RPS

LAND EAST OF HAMILTON LANE SCRAPTOFT

INITIAL TRANSPORT FEASIBILITY ASSESSMENT

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INITIAL TRANSPORT FEASIBILITY ASSESSMENT

10 August 2016

Our Ref: BP/MAL/sjs/JNY8843

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1 INTRODUCTION

Introduction

1.1 RPS has been instructed to provide an Initial Transport Feasibility Report, to consider the issues and opportunities relating to the development of land to the east of Hamilton Lane, Scraptoft for circa 1200 dwellings. This land lies to the north of the existing settlement of Scraptoft and is currently occupied in part by the Scraptoft Golf Course. As part of this proposal to develop the land, a relocated golf course would be provided. The scope of the assessment is to consider the opportunities for access to the site and the overall impact of the development on the local highway network. As part of this work consideration will also be given to the opportunities for sustainable travel from this location.

1.2 At this stage the report provides an overview of the assessment of the development in relation to highways and transportation matters, including initial junction assessments. Clearly, more detailed transport assessments will be required in the future to support any future planning application.

Report Format

1.3 Section 2 of the report considers the site location in relation to the existing surrounding transport network and the local facilities. The report also identifies current transport issues on the network within the vicinity of the site together with the opportunities to travel to and from the site by modes of transport other than the private car.

1.4 Within this section consideration is given to the committed development within the local area affecting Scraptoft and the issues of traffic currently travelling through Scraptoft. Furthermore details are provided of the local census data to understand the general travel patterns of the existing local residents within the vicinity of the site.

1.5 Section 3 includes an overview of the transportation planning policy in relation to the site both in the context of Central Government planning policy and local planning policies and guidance. This includes Leicestershire County Council 6C's guidance.

1.6 Section 4 of this report provides details of the development proposals and the access arrangement for the site. This section also identifies the opportunities for improvements to the highway network, together with measures that can be provided by the development to address current issues. Finally, this section highlights the sustainable transport opportunities to and from the site.

1.7 Section 5 provides information on the likely trip generation of the proposed site and how the traffic generated by the development is distributed to the surrounding highway network

1.8 Section 6 considers the traffic impact of the development on the local highway network and provides some capacity assessment of the key junctions in close proximity to the site.

1.9 Section 7 reviews the Strategic Road Network (SRN) using the latest LLITM data that includes the Strategic Urban Extension on land north east of Leicester (Thurmaston). This section considers the existing junctions on the local SRN and the potential impact of the development traffic.

1.10 Section 8 provides a summary and conclusion of the key issues and opportunities highlighted within the report.

Report Summary

1.11 The report concludes that subject to the detailed assessment of the various junctions, the development of the site offers the opportunity to accommodate in the region of 1,200 dwellings in a sustainable location where measures can be provided to address existing transport issues to ensure the residual cumulative impact of the development is not severe.

1.12 The development also provides the opportunity for measures that allow the broader network and committed developments to benefit from the infrastructure provided by the site. Finally, the report identifies that safe and suitable access can be provided to the development.

2 SITE LOCATION AND SURROUNDING TRANSPORT NETWORK

Introduction

2.1 This section of the report provides details of the site location, the transport infrastructure in close proximity to the site, and the site's accessibility to modes other than the private car.

Site Context

2.2 The site is situated to the north of the village of Scraptoft and east of the main existing urban area of Hamilton, Leicester. The land is bounded to the west by Hamilton Lane and to the east by Beeby Road. The southern boundary of the site is the village of Scraptoft and the northern part of the site extends to farmland. Details of the site location are shown on the plan attached at Figure 1.

2.3 The main routes through the village of Scraptoft operate as a one-way system with traffic exiting the village to the south via Church Hill. There has been a high level of development around Scraptoft in the recent years, mainly to the east of the village and this has introduced additional traffic to the centre of Scraptoft, in addition to traffic using the mini roundabout to the south at the junction of Covert Lane, Church Lane, Station Lane and Scraptoft Lane.

2.4 Further traffic associated with consented sites yet to be developed to the north east of Scraptoft will add to the existing traffic flows.

2.5 Traffic also routes through Scraptoft as an informal outer bypass to Leicester connecting from the A47 to the south to the areas around Thurmaston to the north and west of the site. Thurmaston is an allocated urban extension (North East Leicester SUE) to the north of Hamilton (within Charnwood Borough), but has not yet started. Accordingly, in considering the impact of the development traffic on the local highway network it is important to recognise the recent developments that have been implemented and the additional committed development that may yet affect this locality.

Local Facilities

2.6 The plan attached at Figure 2 identifies the local facilities that are considered to be accessible from the site. These are listed in the table below together with the distances from the centre of the site.

Table 2.1: Local Facilities

Facility	Distance from the centre of the site
Tesco Hamilton	1.8km
Hamilton Community College	700m
Scraptoft Valley Primary School	900m
Scraptoft Village Centre	1100m
Keyham Lodge School	1.25km
Hamilton Library and Learning Centre	1.8km
Netherhall Road Centre	1.4km
Elizabeth Medical Centre, Netherhall Road	1.5km
Bus Stops 38, 38A, 40, 58 and 58A	400m

Facility	Distance from the centre of the site
Gateway Sixth Form College	2.0km

Source: Distances from Google Maps

2.7 The above demonstrates the extensive facilities that are accessible from the site and are within walking distance including primary and secondary schools, health care, top-up and main food shopping, together with community facilities.

2.8 The proximity of these facilities to the site provides the realistic opportunity for many trips to be undertaken by foot or cycle.

Walking and Cycling

2.9 The report now considers the opportunities for walking and cycling within the local area. In the context of acceptable walking and cycling distances, Local Transport Note 1/04 states at para 3.10.3:

> **"There are limits to the distances generally considered acceptable for utility walking and cycling. The mean average length for walking journeys is approximately 1km (0.6miles) and for cycling, it is 4 km (2.4miles), although journeys of up to three times these distances are not uncommon for regular commuters. The distances people are prepared to walk or cycle depend on their fitness and physical ability, journey purpose, settlement size, and walking / cycling conditions. Useful guidance on desirable, acceptable and preferred maximum walking distances for different purposes is included in Table 3.2 and 3.3 of Providing for Journeys on Foot, IHT 2000."**

2.10 More recently published guidance is within Manual for Streets. This states in paragraph 4.4.1 that:

> **"Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which residents may access comfortably on foot. However, this is not an upper limit and PPG13 states that walking offers the greatest potential to replace short car trips, particularly those under 2km."**

2.11 PPG13 has since been replaced by the National Planning Policy Framework, however this states under Core Planning Principles that planning should:

> **"actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling."**

2.12 Leicestershire County Council apply the 6C's Design Guide in considering any new development. As part of the introduction of this document, paragraph IN6: Sustainability Standards for Residential Developments, identifies the following at para 1.3.6 to 1.37:

> **"1.36 Local Transport Plans (LTPs) set out transport policy for the relevant Highway Authority. Based on extensive evidence LTPs are aligned to national transport and planning policies, which are set out in the National Planning Policy Framework, Circulars and Guidance Notes.**

1.37 To help deliver their LTP the Highway Authority will seek to ensure that new development is delivered in suitable locations and where the possibility of home-working is considered. These locations will be accessible by walking, cycling and public transport and will also have good access to key services, thereby reducing reliance on the private car."

2.13 The guidance goes on to identify the relevant distances to facilities.

General Standards / Guidelines

"1.40 The following guidelines for sustainable development have been derived from national guidance and are based on the following assumptions:

- **Average walk speed of 1.4m/s or 400m every 5 minutes.**
- **Cycling speeds 12 mph/or 1.6km every 5 minutes.**

1.41 Applicants should be aware of the following guidelines when submitting planning applications for new development within the Principal Urban Area (PUA) and Sub Regional Centres (SRC):

- **Major employment areas should be within 2km (25min) walk or 5 km (15min) cycle ride. For applications involving new employment uses the same standards will apply in respect of major residential areas.**
- **Public transport to a main public transport interchange should be within 800m (10min) walk.**

1.42 In more rural areas i.e. those outside the PUA and SRC the following will apply:

- **Minimum of hourly bus service to SRC within 800m (10min) walk.**
- **PUA / SRC within 5km.**
- **800m (10min) walk to village centre offering access to key services for example education facilities, local convenience shop/Post Office, public house, community facilities, health services, employment areas."**

2.14 In the context of the above, it is considered that the site accords with the requirements of the 6C's guidance.

2.15 The local area has a good level of provision of footways which are generally street lit. Accordingly the proposed development site offers the opportunity to connect into an existing good level of pedestrian facilities that can be enhanced where possible.

2.16 The plan attached at Figure 3 shows the indicative walking isochrones from the application site, based on a walking speed of 80m per minute (circa 4.8mph), up to a maximum walking distance of 2km from the site. The pedestrian isochrones indicate that all of the local facilities are a walkable distance from the site, which includes the District Centre at Hamilton.

2.17 The plan attached at Figure 4 shows the indicative cycling isochrones from the site, based on a cycling speed of 320m per minute (circa 12mph), up to a maximum cycling distance of 5km from the site. The cycling isochrones indicate that the employment areas to the east of the city centre are within a 5km distance and that the city centre is only marginally outside this catchment at 6.5Km from the site.

Public Transport

2.18 The site is well connected to a number of existing bus services passing within the immediate vicinity of the site. Bus routes 38, 38A, 40, 58 and 58A pass within 400m of the site; details of the routes and bus frequencies are provided in Table 2.2 below. In addition to these routes other services connect to Scraptoft and the local area. These services are shown on the plan attached at Figure 5.

Table 2.2: Bus Routes and Frequencies

<table>
<tr><th colspan="6"></th><th colspan="3">Frequency</th></tr>
<tr><th>Bus Route</th><th>Bus Operator</th><th>Destinations</th><th>Day</th><th>First Bus</th><th>Last Bus</th><th>AM Peak</th><th>PM Peak</th><th>Off peak</th></tr>
<tr><td rowspan="3">38/38A</td><td rowspan="3">First</td><td rowspan="3">Leicester: City Centre – Nether Hall – City Centre</td><td>Mon – Fri</td><td>06:16</td><td>23:23</td><td>10 mins</td><td>10-15 mins</td><td>10-15 mins</td></tr>
<tr><td rowspan="2"></td><td rowspan="2"></td><td rowspan="2"></td><td colspan="3">12 mins till 17:30, then 30 mins</td></tr>
<tr><td colspan="3">30 mins</td></tr>
<tr><td></td><td></td><td></td><td>Mon - Fri</td><td>06:29</td><td>18:53</td><td>hourly</td><td>hourly</td><td>hourly</td></tr>
<tr><td>40</td><td>Centre Bus</td><td>Leicester Circle Line</td><td>Sat</td><td>06:39</td><td>18:38</td><td colspan="3">hourly</td></tr>
<tr><td rowspan="3">58/58A</td><td rowspan="3">Arriva</td><td rowspan="3">Leicester Circular via Nether Hall and Hamilton</td><td>Mon - Fri</td><td>06:32</td><td>22:34</td><td>12-15 mins</td><td>12-15 mins</td><td>12-15 mins</td></tr>
<tr><td>Sat</td><td>07:39</td><td>23:01</td><td colspan="3">20 mins</td></tr>
<tr><td>Sun</td><td>10:16</td><td>23:01</td><td colspan="3">30 mins til 19:00 then hourly</td></tr>
</table>

Source: Traveline Southeast

2.19 The range of existing bus services within the locality of the site provides a high level of bus services connecting to various locations around Leicester. The development then offers the opportunity to extend such services into the site or provide additional services linking the site with the city. However, it is important to recognise the extent of the existing services, as these ensure that development can commence without the need to change or amend these services.

Travel to Work Characteristics

2.20 The site lies within the Thurnby & Houghton Ward which encompasses the site and the village of Scraptoft. To the west is the Humberstone & Hamilton Ward which relates to part of Hamilton. To obtain an idea of the likely modal split for the proposed site for journeys to work, a review of the existing modal splits has been undertaken for both wards and the results are provided in the tables below.

Table 2.3: Census Data – Modal Split – Humberstone & Hamilton Ward

Car Driver	Car passenger	Walking	Cycling	Bus	Taxi	Motor Cycle
70%	7%	7%	2%	13%	0%	1%

Table 2.4: Census Data – Modal Split – Thurnby & Houghton Ward

Car Driver	Car passenger	Walking	Cycling	Bus	Taxi	Motor Cycle
70%	7%	7%	2%	13%	0%	1%

2.21 The above Census data shows that those living within the Humberstone & Hamilton Ward are more likely to use the bus than those within the Thurnby and Houghton Wards. This, no doubt reflects the more rural nature of the Thurnby and Houghton Ward and the fact that bus access is not as great as within the Humberstone and Hamilton Wards. Given that the site sits adjacent to the ward boundaries and is within close proximity to existing bus services, and also includes large scale recent developments, it is considered that the travel characteristics of the Humberstone Ward are more applicable to the proposed development.

Local Highway Network

2.22 The site abuts Hamilton Land and Beeby Road. Hamilton Lane, over the frontage of the site provides access to a number of properties and has a footway to the western side of the route. This road in turn connects to Keyham Lane West and New Romney Crescent, which provide routes into the city centre and also to the outer ring road.

2.23 To the south on Hamilton Lane, the route connects to the centre of Scraptoft and the one-way system within the village. Further south are the links to Scraptoft Lane, Station Lane and the A47.

2.24 A series of traffic counts have been undertaken within the area to establish the baseline flows on which to assess any new development. These are shown on the plans attached at Appendix D together with a summary below.

Table 2.5: Baseline Traffic Flows

Link	AM Peak Hour 2 way flows	PM Peak hour 2 way flows
Hamilton Lane	640	680
Keyham Lane west (eastern end)	280	300
Preston Rise / Keyham Lane west (western end)	790	650
New Romney Crescent	160	180
Scraptoft Lane (western end)	1090	1070
Scraptoft Lane (eastern end)	620	610
Station Lane	870	860
Station Road (adjacent to the A47 junction)	900	850

Link	AM Peak Hour 2 way flows	PM Peak hour 2 way flows
A47 east of Station Road	1470	1330

Source: Traffic Survey data

2.25 In general, it is considered that the levels of traffic flow on these routes around the site are within the operational capacity of the various links and that the extent of any congestion will relate to peak hour capacities at the key junctions. This issue is discussed in Section 6 of this report.

2.26 Also within Section 6 consideration is given to the extent of committed development that will add to the baseline flows, and the changes the development infrastructure may have on the distribution of the traffic within the local area.

Summary

2.27 In summary, the site location is very well placed to benefit from access to the local facilities via sustainable modes of travel. Beyond the immediate site location, access to the city centre is readily achieved by bus or on cycle.

2.28 In the context of the local road network and the existing traffic volumes, the traffic counts demonstrate levels of traffic are currently within the operational capacity of the various links with the issue of capacity only likely to affect the peak-hour operation of some junctions.

3 TRANSPORT POLICY

Introduction

3.1 This section of the report considers the relevant national and local planning policy guidance relating to Transport.

3.2 The Harborough Local Plan is not referred to within this section as clearly the purpose of this report is to support the promotion of land through the Local Plan process.

National Planning Policy Framework

3.3 The current planning policy guidance set by the government is the National Planning Policy Framework (NPPF) adopted in March 2012.

3.4 One of the 12 core land-use principles within the NPPF is:

> **"To actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable."**

3.5 Section 4 of the NPPF, paragraphs 29 to 41 deal specifically with transport planning and promoting sustainable transport.

3.6 Paragraph 29 states that:

> **"The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice of how they travel."**

3.7 Paragraph 30 states that:

> **"Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilities the use of sustainable modes of transport."**

3.8 Paragraph 32 states that:

> **"All developments that generate significant amounts of movements should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:**
>
> - **The opportunities for sustainable modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;**
> - **Safe and suitable access to the site can be achieved for all people; and**
> - **Improvements can be undertaken within the transport network that cost effectively limits the significant impacts of the development. Development should only be prevented or**

refused on transport grounds where the residual cumulative impacts of development are severe."

