Hall Lane



Lat/Long
lat 53.489845° lon -2.201292°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)

TIME	2Ba	2Bb	2Bc	2Bd	2Be	2Bf	2Bg	2Bh
1000 - 1005	1	2	1	0	0	0	5	3
	1	1	4	1	1	0	2	3
	1	2	1	0	0	0	3	1
	0	1	2	0	2	0	5	5
	1	0	0	0	2	0	2	1
	0	2	6	2	1	0	1	2
			0	0	1	0	1	1
1005 - 1010	1	1	0	0	1	0	3	2
	1	2	1	0	1	0	4	1
	1	0	1	0	0	0	2	2
	1	1	2	0	0	0	5	1
	2	0	3	3	1	0	7	7
	3	1				0	6	2
1010 - 1015	3	1	1	0	0	0	3	5
	3	0	2	0	0	0	4	3
	2	0	4	0	3	0	5	5
	1	1				0	0	2
	2	0				0	4	5
	6	6				0	3	2
	0	1						
1015 - 1020	2	2	0	0	1	0	3	2
	0	2	0	1	2	0	4	3
	1	1	0	0	1	0	2	1
	2	0	0	0	1	0	8	4
	5	0	4	0	1	0	5	6
	1	0	0	0	2	0	7	6
						0	4	2
1020 - 1025	2	3	1	0	4	0	4	2
	1	1	1	1	1	0	11	13
	2	1	1	0	3	0	12	13
	0	1	0	1	0	0	9	7
	6	4				0	6	5
						0	4	6
						0	2	1
1025 - 1030	2	4	2	0	0	0	2	3
	2	3				0	5	1
	8	7				0	3	1
1030 - 1035	8	7	2	0	0	0	6	2
	1	1	0	0	2	0	10	11
	3	4	0	0	1	0	13	7
	0	1	0	0	2	0	7	0
	9	1				0	13	3
	0	2						
1035 - 1040	1	2	0	0	5	0	14	3
	7	8	0	0	4	0	7	7
	9	2	0	2	3	0	8	3
			0	0	3	0	1	0
			0	0	1			

1040 - 1045	10	2	0	0	1	0	4	2
	2	4	1	0	1	0	6	3
	4	5	0	0	1	0	5	3
			0	0	1			
			1	0	1			
1045 - 1050	4	0	0	0	2	0	5	0
	2	2	0	0	2	0	4	1
	2	1	3	2	2	0	3	4
	1	0	3	0	3	0	2	4
	1	0	0	0	5	0	7	4
	0	2						
1050 - 1055	2	3	3	2	2	0	7	4
	2	0	0	0	1	0	10	13
	2	1	3	1	2	0	4	6
	0	1	2	0	1	0	8	6
	0	12				0	6	6
	9	0				0	7	4
						0	3	1
1055 - 1100	6	6	2	0	1	0	5	3
	6	5	2	1	1	0	8	4
	6	4	1	2	3	0	9	7
1100 - 1105	5	2	1	0	0	0	3	4
	6	3	2	3	2	0	8	5
	3	3	3	3	1	0	7	3
1105 - 1110	3	5	0	0	1	0	1	3
	1	0	1	0	1	0	9	10
	2	1	2	2	3	0	4	3
	2	3	3	2	3	0	11	5
	2	1	2	0	0	0	8	0
	1	4				0	8	10
	1	0						
	1	0						
1110 - 1115	3	1	4	2	5	0	9	8
	5	0	0	0	1	0	4	7
	10	6	4	3	0			
	6	4	5	3	2			
1115 - 1120	6	8	3	2	4	0	2	3
	10	4	0	0	2	0	4	1
	4	2	5	2	2	0	5	4
			0	0	4			
			3	1	6			
1120 - 1125	7	6	0	0	2	0	6	5
	7	6	1	2	0	1	0	0
	1	3	4	1	1	0	7	3
	0	1	0	0	3	0	2	2
1125 - 1130	5	3	0	0	1	0	3	3
	9	3	0	0	2	0	4	5
	5	5	0	0	1	0	5	3
			0	0	2	0	0	3
1130 - 1135	3	1	1	1	0	0	5	3
	2	2	3	1	2	0	5	5
	1	2	1	0	0	0	10	6
	9	6				0	12	10
	2	1				0	5	7
1135 - 1140	8	3	0	0	1	0	4	6
	6	2	0	0	1	2	5	12
	7	6				0	11	6
1140 - 1145	4	1	1	0	0	0	7	6
	3	2	4	2	5	0	8	8
	9	4	1	1	2	0	4	7
	0	1						
1145 - 1150	11	3	1	2	2	0	7	7
	7	6	1	0	1	0	10	6
	7	5				0	8	5
						0	6	6

1150 - 1155	5	3	3	0	1	0	10	9
	6	5	0	0	1	0	7	9
	1	2	0	0	2	0	11	12
			0	1	0			
1155 - 1200	11	3	0	1	0	0	11	10
	8	5	2	0	1	0	10	8
	5	3	0	0	4	0	9	6
1200 - 1205	2	0	3	2	4	0	9	10
	6	5	3	0	3	0	7	9
	8	3	1	1	5	0	12	8
1205 - 1210	8	3	4	0	0	0	9	9
	5	3	3	1	2	0	7	8
	0	1	4	1	2	0	9	10
	3	3						
1210 - 1215	5	5	3	0	3	0	9	6
	8	1	3	0	4	0	10	9
	6	3	0	1	1	0	4	4
1215 - 1220	4	4	0	0	2	0	6	2
	5	2	3	0	0	0	5	1
	3	1	0	0	1	0	14	3
1220 - 1225	8	2	1	0	0	0	10	4
	4	2	0	1	1	0	11	3
	5	1				0	8	0
	1	2				0	5	1
	1	3						
1225 - 1230	1	4	3	3	3	0	1	1
	2	0	0	1	1	0	5	4
	5	4	0	2	1	0	1	1
	3	4	0	0	1	0	12	5
	0	2	1	0	1	0	5	3
	4	1				0	6	2
1230 - 1235	0	2	6	4	3	0	7	2
	1	2	4	4	3	0	4	2
	4	4	2	0	2	0	7	1
	0	4	2	1	0	0	3	1
	2	0	2	0	0	0	10	3
	2	0	1	2	2	0	2	1
						0	3	2
1235 - 1240	0	1	1	2	3	0	6	2
	1	0	1	1	1	0	1	1
	2	1	1	1	2	0	4	1
	2	2	1	0	0	0	5	2
	1	1	0	1	0	0	7	2
			0	0	1	0	1	1
1240 - 1245	0	1	0	0	2	0	7	3
	1	2	1	0	0	0	0	2
	1	2	2	1	1	0	10	4
	4	6	2	0	1	0	5	5
	1	3	2	0	2	0	0	1
1245 - 1250	1	2	0	0	1	0	5	4
	2	0	0	0	2	0	2	0
	1	2	1	0	2	0	4	4
	1	0	0	2	2	0	2	1
	0	2				0	5	3
	1	2						
1250 - 1255	1	1	0	0	2	0	7	4
	1	2	0	2	0	0	8	1
	4	1	1	2	2	0	5	1
	1	2	1	1	0	0	1	0
	3	1				1	8	4
	5	3				0	1	1
1255 - 1300	0	1	1	1	0	0	2	1
	1	1	2	0	2	0	4	2
	5	0	2	2	2	0	1	0
						0	10	6
						0	1	1
						0	5	2

1300 - 1305	3	7	0	0	3	0	6	4
	1	4	2	1	2	0	2	1
	1	0	1	0	1	0	7	1
	1	2	1	1	2	0	2	1
	0	1	1	0	0	0	5	3
			0	2	1			
1305 - 1310	1	1	2	0	0	0	2	1
	1	5	2	1	0	0	5	3
	5	2	1	2	0	0	12	5
	2	2	0	0	1	0	2	0
	2	1	1	2	1	0	2	1
	4	0						
1310 - 1315	1	0	1	2	1	0	5	5
	2	3	4	4	0	0	1	0
	0	2	7	0	4	0	8	2
	5	0	0	3	7	0	1	0
	4	1				0	5	4
						0	2	0
1315 - 1320	3	0	5	0	4	0	1	2
	0	3	3	0	1	0	1	1
	1	1	2	0	1	0	5	2
	3	3	1	0	0	0	1	0
	1	1				0	7	4
	0	3				0	1	2
1320 - 1325	3	1	1	0	5	0	7	6
	1	3	2	0	1	0	6	3
	2	1	0	3	5	0	5	3
	0	1	3	1	5	0	2	1
	0	2				0	5	7
	0	1				0	1	2
1325 - 1330	1	1	4	0	3	0	1	2
	1	3	0	3	0	0	6	4
	1	2	3	0	1	0	5	0
	0	1	4	0	0	0	4	4
	2	2	6	4	5	0	5	2
	0	0				0	4	1
						0	1	1
1330 - 1335	0	2	6	4	1	0	1	0
	0	4	7	4	6	0	10	3
	1	2	5	4	6	0	4	2
	0	4	0	1	1	0	9	5
	0	5	1	0	0	0	4	2
	1	4				0	1	0
1335 - 1340	4	3	2	0	1	0	4	3
	3	1	1	0	3	0	5	0
	0	3	4	2	5	0	1	2
	2	1				0	9	4
	1	0				0	4	3
	0	0				0	7	3
1340 - 1345	0	2	0	1	0	0	3	1
	0	1	5	5	1	0	7	3
	0	1	2	0	0	0	2	3
	1	4	0	0	1	0	6	3
	1	1	0	0	1	0	3	3
	1	4				0	5	1
1345 - 1350	1	4	0	0	8	0	0	2
	0	2	9	5	0	0	7	6
	0	4	2	0	1	0	5	3
	3	0	3	2	4	0	6	2
	1	6	7	2	2	0	7	3
						0	0	1
1350 - 1355	3	2	2	1	2	0	1	1
	0	3	1	0	4	0	2	0
	5	4	9	4	0	0	1	1
	1	1	6	4	1	0	3	2
1355 - 1400	2	2	3	3	4	0	2	2
	5	6	9	7	8	0	5	2
	5	0	0	0	2	0	3	1
	1	0						

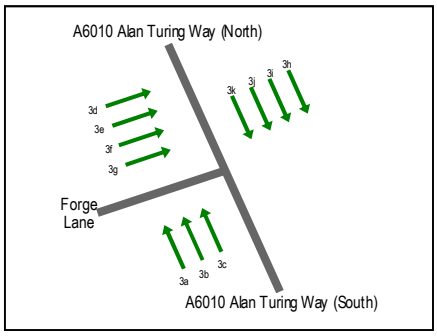
1400 - 1405	1	0	2	2	2	0	3	5
	3	2	3	2	2	0	6	3
	6	4	5	1	1	0	8	1
	2	2	2	2	1			
1405 - 1410	0	5	2	2	1	0	5	4
	0	7	1	1	1	0	1	0
	0	5	1	0	0	0	6	3
	0	1	2	0	0	0	6	3
			1	0	2			
1410 - 1415	0	2	2	1	2	0	5	4
	0	4	1	1	0	1	6	0
	0	6	9	3	3	0	6	2
	0	5						
1415 - 1420	0	8	2	2	1	1	3	3
	0	10	0	0	4	0	9	4
	0	8				0	1	0
1420 - 1425	0	5	2	1	0	0	13	7
	0	7	10	2	1	0	4	1
	0	2	0	0	1	0	9	10
			2	0	4	0	2	2
			2	1	1			
			3	2	1			
1425 - 1430	0	5	2	2	3	0	6	4
	0	2	2	3	2	0	4	4
	0	5	2	2	1	0	4	5
1430 - 1435	0	6	3	2	1	1	4	2
	0	10	8	4	3	0	6	5
	0	3	0	0	2	0	9	10
			3	3	0	0	6	4
			2	2	1			
			7	6	1			
1435 - 1440	0	8	16	17	0	0	11	9
			1	0	0	0	9	9
			3	0	0			
			2	2	1			
1440 - 1445	0	8	2	2	1	0	11	10
	0	6	3	2	1	0	10	9
	0	12	0	0	2	0	10	9
			7	7	4			
1445 - 1450	0	12	0	0	1	0	5	4
	0	7	6	6	7	0	11	4
	0	11	3	3	5	0	8	3
			1	0	0			
			4	2	1			
1450 - 1455	0	8	0	0	7	0	8	4
	0	7	7	8	6	0	1	0
	0	5	9	10	7	0	2	4
	0	4	0	0	7	0	9	2
			9	9	6	0	2	0
			10	10	7			
			8	9	4			
			6	5	5			
1455 - 1500	0	8	7	7	0	0	2	0
	1	11	6	6	0	0	4	0
	3	2	8	6	1	0	3	1
			6	6	1	0	3	4
			7	1	6			
			9	9	7			
			7	8	3			
1500 - 1505	5	3	7	5	6	0	4	0
	0	3	8	5	4	0	6	5
	1	5	3	5	0	0	10	7
	0	1	2	4	0	0	3	1
			2	3	2			
			2	5	2			
			4	9	6			
1505 - 1510	0	1	2	2	0	0	8	2
	5	9	2	6	0	0	5	7