3.9 Paragraph 34 states that:

> **"Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised."**

3.10 Paragraph 35 states that:

> **"Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods and people. Therefore, developments should be located and designed where practical to:**
>
> - **Accommodate the efficient delivery of goods and supplies;**
> - **Give priority to pedestrian and cycle movements and have access to high quality public transport facilities;**
> - **Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;**
> - **Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and**
> - **Consider the needs of people with disabilities by all modes of transport."**

3.11 Paragraph 36 states that:

> **"A key tool to facilitate this (the aims of paragraph 35) will be a Travel Plan. All developments which generate significant amounts of movement should be required to provide a Travel Plan."**

3.12 Paragraph 37 states that:

> **"Planning policy should aim for a balance of land uses within areas in order for people to be encouraged to minimise journey lengths for employment, leisure and education. Reducing journey lengths can encourage the use of public transport and walking / cycling."**

3.13 In the context of the above and the requirements of the NPPF, it is considered that the three key criteria are those identified within paragraph 32. These seek sustainable locations that reduce the need for major infrastructure, safe and suitable accesses to the development, and the need to ensure that the residual cumulative impact of the development is not severe.

3.14 This report highlights the key sustainable opportunities that the development site offers, and demonstrates the accesses are safe and suitable, and shows that the residual cumulative impact is not severe.

Leicestershire County Council – LTP3

3.15 Leicestershire's Local Transport Plan 3 sets out how LCC will manage and improve transport over the next fifteen years (2011 – 2026) and also their short-term Implementation Plan (a rolling three-year period). The Plan aims to achieve a Sustainable Community by:

- **"Efficient, easy and affordable access to key services, particularly by walking, cycling and public transport;**
- **More consistent, predictable and reliable journey times for people and goods;**
- **Improved satisfaction with our transport system;**
- **More people walking, cycling and using public transport as part of their daily journeys**
- **Efficient ac**
- **cess to the natural environment (for instance parks and open spaces), where possible by walking and cycling;**
- **A reduction in the number of road casualties;**
- **An effectively managed and well maintained transport system and assets;**
- **Improved reliance of our transport system to the effects of climate change;**
- **Reduced impact from the transport system on the environment and individuals."**

The 6C's Design Guide

3.16 The 6C's Design Guide is a web-based regional design guide adopted by three District Councils and three County Councils. This guide provides developers with the information that they will need as part of their development process including policy guidelines. The key policies relevant to this development proposal are as follows:

3.17 Section IN4: Our highways development control policy

- Para 1.24: We will work with developers and planning authorities to make sure new development is only permitted:

a. In areas where there is a choice of safe and accessible methods of transport for all road users (including pedestrians and cyclists).
b. On roads suitable for the type of development; and
c. If the environment is not harmed, including through increased congestion.

3.18 Section IN5: Our access to the road network policy

d. Para 1.27: To maintain safety and the free flow of traffic, policy in the past has discouraged new accesses onto A and B-class roads and avoided increasing the use of existing accesses. For the future, and in line with an integrated transport policy, we will adopt a flexible policy on new connections to the road network. We will severely restrict access to the most important high standard routes. Elsewhere, particularly in urban locations, in principal we will apply a more flexible approach.
e. Para 1.28: Where access is acceptable to us in principle, we will normally expect its layout to comply with the design guidance set out in Part 3.

3.19 Access to other classified roads and unclassified roads

- Para 1.32: New accesses for vehicles and the increased use of existing accessed will normally be restricted on;

a. Routes where there are proposals for bus-priority measures
b. Roads where there is an existing problem with road safety;
c. Roads where there are proposals to establish quiet lanes; and
d. Other routes that is not suitable to carry the additional traffic and type of traffic from the development.

3.20 Para 1.33: Elsewhere, new accesses for vehicles will not normally be restricted, if they meet the conditions of paragraph 1.28. Also, if access to a development can be gained off a minor side road, you should normally consider this option as preferable.

3.21 Para 1.34: In rural areas, new accesses for vehicles and the increased use of existing accesses will not normally be resisted in principle to:

a. Land allocated for development in the local plan;
b. Agricultural land (that is remaining in agricultural use); and
c. A new, better access to replace an existing one.

3.22 Section IN6: Sustainability Standards for Residential Developments

Principles:

- Para 1.37: To help deliver their LTP the Highway Authority will seek to ensure that new development is delivered in suitable locations and where possibility of home-working is considered. These locations will be accessible by walking, cycling and public transport and will also have good access to key services, thereby reducing reliance on the private car.

- Para 1.41: Applicants should be aware of the following guidelines when submitting planning applications for new development within Principal Urban Area (PUA) and Sub Regional Centres (SRC)

a. Minimum of hourly bus service to SRC within 800m (10min walk)
b. PUA/SRC within 5KM
c. 800m (10min) walk to village centre accessing to key services for example education facilities, local convenience shop/ post Office, public house, community facilities, health services, employment areas.

3.23 It is therefore considered that the development accords with the requirements of the 6C's guidance.

Summary

3.24 In summary, it is considered that the key requirements of the NPPF in the context of transportation are those identified within paragraph 32. These seek sustainable locations that reduce the need for major infrastructure, safe and suitable accesses to the development, and the need to ensure that the residual cumulative impact of the development is not severe.

3.25 This report highlights the key sustainable opportunities that the development site offers, demonstrates the accesses are safe and suitable and shows that the residual cumulative impact is not severe.

3.26 In relation to the 6C's Guidance, it is considered that the development accords with the various requirements of the guidance in the context of the spatial proximity to the key facilities.

4 DEVELOPMENT PROPOSALS

Introduction

4.1 This section of the report provides details of the development proposed for the site, together with the opportunities the site offers to the broader highway network, including the village of Scraptoft.

4.2 The plan attached at **Appendix A**, provides an indicative master plan for the site.

Development Proposals

4.3 The proposals are for the development of circa 1,200 residential units on land to the north of Scraptoft village. The proposal might offer the first phase of a potentially greater development which could link to land to the south east of Scraptoft and then onto the A47, or provide a more modest extension to the east of Beeby Lane to a scale of around 400 additional dwellings. However, for the purpose of this report the assessment is focused on the first phase of the development that proposes 1,200 dwellings west of Beeby Lane.

4.4 In relation to access to the site, the opportunities exist to provide access from Hamilton Lane at two locations to tie into the westward links via Keyham Lane west and New Romney Crescent. By forming the accesses with these westward links, the opportunity is afforded to change the priority of traffic on Hamilton Lane and hence this north/ south traffic would give way to the traffic travelling east / west along the corridors connecting the accesses into the site, with both Keyham Lane West and New Romney Crescent.

4.5 Furthermore the alignment and north / south link of Hamilton Lane, could be diverted to discourage this route and connection to the Thurmaston area to the north. However, the volume of traffic currently using the link, which is in the order of 600 two-way movements, is not considered to be significant in the peak hours, and it would be for the Thurmaston scheme to ensure traffic was not rat-running from that scheme along Hamilton Lane.

4.6 The site also offers the opportunity to connect the development infrastructure to Beeby Lane. This provides in the longer term a link to connect to the east and around the north and east of Scraptoft and onto the A47.

4.7 However in the short term, it allows a better connection for that traffic associated with the more recent consented developments (accessed from Beeby Road), to access Leicester city and areas to the west rather than travelling through Scraptoft. This is a positive benefit to the residents of Scraptoft who will have experienced a growth in traffic within the centre of the village from the various developments that have taken place in recent years.

4.8 Such a link from Beeby Lane, through the site, also offers the potential for further development east of Beeby Lane, of potentially around 400 dwellings to be developed without significantly impacting on the routes through Scraptoft.

4.9 Therefore, the access proposals would be for 2 points of access on to Hamilton Lane and a single access on to Beeby Lane to the east. The details of these are shown indicatively on the plan attached at **Appendix B**.

4.10 Beyond these vehicular accesses, the development would provide pedestrian and cycle links to the south, as well as the provision of such measures alongside the proposed road infrastructure for pedestrians and cyclists.

Mitigation Measures

4.11 The site offers the opportunity for a number of mitigation measures within the vicinity of the site that will not only mitigate for the development traffic but also offer improvements for existing road users. These opportunities which are identified below and indicated on the attached plans at **Appendix B and C** would be the subject of more detailed assessment as part of the promotion of this land. However, the opportunities are set out below together within an initial assessment of the measures with this overall report.

4.12 As previously identified the proposed site accesses provide the opportunity to change the priority of the junctions at Keyham Lane West and New Romney Crescent. Beyond these junctions both of these routes provide the potential to address current issues of car parking and road width.

4.13 In the context of Keyham Lane West, there is parking on the road that is relatively narrow in width at around 5.5m. The current parking causes delays to traffic using this route including bus services, and also damages the verge. Accordingly, the opportunity exists to formalise parking laybys along the route which are currently provided in part (shown in the photo below), but could be more extensive and allow the removal of the kerbside parking.

Source: Image from Google Maps (Keyham Lane)

4.14 In addition, at the school entrance locations along this route, a tabled area could be provided to enhance the traffic calming and improve the environment for those accessing the school. Details of these proposals are shown on the plan attached at **Appendix B**.

4.15 New Romney Crescent is relatively wide with on street parking on both sides of the road. A similar arrangement could be provided here to that on Keyham Lane West, where the road is effectively narrowed and parking bays formed. In addition, at the location of the primary school, a tabled area could be provided to improve the accessibility for those using the school and to calm traffic along this route. Again, this is indicated on the plan attached at **Appendix B**.

4.16 Within Scraptoft, the provision of the link through the site, and the changes to the priority at the various junctions on Hamilton Lane, offers the opportunity to change the traffic patterns within the centre of the village and limit traffic rat running through this village. This could include reversing the one-way system on part of Church Hill to allow exit only from the mini-roundabout junction with Station Lane. Traffic would then use Stocks Road and then Scraptoft Rise to access Scraptoft Lane.

4.17 Such changes in flow would allow alterations to the priorities within the village and hence deter traffic rat-running through this area. Details of these changes are shown on the plan attached at **Appendix C.** In addition, the deterrent to traffic rat-running through the village could be the introduction of priority working on the southern section of Hamilton Lane which would add further to the delays traffic using this route would face.

4.18 Effectively traffic would be signed to use the route via New Romney Crescent to access Scraptoft Lane. An alternative route to this could be delivered over the land between New Romney Crescent and Scraptoft Rise, however, this is considered an unnecessary addition to the road network given the existing low levels of traffic flow on New Romney Crescent.

4.19 It should be noted that the measures proposed to deter traffic passing through Scraptoft village, are proposed to address the current issues and the effect of the more recent developments within the area. It is not considered to be a requirement of the impact of the development traffic, but is a beneficial consequence of the proposed development.

4.20 Beyond the local area, other opportunities exist to enhance the following key junctions:

- Station Road / A47 signal junction.
- Scraptoft Lane / Hungarton Boulevard.
- Hamilton Way / Maidenwell Avenue (Tesco Junction)
- Netherhall Road / Hungarton Boulevard.

4.21 The above junctions have been reviewed in terms of the levels of traffic flow and queuing and will be assessed as part of the full Transport Assessment for the site.

4.22 In addition to improvements to the road network, opportunities exist to enhance the public transport system extending services into the site. However, this would not be necessary at the start of the development given the location of the existing services in proximity to the site.

Travel Planning Measures

4.23 The travel planning measures for the development would include the provision for bus passes for new residents for the first 6 months and travel packs for all new residents to identify the options for sustainable travel.

4.24 The proposals would be supported by a Travel Plan that would include a travel plan coordinator assisting in the implementation of the proposed measures.

5 TRIP GENERATION AND DISTRIBUTION

Introduction

5.1 This section of the report deals with the likely traffic generation from the site and the impact this may have on the local highway network.

Trip Generation

5.2 In order to assess the likely impact the proposed development will have on the local highway network, the TRICS database has been used, based on similar sized developments in similar located areas. The table below provides the likely number of vehicle movements that would be generated by a new housing development of circa 1,200 dwellings.

Table 5.1: Trip Generation – circa 1,200 dwellings – Private Dwellings

	Arrivals		Departures		Two-Way	
	Trip Rate	Number of Vehicle Trips	Trip Rate	Number of Vehicle Trips	Trip Rate	Number of Vehicle Trips
Weekday AM Peak	0.089	135	0.395	474	0.484	609
Weekday PM Peak	0.366	439	0.200	240	0.566	679

Source: TRICS Database

5.3 The above trips are based on private dwelling developments; however there will be a proportion of affordable units within the proposed development which would provide a lower trip rate. For the purpose of this report the above trip rates have been used to provide a robust review.

Modal Split

5.4 The 2011 Census data identified in Tables 2.2 and 2.3 the existing modes used by residents to their place of work for the Humberstone and Hamilton Ward and also the Thurnby & Houghton Ward. Whilst the site lies within the Thurnby and Houghton Ward, it immediately abuts the Humberstone & Hamilton Ward, and is therefore considered to more readily reflect the travel characteristics of the Humberstone Ward. The table below therefore provides this information.

Table 5.2: 'Travel to Work' Mode for residents to the proposed site

Mode	Car	Bus	Walk	Cycle	Motor Cycle
Humberstone & Hamilton Ward	77%	13%	7%	2%	1%

Source: Census Database 2011

5.5 The above data suggests that those that will travel to work, 77% will travel to work by car of which 7% will car share, 13% will use public transport and 9% will walk or cycle to work.

5.6 A review of the work place destinations for the Humberstone & Hamilton Ward identifies that 92% of residents work within Leicester and the immediate areas around the city. The table below identifies the key towns that residents travel to by car.

Table 5.3: Key Work Place destinations for the Humberstone & Hamilton ward within Leicester

Destination	%
Blaby	6%
Charnwood	8%
Harborough	3%
Hinckley & Bosworth	2%
Leicester	67%
Melton	1%
North West Leicester	1%
Oadby & Wigston	4%
Total	**92%**
Other Locations include:	
Northamptonshire	3%
Oxfordshire	1%
Warwickshire	2%
West Midlands	2%

Source: Census Database

5.7 To establish the likely route that traffic will use during the morning and evening peak periods, the above information from the Census data has been used together with Google Maps direction routing choice, a plan indicating these routes and predicted traffic distribution is provided in **Appendix E.**

5.8 As part of the predicted traffic movements an account has been taken of the traffic generated by the developments adjacent to Beeby Lane which are consented but which have not been developed. Likewise, the assessment of the flows has made an allowance for the re-routing of traffic through Scraptoft as a consequence of the new infrastructure and the changes proposed to the one way system within Scraptoft. Details of the predicted traffic movements including the re-routing of the traffic are shown on the diagrams attached at **Appendix F**.

6 TRAFFIC IMPACT

6.1 This section of the report considers the likely impact of the traffic associated with development of 1,200 dwellings.

6.2 The table below identifies the baseline traffic movements and the proposed traffic associated with the proposed development. These figures do not take account of traffic growth on the local highway network, which will relate to the committed development within the local area that has yet to be implemented. The addition of such growth will increase the total flows on the network, but will reduce the percentage impact of the development traffic.

6.3 For a transport assessment, the key junctions will be assessed with background growth added at the design year and the future year assessment, based on scoping discussions to be held with Leicestershire County Council.

6.4 The tables below do not reflect the redistribution of traffic associated with the proposed mitigation measures, but simply assess the development traffic distribution based on the existing flow data. The effect of the redistribution is considered in Tables 6.3 and 6.4.

Table 6.1: Baseline & Proposed Traffic Flows – AM Peak

Link	AM Peak Hour 2 way flows	Proposed Development flows	Predicted Change (%)	Total Flow
Hamilton Lane North of Keyham Lane	589	34	6%	623
Keyham Lane west (eastern end)	282	261	93%	543
Preston Rise / Keyham Lane West (western end)	788	261	33%	1049
New Romney Crescent	241	238	99%	479
Scraptoft Lane (western end)	1087	237	22%	1324
Scraptoft Lane (eastern end)	622	47	8%	669
Station Lane	866	47	5%	913
Station Road (adjacent to the A47 junction)	894	47	5%	941
A47 east of Station Road	1466	23	2%	1489

Table 6.2: Baseline and Proposed Traffic Flows – PM Peak

Link	PM Peak Hour 2 way flows	Proposed Development flows	Predicted Change (%)	Total Flows
Hamilton Lane North of Keyham Lane	608	40	7%	648
Keyham Lane west (eastern end)	298	296	99%	594
Preston Rise / Keyham Lane West (western end)	649	296	46%	945
New Romney Crescent	314	269	85%	583
Scraptoft Lane (western end)	1071	269	25%	1340
Scraptoft Lane (eastern end)	619	53	9%	672
Station Lane	854	53	6%	907
Station Lane (adjacent to the A47 junction)	854	53	6%	907
A47 east of Station Road	1328	26	2%	1354

6.5 The above tables show that the greatest impact will be on Keyham Lane West and New Romney Crescent. Whilst the increase in percentage terms is high, in relation to the total flow, the overall traffic flows will still be low for these types of roads, these being circa 600 vehicles two-way. These tables reflect the development traffic distribution on the local highway network assuming no changes to the baseline flows as a consequence of the development.