	0	4	1	2	1	0	9	9
	0	9	1	3	3			
			0	0	2			
1510 - 1515	0	9	1	3	6	0	8	9
	1	8	0	0	1	0	8	2
	2	4	5	4	4	0	1	1
	0	5	1	0	1			
			3	3	6			
1515 - 1520	3	7	0	0	2	0	1	1
	3	7	2	0	4	0	8	7
	0	3	3	5	6	0	5	2
			0	0	2			
			4	2	6			
			1	1	0			
1520 - 1525	3	5	2	3	6	0	9	6
	2	12	1	0	0	0	9	8
			2	2	3			
			4	0	0			
			0	0	4			
			0	0	6			
			1	0	0			
1525 - 1530	2	8	1	2	2	0	9	8
	5	12	0	0	4	0	10	9
			1	4	4			
			0	0	2			
1530 - 1535	7	9	2	1	1	0	8	3
	3	7	1	0	0	0	7	3
	2	2	2	2	0	1	7	0
			3	0	4			
			2	3	0			
1535 - 1540	3	2	0	1	0	0	9	1
	6	2	2	0	0	0	8	4
	4	5	2	1	4			
1540 - 1545	2	4	1	0	0	0	6	1
	6	5	0	0	3	0	7	3
	0	2	1	0	0	0	5	2
1545 - 1550	0	2	1	0	0	0	4	4
	2	3	2	0	0	0	8	1
	3	4				0	1	0
	4	6						
1550 - 1555	3	4	1	2	1	0	6	3
	5	4	1	0	0	0	6	3
						0	4	3
1555 - 1600	1	4	2	1	1	0	5	4
	3	5	2	2	1	0	2	1
	2	0	3	0	0	0	2	0
	1	6	0	1	2	0	2	0
	0	6	0	0	2			
	0	1						
1600 - 1605	2	2	2	1	3	0	2	2
	1	0	3	3	5	0	10	2
	1	4	0	3	1	0	2	4
	2	0	1	0	2	0	1	1
	1	0	2	0	0			
1605 - 1610	3	3	2	2	4	0	1	3
	2	0	0	1	0	0	1	3
	1	0	1	0	0	0	3	2
	4	3	4	2	3	0	1	0
	0	1				0	0	1
1610 - 1615	4	0	3	1	1	0	0	2
	3	0	10	9	1	0	3	2
	1	1	5	3	6	0	4	4
	1	0				0	1	0
	1	1				1	3	1
						0	5	3
						0	6	2

1615 - 1620	1	2	3	3	1	0	8	3
	1	3	8	2	5	0	2	0
	1	1	9	1	0	0	1	0
	4	2	1	2	2	0	4	0
						0	7	7
						0	5	3
						0	2	1
1620 - 1625	1	0	1	2	4	0	6	3
	3	3	2	2	4	0	2	1
	0	3	2	0	0	0	0	1
	3	0	1	1	2	0	4	2
	1	0	2	0	1			
			3	2	6			
1625 - 1630	0	1	2	0	3	0	3	1
	1	0	2	2	4	0	1	0
	0	1	6	2	3	0	6	1
	2	1	0	0	4	0	2	0
	2	2	3	3	3	0	4	1
	1	0				0	2	1
1630 - 1635	1	0	0	0	2	1	5	6
	2	2	3	1	4	0	0	1
	1	1	2	1	0	0	4	3
	0	1	3	3	4	0	3	1
	4	3	10	1	9	0	3	0
	0	2						
1635 - 1640	0	2	3	2	2	0	2	0
	2	2	0	0	1	0	2	3
	0	1	0	1	2	0	2	1
	2	1	4	3	0	0	1	0
	4	1	1	0	0	0	2	2
	0	1						
1640 - 1645	1	1	1	0	0	0	3	4
	2	2	2	1	4	0	2	1
	2	1	4	2	0	0	7	4
	4	3	1	2	0	0	3	0
1645 - 1650	5	3	1	0	1	0	3	0
	1	4	1	0	3	0	1	1
	2	1	1	1	3	0	2	1
	3	1	2	2	1	0	1	0
	3	0	1	0	0	0	7	6
	1	1						
1650 - 1655	3	0	3	2	1	0	0	6
	1	0	1	0	1	0	10	7
	8	3	0	0	2	0	5	2
	1	0	1	0	3	0	3	1
	3	1				0	4	2
						1	0	1
1655 - 1700	3	1	1	0	2	0	3	2
	4	2	1	1	2	0	5	4
	9	4				0	6	4
	3	1				0	1	1

Man City Surveys - Part 2
Queue Length Survey

Site 3
A6010 Alan Turing Way (South)
Forge Lane
A6010 Alan Turing Way (North)



Lat/Long
lat 53.487241° lon -2.199148°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)

TIME	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k
1000 - 1005	2	5	4	1	0	1	1	0	0	0	5
	1	4	3	0	0	1	1	0	1	0	1
	3	1	3	1	0	1	0	0	0	0	1
				0	0	1	0	0	0	0	5
								0	0	0	5
								0	2	1	0
1005 - 1010	3	2	3	1	0	0	0	0	0	0	3
	1	5	3	1	0	0	0	0	0	0	3
	1	2	3	0	0	0	1	0	1	0	0
								0	0	0	1
								0	2	0	0
1010 - 1015	3	3	4	0	0	1	2	0	0	0	2
	0	4	7	1	0	0	2	0	2	1	0
	0	0	1	1	0	0	1	0	0	0	2
				0	0	0	1	0	1	0	0
								0	0	0	2
1015 - 1020	2	1	3	0	0	0	1	0	3	3	0
	1	2	4	1	0	0	0	0	0	0	2
	0	0	2	1	0	0	0	0	2	1	0
				1	0	0	0	0	0	0	1
								0	2	4	0
								0	0	0	5
1020 - 1025	2	0	3	2	0	0	0	0	0	0	5
	2	5	2	0	0	1	1	0	6	4	0
	0	3	3					0	0	0	1
								0	0	0	9
								0	1	0	0
								0	0	0	5
1025 - 1030	1	4	2	0	0	0	1	0	0	0	5
	0	5	4	1	0	0	0	0	1	0	0
	0	4	4	0	0	1	0	0	0	0	4
				0	0	1	1				
1030 - 1035	2	4	3	0	0	1	2	0	0	0	1
	3	4	10	1	0	0	1	0	5	4	0
	2	1	5	0	0	0	1	0	0	0	1
				1	0	0	0	0	1	0	0
				0	0	0	1	0	0	0	3
								0	0	0	2
1035 - 1040	2	4	8	0	0	0	1	0	0	0	5
	0	2	5	0	0	0	1	0	4	1	1
	0	3	5	1	2	0	0	0	3	0	6
				0	0	0	2	0	10	12	0
								0	5	0	2
								0	7	1	2
								0	12	9	2
								0	14	11	0
1040 - 1045	3	1	6	0	0	0	2	0	13	11	0
	4	5	4	1	0	0	0	0	18	15	1
	0	0	1	0	0	0	1	0	15	20	6
				0	0	0	1	0	10	15	4
								0	15	12	8
								0	5	2	2
								0	0	0	2
1045 - 1050	4	0	5	0	0	0	1	0	0	0	2
	1	7	8	1	0	0	0	0	1	0	0
	0	4	4					0	0	0	4
	0	1	1					0	0	0	5
1050 - 1055	2	2	6	0	0	1	1	0	0	0	2
	4	2	6	0	0	0	2	0	1	0	1
	4	1	3					0	0	0	5
	1	1	0					0	0	0	3
1055 - 1100	2	5	8	0	0	0	2	0	5	3	0
	4	1	3	1	0	0	1	0	0	0	3
	3	1	3	0	0	0	1	0	1	0	2
				1	0	0	0	0	0	0	7
				1	0	0	0	0	0	0	6
1100 - 1105	3	4	5	0	0	0	1	0	0	0	8

	0	2	7	2	0	0	0	0	6	2	0
	0	2	4					0	0	0	6
								0	0	0	5
1105 - 1110	4	1	3	2	0	0	0	0	0	0	4
	3	1	5	1	1	3	2	0	3	3	0
	0	2	2					0	0	0	5
								0	2	3	0
								0	0	0	5
								0	3	2	0
1110 - 1115	2	4	2	1	0	0	0	0	0	0	9
	3	3	3	1	3	1	0	0	6	6	0
	0	1	1	2	0	1	0	0	0	0	6
				0	0	2	1	0	7	6	0
								0	0	0	9
1115 - 1120	2	2	2	2	0	0	0	0	2	0	0
	2	2	6	1	0	0	0	0	0	0	5
	0	3	5					0	2	2	0
	0	0	1					0	7	9	11
								0	8	6	12
1120 - 1125	2	4	3	0	0	0	0	0	9	8	0
	1	4	5					0	0	0	9
	0	5	3					0	3	7	0
								0	0	0	9
								0	3	1	0
1125 - 1130	1	3	5	1	0	0	1	0	0	0	8
	0	4	5	0	0	0	1	0	0	0	3
	0	2	2					0	6	4	0
								0	0	0	8
								0	2	3	0
1130 - 1135	2	3	4	0	0	0	2	0	0	0	5
	3	2	6					0	0	0	4
	2	3	3					0	1	2	0
								0	0	0	11
								0	4	7	0
1135 - 1140	3	3	3	0	0	0	1	0	0	0	8
	3	1	1	0	0	0	1	0	0	0	11
	2	0	0	0	0	0	1	0	3	2	0
	1	0	0								
1140 - 1145	4	3	5	1	0	0	0	0	2	5	0
	2	1	3	0	0	0	1	0	0	0	12
	2	2	6					0	1	2	0
	2	1	1					0	0	0	8
								0	0	0	8
1145 - 1150	3	1	3	1	0	0	0	0	3	3	0
	2	4	6					0	0	0	12
	2	2	3					0	0	0	13
	0	1	1					0	0	0	10
1150 - 1155	3	1	3	0	0	0	1	0	2	2	0
	4	1	6	0	0	0	1	0	0	0	8
	4	0	3					0	7	4	0
	2	1	1					0	0	0	9
								0	4	2	0
								0	0	0	7
1155 - 1200	3	3	2	0	0	0	1	0	3	0	0
	1	4	7	0	0	0	1	0	0	0	6
	4	1	4	1	0	0	0	0	0	0	8
	2	0	0					0	6	4	11
								0	3	2	0
								0	0	0	10
1200 - 1205	3	0	2	1	0	0	1	0	1	0	7
	3	1	2	0	0	0	2	0	3	0	8
	2	0	0	0	0	0	1	0	2	2	8
				1	0	0	0				
1205 - 1210	2	4	3	0	1	0	1	0	2	2	8
	0	5	6	0	0	2	1	0	4	5	4
	0	3	3	0	0	1	0	0	5	0	8
1210 - 1215	1	4	5	1	0	0	0	0	11	7	3
	2	2	3	1	0	0	0	0	7	6	6
	0	3	3					0	7	1	2
1215 - 1220	3	2	2	0	0	0	1	0	9	0	2
	0	5	3	1	0	0	0	0	3	4	2
	0	5	4	0	0	1	0	0	0	0	1
								0	4	2	0
1220 - 1225	0	2	2	0	0	0	1	0	0	0	2
	0	4	3	0	0	1	0	0	1	0	0
	0	2	3								
1225 - 1230	1	3	4	1	0	0	0	0	2	2	0
	0	2	1	1	0	0	0	0	0	0	1
1230 - 1235	0	3	1	0	0	0	1	0	0	0	1
	0	2	2					0	1	1	1
	0	1	0					0	3	0	1
1235 - 1240	0	3	2	1	0	1	0	0	0	0	1
	0	3	2	0	0	1	2	0	0	0	1
1240 - 1245	0	2	1	1	0	0	0	0	0	0	1
				1	0	0	0	0	0	0	2