6.6 However, the development proposals are to down grade the use of Hamilton Lane and to discourage the rat-running of traffic through Scraptoft. To this end, the proposals are to amend the one-way system within Scraptoft to deter traffic. Accordingly, the net effect of this is shown on the diagrams attached at **Appendix F**. These changes will leave some of the traffic still travelling through Scraptoft, but seek to remove circa 45% of the through-movement from Scraptoft. As previously identified, this is not considered a requirement of the proposed development, but an opportunity the development offers to the local highway network through the provision of mitigation measures. The tables below reflect these changes to the baseline and the development traffic flows.

Table 6.3: Amended Baseline & Proposed Traffic Flows – AM Peak

Link	AM Peak Hour 2 way flows	Amended Peak Hour 2 way flows	Proposed Development flows	Predicted Overall Change (%)	Total Flow
Hamilton Lane North of Keyham Lane	589	589	34	6%	623
Keyham Lane west (eastern end)	282	282	261	92%	543

Preston Rise / Keyham Lane West (western end)	788	788	261	33%	1049
New Romney Crescent	241	411	238	169%	649
Scraptoft Lane (western end)	1087	1087	237	22%	1324
Scraptoft Lane (eastern end)	622	792	38	33%	830
Station Lane	866	866	47	5%	913
Station Road (adjacent to the A47 junction)	894	894	47	5%	941
A47 east of Station Road	1466	1466	23	2%	1489

Table 6.4: Amended Baseline & Proposed Traffic Flows – PM Peak

Link	PM Peak Hour 2 way flows	Amended PM peak hour 2 way flow.	Proposed Development flows	Predicted Change (%)	Total Flows
Hamilton Lane North of Keyham Lane	608	608	40	7%	649
Keyham Lane west (eastern end)	298	298	296	99%	592
Preston Rise / Keyham Lane West (western end)	649	649	296	46%	945
New Romney Crescent	314	395	269	111%	664
Scraptoft Lane (western end)	1071	1071	269	21%	1340
Scraptoft Lane (eastern end)	619	835	17	37%	852
Station Lane	854	854	53	6%	907
Station Lane (adjacent to the A47 junction)	854	854	53	6%	907
A47 east of Station Road	1328	1328	26	2%	1354

6.7 From the above figures it can be seen that as a consequence of the re-routing of the traffic, the flows on New Romney Crescent increase to the greatest extent. However, the proposed total flows on this link are still at a similar level to the existing levels of flow on Scraptoft Lane. This rerouting has assumed the flows within Scraptoft reduce by circa 50%, which relates to 321 two way movements in the AM peak hour and 247 two way movements in the PM peak hour, of the base line flows. Clearly, on top of this would be the traffic flows associated with the committed developments that have yet to be implemented.

6.8 It is recognised that the impact of the development traffic will extend beyond the network identified above and to this extent traffic surveys have been undertaken at the key junctions on the ring road, together with the A47.

6.9 The surveys that were carried out included queue length data that identified the number of vehicles queueing every 5mins. The junctions that had more than 10 vehicles queuing at any one time during the peak periods included

- Scraptoft Lane/ Colchester Road/ Hungarton Boulevard;
- Lower Keyham Lane/ Hamilton Way/ Hungarton Boulevard; and
- Station Road/ A47.

6.10 Whilst the a detailed assessment of these junction will be necessary as part of any TA, the predicted impact at these junctions is not considered to be as extensive as the more immediate network to the site, and as such it is considered that the traffic generated by the development will not have a material impact on those junctions. As part of a detailed transport assessment report, junctions local to the site will be assessed and where necessary mitigation measures will be provided.

6.11 For the purpose of this initial transport assessment, the junctions closest to the development have been assessed together with the changes identified within Scraptoft, which would alter the operation of the Covert Lane / Station Lane mini-roundabout junction. This more detailed assessment is discussed below.

Hamilton Lane / Site Access Junctions

6.12 As identified the proposal would be to change the priority of the flow on Hamilton Lane and create 2 access points into the site extending both Keyham Lane West and New Romney Crescent. The assessment of these two junctions as proposed is set out in the tables below.

Table 6.5: Assessment of the Keyham Lane West / Hamilton Lane / Site Access Junction

	Hamilton Lane North		Site Access to HLN		Hamilton Lane South		Keyham Lane West to HLS.	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
AM Peak Hour	0.49	1	0.52	1	0.52	1	0.49	1
PM Peak Hour	0.78	3	0.42	1	0.34	1	0.68	3

Source: Junctions 9 Assessment

Table 6.6 Assessment of the new Romney Crescent / Hamilton Lane / Site Access Junction

	Hamilton Lane North		Site Access to HLN		Hamilton Lane South		Keyham Lane West to HLS.	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
AM Peak Hour	0.49	1	0.52	1	0.52	1	0.49	1
PM Peak Hour	0.78	3	0.42	1	0.34	1	0.68	3

Source: Junctions 9 Assessment

6.13 From the above assessment it can be seen that the levels of predicted traffic can be accommodated by the proposed junction arrangements. These junctions will be upgraded to improve visibility and the various road widths and hence the capacity of the junctions is not considered to be an issue.

New Romney Crescent / Scraptoft Lane Junction

6.14 The proposal is to route traffic from Hamilton Lane onto New Romney Crescent. Measures would be provided in proximity to the school to ensure traffic speeds where kept to a minimum and the parking arrangements would be improved along the line of New Romney Crescent. Details of these measures are shown on the plan attached at **Appendix B.**

6.15 The junction with Scraptoft Lane is proposed as a priority junction. An assessment of this junction has been undertaken to demonstrate the level of capacity with the proposed re-routing. This shows the junction will operate within capacity. However, the opportunity exists to amend this junction to either widen the approach to the junction on New Romney Crescent or to form a mini roundabout to assist in calming traffic on Scraptoft Lane. These options would be discussed with the Local Highway Authority as part of the assessment of the site.

Table 6.7: Assessment of the existing New Romney Crescent / Scraptoft Lane Junction

	New Romney Crescent		Scraptoft Lane east	
	RFC	Q	RFC	Q
AM Peak Hour	0.71	2	0.35	1
PM Peak Hour	0.46	1	0.34	1

Source: Junctions 9 Assessment

6.16 The above assessment demonstrates that even with the additional traffic on New Romney Crescent, the junction operates within capacity. However, as previously identified this junction could be upgraded to a mini roundabout arrangement. A detailed plan of this layout is attached at Appendix H of this report, together with the option for widening of the junction. The results of the junction widening assessment are shown below.

Table 6.8 Assessment of the amended New Romsey Crescent / Scraptoft Lane Junction

	Romney Crescent		Scraptoft Lane (East)	
	RFC	Q	RFC	Q
AM Peak	0.69	2	0.35	1

	Romney Crescent		Scraptoft Lane (East)	
	RFC	Q	RFC	Q
PM Peak	0.46	1	0.34	1

Source: Junctions 9 Assessment

Scraptoft Lane / Scraptoft Rise Junction

6.17 As a consequence of the changes to the one-way system, the traffic on Scraptoft Rise will operate in the opposite direction over the southern section of this road and hence the junction with Scraptoft Lane needs to be assessed as a priority junction. The assessment of this junction is set out below.

Table 6.9 Assessment of the Scraptoft Lane / Scraptoft Rise Junction

	Scraptoft Rise	
	RFC	Q
AM Peak Hour	0.50	1
PM Peak Hour	0.50	1

Source: Junctions 9 Assessment

6.18 This assessment shows the junction operates at an acceptable level of capacity. The junction layout and visibility splays are shown in detail on the plan attached at **Appendix H**, and show the necessary requirements are achieved.

Covert Lane / Station Lane min-roundabout

6.19 The final junction assessed within this report is that of the junction of Covert Lane and Station Lane. The existing mini roundabout operates as a four-arm mini, which is not ideal in the context of the junction accommodating relatively high flows from three of the arms of the junction in the peak hour.

6.20 The proposals amend the one-way system, and as a consequence remove one of the entry arms from the junction and convert this to an exit. The assessment of the junction is shown below and is compared with the exiting operation.

Table 6.10 Assessment of the Station Lane / Covert Lane Mini Roundabout Junction

	Covert Lane		Station Lane		Scraptoft Lane.		Church Hill	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
AM Peak Hour Existing	0.20	0	0.42	1	0.18	0	0.44	1
AM Peak Hour Proposed	0.20	0	0.43	1	0.70	2	NA	NA
PM peak Hour Existing	0.08	0	0.16	0	0.37	1	0.36	1
PM peak Hour	0.14	0	0.25	0	1.03	26	NA	NA

	Covert Lane		Station Lane		Scraptoft Lane.		Church Hill	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
Proposed								

Source: Junctions 9 Assessment

6.21 This assessment shows the effect of the changes in traffic flow that result in additional queuing on Scraptoft Lane in the PM peak on approach to the junction. Further measures can be provided at this junction to improve the capacity by improving the approach to the junction on Scraptoft Lane. Details of the changes and potential improvements to the junction are shown on the plan attached at **Appendix H** of this report with the resultant assessment highlighted below.

Table 6.11 Assessment of the Station Lane / Covert Lane Mini Roundabout Junction with improvements.

	Covert Lane		Station Lane		Scraptoft Lane		Church Hill	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
AM Peak Hour Proposed	0.20	0	0.43	1	0.55	1	NA	NA
PM peak Hour Proposed	0.14	0	0.25	0	0.81	4	NA	NA

Source: Junctions 9 Assessment

6.22 The assessment with the amendments shows no material change to the queuing on all arms of the junction. Hence the re-routing of traffic out of Scraptoft can accommodate the changes to the Covert Lane roundabout junction.

Summary

6.23 In summary, it is considered that the effect of the development traffic can be mitigated by measures within the local highway network. These measures not only mitigate the development traffic, but also provide benefits to the local network rerouting traffic away from Scraptoft.

6.24 These improvement measures provide:-

- Formalised parking bays on key routes, including New Romney Crescent and Keyham Lane West;
- Create an appropriate level of carriageway width to maintain the flow of traffic on the key routes;
- Deter traffic using Hamilton Lane as an outer bypass route;
- Reduce the attractiveness for traffic travelling through Scraptoft and offer alternative routing to such traffic;
- Provide enhances areas around the school entrances to improve the safety of those accessing the schools;

- Provide a key link between Beeby Lane and Hamilton Lane to reroute traffic from the centre of Scraptoft; and
- Improve the operational capacity of the Covert lane / Station Lane mini roundabout.

6.25 Overall, it is considered that the residual cumulative impact of the development traffic is not severe, and that the measures proposed provide a safe and suitable access to the development.

7 STRATEGIC ROAD NETWORK

7.1 This section reviews the impact of the development on the Strategic Road Network, Whilst this will be reviewed in more detail as part of the Transport Assessment work, this section sets out an initial appraisal of the network. Accordingly, the following junctions have been assessed;

- Hamilton Way/ Maidenwell Avenue/ Lower Keyham Lane;
- Tesco / Maidenwell Avenue/ Preston Rise;
- Hungarton Boulevard/ Colchester Road/ Scraptoft Lane; and
- Uppingham Road/ Station Road.

7.2 These assessments include traffic flows obtained from Leicestershire County Council in relation to the 2026 LLITM model that includes for the full Strategic Urban Extension on land to the north east of Leicester. As a proposed scenario, the proposed development traffic flows as identified earlier in this report have been added to the LLITM flows.

7.3 An initial review of the LLITM flows shows that there is not a significant change in the volume of movements along the strategic road corridor when compared to the 2015 Base + Development flows. This would infer that that local higher network is not expected to experience a significant impact from the SUE.

Hamilton Way/ Maidenwell Avenue Junction

7.4 The Hamilton Way/ Maidenwell Avenue junction is a four-arm roundabout and has been modelled using the Junctions 9 computer programme.

Table 7.1 Assessment of the Hamilton Way/ Maidenwell Ave Junction

	Maidenwell Ave		Hungarton Boulevard		Lower Keyham Lane		Hamilton Way	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
AM Peak								
2016 AM Peak – No Development	0.49	1	0.81	4	0.41	1	0.75	3
2016 AM Peak – With Development	0.63	2	0.91	9	0.47	1	0.78	3
2026 AM Peak – No Development	0.34	1	0.63	2	0.14	0	0.71	3
2026 AM Peak - With Development	0.49	1	0.67	2	0.18	0	0.79	4
PM Peak								
2016 PM Peak – No Development	0.41	1	0.76	3	0.45	1	0.86	6

	Maidenwell Ave		Hungarton Boulevard		Lower Keyham Lane		Hamilton Way	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
2016 PM Peak – With development	0.47	1	0.79	4	0.64	2	0.97	18
2026 PM Peak – No Development	0.45	1	0.58	1	0.37	1	0.94	13
2026 PM peak – With Development	0.51	1	0.61	2	0.53	1	1.01	30

Source: LINSIG Assessment

7.5 The above results show that the RFC on Hamilton Way in 2016 will be close to its design capacity in the PM Peak both with and without the proposed development traffic. All other arms of the junction are operating within capacity in the design year. However, in the context of the Hamilton Way approach to the junction, it is considered that there is sufficient highway land available at this junction to allow for widening on this arm to mitigate the developments impact.

7.6 The LLITM flows provided by LCC show a reduction in overall traffic through this junction when compared to the 2016 Base flows of around 400 vehicles in the AM Peak and around 200 in the PM Peak, albeit an increase of movements on Hamilton Way. Despite this ambiguity in the level of traffic, it is considered that improvements can be made to this junction as part of the development proposals to address any impact on the local and strategic highway network.

Tesco/ Maidenwell Avenue Junction

7.7 This is a four-arm roundabout serving the Tesco Store. Again this junction has been assessed using the Junctions 9 software with the inclusion of the LLITM traffic data. The results are provided in the Table below.

Table 7.2 Assessment of the Hamilton Way/ Maidenwell Ave Junction

	Maidenwell Ave NE		Preston Rise		Maidenwell Avenue SW		Tesco Access	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
AM Peak								
2016 AM Peak – No Development	0.26	0	0.30	0	0.26	0	0.17	0
2016 AM Peak – With Development	0.26	0	0.44	1	0.29	0	0.18	0
2026 AM Peak – No Development	0.25	0	0.30	0	0.26	0	0.16	0
2026 AM Peak - With Development	0.26	0	0.31	0	0.25	0	0.16	0
PM Peak								

	Maidenwell Ave NE		Preston Rise		Maidenwell Avenue SW		Tesco Access	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q
2016 PM Peak – No Development	0.19	0	0.17	0	0.37	1	0.33	1
2016 PM Peak – With Development	0.21	0	0.24	0	0.47	1	0.36	1
2026 PM Peak – No Development	0.19	0	0.18	0	0.37	1	0.30	0
2026 PM peak – With Development	0.20	0	0.18	0	0.37	1	0.31	1

Source: Junctions 9 Assessment

7.8 The results show that this junction operates within its design capacity and will be unaffected by the proposed development traffic flows.

Hungarton Boulevard/ Scraptoft Lane Junction

7.9 The Hungarton Boulevard / Scraptoft Lane junction is a four-arm signalised junction. This junction has been modelled using the LINSIG computer programme. The results are provided in the table below.

Table 7.3 Assessment of the Hungarton Boulevard/ Scraptoft Lane Junction

	Hungarton Boulevard		Scraptoft Lane (East)		Colchester Road		Scraptoft Lane (West)		PRC
	Deg of Sat	MMQ	Deg of Sat	MMQ	Deg of Sat	MMQ	Deg of Sat	MMQ	
AM Peak									
2016 AM Peak – No Development	92.0%	21	91.7%	19	79.3%	15	45.0%	7	-2.4
2016 AM Peak – With Development	112.6%	56	98.0%	66	96.9%	22	43.6%	8	-25.1
2026 LLITM AM Peak – No Development	80.6%	17	81.2%	12	79.5%	13	52.5%	7	10.9
2026 AM Peak - With Development	97.5%	26	98.4%	29	98.1%	15	46.0%	7	-9.4
PM Peak									
2016 PM Peak – No Development	87.5%	21	71.4%	10	74.3%	15	85.1%	15	2.8
2016 PM Peak – With Development	101.1%	34	71.4%	13	84.7%	17	98.1%	28	-12.3

	Hungarton Boulevard		Scraptoft Lane (East)		Colchester Road		Scraptoft Lane (West)		PRC
	Deg of Sat	MMQ	Deg of Sat	MMQ	Deg of Sat	MMQ	Deg of Sat	MMQ	
2026 LLITM PM Peak – No Development	78.7%	18	70.2%	8	92.7%	26	91.9%	14	-3.0
2026 PM peak – With Development	97.7%	26	97.4%	26	78.2%	14	44.3%	7	-8.6

Source: LINSIG Assessment

7.10 The results show that with the proposed development traffic, there is likely to be some reduction in capacity at this junction, however there is sufficient highway land available at this junction and on the approach to provide improvements that would mitigate the developments impact.

7.11 As with the Hamilton Way junction, the LLITM movements show a reduction in traffic flows through this junction when compared to the 2016 base by around 200 vehicles in the AM Peak and around 400 vehicles in the PM Peak, although the modelling in the PM Peak is not showing the benefits of this reduction in vehicle flow.

Uppingham Road/ Station Road Junction

7.12 The A47 Uppingham Road/ Station Road junction is a three-arm signalised junction. This junction has been modelled using the LINSIG computer programme. The results are provided in the table below.

Table 7.4 Assessment of the Uppingham Road/ Station Road Junction

	A47 Uppingham Road (West)		Station Road		A47 Uppingham Road (East)		PRC
	Deg of Sat	MMQ	Deg of Sat	MMQ	Deg of Sat	MMQ	
AM Peak							
2016 AM Peak – No Development	88.8%	21	90.2%	14	77.9%	18	-0.2
2016 AM Peak – With Development	91.6%	23	92.1%	16	79.8%	18	-2.3
2026 LLITM AM Peak – No Development	73.3%	13	74.2%	11	35.0%	4	21.2
2026 LLITM AM Peak - With Development	76.0%	14	76.3%	11	36.1%	4	17.9
PM Peak							
2015 PM Peak – No Development	86.8%	23	86.7%	9	57.4%	6	4

	A47 Uppingham Road (West)		Station Road		A47 Uppingham Road (East)		PRC
	Deg of Sat	MMQ	Deg of Sat	MMQ	Deg of Sat	MMQ	
AM Peak							
2015 PM Peak – With Development	88.5%	24	89.4%	10	65.8%	7	0.6
2026 PM Peak – No Development	60.0%	10	60.6%	7	27.0%	3	48.5
2026 PM peak – With Development	62.2%	11	62.6%	7	28.7%	3	43.8

Source: LINSIG Assessment

7.13 The above results for the Base 2016 scenario reflect the observed queues recorded as part of the traffic surveys. The analysis with the development traffic in this design year shows no material change to the operation of this junction.

7.14 The LLITM flows show a significant reduction in the volume of traffic passing through this junction of around 600 vehicles in the AM Peak and around 400 in the PM Peak. As such the results above show a greater improvement to the operation of this junction.

7.15 Clearly, there will need to be a more detailed assessment of the predicted levels of traffic through this junction given the disparity of the levels of flow when comparing the LLITM data with the measured flows. However, what is clear is that the level of impact of the development on this junction is not considered to be material and certainly not severe.

7.16 Opportunities do exist at this junction to improve the overall performance of the junction and this will be considered in more detailed as part of the more comprehensive level of assessment of the scheme.

Summary

7.17 Data has been obtained from LCC to consider the effect of the development on the flows established from the LLITM model that includes the NEL SUE at Thurmaston. A comparison of the flows indicates that the LLITM model is understating the baseline flows within the local area.

7.18 However, the analysis of the local strategic network shows no material impact as a result of the proposed development traffic that cannot be mitigated by localised improvements at the key junctions. In addition, the review of the LLITM data requested by LCC shows a reduction in the movements of traffic along this corridor when compared to the surveyed 2016 flows. On the basis of the work provided in this report it is evident that the development of circa 1,200 dwellings in this location will not have a 'severe' impact on the local highway network.

8 CONCLUSIONS

Introduction

8.1 This report has been prepared to provide an initial assessment of the impacts of the development on the local and strategic road network within the vicinity of the site. This is the first stage in a process to demonstrate that the development can provide sufficient mitigation measures to offset the impact of the development.

8.2 The report demonstrates that the location of the development provides a sustainable location for development where the opportunities for sustainable travel can be maximised. Furthermore, it is considered that this initial assessment demonstrates that the development will not result in a residual cumulative impact that is considered to be severe.

Summary

8.3 This report demonstrates that the site is an accessible location, the access arrangement accords to the relevant design standards, and demonstrates that the development will not have a material impact on the local road network in accordance with the relevant planning policies.

8.4 The development location is very well placed to benefit from access to local facilities via sustainable modes of travel. Beyond the immediate site, access to the city centre is readily achieved by bus or on cycle.

8.5 The traffic counts demonstrate levels of traffic are within the operational capacity of the various links with the issue of capacity only likely to affect the peak-hour operation of some junctions.

8.6 In relation to the 6C's Guidance, it is considered that the development accords with the various requirements of the Guidance in the context of the spatial proximity to the key facilities.

8.7 It is considered that the effect of the development traffic can be mitigated by measures within the local highway network. In addition, these measures provide benefits to the local network re-routing traffic away from Scraptoft.

8.8 These improvement measures provide:-

- Formalised parking bays on key routes, including New Romney Crescent and Keyham Lane West.
- Create an appropriate level of carriageway width to maintain the flow of traffic on the key routes.
- Deter traffic using Hamilton Lane as an outer bypass route.
- Reduce the attractiveness for traffic travelling through Scraptoft and offer alternative routing to such traffic.
- Provide enhances areas around the school entrances to improve the safety of those accessing the schools.

- Provide a key link between Beeby Lane and Hamilton Lane to reroute traffic from the centre of Scraptoft.
- Improve the operational capacity of the Covert lane / Station Lane mini roundabout.

8.9 The initial assessment work undertaken on the Strategic Road Network concludes that the proposed development traffic will not materially affect the operation of the junctions on the local strategic network.

8.10 In summary, it is considered that subject to the detailed assessment of the various junctions, the development of the site offers the opportunity to accommodate in the region of 1,200 dwellings in a sustainable location where measures can be provided to address existing transport issues to ensure the residual cumulative impact of the development is not severe.

8.11 The development also provides measures that allow the broader network and committed developments to benefit from the infrastructure provided by the development. Finally the report identifies that safe and suitable access can be provided to the development.

Next Steps

8.12 To progress the development and the assessment of the development impact on the local highway network it is considered that a number of further matters will need to be addressed. These include:-

8.13 An assessment of the development within the LLITM model. Given the discrepancies in the model flows and the measured flows, it is considered that the LLITM model needs to be reviewed within the local area and an assessment undertaken to consider the cumulative effect of the development with other committed schemes. This would be undertaken by LCC in liaison with the Leicester City Council.

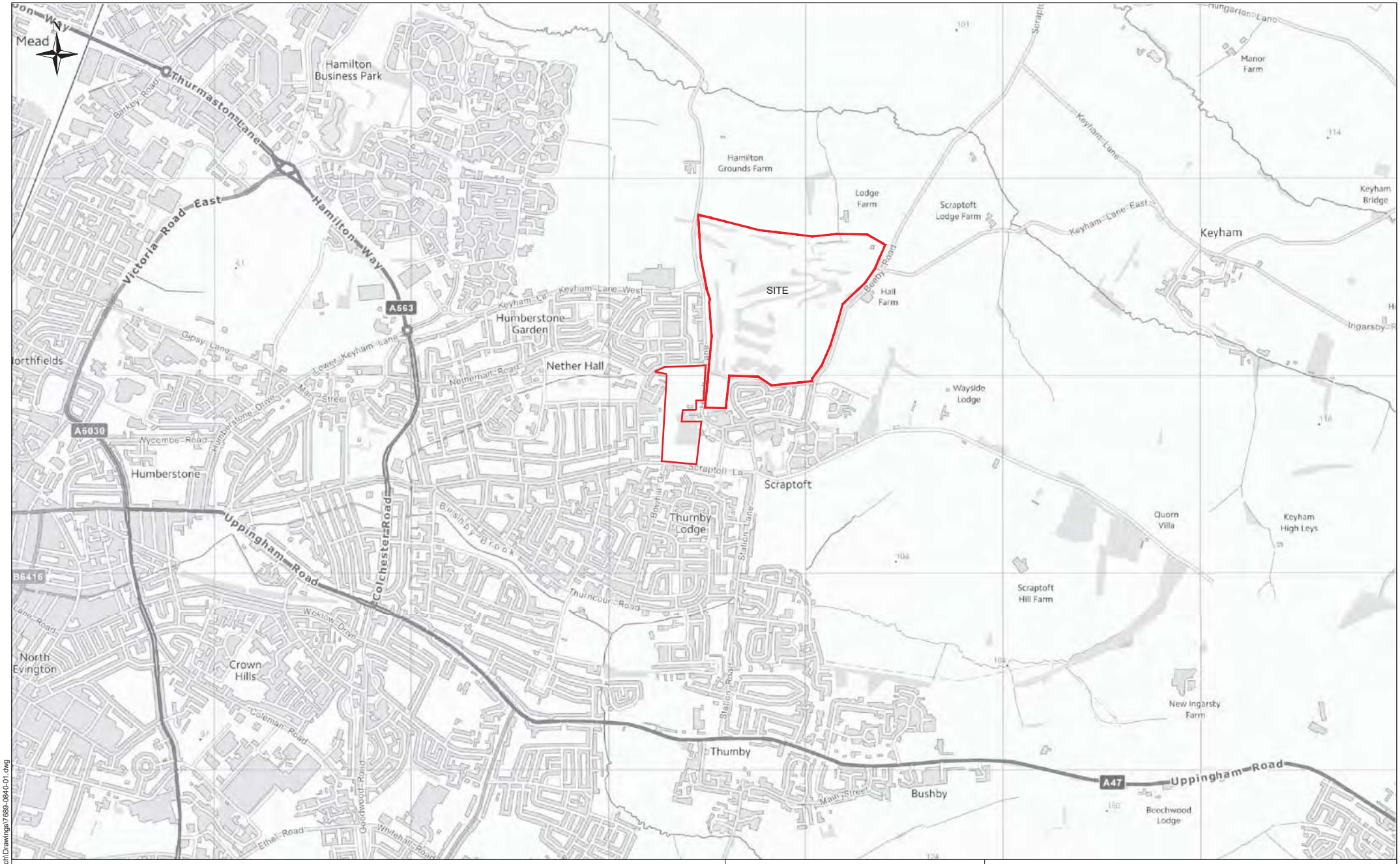
8.14 Phasing of the development will be considered as part of the more detailed Transport Assessment work. This will need to ensure the appropriate mitigation is provided in combination with the phasing of the development.

8.15 Liaison with Highways England will be required to demonstrate that the development will not impact on the Highways England network.

8.16 Further liaison with LCC and LCityC over the parameters considered within this report and the assessment of the study area, to be able to inform a more detailed appraisal.

8.17 Subject to the above, it will then be necessary to consider the assessment of the development in more detail drawing on the further assessment of the scheme within the LLITM model.