1245 - 1250	0	1	2	1	1	0	0	0	0	0	2
	0	2	3	0	0	0	1	0	0	0	1
	0	2	4								
1250 - 1255	0	1	1	1	2	0	0	0	5	3	1
	0	0	2	0	0	1	0	0	1	1	0
				1	3	0	1				
1255 - 1300	0	2	2	1	1	0	1	0	2	3	0
	0	3	2	1	0	0	0				
				1	0	0	0				
1300 - 1305	0	1	0	2	0	1	1	0	1	1	0
				4	0	2	0	0	0	1	0
				0	0	2	0				
1305 - 1310	0	0	4	2	1	1	0	0	2	1	0
	0	1	0	2	1	0	0	0	0	0	1
	0	5	8					0	0	0	1
1310 - 1315	1	7	2	0	0	1	1	0	0	0	1
	0	4	7	1	1	2	0	0	3	1	0
	0	2	2					0	2	2	0
1315 - 1320	0	3	1	0	0	1	0	0	0	2	0
	0	7	6	1	0	1	0	0	0	0	1
	0	7	9	0	0	2	0	0	1	0	0
				1	0	1	1	0	2	1	0
1320 - 1325	0	5	4	0	0	0	1	0	1	0	0
	0	5	7	0	0	1	1				
1325 - 1330	1	3	0	2	0	0	0	0	1	1	0
	0	2	1	1	0	0	0	0	1	0	0
				1	0	0	0	0	0	0	1
1330 - 1335	0	7	9	1	0	0	0	0	0	0	1
				0	0	1	1	0	1	0	0
								0	3	0	0
1335 - 1340	1	4	2	0	0	1	0	0	4	0	0
	0	3	1	1	0	0	0	0	1	0	0
	0	0	4	0	0	0	1	0	1	1	0
1340 - 1345	0	4	2	0	0	1	0	0	1	0	0
	0	5	4	0	0	1	0	0	0	0	1
1345 - 1350	0	3	2	0	0	2	0	0	0	0	0
	0	2	6	2	1	0	0				
	0	4	0	1	0	1	0				
				0	0	1	0				
1350 - 1355	0	3	0	0	0	1	0	0	2	0	0
	0	0	1	1	1	1	0	0	2	1	0
				2	0	1	0	0	1	0	0
1355 - 1400	0	2	6	1	0	1	0	0	2	0	0
	0	2	2	0	0	1	2				
1400 - 1405	0	1	2	2	0	0	0	0	1	0	0
	0	3	1	0	0	1	0	0	6	0	0
				1	0	1	1	0	0	0	1
1405 - 1410	0	1	1	2	0	3	0	0	1	0	0
	0	1	0	1	1	0	0	0	2	0	0
	0	1	0	0	1	1	0				
1410 - 1415	0	2	2	3	1	0	1	0	0	0	1
	0	2	2	0	0	1	2				
	0	4	3	1	1	3	3				
				0	0	1	1				
1415 - 1420	0	2	2	0	0	1	2	0	1	0	0
	0	2	3	1	0	1	1	0	3	1	0
	0	3	2	4	4	1	1	0	4	7	1
				4	2	4	3	0	1	1	0
1420 - 1425	0	3	2	1	2	0	0	0	1	1	0
	0	3	2	6	3	2	2	0	7	6	0
	0	5	3	2	3	0	1	0	1	0	0
	0	4	6	0	1	0	0	0	4	7	1
	0	1	0	4	3	0	1				
1425 - 1430	0	6	5	6	3	0	2	0	1	0	0
	0	1	0	5	3	0	0	0	2	1	0
	0	7	8	2	1	0	0				
	0	2	2	1	0	0	0				
	0	2	1	3	1	0	0				
1430 - 1435	0	3	2	6	3	0	5	0	2	1	0
	0	2	4	3	3	0	0	0	3	5	0
	0	1	1	2	2	1	2	0	10	9	0
	0	1	2	3	3	2	1				
	0	4	6	2	0	2	0				
1435 - 1440	0	1	0	3	2	2	0	0	16	9	2
	0	3	2	1	4	0	1				
	0	8	6	5	1	0	1				
				9	4	0	0				
				7	4	0	0				
1440 - 1445	0	9	8	7	3	0	0	0	4	0	0
	0	6	6	6	3	0	0	0	6	4	0
	0	7	6	1	3	8	6	0	14	6	0

				2	4	4	4	0	12	7	0
								0	14	6	0
1445 - 1450	0	8	9	3	3	5	7	0	10	0	0
	0	2	5	4	0	8	7	0	13	9	1
	0	2	7	1	2	9	9	0	17	12	0
	0	8	7					0	13	10	0
1450 - 1455	0	11	9	4	4	5	7	0	16	13	0
	0	10	7	3	4	10	10	0	12	8	0
	0	5	5					0	14	10	0
								0	20	16	0
								0	16	12	1
1455 - 1500	0	7	8	3	1	10	11	0	22	16	1
	0	6	7	3	4	5	9	0	18	14	0
	0	7	5					0	20	16	5
	0	6	4								
1500 - 1505	1	6	5	3	0	0	0	0	14	12	13
	0	5	6	5	2	0	0	0	12	17	0
				3	3	0	3				
				9	4	4	8				
1505 - 1510	0	7	9	6	4	0	0	0	16	15	3
	0	6	7	7	3	4	4	0	15	19	3
	0	5	3					0	7	6	0
1510 - 1515	0	9	3	5	3	3	6	0	15	13	0
	0	6	5	5	3	6	8	0	17	15	2
	0	6	7	6	3	4	5	0	19	18	1
	0	8	4	0	0	2	6	0	13	16	2
1515 - 1520	0	10	5	3	4	4	6	0	19	17	3
	0	5	8	3	3	3	4	0	21	17	2
	0	9	7					0	23	15	4
	0	7	7								
1520 - 1525	0	5	2	5	1	5	6	0	24	20	1
	0	7	6	7	3	7	9	0	22	19	1
	0	6	5	6	4	3	5				
1525 - 1530	0	8	6	0	1	5	7	0	24	17	0
	0	5	3	1	3	0	3	0	0	0	2
	0	4	5	3	1	3	2	0	22	11	1
	0	3	2					0	25	17	0
								0	22	12	1
1530 - 1535	0	2	2	3	2	4	3	0	24	13	4
	0	6	4	0	0	3	4	0	23	14	6
	0	9	4	2	0	1	2	0	20	13	5
								0	19	12	2
1535 - 1540	0	4	3	3	2	1	3	0	0	0	2
	0	3	4	3	1	2	3	0	22	13	4
	0	3	3	1	2	2	1	0	15	12	0
								0	17	12	3
1540 - 1545	0	6	2	3	4	0	2	0	5	4	0
	0	2	2	3	1	1	2	0	1	3	0
				0	0	2	3	0	4	2	0
1545 - 1550	0	3	1	1	1	2	4	0	0	0	1
	0	1	1	0	2	2	2	0	2	1	0
	0	1	0	2	3	3	3	0	0	0	1
								0	3	5	0
								0	2	2	0
1550 - 1555	0	3	2	2	1	1	1	0	4	6	0
	0	6	5	1	2	2	3	0	4	2	0
	0	0	4	1	1	0	3	0	1	0	0
	0	3	4	0	1	0	0	0	0	0	1
	0	4	3	0	0	2	3	0	0	1	0
				0	3	2	2				
1555 - 1600	0	3	5	0	0	2	2	0	0	0	1
	0	1	1	0	2	1	1	0	0	1	0
	0	5	4	0	2	1	2	0	2	0	0
	0	2	2	0	1	2	1	0	0	2	0
	0	2	1	0	0	2	0	0	1	1	0
				0	0	0	3	0	2	3	0
				1	1	0	0				
1600 - 1605	1	1	3	1	3	1	0	0	1	0	0
	0	1	2	1	0	2	4	0	1	1	0
	0	2	0	2	0	1	2	0	6	0	1
				0	1	1	1	0	0	0	1
				0	0	1	1	0	5	4	1
				0	2	2	1	0	0	0	1
1605 - 1610	0	1	2	0	0	3	1	0	1	0	0
	0	1	0	0	1	0	0	0	4	3	0
	0	1	3	1	0	0	1	0	1	1	0
	0	0	1	0	1	0	0	0	3	1	0
				0	1	0	0				
1610 - 1615	0	2	1	0	1	0	0	0	4	1	0
	0	2	0	0	1	0	0	0	0	0	1
				1	0	2	1	0	3	1	0
				1	1	2	1	0	3	1	2
1615 - 1620	0	2	0	0	1	0	0	0	4	2	2
	0	4	2	0	0	1	0	0	0	0	2
	0	2	1	1	1	4	1	0	2	2	0
	0	1	0	2	0	3	0	0	3	1	0

								0	2	1	0
1620 - 1625	1	1	1	0	2	3	1	0	3	2	0
	0	1	0	1	0	2	2	0	1	0	0
	0	1	2	0	1	0	4	0	0	0	1
								0	2	3	0
								0	0	0	2
1625 - 1630	0	1	4	0	0	2	1	0	1	3	0
	0	1	1	0	1	0	0	0	0	0	1
	0	1	2	0	1	2	0	0	3	1	0
	0	3	2								
1630 - 1635	0	5	4	1	0	1	1	0	0	0	2
	0	3	4	0	0	1	1	0	3	0	0
	0	1	1	0	0	1	0	0	1	0	0
				0	1	1	1				
1635 - 1640	0	2	2	0	0	1	0	0	2	0	0
	0	2	3	1	0	1	1	0	2	0	0
				0	0	1	0	0	0	0	1
								0	3	1	0
								0	0	0	1
1640 - 1645	0	2	3	1	0	1	0	0	0	0	1
	0	2	1	0	0	2	0	0	3	1	0
	0	1	2	1	1	2	2	0	0	0	1
				0	0	3	0	0	1	0	0
				1	1	1	0				
1645 - 1650	0	3	2	1	1	1	0	0	3	2	0
	0	1	1	0	0	2	1	0	2	0	0
	0	2	2	1	1	4	1	0	1	0	0
				1	0	2	1				
1650 - 1655	0	1	1	0	0	1	1	0	1	0	0
	0	2	1	1	1	2	0	0	2	2	1
	0	3	1	0	1	0	0				
	0	1	3								
1655 - 1700	0	0	1	1	1	1	0	0	3	0	0
	0	2	1	0	1	2	0	0	2	2	0
	0	1	1	0	0	2	0				
				0	1	0	0				

Man City Surveys - Part 2
Queue Length Survey

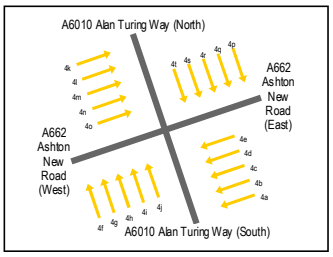
Site 4
A662 Ashton New Road (East)
A6010 Alan Turing Way (South)
A662 Ashton New Road (West)
A6010 Alan Turing Way (North)

Lat/Long
lat 53.481602° lon -2.195124°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)