FIGURES



O:\7689 Newbury Tech Support\Tech\Drawings\7689-0840-01.dwg

RPS

Date: MAY 2016	Scale: 1:25,000	Rev: -
Drwg. No: JNY8843	Drawn: AVG	Checked: WA

Project:
SCRAPTOFT

Title:
SITE LOCATION PLAN

Figure No:
1

Transport

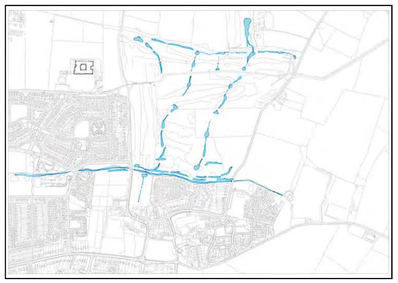
APPENDICES

APPENDIX A – INIDICATIVE MASTER PLAN

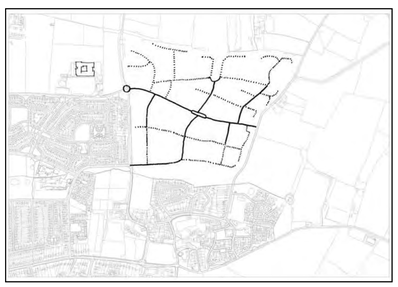
Scraptoft North - Concept Plan

Boundaries

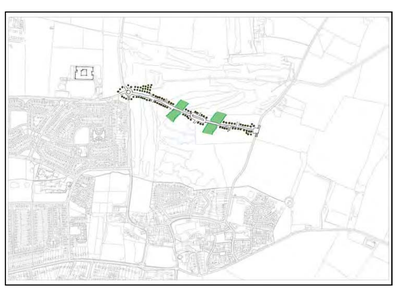
Parks



Water Systems



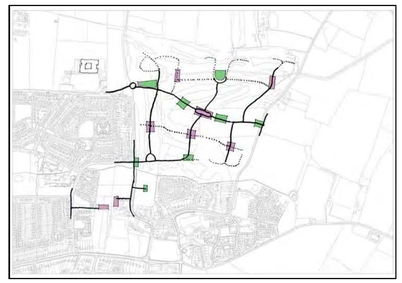
Circulation



The Main Street

Housing

School & Recreation

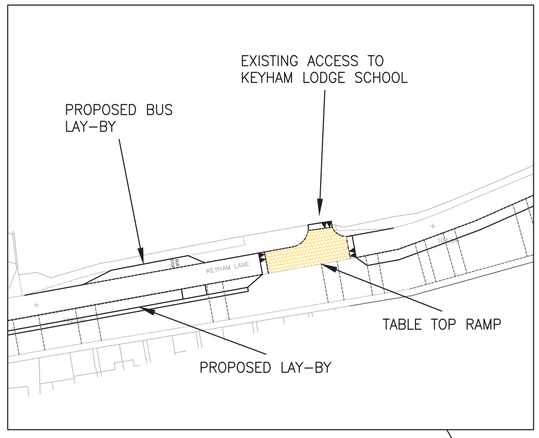


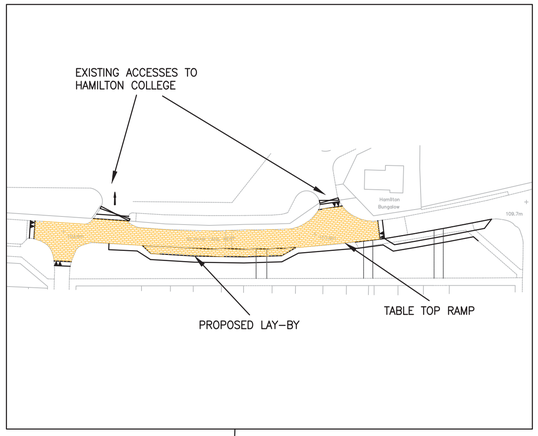
Places

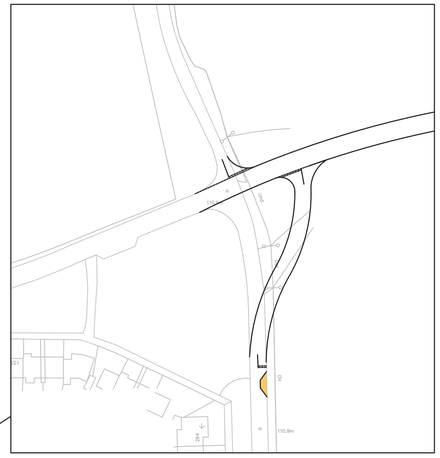
Grain

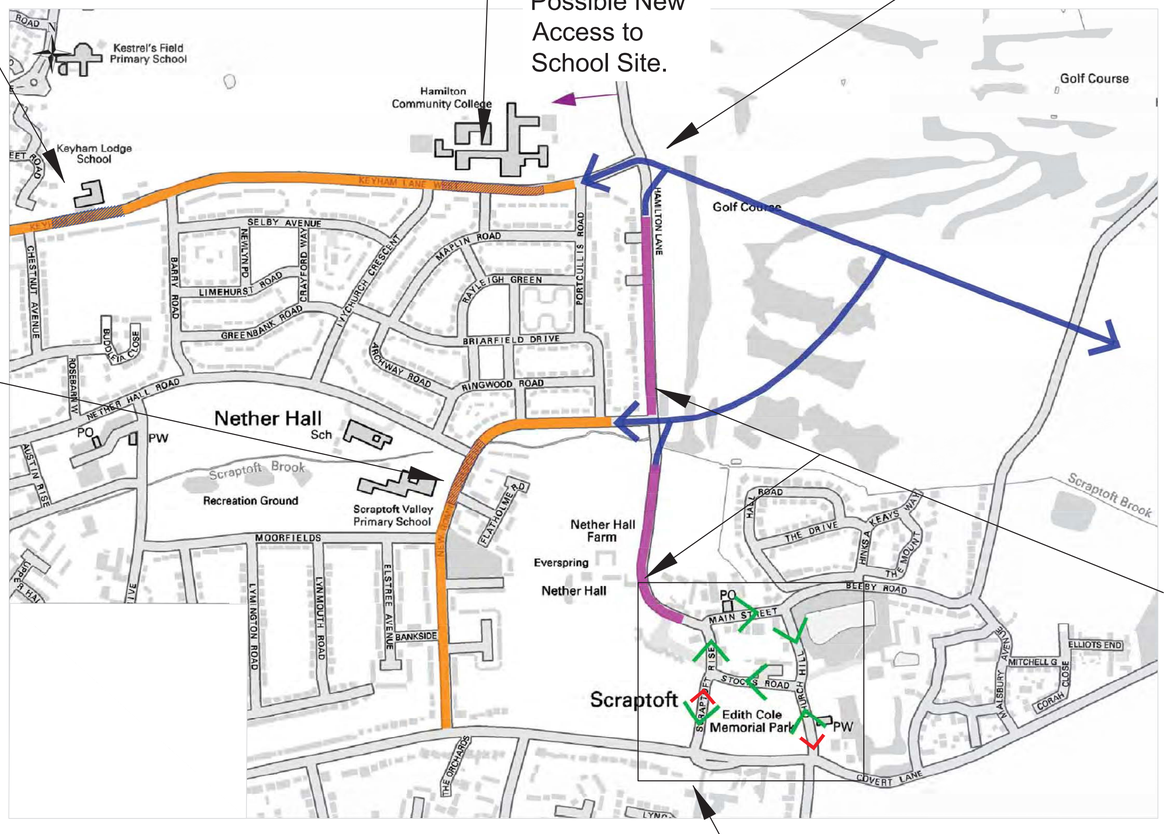
Future Phase

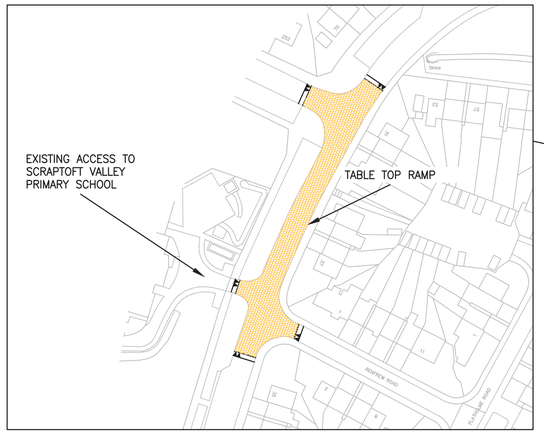
APPENDIX B – SITE ACCESS ARRANGEMENTS AND HIGHWAY IMPROVEMENTS

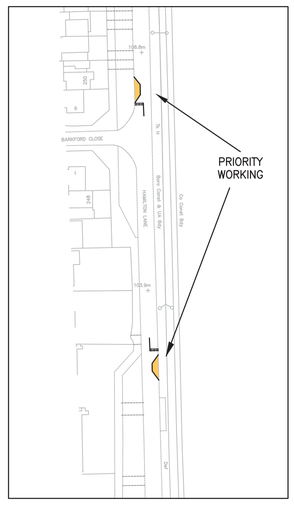












Details of proposed changes to one-way system are provided on Drawing No. JNY8843 - 02

NOTES

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used. DO NOT SCALE.

Key:

- Proposed Highway improvements
- Proposed Traffic Calming Measures
- Potential Link to future development areas
- Possible changes to one way system
- Existing one-way system

Rev	Description	Date	Initial	Checked

RPS

140 London Wall
London, EC2Y 5DN
T: +44(0)20 7280 3300 E: transport@rpsgroup.com

Client: Parkers of Leicester

Project: Scraptoft

Title: Proposed Access and off Site proposals

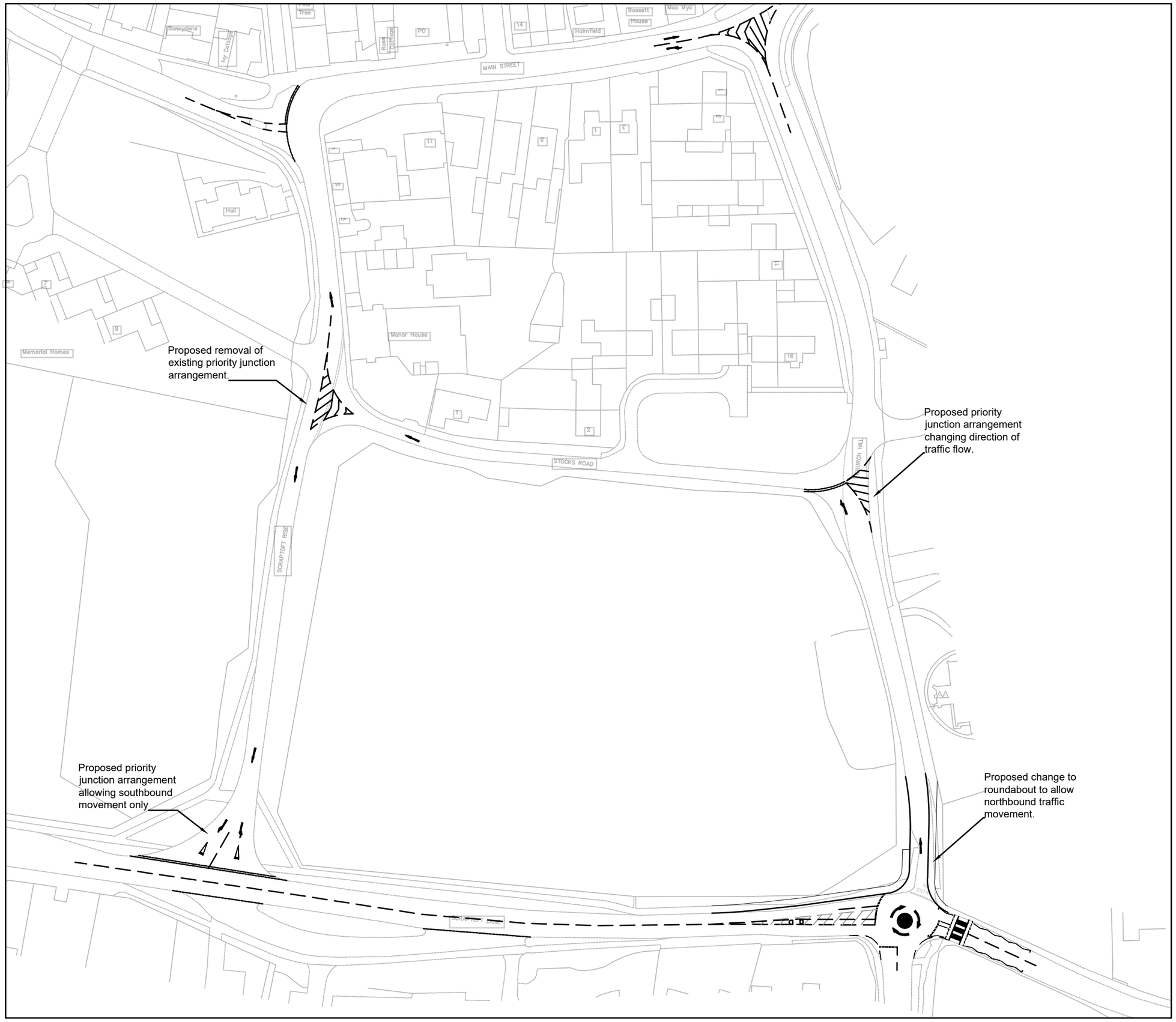
Status	Drawn By	Checked by
	MRA	BRP
Project Number	Scale @ A1	Date Created
BRP	1:1000 Insert plans	20.05.16

Drawing Number: JNY8843 - 01

Rev:

rpsgroup.com

APPENDIX C – CHANGES TO THE TRAFFIC ARRANGEMENTS WITHIN SCRAPTOFT



NOTES

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used. DO NOT SCALE.

Rev	Description	Date	Initial	Checked
A	Amendments made to mini roundabout	09/06/16	MRA	BRP

RPS

140 London Wall
London, EC2Y 5DN

T: +44(0)20 7280 3300 E: transport@rpsgroup.com

Client: Parkers of Leicester

Project: Scraptoft

Title: Proposed changes to existing one-way system in Scraptoft

Status	Drawn By	Checked by
	MRA	BRP
Project Number	**Scale @ A3**	**Date Created**
JNY8843	1:1000	02/06/2016

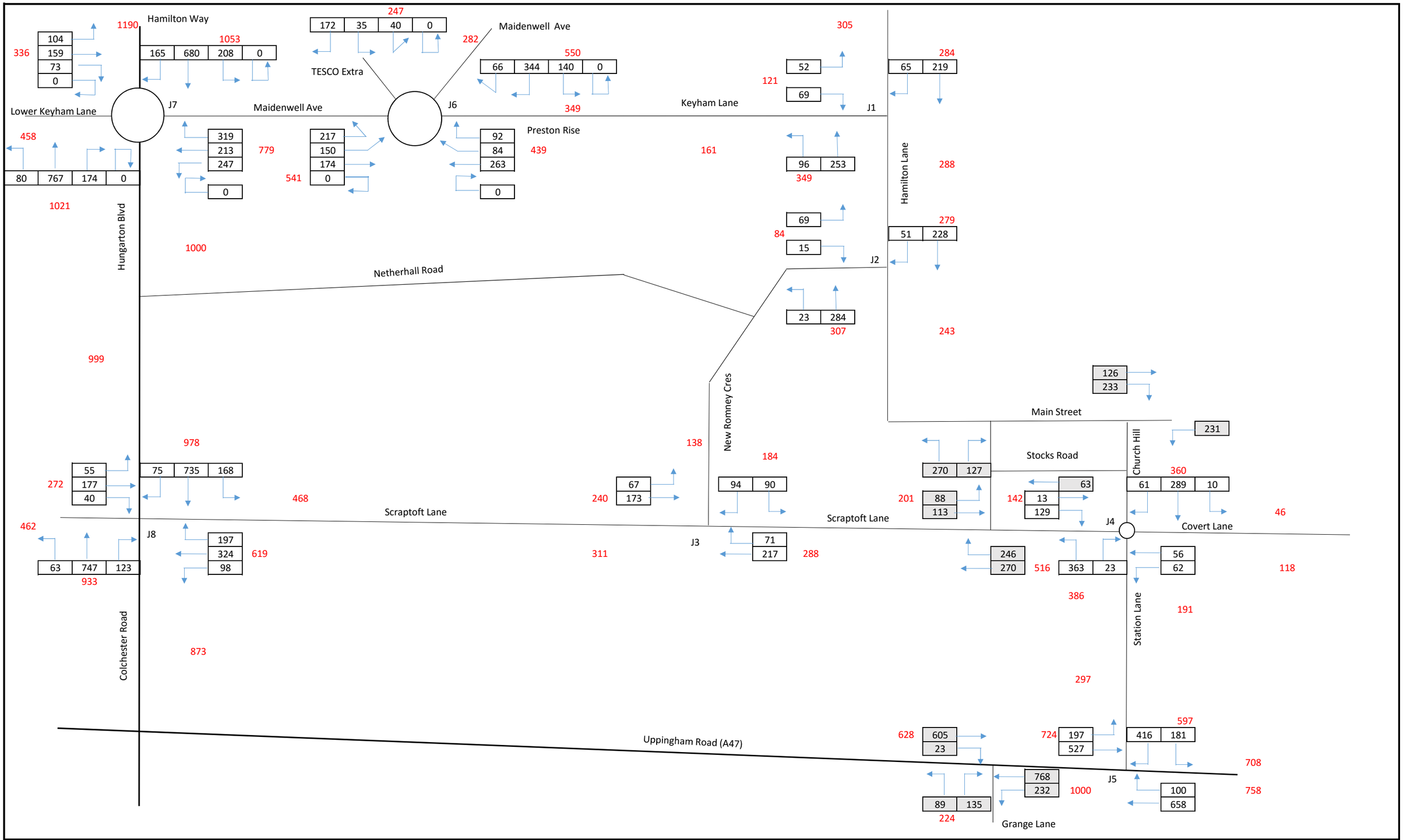
Drawing Number: JNY8843 - 02

Rev: A

rpsgroup.com

Drawing Ref: P:\JNY8843 - SCRAPTOFT, LEICESTERSHIRE\HIGHWAYS\DRAWINGS\JNY8843-02A SCRAPTOFT.DWG Plotted Date: 6/9/2016 3:19 PM

APPENDIX D – TRAFFIC FLOW DATA



RPS

13th April 2016 Surveys

WYG 2015 Traffic Flows

Project Name: Scraptoft

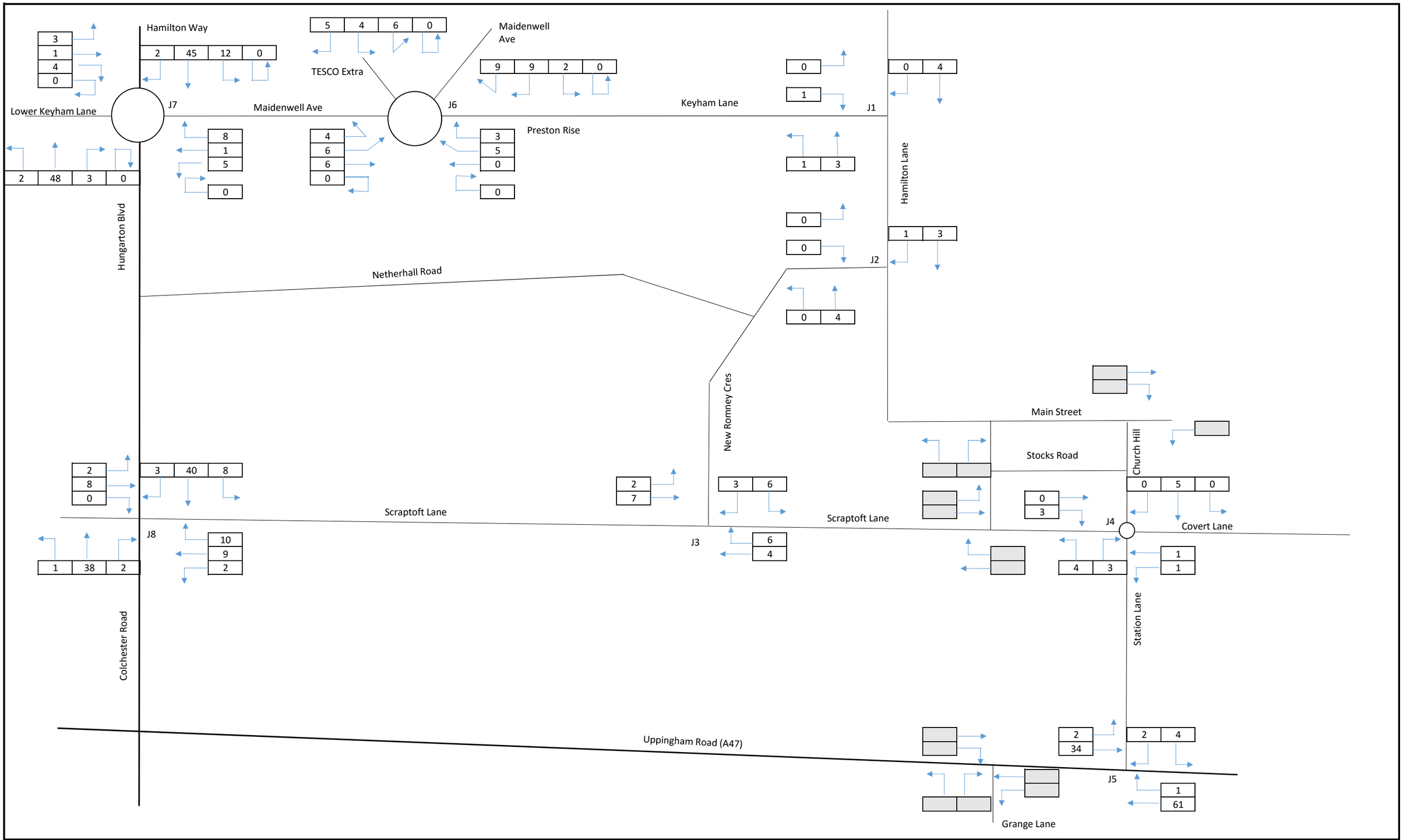
Project Number: JNY8843

Base Traffic Flows

AM PEAK (08:00 - 09:00)

All Vehicles

FIGURE 01



13th April 2016 Surveys

WYG 2015 Traffic Flows

Project Name: Scraptoft

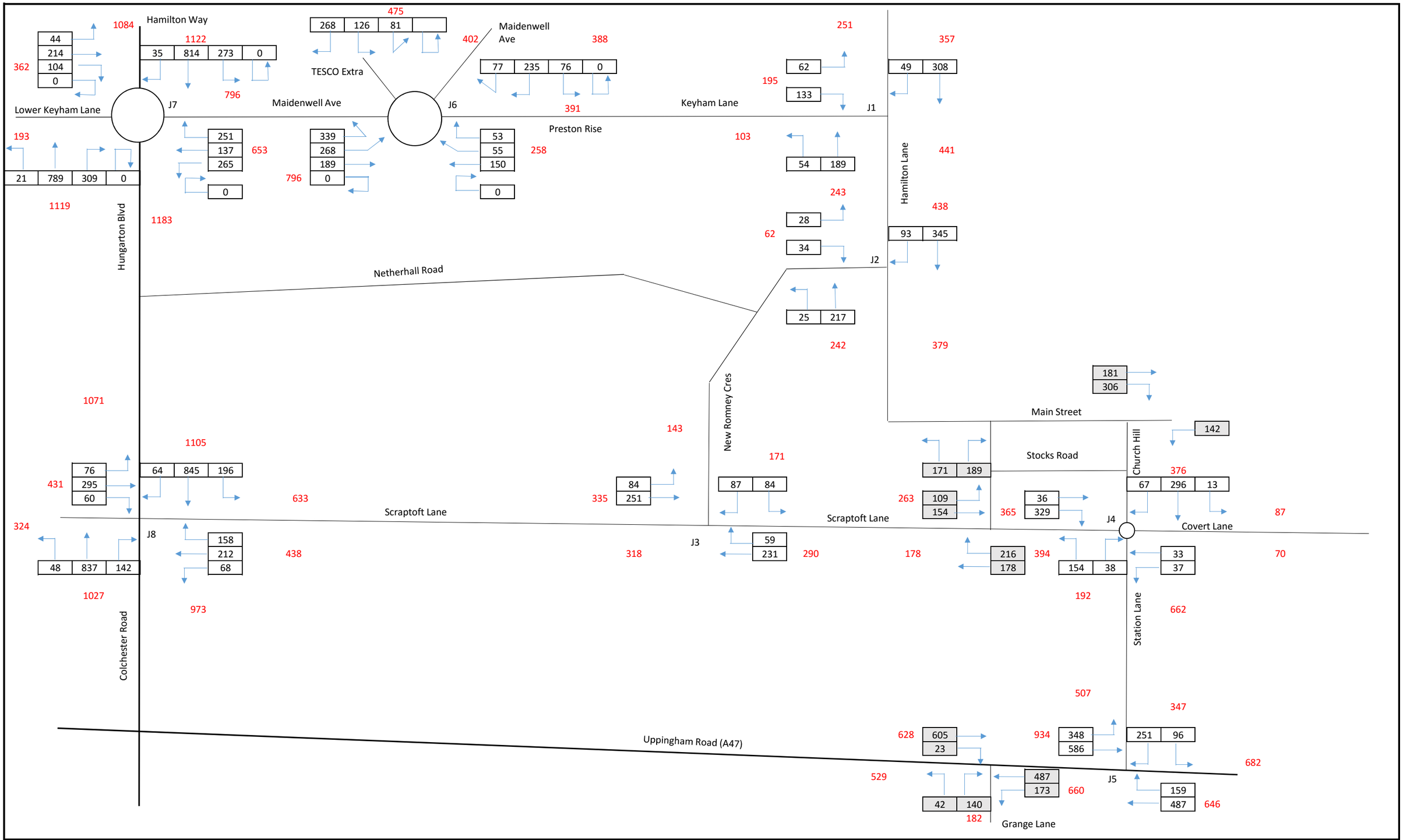
Project Number: JNY8843

Base Traffic Flows

AM PEAK (08:00 - 09:00)

HGV's

FIGURE 02



RPS

13th April 2016 Surveys

WYG 2015 Traffic Flows

Project Name: Scraptoft

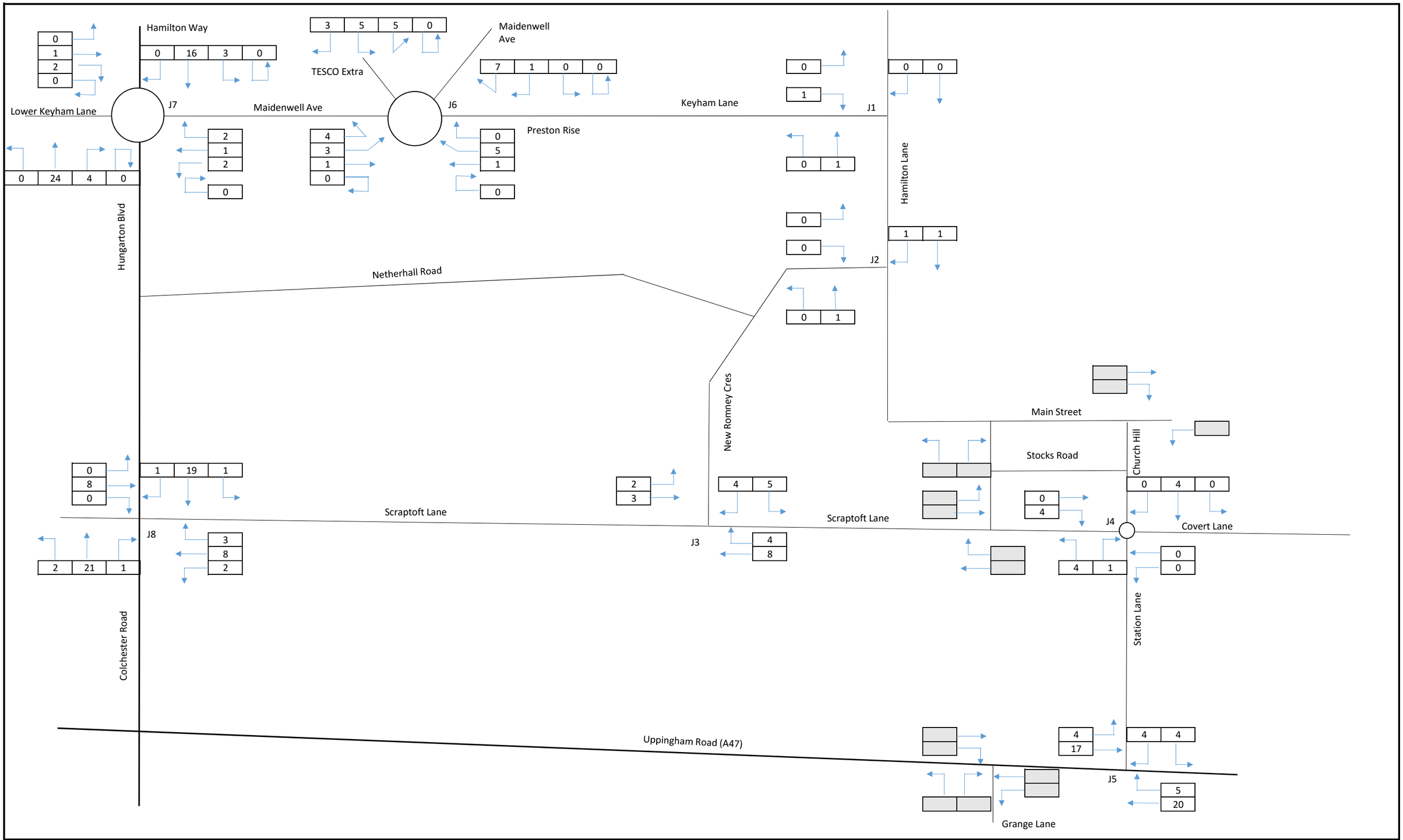
Project Number: JNY8843

Base Traffic Flows

PM PEAK (17:00 - 18:00)