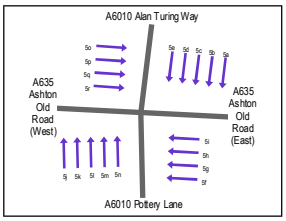
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1000 - 1005	1	0	3	4	5	1	0	1	3	4	1	0	9	6	2	1	0	1	0	0
	0	0	10	4	3	2	0	8	4	4	4	0	4	3	1	3	0	4	8	7
	0	1	3	1	3	1	0	1	2	3	4	0	3	6	4	1	0	2	0	1
	0	0	1	1	0											0	0	0	0	1
																1	0	0	0	0
1005 - 1010	0	0	1	1	0	1	0	2	3	1	4	0	8	4	1	1	0	0	0	0
	3	0	3	4	1	0	0	2	0	3	0	0	5	3	1	0	0	0	0	1
	0	0	6	5	0	0	0	8	3	5	1	0	1	0	2	0	0	5	4	6
	1	0	1	2	2	0	0	4	2	7						1	0	1	0	2
						1	0	0	1	4						0	0	0	0	4
																1	0	0	0	3
1010 - 1015	2	0	2	2	2	4	0	2	4	9	1	0	1	0	2	1	0	1	1	5
	0	0	5	3	0	2	1	3	5	3	4	0	3	4	3	0	0	0	0	6
	2	0	6	5	1	2	0	1	1	1	3	0	4	1	2	2	0	6	0	1
	0	0	4	0	1	0	0	0	0	1	0	0	3	1	1	1	0	0	0	2
																0	0	0	0	6
1015 - 1020	0	0	7	2	3	6	0	3	2	3	0	0	5	2	1	3	0	1	0	1
	0	0	4	6	4	1	0	8	8	3	0	0	3	0	1	0	0	0	0	5
	3	0	2	6	6	0	0	7	5	2	3	0	7	5	1	2	0	5	7	9
	1	0	3	2	2						4	0	3	2	0	1	0	1	0	2
																0	0	0	0	6
1020 - 1025	1	0	5	5	4	1	0	11	4	5	4	0	3	2	0	1	0	1	2	3
	2	0	9	4	4	3	0	3	4	5	3	0	7	1	0	0	0	2	1	2
	2	0	3	2	1	3	0	4	3	2	4	0	1	0	0	0	0	0	0	6
	1	0	2	4	4	0	0	0	0	2	4	0	1	2	1	1	0	1	1	2
											4	0	2	0	1	0	0	0	0	6
1025 - 1030	2	0	2	4	4	3	0	9	8	4	4	0	4	0	3	3	0	0	0	2
	3	0	2	0	3	0	0	6	2	7	4	1	0	0	5	0	0	0	0	9
	0	0	11	5	1	1	0	5	8	6	4	0	0	0	6	2	0	1	0	7
	1	0	2	2	0						3	0	2	1	1	0	0	0	0	12
											4	0	1	0	3	3	0	1	0	2
																0	0	0	0	3
1030 - 1035	2	0	3	3	2	1	0	10	7	5	4	0	2	2	5	0	0	0	0	4
	4	0	2	1	3	0	0	11	9	1	4	0	4	4	1	1	0	1	1	3
	0	0	0	0	3	2	0	7	7	2	4	0	2	1	1	0	0	0	0	2
	0	0	9	5	4						3	0	0	1	2	3	0	1	1	2
1035 - 1040	2	0	7	6	5	2	0	9	10	6	4	0	0	1	5	0	0	0	0	2
	2	0	1	1	5	1	0	12	11	2	0	0	0	0	2	2	0	2	5	4
	2	0	1	1	4	4	0	9	7	2	4	0	1	1	1	3	0	4	0	1
											4	0	2	4	5	1	0	0	0	3
											1	0	1	0	0					
1040 - 1045	3	0	2	1	4	4	0	12	10	2	4	0	3	2	4	1	0	2	1	3
	1	0	3	4	7	1	0	6	8	7	4	0	2	1	1	0	0	0	0	4
	2	0	1	2	0	0	0	10	9	8	4	0	3	4	2	2	0	5	6	7
						1	0	5	7	3						1	0	5	1	3
																0	0	0	0	6
																2	0	3	2	2
1045 - 1050	2	0	2	0	2	2	0	7	10	3	4	0	1	2	3	2	0	3	2	2
	1	0	11	8	2	2	0	8	9	0	4	0	2	8	1	0	0	3	2	4
	4	0	2	2	3	1	0	13	12	7	4	1	3	3	0	0	0	6	1	10
						2	0	8	9	4						3	0	1	0	1
1050 - 1055	1	0	5	4	4	2	0	14	13	4	3	0	2	0	2	6	0	2	1	1
	1	0	7	3	1	0	0	12	9	7	4	0	5	2	4	0	0	0	0	2
	2	0	3	4	3	3	0	10	8	1	3	0	2	0	0	2	0	0	1	7
						1	0	2	5	4						2	0	6	1	4
																0	0	0	0	8
1055 - 1100	3	0	3	5	3	1	0	12	11	8	4	0	2	0	0	5	0	3	2	3
	3	0	6	2	4	0	0	13	12	9	4	0	4	2	8	3	0	3	1	4
	4	0	3	1	5	0	0	12	12	11	2	0	9	0	6	5	0	3	2	2
	1	0	0	0	1	0	0	0	0	3	4	0	0	1	4					
1100 - 1105	3	0	1	0	2	2	0	6	7	6	4	0	0	2	4	2	0	2	2	0
	0	0	5	3	2	4	0	5	2	7	4	0	3	5	5	0	0	1	3	6
	0	0	3	2	1	1	0	6	4	5	4	0	3	3	1	1	0	7	7	2
	1	0	3	2	3						3	0	1	2	1					
1105 - 1110	1	1	5	5	5	3	0	7	6	11	3	0	3	3	3	1	0	2	3	0
	3	0	2	5	9	2	0	6	4	5	3	0	6	3	2	0	0	2	3	11
	0	0	1	1	6	2	1	3	6	8	4	0	3	0	2	4	0	0	1	9
	2	0	0	0	0						4	0	1	1	2					
1110 - 1115	5	0	1	0	3	0	0	8	6	3	2	0	4	2	3	4	0	3	4	9
	1	0	7	2	6	2	0	6	4	1	4	0	2	0	3	1	0	3	2	3
	5	0	2	0	2	1	1	5	5	7	4	0	3	2	2	3	0	3	2	1
1115 - 1120	2	0	3	1	3	1	1	5	5	7	4	0	3	2	1	3	0	3	2	3
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1120 - 1125	2	0	7	6	3	1	0	5	5	6	2	0	5	1	2	4	0	10	3	9
	5	0	3	0	3	2	0	4	4	3	4	0	1	2	3	1	0	2	0	7
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						1	0	3	3	1						3	0	1	0	0
1125 - 1130	2	0	8	5	5	2	0	7	4	2	3	0	1	3	3	5	0	1	2	2
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						0	0	5	3	4						1	0	3	0	3
1130 - 1135	0	0	6	2	4	0	0	11	3	8	4	0	2	2	1	3	0	6	1	4
	2	1	4	2	2	2	0	3	3	4	4	0	2	3	2	1	0	6	3	10
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						1	0	1	0	3										
1135 - 1140	2	1	3	2	3	5	0	5	4	5	4	0	1	2	2	3	0	5	1	9
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1140 - 1145	1	0	5	1	3	2	0	1	3	3	4	0	2	6	5	3	0	2	2	3
	2	0	6	3	6	2	0	8	6	6	4	0	2	3	4	3	0	2	0	8
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1145 - 1150	4	0	2	3	6	2	0	8	4	5	4	0	2	1	2	0	0	0	0	3
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	2	0	4	2	7						4	0	0	0	1	1	0	3	0	5
	1	0	0	0	0															
1150 - 1155	1	4	1	4	4	2	2	8	4	5	4	1	1	2	3	1	0	3	0	5
	4	0	2	2	7	1	0	4	4	5	2	0	4	3	5	4	0	7	5	7
	1	0	2	1	5	1	0	3	4	5	0	0	0	0	4	0	0	1	0	7
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1155 - 1200	3	0	2	1	4	1	1	5	2	5	0	0	10	7	3	4	0	2	0	6
	0	1	4	1	7	1	1	6	4	2	4	0	2	1	4	0	0	0	0	4
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						2	0	8	5	2	1	0	0	0	0	0	0	3	0	0
											3	0	1	1	3					
1200 - 1205	2	0	3	2	2	2	0	15	14	2	3	0	4	0	4	0	0	8	1	3
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						0	0	10	0	2										
1205 - 1210	0	0	4	0	6	0	0	12	0	2	2	0	3	3	3	0	0	1	1	4
	4	0	3	3	1	4	0	15	13	6	3	0	1	1	5	1	0	8	3	3
	1	0	5	5	5	0	0	11	11	8	3	0	1	1	3	1	0	3	4	4
1210 - 1215	1	0	6	5	6	2	0	8	3	5	3	0	3	1	4	1	0	1	1	4
	3	0	3	4	8	2	0	5	6	5	4	0	1	9	2	1	0	1	0	4
	1	0	6	4	5	4	0	5	8	6	2	0	6	3	3	0	0	2	3	5
	2	0	6	4	7						0	0	1	1	3					
	2	0	0	2	6															
1215 - 1220	3	0	0	2	7	0	0	8	6	5	3	0	1	1	4	1	0	8	8	3
	3	0	5	4	0	5	0	2	3	8	4	0	2	4	2	1	0	7	6	3
	2	0	4	2	5	2	0	7	6	3	1	0	1	2	2	1	0	8	4	3
											1	0	1	0	4					
1220 - 1225	2	0	0	2	5	2	0	4	8	2	1	0	1	1	4	2	0	8	5	6
	0	0	1	2	3	1	0	9	13	1	3	0	3	1	4	0	0	0	0	6
	1	0	3	3	3	3	0	4	8	7	1	0	5	1	2	0	0	9	2	9
	0	0	0	0	3						3	0	1	0	3					
1225 - 1230	3	0	1	3	4	3	0	4	8	5	4	0	1	1	5	2	0	11	2	10

	0	0	0	0	2	2	0	7	5	5	2	0	0	0	0	5	0	10	8	8
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	2	0	2	2	2						1	0	3	3	2					
											0	0	0	0	2					
1230 - 1235	3	0	2	2	3	2	0	4	4	4	2	0	1	0	2	0	0	2	2	0
	2	0	2	0	1	0	0	9	8	8	4	0	2	4	7	1	0	9	7	5
	1	0	3	2	0	2	0	1	2	1	4	0	3	1	1	0	0	1	1	1
1235 - 1240	0	0	3	5	3	2	0	5	4	2	3	0	2	0	3	1	0	7	2	3
	2	0	0	4	2	1	0	1	4	4	1	0	4	1	1	0	0	7	1	1
	0	0	1	1	3	1	0	0	2	5	3	0	6	1	0	4	0	6	6	4
						0	0	0	0	1						0	0	1	1	1
1240 - 1245	4	0	1	0	2	1	0	2	4	1	0	0	7	6	4	6	0	6	4	5
	4	0	2	1	3	0	0	6	7	3	1	0	5	2	2	1	0	6	4	2
	0	0	1	1	4	1	0	2	9	2	1	0	7	4	0	3	0	7	5	4
1245 - 1250	0	0	3	1	5	1	0	8	8	2	1	0	8	6	0	0	0	1	1	0
	2	0	2	3	2	0	0	3	4	5	3	0	1	3	3	6	0	5	4	4
	3	1	3	2	4	0	0	7	8	6	1	0	4	4	0	2	0	9	1	3
	1	0	2	3	2						4	0	2	2	0					
1250 - 1255	1	0	2	3	4	1	0	2	2	2	4	0	2	3	0	1	0	0	0	1
	3	0	3	1	6	1	0	2	3	2	3	0	0	1	0	2	0	3	3	1
	4	0	1	2	0	2	0	6	7	4	2	0	4	1	2	2	0	3	3	5
											4	0	1	2	2					
1255 - 1300	4	0	2	6	0	2	0	3	3	0	4	0	2	2	3	1	0	3	0	4
	3	0	4	4	0	0	0	3	4	0	2	0	4	1	0	1	0	6	2	5
	0	0	1	2	3	0	0	1	4	3	2	0	3	1	1	4	0	6	4	4
											3	0	0	0	0					
1300 - 1305	5	0	0	1	0	1	0	2	6	3	4	0	1	0	0	0	0	0	0	8
	2	0	3	3	6	0	0	3	4	1	1	0	4	5	1	0	0	0	0	1
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1305 - 1310	1	0	0	1	4	1	0	3	7	0	4	0	11	2	1	0	0	0	0	1
	4	0	1	3	3	0	0	5	4	1	2	0	6	2	4	2	0	5	0	3
	1	2	1	1	1	2	0	4	5	1	4	0	4	1	0	0	0	0	0	0
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1310 - 1315	0	0	1	0	2	0	0	3	4	2	1	0	7	3	2	1	0	5	6	4
	2	0	2	1	3	0	0	5	6	2	0	0	3	3	0	0	0	0	0	0
	0	0	2	3	2	0	0	5	6	4	1	0	4	2	4	5	0	2	1	4
						0	0	1	0	0						0	0	0	0	0
1315 - 1320	1	0	7	9	6	0	0	2	1	1	0	0	0	0	3	1	0	3	3	5
	3	0	2	1	6	0	0	5	7	3	4	0	3	3	3	2	0	7	6	5
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						0	0	0	0	2	4	0	3	4	0					
1320 - 1325	0	0	3	2	3	0	0	2	3	2	4	0	4	3	0	2	0	8	2	4
	1	0	0	1	2	0	0	7	7	4	1	0	5	3	2	2	0	5	2	1
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	1	0	2	3	2	0	0	0	1	1	3	0	1	1	2					
1325 - 1330	2	0	4	3	4	1	0	2	2	1	3	0	1	2	2	3	0	4	3	2
	2	0	4	4	5	0	0	2	5	1	3	0	2	4	3	1	0	3	4	3
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1330 - 1335	1	0	4	6	1	0	0	0	4	6	4	0	4	1	1	1	0	3	2	4
	3	0	8	5	2	1	0	1	2	5	3	0	1	0	0	3	0	4	0	3
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						1	0	0	5	2						2	0	1	1	1
1335 - 1340	0	0	1	0	1	1	0	1	5	3	3	0	1	4	2	2	0	3	3	4
	2	0	4	5	3	0	0	1	3	1	3	0	2	2	4	5	0	3	3	4
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						0	0	1	1	2						2	0	1	2	1
1340 - 1345	2	0	1	6	7	0	0	6	5	3	3	0	3	3	2	3	0	3	2	3
	0	0	2	4	0	1	1	6	7	1	4	0	3	1	1	2	0	1	5	0
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						0	0	0	0	1						2	0	1	1	1
1345 - 1350	3	0	3	2	1	0	0	7	9	2	4	0	2	0	3	4	0	4	3	4
	0	1	0	0	0	0	0	7	6	0	4	0	2	1	3	1	0	0	1	5
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	4	0	6	1	4	0	0	0	0	1						3	0	1	1	1
	0	0	10	1	4															
1350 - 1355	0	0	9	1	1	1	0	0	1	3	1	0	5	3	1	3	0	2	1	3
	2	0	7	1	3	1	0	4	5	4	4	0	2	1	2	0	0	1	0	4
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						1	0	5	6	1	1	0	1	1	0	3	0	4	3	3
1355 - 1400	2	0	5	1	0	0	0	1	2	1	3	0	4	3	1	2	0	5	3	0
	0	0	8	1	2	0	0	2	1	2	3	0	1	0	1	1	0	2	2	2
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	2	0	2	1	4	0	0	0	0	1	4	0	1	3	2					
1400 - 1405	2	0	4	1	4	1	0	2	0	2	3	0	1	4	2	3	0	3	3	0
	1	0	0	1	4	0	0	2	0	2	1	0	1	0	0	1	0	4	5	0
	3	0	0	1	1	0	0	3	4	9	0	0	0	0	1	1	0	6	7	0
	0	0	2	2	1	0	0	0	0	1						1	0	4	5	0
1405 - 1410	6	0	0	1	3	0	0	1	2	1	1	0	0	0	0	3	0	4	5	0
	4	0	0	1	4	0	2	0	0	2	0	0	1	0	0	0	0	3	4	0
	2	0	0	1	4	0	1	3	1	5	2	1	0	2	0	3	0	3	4	0
	0	1	0	1	1											1	0	2	1	0
1410 - 1415	2	1	0	1	2	0	0	2	0	4	2	1	0	2	0	2	0	2	5	0
	6	0	0	1	2	0	0	0	1	2	3	0	1	0	0	0	0	1	6	0
	4	0	0	1	2	0	0	9	8	7	0	0	2	0	1	4	0	8	7	0
						0	0	10	7	5										
						0	0	0	0	3										
1415 - 1420	2	0	0	1	2	0	0	10	7	0	0	0	2	0	1	2	0	8	7	0
	0	0	0	1	2	0	0	2	7	6	0	0	2	0	0	2	0	5	8	0
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	1	0	5	1	1	0	0	2	0	4										
	3	0	5	1	3	0	0	0	0	6										
1420 - 1425	3	0	7	1	3	0	0	0	0	7	0	0	1	0	0	4	0	3	5	0
	5	0	0	1	3	0	0	1	1	4						1	0	4	3	0
	5	0	0	1	3	0	0	7	6	5						2	0	1	2	0
	5	0	0	1	1	0	0	0	0	1										
1425 - 1430	6	0	0	1	2	0	0	10	8	6	0	0	0	0	0	6	0	0	5	0
	6	0	0	1	3	0	0	0	0	1						1	0	4	5	0
	5	0	0	1	5	0	0	0	0	1						3	0	11	9	0
						0	0	8	10	0										
						0	0	1	3	3										
1430 - 1435	6	0	0	1	5	0	0	10	12	3	0	0	1	0	0	3	0	11	9	0
1435 - 1440	5	0	1	1	6	0	0	13	14	5	0	0	0	0	0	3	0	11	9	0
	1	0	0	1	0	0	0	14	12	5						1	0	5	5	0
						0	0	15	16	9						3	0	6	2	0
																1	0	7	6	0
1440 - 1445	4	0	9	2	2	0	0	16	11	14	0	0	1	0	1	1	0	7	6	0
	4	0	1	1	8	0	0	15	13	12	1	1	1	5	5	0	0	10	11	0
	4	0	0	1	0											0	0	6	5	0
1445 - 1450	4	0	7	1	4	0	0	9	9	14	2	0	0	4	0	1	0	6	5	0
	4	1	7	1	0	0	0	0	0	16	0	0	1	1	0	0	0	7	8	0
						0	0	1	0	17						1	0	9	8	0
						0	0	11	12	21										
1450 - 1455	4	0	7	1	1	0	0	13	15	26	0	0	1	2	0	0	0	6	7	0
	5	0	6	1	1	0	0	12	16	18	0	0	11	7	3	2	0	6	7	0
						0	0	11	15	16										
1455 - 1500	4	0	6	2	2	0	0	8	12	13	0	0	11	8	4	4	0	9	8	4
	3	0	9	1	6	5	0	10	8	18	3	0	11	7	14	2	0	8	7	2
	0	0	0	1	0						4	0	0	0	14					
											3	0	0	0	9					
1500 - 1505	0	0	3	0	0	0	0	2	0	2	4	0	11	8	9	2	0	15	14	2
	2	0	2	0	1	0	0	1	0	1	4	0	8	5	7	3	0	17	13	6
	0	0	8	0	0	0	0	3	3	0										
						0	0	0	0	1										
1505 - 1510	0	0	9	0	9	0	0	1	2	1	4	0	1	8	9	0	0	21	8	5
	4	0	7	3	6	0	0	0	0	2	3	0	5	5	3					
						0	0	3	1	5										
						0	0	2	1	3										
1510 - 1515	4	0	14	9	11	0	0	0	1	2	4	0	4	10	5	3	0	9	11	5
	6	0	1	6	3	0	0	8	8	7	4	0	8	7	5	2	0	20	12	10
						0	0	8	7	5										
						0	0	0	0	3										
1515 - 1520	6	0	1	6	5	0	0	2	5	6	4	0	14	10	8	0	0	0	1	0
	0	1	0	0	0	0	0	5	3	6	0	0	13	6	8	0	0	15	13	9
	5	0	4	6	3	0	0	2	0	4						1	0	9	12	2
						0	0	0	0	6										
1520 - 1525	6	0	2	2	3	0	0	0	0	7	0	0	12	7	7	1	0	17	10	4
	3	0	2	4	4	0	0	1	1	4	3	0	7	6	6	3	0	15	10	8
						0	0	8	4	4						3	0	0	3	8
						0	0	0	0	1										
1525 - 1530	6	0	2	5	4	0	0	16	8	6	3	0	6	6	6	0	0	9	6	2
	0	0	8	5	6	0	0	8	9	0	4	0	3	7	2	2	0	5	7	4
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	2	0	0	1	2						2	0	12	7	6					
1530 - 1535	2	0	3	1	5	0	0	12	10	0	4	0	7	6	5	0	0	8	6	4
	1	0	2	0	8						4	0	6	9	3	4	0	3	2	2