All Vehicles

FIGURE 03



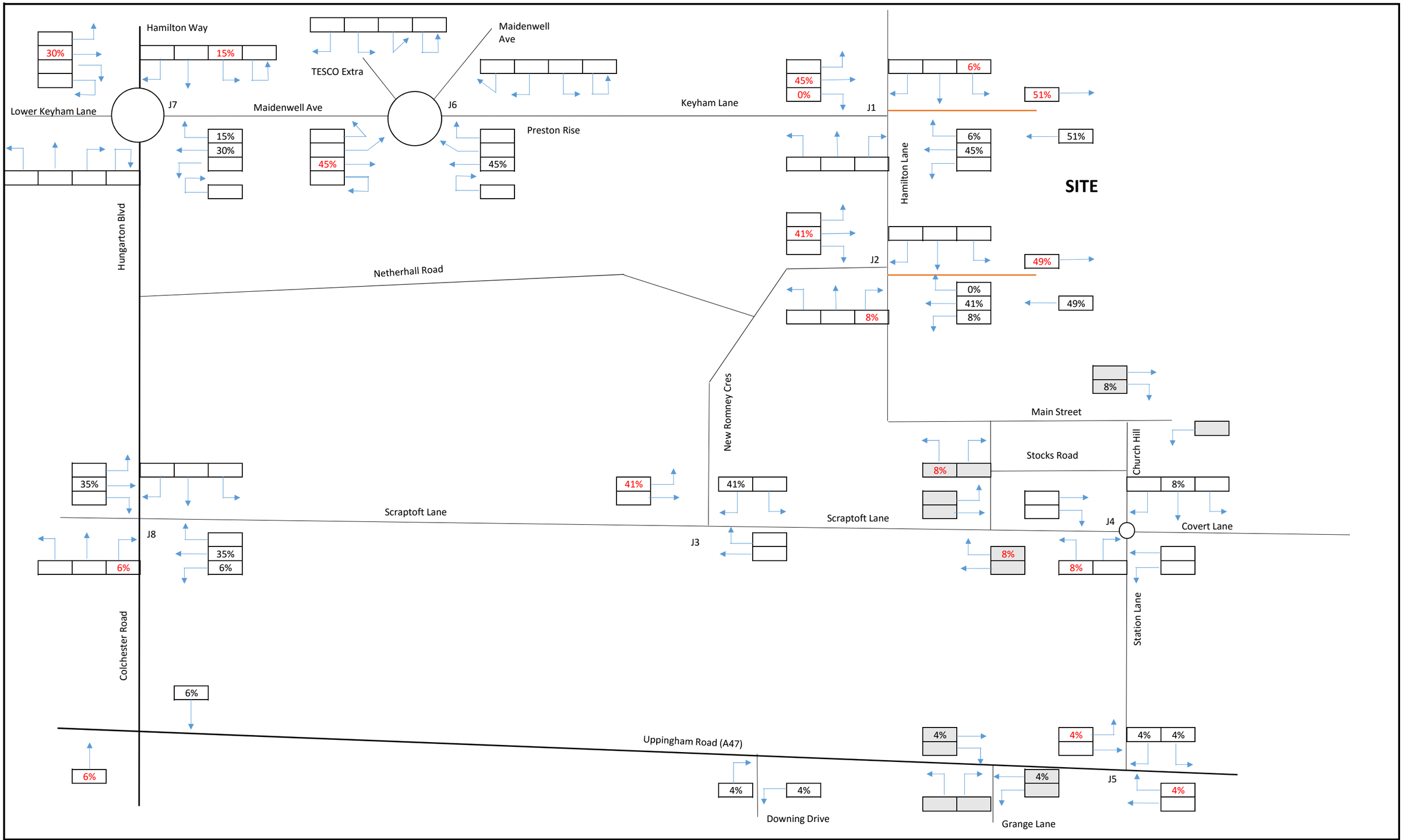
RPS

13th April 2016 Surveys
WYG 2015 Traffic Flows

Project Name: Scraptoft
Project Number: JNY8843

Base Traffic Flows
AM PEAK (08:00 - 09:00)
HGV's
FIGURE 04

APPENDIX E – TRAFFIC DISTRIBUTION PLAN



RPS

13th April 2016 Surveys

WYG 2015 Traffic Flows

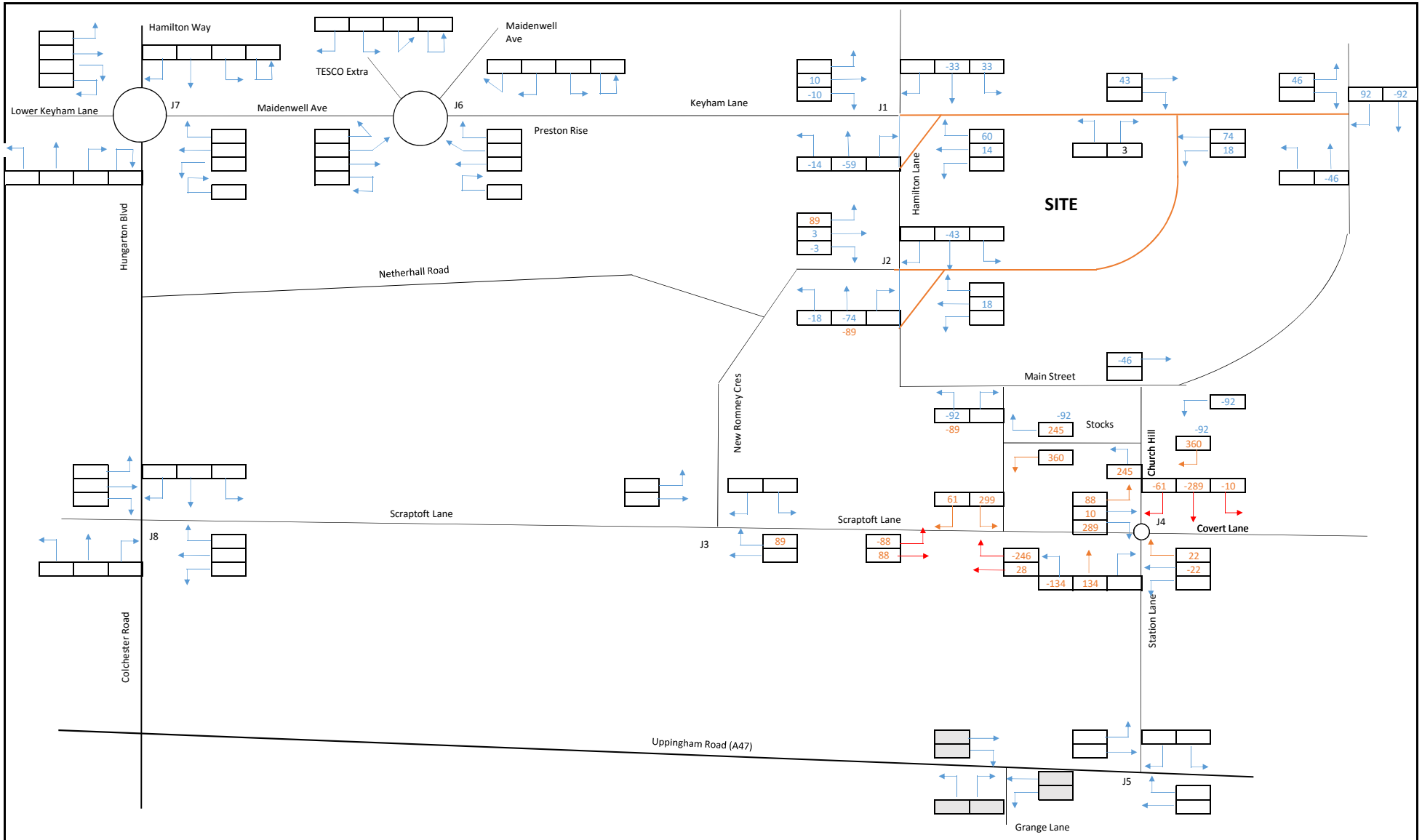
Project Name: Scraptoft

Project Number: JNY8843

Proposed Dev Traffic Distribution

FIGURE 11

APPENDIX F – PROPOSED TRAFFIC FLOW DATA

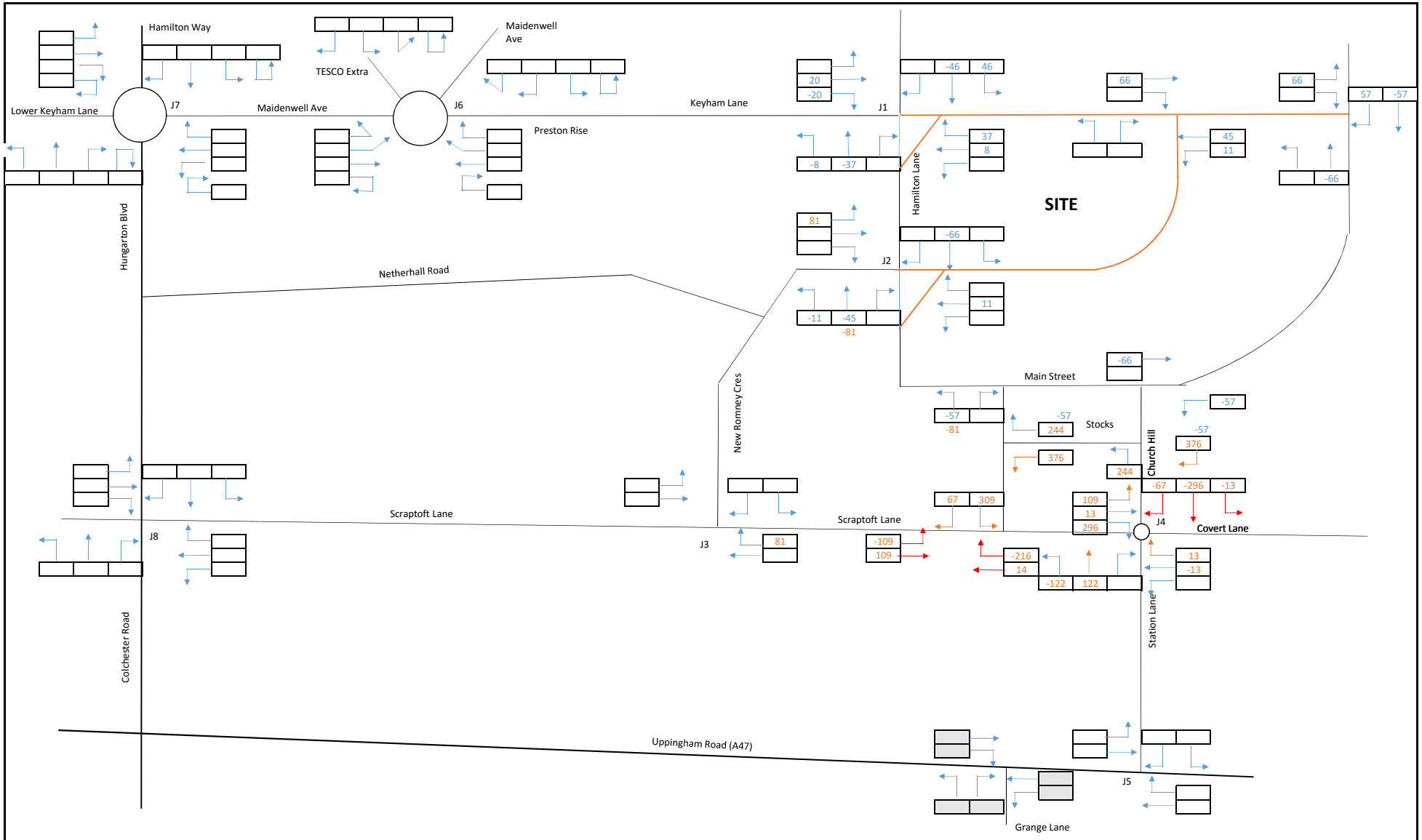


RPS

13th April 2016 Surveys
WYG 2015 Traffic Flows

Project Name: Scraptoft
Project Number: JNY8843

Redistributed Base Traffic Flows
AM PEAK (08:00 - 09:00)
All Vehicles
FIGURE 05

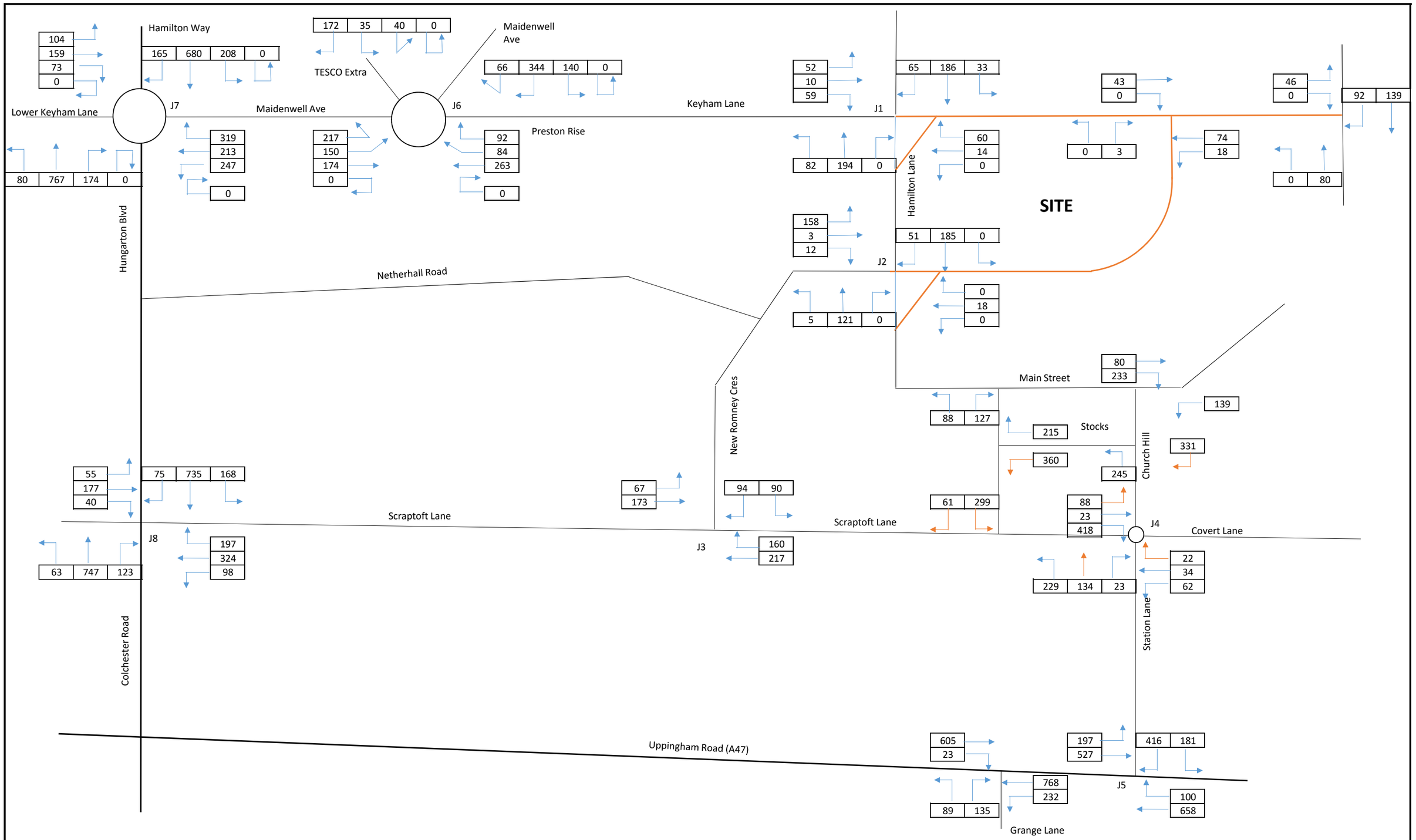


RPS

13th April 2016 Surveys
WYG 2015 Traffic Flows

Project NPMe: Scraptoft
Project Number: JNY8843

Redistributed Base Traffic Flows
PM PEAK (08:00 - 09:00)
All Vehicles
FIGURE 06



RPS

13th April 2016 Surveys

WYG 2015 Traffic Flows

Project Name: Scraptoft

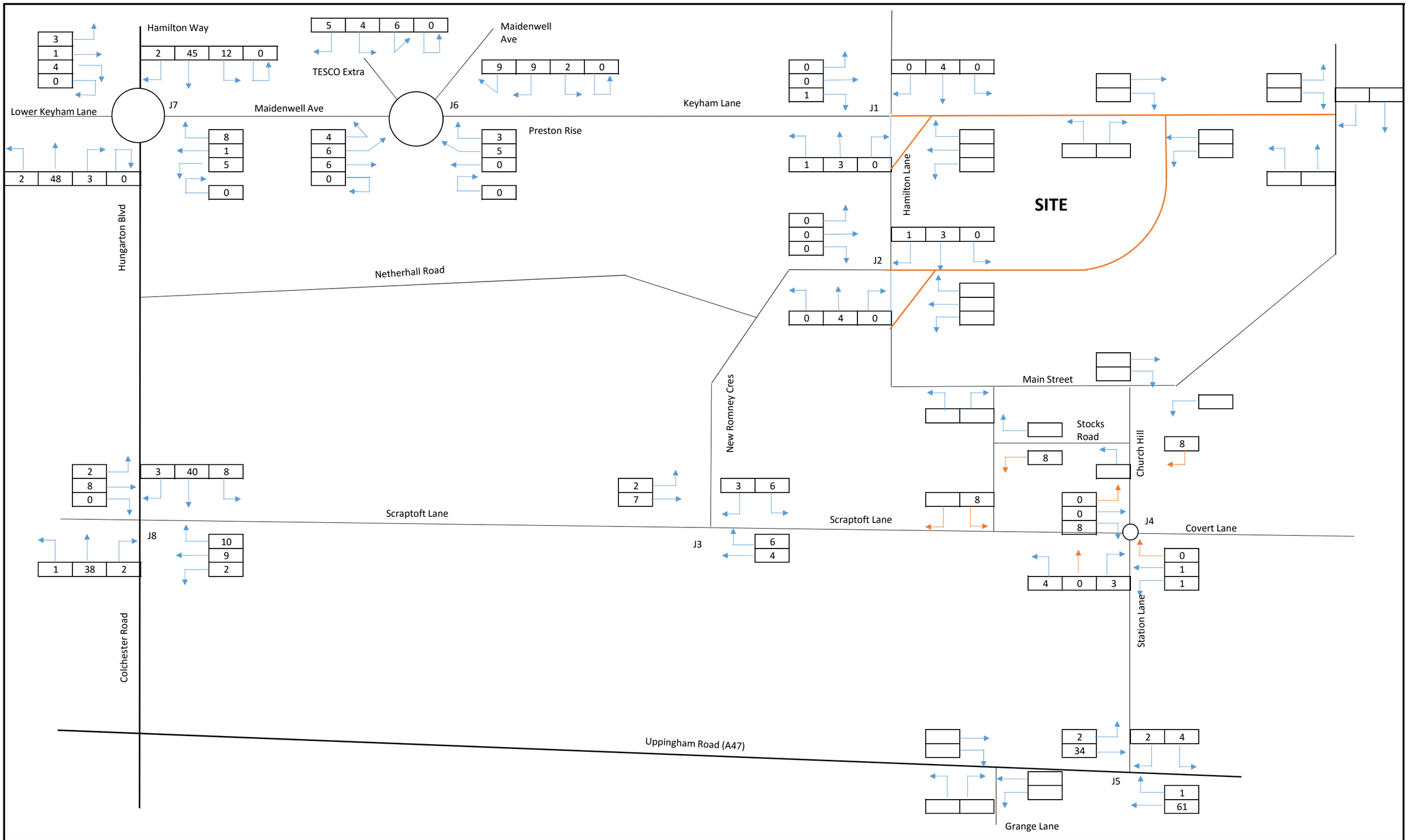
Project Number: JNY8843

Re-Distributed Base Traffic Flows

AM PEAK (08:00 - 09:00)

All Vehicles

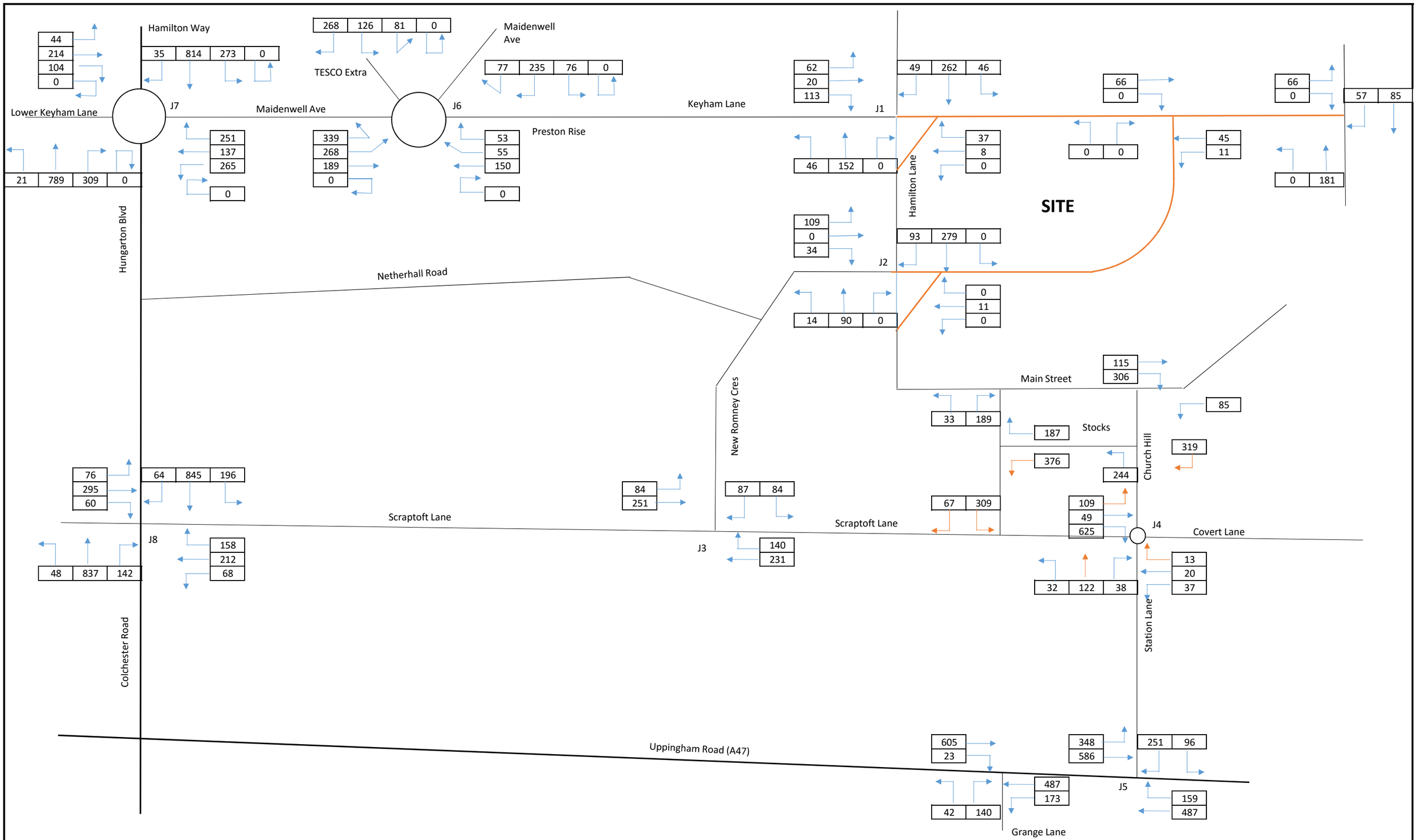
FIGURE 07



13th April 2016 Surveys
WYG 2015 Traffic Flows

Project Name: Scraptoft
Project Number: JNY8843

Re-Distributed Base Traffic Flows
AM PEAK (08:00 - 09:00)
HGV's & Buses
FIGURE 08