	4	0	1	4	4						4	0	4	6	1	4	0	2	4	6
	1	0	0	0	1															
1535 - 1540	2	0	3	1	2	0	0	12	10	0	4	0	6	6	1	1	0	7	1	2
	3	0	2	2	3	0	0	9	15	9	4	0	6	5	4	0	0	9	7	6
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	1	0	3	1	4						2	0	7	5	1					
1540 - 1545	2	0	3	2	3	0	0	5	5	14	3	0	7	6	5	2	0	13	6	5
	2	0	2	2	7	0	0	6	5	9	2	1	8	3	4	3	0	0	2	11
	1	0	6	4	5						3	0	9	8	6	3	0	6	1	6
	2	0	3	1	1						1	0	10	6	5					
1545 - 1550	2	0	5	2	2	0	0	8	8	11	1	0	11	7	5	3	0	3	3	6
	1	0	6	7	2	0	0	0	0	13	3	1	7	8	4	0	0	8	3	7
	2	0	5	4	3	0	0	0	1	17	4	0	7	7	6	1	0	4	5	3
	2	0	2	3	1	0	0	5	6	5	4	0	6	4	3					
1550 - 1555	2	0	4	6	3	0	0	9	10	15	3	0	5	5	4	0	0	4	6	3
	3	0	3	1	5	0	0	12	13	16	1	1	7	6	1	1	0	1	0	2
	5	0	1	8	3	0	0	5	4	5	4	0	8	7	1	5	0	7	8	3
	0	0	2	1	1						2	0	9	10	1					
1555 - 1600	0	0	2	1	1	0	0	5	12	10	2	0	11	9	1	3	0	12	13	5
	1	0	3	4	4	0	0	4	7	4	3	0	8	6	2	0	0	1	1	4
	4	0	1	4	3						3	0	10	5	3	0	0	2	0	5
	4	0	1	3	0						4	0	1	8	1					
1600 - 1605	4	0	6	5	1	1	0	0	2	3	4	0	1	15	1	3	0	2	3	7
	3	0	6	2	3	1	0	3	2	3	4	0	3	7	1	0	0	5	3	4
	3	0	6	2	5	1	0	3	2	5	4	0	1	8	3	0	0	9	8	9
	1	0	10	4	4						4	0	1	8	2					
											0	0	0	0	4					
											4	0	2	9	4					
1605 - 1610	1	0	10	4	4	2	0	6	7	5	4	0	2	9	4	4	0	7	6	6
	2	0	2	3	0	0	0	2	1	3	3	0	9	4	1	1	0	7	8	5
	3	0	6	8	5	3	0	11	7	5	4	0	2	8	1	1	0	3	5	3
											2	0	2	0	2					
1610 - 1615	4	0	1	1	1	3	0	11	7	5	4	0	3	5	5	0	0	6	8	3
	1	0	1	4	3	0	0	11	10	3	3	0	1	2	3	4	0	7	4	3
	1	0	4	6	1	3	0	4	4	2	1	0	3	3	2	0	0	1	1	4
						0	0	1	1	1						0	0	3	4	4
																1	0	1	1	0
1615 - 1620	0	0	3	1	1	1	0	6	6	4	2	0	1	3	2	2	0	2	2	6
	2	0	3	5	6	0	0	6	7	3	3	0	5	2	2	4	0	3	3	4
	2	0	1	2	1	0	0	6	7	0	3	0	0	3	3	2	0	2	1	2
	0	0	0	0	1	0	0	0	0	1						1	0	2	2	0
1620 - 1625	0	0	1	2	1	0	0	4	1	2	3	0	3	1	1	3	0	3	3	3
	0	0	1	0	0	1	0	1	2	3	3	0	2	1	1	2	0	2	2	5
	0	0	1	1	1	0	0	2	1	0	3	0	1	1	1	3	0	2	3	6
						0	0	3	1	2						0	0	2	0	1
1625 - 1630	3	0	8	4	2	0	0	3	1	2	4	0	1	2	6	1	0	4	1	3
	2	0	3	0	1	1	0	1	2	1	4	0	2	2	5	0	0	0	0	7
	3	0	5	3	2	0	0	6	7	3	2	0	1	2	0	2	0	4	1	2
						1	0	1	0	1						2	0	5	4	2
																1	0	0	1	2
1630 - 1635	1	0	4	4	1	1	0	2	1	1	2	1	6	0	2	3	0	2	1	2
	3	0	1	3	3	0	0	6	7	5	4	0	4	2	2	3	0	4	6	5
	2	0	4	3	3	0	0	2	3	5	2	0	1	2	2	1	0	6	3	3
						0	0	1	2	3	1	0	0	0	0	3	0	2	1	1
																0	0	0	0	9
1635 - 1640	1	0	1	1	1	0	0	1	2	3	3	0	2	3	3	0	0	0	0	4
	3	0	7	1	1	0	0	2	2	1	4	0	3	4	2	5	0	0	0	0
	1	0	1	0	2	1	0	2	1	0	3	0	3	4	4	0	0	0	0	1
						0	0	1	1	2	0	0	0	0	1	3	0	2	2	3
																0	0	0	0	5
																4	0	4	2	1
1640 - 1645	1	0	4	4	2	0	0	3	3	1	3	0	1	1	2	0	0	0	0	3
	1	0	1	1	3	0	0	6	5	3	4	0	1	3	3	1	0	2	4	2
	3	0	0	4	2	1	0	2	9	2	4	0	2	1	1	2	0	1	1	1
											0	0	1	1	3	0	0	0	0	2
																2	0	2	2	0
1645 - 1650	1	0	7	3	0	0	0	1	2	0	0	0	3	1	3	1	0	3	3	2
	2	0	2	0	2	0	3	0	2	2	2	0	5	3	0	1	0	2	1	4
	3	0	4	3	5	1	0	2	2	6	0	0	2	2	0	1	0	3	1	5
	0	0	4	1	0	0	0	0	0	1	0	0	4	0	0					
1650 - 1655	0	0	4	1	0	1	0	5	4	2	0	0	4	0	0	2	0	2	3	5
	0	0	6	6	6	0	0	9	8	3	0	0	4	2	1	1	0	3	3	2
	1	0	1	2	2	1	0	6	4	5	2	0	5	1	2	0	0	0	3	4
	0	0	5	4	5	0	0	1	1	1	1	0	3	3	5	1	0	0	0	1
1655 - 1700	0	0	5	4	5	0	0	6	3	9	2	0	4	0	1	1	0	3	3	1
	2	0	0	1	0	0	0	3	2	1	1	1	4	1	4	3	0	3	1	2
	4	0	2	4	11	1	0	6	6	2	3	0	4	5	2	0	1	2	0	2
	1	0	1	5	3	0	0	2	3	4						0	0	4	2	2

Man City Surveys - Part 2
Queue Length Survey

Site 5
A6010 Alan Turing Way
A635 Ashton Old Road (East)
A6010 Pottery Lane
A635 Ashton Old Road (West)



Lat/Long
lat 53.474192° lon -2.194445°

Date
Saturday 20 April 2019

Weather
Sunny Intervals
Temp: 20°C

1000 - 1700 (Saturday 7H Session)

TIME	5a	5b	5c	5d	5e	5f	5g	5h	5i	5j	5k	5l	5m	5n	5o	5p	5q	5r
1000 - 1005	1	0	2	1	2	2	4	7	6	1	0	0	0	1	4	2	2	1
	0	0	0	0	3	1	6	4	2	0	0	4	1	2	4	5	4	2
	2	0	1	1	6	0	3	2	1	0	0	0	0	1	2	4	5	1
	0	0	1	0	0													
1005 - 1010	1	0	0	0	1	1	2	1	3	0	0	6	2	2	4	4	3	1
	1	0	3	3	0	3	6	2	3	0	0	0	0	3	3	2	1	0
	1	0	5	2	0	2	3	4	0	1	1	0	1	3	1	5	1	2
	0	0	0	0	2													
	0	0	3	3	1													
1010 - 1015	2	0	4	5	1	1	4	5	4	0	0	1	0	2	3	1	2	1
	5	0	2	3	3	2	2	3	7	0	0	7	4	1	3	3	2	1
	1	0	4	3	2	4	3	3	9	0	0	0	0	1	1	1	0	0
	0	0	3	1	1													
1015 - 1020	0	0	7	5	3	1	2	2	0	0	0	2	0	1	4	1	1	0
	3	0	3	0	2	1	4	4	3	0	0	6	2	2	2	2	3	1
	0	0	6	6	3	0	2	1	3	1	0	4	1	2	3	2	4	1
1020 - 1025	0	0	5	4	0	2	4	6	8	1	0	5	1	2	4	3	5	0
	0	0	3	0	4	0	6	3	2	0	0	5	3	3	4	1	8	2
	1	0	5	3	0	0	2	2	6	1	0	7	4	3	0	3	6	0
	0	0	1	0	0													
1025 - 1030	0	0	2	1	4	2	3	2	3	0	0	1	1	0	4	3	8	0
	5	0	2	5	1	5	1	1	4	1	0	2	2	3	4	3	7	0
	2	0	7	4	4	0	4	2	5	0	0	4	1	1	1	4	0	1
										1	0	1	0	0	1	2	2	1
1030 - 1035	1	0	2	2	3	1	6	3	6	1	0	7	4	0	3	3	6	1
	2	0	4	2	2	0	1	2	5	1	0	7	3	3	4	8	6	1
	0	0	4	2	1	3	2	2	3	0	0	1	1	8	0	4	2	2
						2	2	0	1	0	0	1	0	0	4	0	1	2
1035 - 1040	0	0	1	1	0	3	4	2	3	0	0	5	4	0	4	0	1	4
	2	0	1	4	5	1	2	3	8	1	0	2	1	6	4	1	2	0
	2	0	10	1	2	2	3	5	8	2	0	6	5	6	4	1	2	1
						0	0	0	1						4	1	1	1
1040 - 1045	2	0	6	1	2	0	5	3	3	0	0	8	6	1	3	2	7	3
	0	0	4	2	5	3	5	5	3	0	0	6	8	0	3	5	6	0
	0	0	5	5	3	2	3	1	2	1	0	3	5	1	4	2	5	2
	0	0	1	1	1	0	0	0	1									
1045 - 1050	0	0	1	2	2	2	3	4	9	0	0	8	8	2	3	2	3	0
	0	0	3	1	2	0	3	4	8	1	0	10	5	3	4	1	3	3
	1	0	3	3	5	0	7	8	8	0	0	7	5	0	4	0	7	0
	1	0	0	1	0	2	0	0	4						2	1	0	0
1050 - 1055	1	0	1	1	0	2	1	1	9	0	0	6	0	2	3	2	4	1
	0	0	0	0	2	1	2	3	5	0	0	5	4	1	4	0	8	1
	1	0	6	2	8	5	0	0	7	1	0	10	6	1	4	2	11	3
	1	0	0	0	1													
1055 - 1100	1	0	0	0	2	3	2	5	7	0	0	6	4	3	0	5	5	1
	2	0	8	7	6	2	3	4	1	0	0	4	7	2	4	3	8	2
	1	0	1	0	3	4	6	7	3	1	0	2	2	3	4	2	3	2
	1	0	2	2	1													
1100 - 1105	1	0	7	3	1	1	1	1	3	3	0	3	4	4	3	1	5	1
	0	0	4	4	3	2	4	4	4	0	0	4	4	2	4	1	2	0
	1	0	2	0	3	3	3	2	7	0	0	4	5	6	3	3	2	4
										2	0	1	1	1				
1105 - 1110	4	0	1	0	2	0	0	0	4	2	0	6	7	2	3	3	2	6
	0	0	0	0	3	1	2	3	8	0	0	6	7	1	3	3	5	3
	1	0	2	0	3	6	4	2	6	0	3	6	5	0	1	3	5	0
	0	0	5	1	3	2	5	1	5						0	2	4	0
1110 - 1115	0	0	3	1	0	2	5	1	5	0	1	4	5	2	2	5	2	0
	0	0	0	0	2	3	5	4	7	0	0	6	6	5	4	2	6	0
	0	0	1	2	6	3	3	3	1	1	0	4	4	1	3	1	5	3
	0	0	6	4	4	0	3	4	4	0	0	3	0	1	4	0	1	1
1115 - 1120	1	0	4	2	1	0	4	4	4	0	0	6	6	2	4	0	7	1
	0	0	6	0	0	3	6	6	7	0	0	5	6	4	4	0	9	2
	0	0	0	0	2	0	3	4	8	1	0	7	4	4	4	2	2	2
	0	0	6	3	1	0	2	4	7						3	3	2	1
1120 - 1125	0	0	0	0	3	4	7	5	8	1	0	5	7	2	3	4	6	5
	1	0	4	2	1	4	4	5	9	0	0	4	4	0	4	0	2	0
	2	0	2	2	0	0	0	0	4	1	0	5	7	0	3	3	6	2
	0	0	0	0	1	1	7	5	9	0	0	0	0	3	4	0	0	0
	0	0	3	1	0	0	0	0	4									
1125 - 1130	0	0	3	2	0	3	3	2	6	0	0	6	8	5	4	2	3	4
	0	0	0	0	3	0	2	3	4	0	0	7	6	2	4	2	3	3
	0	0	8	3	1	4	1	4	6	0	1	7	5	2	4	2	3	2
	0	0	4	0	1	0	0	0	1									
	0	0	0	0	2													
	1	0	1	0	0													
1130 - 1135	3	0	2	2	1	0	6	5	8	0	0	5	8	1	4	3	5	2
	2	0	3	4	0	2	2	3	4	2	0	7	5	5	4	1	5	1
	1	0	2	2	2	5	2	2	2	1	2	8	9	2	4	1	7	2
	2	0	1	2	0													
1135 - 1140	2	0	2	1	4	4	4	5	9	1	2	8	9	3	4	3	8	0
	1	0	1	0	4	0	4	3	10	1	0	3	2	1	4	3	6	3
	3	0	3	0	2	0	4	4	12	0	1	5	4	1	4	0	7	0
										0	0	6	7	2				
1140 - 1145	4	0	4	2	3	3	5	6	10	0	0	6	8	2	4	0	7	0
	3	0	1	2	4	4	4	3	9	0	0	8	7	5	3	2	6	2
	1	0	5	1	1	2	7	7	10	2	0	5	6	1	4	1	2	1
										0	1	5	6	0	3	0	5	0
1145 - 1150	0	0	0	0	1	2	4	3	9	0	1	6	7	0	3	0	6	1
	0	0	2	0	1	1	5	6	6	1	0	8	7	0	4	1	5	2
	1	1	7	4	2	4	3	3	5	0	2	3	1	1	3	2	7	1
										1	0	5	6	1	3	1	2	3
1150 - 1155	0	0	6	7	2	3	3	4	6	1	0	7	6	1	3	2	4	3
	1	1	9	6	0	1	4	3	7	2	0	5	7	1	4	1	7	2
	1	0	5	4	4	1	1	1	5	1	1	3	3	5	4	1	4	4
										1	0	0	0	1	3	1	0	0
1155 - 1200	0	0	4	2	3	3	1	6	7	2	0	3	5	1	4	1	3	2
	1	0	6	1	3	1	3	5	6	0	0	9	6	1	4	2	7	2
	1	0	3	1	1	4	4	7	4	2	0	5	7	6	3	5	3	0
						0	3	3	4						0	0	0	1
1200 - 1205	0	0	0	0	1	3	8	7	7	1	1	15	15	2	4	2	3	2
	1	1	3	0	0	4	4	3	8	1	0	5	12	5	4	1	5	0
	0	0	0	0	3	3	1	5	10	0	1	16	14	5	4	2	6	3
	3	0	4	1	0	1	2	3	6						4	2	2	0
	0	0	0	0	4													
	1	0	2	2	2													
1205 - 1210	1	0	4	2	2	3	3	8	10	0	0	13	10	0	4	2	5	0
	0	0	3	1	1	4	3	5	9	0	0	7	8	2	4	3	7	2
	0	0	0	0	6	1	6	7	15	0	0	7	13	3	3	2	2	3
	2	0	3	2	3	0	1	1	4									
1210 - 1215	0	0	0	0	8	2	2	4	10	0	1	6	6	1	4	5	6	3
	0	0	0	0	3	2	4	5	7	1	0	1	1	2	3	5	7	2
	1	0	1	3	3	3	4	7	8	0	0	1	1	0	2	7	7	4

1215 - 1220	0	0	2	0	0	0	3	1	1	0	0	1	1	0	1	4	2	7
	0	0	8	6	0	3	4	3	3	0	0	0	0	1	2	7	9	6
	2	0	6	6	2	2	0	1	5	2	0	10	13	2	3	5	4	0
										1	0	4	5	4				
										0	1	10	10	4				
1220 - 1225	2	0	4	3	3	0	0	0	7	1	3	10	10	9	4	1	2	0
	4	0	2	3	8	0	1	1	3	0	0	7	9	3	2	5	5	0
	3	0	3	2	1	2	3	1	3	0	0	1	0	0	0	6	1	1
						2	3	4	3									
1225 - 1230	0	0	2	1	4	2	3	4	3	0	0	3	3	1	0	6	1	1
	0	0	3	4	5	2	1	2	3	0	0	2	0	0	1	3	2	2
	0	0	5	3	1	2	2	4	2	0	0	2	5	3	1	5	3	2
						1	0	2	1	0	0	1	0	0	2	3	3	1
1230 - 1235	2	0	3	2	1	1	0	2	1	1	0	10	9	1	2	6	3	1
	0	0	2	3	3	5	2	6	2	0	0	6	5	1	1	5	4	2
	0	0	4	4	2	5	4	6	0	0	0	5	5	1	0	3	1	0
						1	2	2	2						2	2	1	0
1235 - 1240	3	1	3	1	1	1	3	4	2	0	0	4	5	0	3	3	5	0
	2	0	4	3	3	1	2	4	5	0	0	3	2	3	1	3	5	1
	1	0	2	1	1	2	3	1	3	0	0	5	6	1	2	4	2	1
															1	2	0	0
1240 - 1245	2	0	2	1	1	2	2	6	4	0	0	6	6	6	2	2	1	3
	0	0	4	4	3	0	1	1	0	1	0	6	8	1	3	3	4	1
	0	0	2	1	1	3	3	5	2	0	0	6	7	1	4	1	3	1
	3	0	2	0	1	1	2	0	1									
1245 - 1250	5	0	3	0	3	4	5	4	5	1	0	6	5	3	1	3	3	3
	1	0	5	2	0	1	5	5	5	1	0	3	3	0	1	4	4	3
	3	0	5	2	2	2	5	3	3	0	0	9	6	4	0	8	3	3
	1	0	3	3	0													
1250 - 1255	2	1	4	6	3	3	2	1	1	1	0	5	6	3	1	7	5	1
	1	0	2	0	1	0	1	2	0	1	0	5	7	2	2	2	1	3
	1	0	4	1	2	1	3	4	2	0	0	0	0	2	0	3	2	0
	1	0	0	1	0													
1255 - 1300	1	0	2	2	1	3	3	3	2	0	0	2	2	2	1	3	3	0
	1	0	8	6	2	2	4	2	3	0	0	6	8	1	1	4	6	0
	5	1	5	0	1	4	5	3	2	0	0	4	7	3	2	2	2	3
	0	0	1	0	0													
1300 - 1305	0	0	12	10	2	0	3	5	1	1	0	6	10	2	2	7	2	3
	1	0	4	3	2	2	5	2	1	1	0	0	1	5	1	6	2	1
	1	0	2	1	1	1	3	1	4	2	0	3	0	1	2	6	5	0
															4	1	6	3
1305 - 1310	1	0	3	1	1	1	3	3	4	2	0	7	5	1	4	2	8	3
	1	0	4	4	0	3	1	5	4	0	0	4	4	1	1	4	2	0
	1	0	3	1	4	1	1	0	2	0	0	9	7	1	3	2	2	1
						0	0	0	1						1	2	1	0
						1	0	1	1									
1310 - 1315	0	0	0	0	5	1	2	2	1	1	0	3	2	3	1	2	1	0
	0	0	2	2	2	3	7	4	2	1	0	4	3	5	2	10	4	4
	0	1	6	0	2	2	2	6	1	1	0	2	8	5	0	2	2	1
	3	0	6	5	0	1	1	2	0	0	0	0	0	5	0	1	0	0
1315 - 1320	6	0	8	2	3	1	2	3	0	0	0	0	0	6	0	1	1	1
	4	0	3	2	0	1	2	1	1	1	0	3	4	3	0	1	2	1
	3	0	7	7	2	6	5	4	2	0	0	2	3	2	2	7	4	0
						0	0	0	1	0	0	0	0	2	0	0	1	0
						0	1	0	2									
1320 - 1325	3	0	10	7	2	4	4	1	2	0	0	6	5	3	2	8	9	0
	1	0	4	2	1	0	0	0	2	0	0	4	6	1	0	6	4	3
	0	0	12	7	0	1	5	2	2	3	0	6	7	3	1	7	5	0
	1	0	3	1	2	1	1	2	2									
						1	0	0	0									
1325 - 1330	1	0	6	4	4	5	6	6	3	0	0	5	0	4	0	1	0	0
	2	1	6	4	4	2	4	3	4	0	0	4	9	1	2	1	3	2
	2	0	7	4	4	1	1	5	0	0	0	1	2	3	4	1	1	1
	0	0	2	1	1	2	2	2	1						0	1	3	3
1330 - 1335	0	0	2	2	1	4	6	6	5	0	0	7	6	0	0	4	5	3
	0	0	1	1	0	0	5	4	1	0	0	0	2	2	2	4	4	6
	0	0	0	0	1	1	5	5	2	1	0	0	2	2	3	2	6	1
	3	0	3	5	3	0	0	2	1	0	0	0	0	5	0	1	0	1
	0	0	2	4	3													
1335 - 1340	0	0	0	0	4	0	2	3	2	0	0	0	0	6	0	9	7	1
	0	0	8	5	5	7	4	5	0	0	0	0	0	5	1	7	5	2
	1	0	1	1	3	0	1	1	4						4	1	0	2
	0	0	7	4	4	0	0	0	1						2	2	1	1
						0	0	2	0									
1340 - 1345	0	0	0	0	4	2	3	4	2	1	0	2	4	1	4	3	3	2
	0	0	2	2	2	2	7	7	4	0	0	4	4	2	1	2	3	1
	0	0	4	4	3	2	1	1	2	0	1	3	4	0	3	10	6	2
	0	0	8	7	2	1	0	1	1						0	1	1	0
1345 - 1350	0	0	12	7	3	5	2	5	4	0	0	5	3	8	0	5	4	2
	2	0	5	5	2	1	2	2	1	1	0	0	0	3	1	1	3	1
	3	0	5	7	0	3	7	7	3	0	0	8	6	1	0	6	5	3
	1	0	6	6	0	1	1	0	1						2	1	1	2
1350 - 1355	0	0	0	0	1	1	2	1	2	2	0	5	7	1	3	5	5	2
	1	0	2	2	0	3	1	0	3	0	0	3	5	0	1	2	1	2
	0	0	0	0	1	3	3	3	0	0	0	0	8	0	0	0	0	1
	0	0	2	1	0	2	3	2	1	0	0	0	0	1	0	3	2	2
	3	1	3	5	2										3	2	1	2
1355 - 1400	2	0	5	5	0	2	4	5	1	0	0	3	5	2	4	2	3	2
	0	0	6	5	2	1	4	4	1	0	0	1	0	1	3	7	6	2
	2	0	2	2	2	1	4	3	3	1	0	5	7	2	0	1	1	2
	0	0	2	0	0	2	3	4	1						1	4	1	1
1400 - 1405	0	0	3	1	1	2	3	7	4	0	0	0	0	1	3	0	2	1
	1	0	1	3	4	2	2	5	5	0	0	0	0	1	1	1	2	2
	2	0	5	2	2	0	4	6	2	1	1	0	2	0	1	2	2	1
	0	0	0	0	5	0	2	2	1	0	0	0	0	1	1	1	0	0
1405 - 1410	0	0	4	0	5	4	3	5	2	0	0	0	0	2	1	5	3	0
	0	0	1	3	3	0	2	2	3	0	0	0	1	0	1	7	6	1
	2	0	1	1	8	0	2	2	1	0	0	0	1	1	1	3	6	3
	0	0	0	1	8	0	2	2	2	0	0	6	5	4	3	1	1	2
1410 - 1415	0	0	8	5	8	4	1	2	3	0	0	8	10	4	3	1	1	3
	0	0	2	2	6	1	5	1	2	0	0	5	7	3	1	7	5	0
	4	0	3	4	5	1	1	1	1	0	0	4	0	0	1	10	9	0
	1	0	1	0	1					0	0	2	2	3	3	7	1	1
															0	1	0	0
1415 - 1420	1	0	1	5	8	1	3	2	6	3	0	10	7	4	0	2	1	0
	3	0	3	9	6	2	3	3	6	1	0	7	8	2	1	10	6	2
	3	0	6	2	5	0	4	0	4	1	0	9	6	4	0	8	7	2
	0	0	2	0	0										0	1	0	0
1420 - 1425	0	0	2	2	8	4	6	3	6	0	0	9	7	4	3	6	8	5
	1	0	3	3	1	4	3	3	1	2	0	5	5	3	3	7	10	9
	1	0	7	8	10	2	6	4	1	0	0	1	2	1	0	11	11	9
1425 - 1430	1	0	5	5	5	1	7	4	1	0	0	9	11	4	0	12	13	9
	1	0	4	1	0	5	2	2	2	0	0	10	9	4	3	9	9	11
	0	0	3	0	0	0	8	9	5	1	0	5	9	0	0	12	11	9
1430 - 1435	0	0	3	1	0	3	4	2	3	0	0	3	8	5	0	10	12	10
	0	1	1	1	0	4	5	5	4	5	0	3	7	3	0	12	11	7
	1	0	3	2	0	2	1	1	2	0	0	2	2	0	3	10	11	8
1435 - 1440	0	1	1	1	3	2	7	5	3	0	0	9	11	1	3	11	12	9
	2	0	1	0	0	5	7	8	4	1	0	4	6	4	2	11	9	8
	2	0	11	13	0	4	3	2	3	1	0	5	6	7	2	8	10	8
						0	1	1	0									
1440 - 1445	2	0	11	13	0	3	4	9	4	0	0	8	7	9	0	9	8	7
	3	0	10	6	5	1	8	4	3	2	0	6	2	7	3	4	10	6
	0	0	10	8	7	0	6	4	1	1	0	1	1	3	2	9	7	5
1445 - 1450	1	0	8	8	6	13	7	4	4	4	0	7	6	6	2	10	9	9
	0	0	6	6	4	2	8	6	0	1	0	2	0	0	1	12	10	8
	2	0	1	3	0	0	4	5	3	1	0	6	2	3	3	8	10	7
1450 - 1455	2	0	8	6	2	2	15	16	6	3	0	4	6	5	3	10	11	8
	0	0	4	4	9	8	8	5	2	0	0	3	10	6	3	11	9	8
	0	0	11	0	0	5	0	0	3	0	0	0	1	4				
1455 - 1500	1	0	8	7	2	5	13	11	3	0	0	1	6	6	3	12	10	10
	0	0	9	11	9	6	5	3	1	1	0	4	3	9	0	10	8	6
						6	9	5	3	0	0	3	4	10	0	6	10	8

1500 - 1505	1	0	10	16	4	2	6	1	2	1	0	4	6	5	3	9	8	5
	0	0	7	2	2	3	0	4	4	1	0	1	8	6	2	1	6	3
	1	0	10	15	1	0	2	2	3						0	1	1	2
1505 - 1510	2	0	10	12	3	4	1	0	0	0	0	5	8	3	3	1	4	6
	0	0	5	3	3	0	10	8	3	0	0	9	8	5	1	9	7	5
	0	0	11	6	6					0	0	3	4	6				
1510 - 1515	0	0	13	10	8	6	8	3	2	0	0	0	0	0	3	9	6	7
	1	0	10	12	7	5	2	2	2	1	0	6	10	5	1	3	7	8
	1	0	9	6	3					2	0	5	6	3	0	5	7	3
1515 - 1520	0	0	13	7	8	4	5	2	4	2	0	5	4	5	2	6	9	8
	2	0	12	8	4	3	4	4	3	1	0	5	6	0	0	5	8	3
	0	0	10	12	4	0	8	5	3	1	0	5	3	3	0	5	4	5
1520 - 1525	0	0	9	15	4	3	3	5	3	0	0	5	8	2	3	4	6	8
	3	0	1	4	1	4	3	5	4	0	0	6	5	2	1	2	6	7
	5	0	10	12	5										3	3	2	0
1525 - 1530	2	0	2	1	4	7	9	7	4	1	0	5	3	2	3	5	4	0
	0	0	10	6	6	3	4	4	4	0	0	0	1	3	2	3	3	4
	0	0	5	7	5	1	4	6	5	0	0	4	3	1	4	3	7	2
1530 - 1535	0	0	6	7	5	2	3	7	1	2	0	5	7	0	1	2	3	4
	4	0	5	3	0	6	3	5	3	0	0	6	8	2	1	3	0	3
	0	0	5	4	0	1	1	2	3						0	1	0	2
1535 - 1540	0	1	8	10	4	2	2	5	5	0	0	6	6	1	2	8	4	5
	3	0	4	3	4	2	5	5	4	0	0	6	10	2	2	7	9	3
	1	0	8	4	4	1	3	5	3	3	0	6	11	4	1	7	10	2
1540 - 1545	1	0	10	5	4	2	2	4	1	0	0	9	7	0	1	4	8	4
	1	0	10	9	4	1	4	8	2	0	0	4	8	4	4	5	7	2
	0	0	13	10	3										1	2	2	3
1545 - 1550	0	0	7	6	2	1	6	1	2	2	1	6	4	5	1	4	5	4
	2	0	2	2	0	4	4	4	4	1	0	3	6	0	2	4	4	1
	0	0	2	3	1	1	1	1	1	0	0	5	5	4	3	5	6	0
1550 - 1555	0	0	3	3	1	5	6	3	0	0	0	8	8	4	2	4	8	2
	2	0	5	4	1	2	5	2	2	0	0	2	7	5	3	1	6	1
	4	0	5	1	3	2	2	4	2						3	1	3	2
1555 - 1600	0	0	10	9	4	3	2	4	2	0	0	8	10	3	3	2	7	3
	2	0	7	8	1	1	3	2	5	1	0	5	7	2	2	4	6	3
	2	0	6	6	0	1	4	2	2	1	0	6	6	1	1	4	3	4
1600 - 1605	2	0	9	7	0	0	3	2	0	0	0	5	5	4	3	2	1	0
	1	0	5	2	2	5	4	7	2	0	0	2	6	6	2	3	5	0
	0	0	8	2	1	1	1	1	3	0	0	2	2	1	0	3	1	3
1605 - 1610	1	0	15	13	7	1	3	4	3	0	0	15	17	6	0	11	9	5
	3	0	7	6	3	4	4	0	4	0	0	1	3	2	2	3	6	0
															1	1	2	0
1610 - 1615	0	0	0	0	3	6	3	1	1	0	0	1	0	3	2	4	3	0
	3	0	9	9	7	0	2	3	2	0	0	4	7	0	2	6	5	2
	2	0	12	9	4	0	2	2	0	0	0	1	1	1	3	4	9	3
	1	0	4	5	2													
1615 - 1620	1	0	7	8	3	0	2	4	3	0	0	4	0	0	0	7	6	1
	4	0	6	4	2	1	2	2	0	0	0	2	0	1	1	7	3	1
	3	0	10	5	5	1	0	5	2	0	0	1	1	1	0	6	4	0
	0	0	2	1	2													
1620 - 1625	2	2	10	8	3	1	3	1	0	0	0	4	1	4	1	2	7	3
	0	0	14	13	2	6	4	4	3	0	0	2	3	2	3	3	2	0
	3	0	13	6	2	1	3	2	1	0	0	6	7	2	0	3	5	5
										0	0	0	1	1				
1625 - 1630	7	0	4	4	4	4	1	0	1	1	0	4	8	1	3	5	5	1
	3	0	12	5	1	1	6	6	2	0	0	9	8	0	2	3	4	0
	0	0	0	0	2	1	2	5	5	0	0	0	0	1	1	2	2	1
	1	0	6	7	2													
1630 - 1635	3	0	8	5	5	0	0	0	1	0	0	0	0	1	1	5	3	3
	1	0	6	3	2	1	5	6	4	0	0	0	1	3	3	6	3	1
	0	0	14	9	3	2	2	3	0	0	0	1	1	3	0	7	5	0
	0	0	3	0	3					0	0	2	5	1				
1635 - 1640	1	0	11	9	3	1	1	4	4	0	0	3	4	3	0	6	3	0
	0	0	9	4	3	4	5	4	2	0	0	0	0	2	3	2	3	1
	1	0	6	8	3	2	3	3	1	0	0	7	4	2	0	5	8	2
	0	0	7	2	1	0	0	0	1									
1640 - 1645	0	0	8	7	2	0	1	1	3	0	0	5	0	4	4	2	2	3
	2	0	6	5	1	1	5	2	5	0	0	1	0	3	2	3	2	1
	0	0	0	1	2	1	1	1	2						0	3	1	0
	0	0	0	0	3	1	2	0	0						1	1	4	0
	0	0	6	6	0													
1645 - 1650	1	0	4	2	2	1	2	3	1	0	0	0	0	1	1	10	10	2
	0	0	0	1	1	0	1	4	0	0	0	1	0	0	1	3	5	1
	0	0	0	0	2	1	2	3	1	0	0	1	0	1	0	2	5	1
	0	0	4	3	1	3	2	4	0	0	0	1	0	5	3	1	2	1
	0	0	3	1	0													
1650 - 1655	0	0	7	3	3	0	1	0	1	0	0	1	1	1	3	4	4	3
	1	0	4	3	0	1	1	1	2	0	0	3	1	0	2	3	4	0
	0	0	0	0	2	0	6	3	1	0	0	0	1	5	1	4	4	3
	1	0	7	4	1					0	0	0	0	3				
1655 - 1700	0	0	0	2	2	0	4	7	3	0	0	0	0	2	4	5	7	4
	1	0	4	5	0	2	4	4	3	0	0	0	1	2	3	1	2	0
	0	0	6	2	3	1	2	2	1	0	0	1	1	0	2	4	7	0
	1	0	1	1	0	0	1	0	2	0	0	0	0	1				

Appendix Q: Assessment of the planning submission in light of Covid-19

OVG Manchester Planning Application Documents	Consideration of Covid-19
Full suite of existing and proposed plans, including landscaping plans and Accommodation Schedule	The proposed arena would not be operational until 2023, by which time it is anticipated that the current restrictions in place regarding social distancing will have been lifted. In the event that this is not the case, OVG Manchester and Populous would review the internal layout in advance of the arena becoming operational in order to incorporate appropriate additional measures to ensure it is Covid-19 Secure.
Design and Access Statement (including Landscaping and Public Realm Strategy and Signage Strategy)	As above.
Market Assessment: Volume 1: OVG Manchester, due diligence report Volume 1: UK Arena and Manchester Market Overview Volume 2: UK Large Arena Market and Growth Scenarios 2018-2040	As referenced elsewhere in the response, most countries expect growth and recovery to become embedded by 2023 at the very latest. This broad analysis is supported by industry, including through survey activity undertake by Live Nation, which reveals that there could be a boost to demand for touring next year and in 2022. There are no significant change reported in investment plans for other UK arenas as a result of Covid 19. As such, it is considered that the Market Assessment remain robust.
Economic Impact of Two Arenas in Manchester	As above. OVG Manchester's investment proposals will create a very significant short term boost in the economic recovery; stimulating the economy through private sector investment in infrastructure is one way of reducing the short term negative employment impacts on the local and regional economy.
Sequential Test Assessment	No sequentially preferable sites have become available since March 2020.
Statement of Community Involvement	No Impact
Sustainability Statement *including the following technical appendices:* • Response to the Green and Blue Infrastructure Strategy for Manchester • BREAAM Pre Assessment • Crime Impact Statement • Ecological Mitigation Report • Energy Statement • Local Benefits Proposal • Social Value Toolkit • Tree Survey • Operational Waste Management Strategy	No Impact
Broadband Connectivity Statement	No Impact
Daylight/Sunlight Assessment	No Impact
Heritage Statement	No Impact
Operating Schedule and Event Management Strategy	The proposed arena would not be operational until 2023, by which time it is anticipated that the current restrictions in place regarding social distancing will have been lifted. In the event that this is not the case, OVG Manchester would review the Operational Management Strategy in advance of the arena becoming operational in order to incorporate appropriate additional mitigation measures to ensure it is Covid-19 Secure.

OVG Manchester Planning Application Documents	Consideration of Covid-19
Topographical Survey	No Impact
TV Reception Survey	No Impact
Ventilation, Extraction and Odour	No impact

OVG Manchester Environmental Impact Assessment	Consideration of Covid-19
Construction Management and Phasing	No impact in respect of phasing. Subject to grant of Planning Permission, the project programme currently schedules a start on site in late 2020. It is anticipated that social distancing guidance will still be in place at this time, together with guidance for the construction industry on safe operation of sites in light of the Covid-19 pandemic. The contractor would follow and implement all relevant guidance in the operation of the site. In line with Government guidance, the contractor may consider applying for an extension of construction hours; any request would be supported by information to demonstrate that this would not result in an unacceptable adverse effect to residential amenity. On that basis, it is not considered that the Covid-19 pandemic materially changes the conclusions of the construction information submitted with the planning application.
Air Quality and Dust	No Impact
Ground Conditions	No Impact
Lighting	No Impact
Townscape and Visual Impact	No Impact
Noise and Vibration	No Impact
Socio-Economic	OVG Manchester's investment proposals will create a very significant short term boost in the economic recovery; stimulating the economy through private sector investment in infrastructure is one way of reducing the short term negative employment impacts on the local and regional economy. The three year, £288m construction phase would create circa 3,350 jobs, with over 70 companies in the construction supply chain. 1,000 new jobs created once the proposed new arena is operational. The operation of two arenas would create over £1.3bn in additional economic activity with City Centre businesses accounting for over 85% of visitor expenditure.
Traffic and Transport / Travel Plan	The proposed arena would not be operational until 2023, by which time it is anticipated that the current restrictions in place regarding social distancing will have been lifted. In the event that this is not the case, OVG Manchester and the Travel Plan Co-ordinator would review the Travel Planning proposals in advance of the arena becoming operational in order to align with any guidance or operational requirements regarding the use of public transport options.
Water Quality, Drainage and Flood Risk	No Impact
Wind Microclimate	No Impact
Climate Change	No Impact

Deloitte.
Real Estate

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