RPS

13th April 2016 Surveys

WYG 2015 Traffic Flows

Project NPMe: Scraptoft

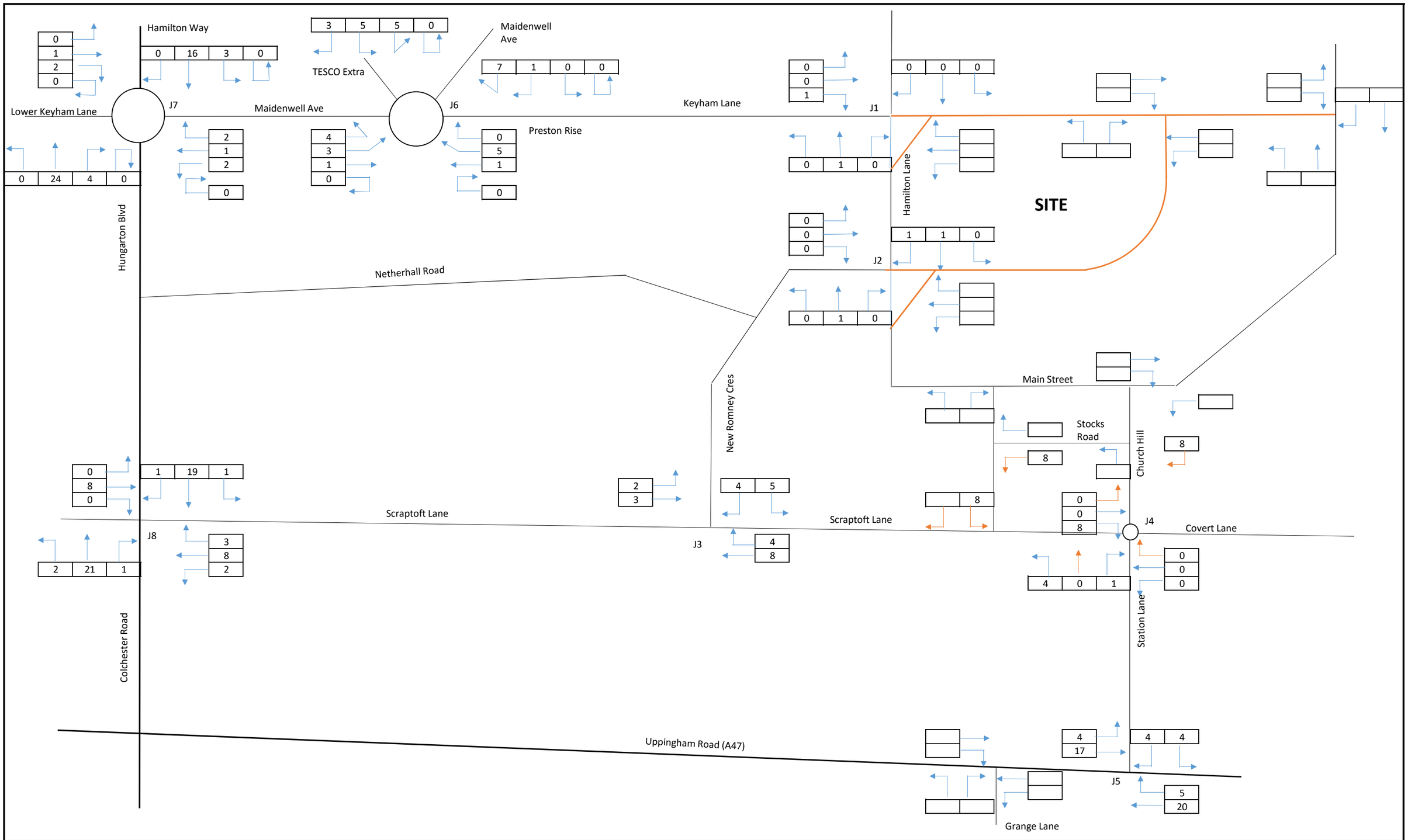
Project Number: JNY8843

Re-Distributed Base Traffic Flows

PM PEAK (17:00 - 18:00)

All Vehicles

FIGURE 09

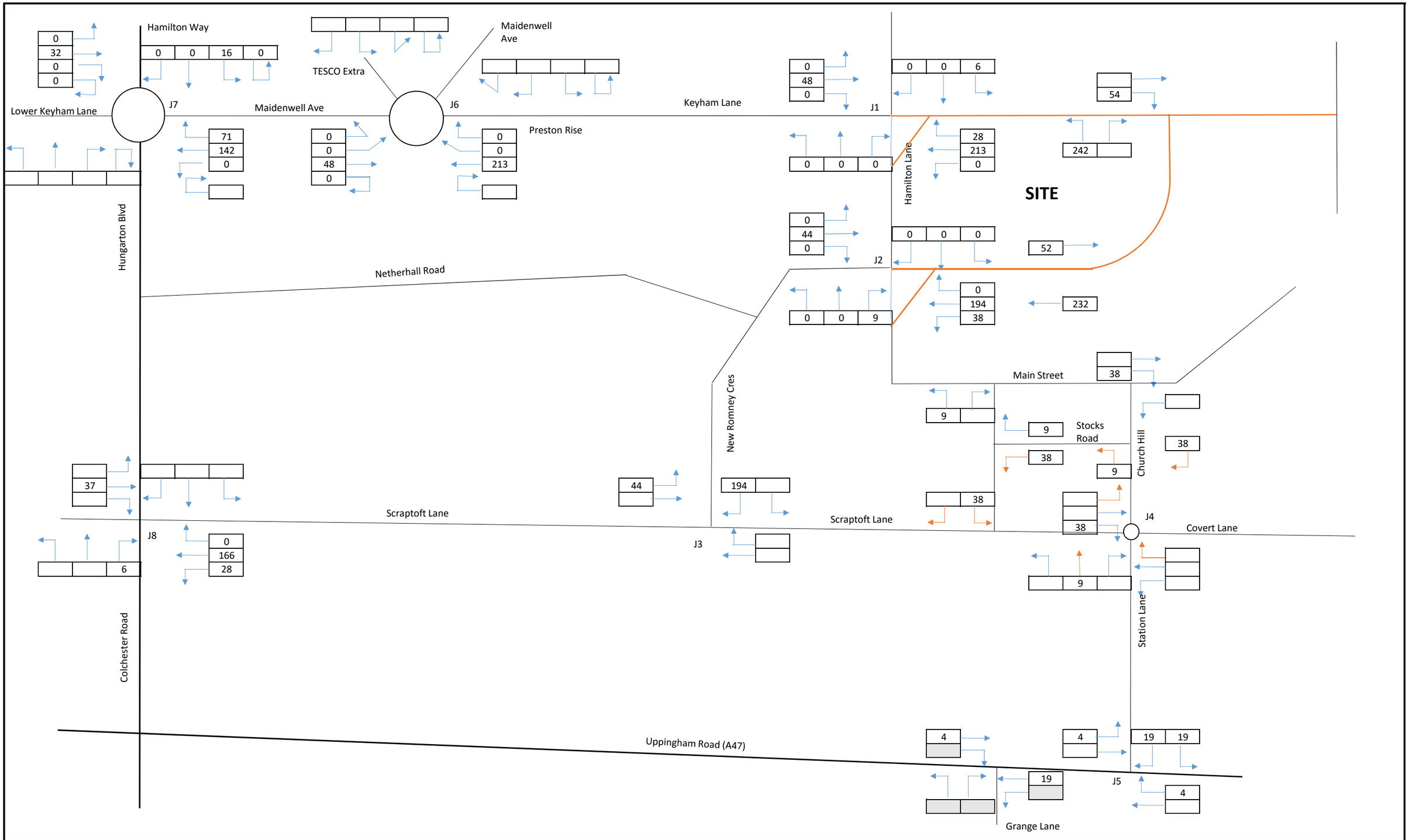


RPS

13th April 2016 Surveys
WYG 2015 Traffic Flows

Project NPMe: Scraptoft
Project Number: JNY8843

Re-Distributed Base Traffic Flows
PM PEAK (17:00 - 18:00)
HGV's & Buses
FIGURE 10

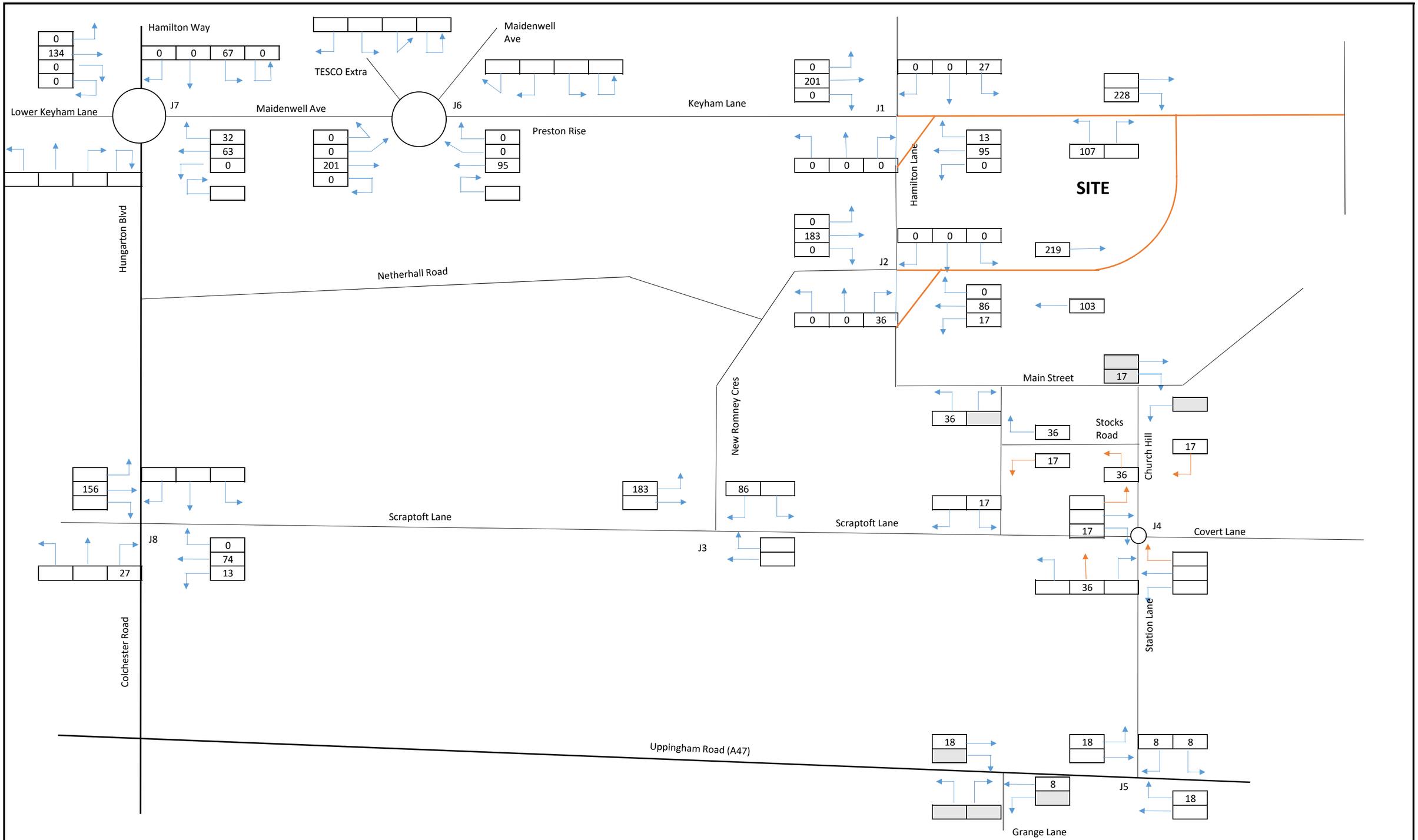


RPS

13th April 2016 Surveys
WYG 2015 Traffic Flows

Project Name: Scraptoft
Project Number: JNY8843

Proposed Development Flows
AM PEAK (08:00 - 09:00)
All Vehicles
FIGURE 12

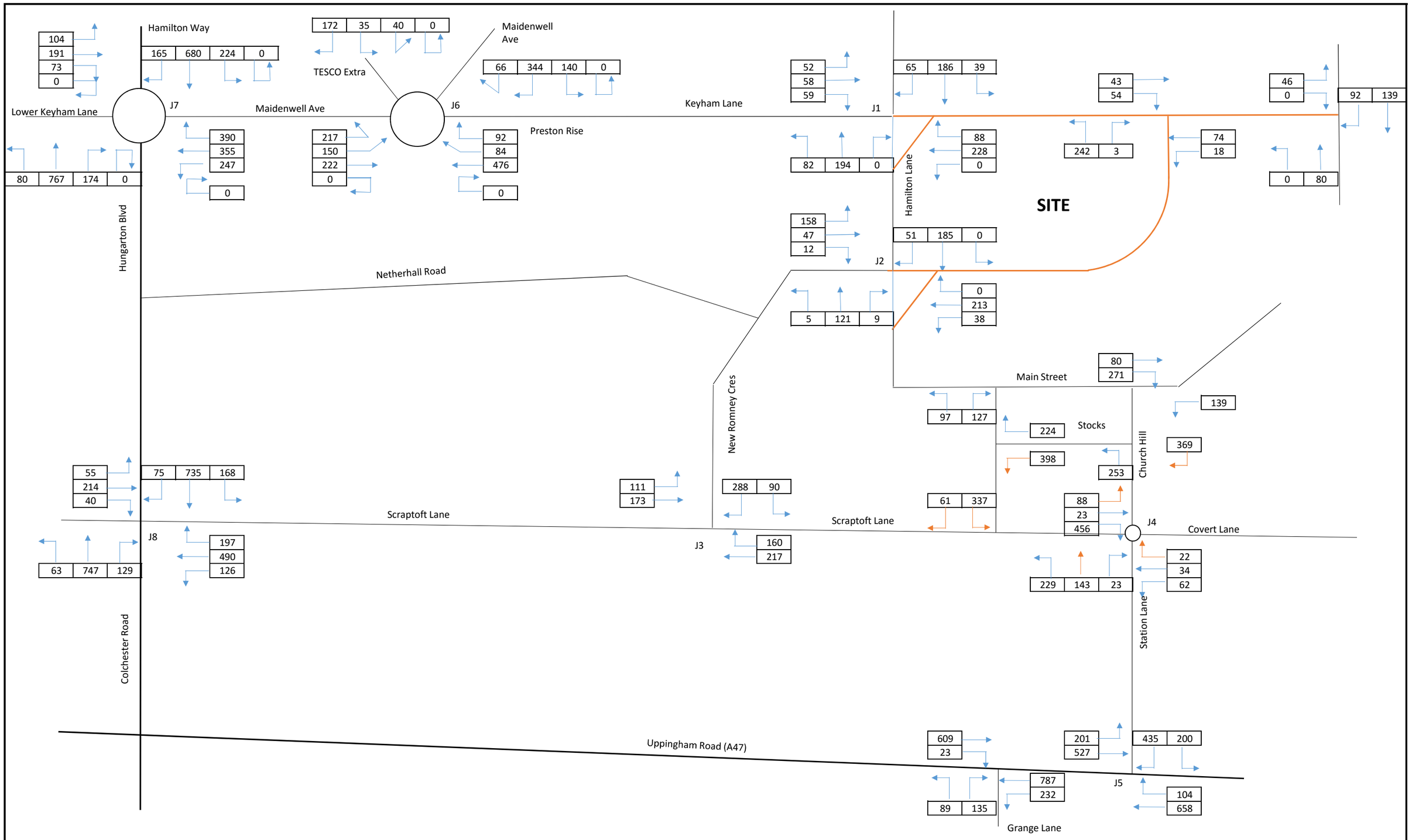


RPS

13th April 2016 Surveys
WYG 2015 Traffic Flows

Project Name: Scraptoft
Project Number: JNY8843

Proposed Development Flows
PM PEAK (17:00 - 18:00)
All Vehicles
FIGURE 13

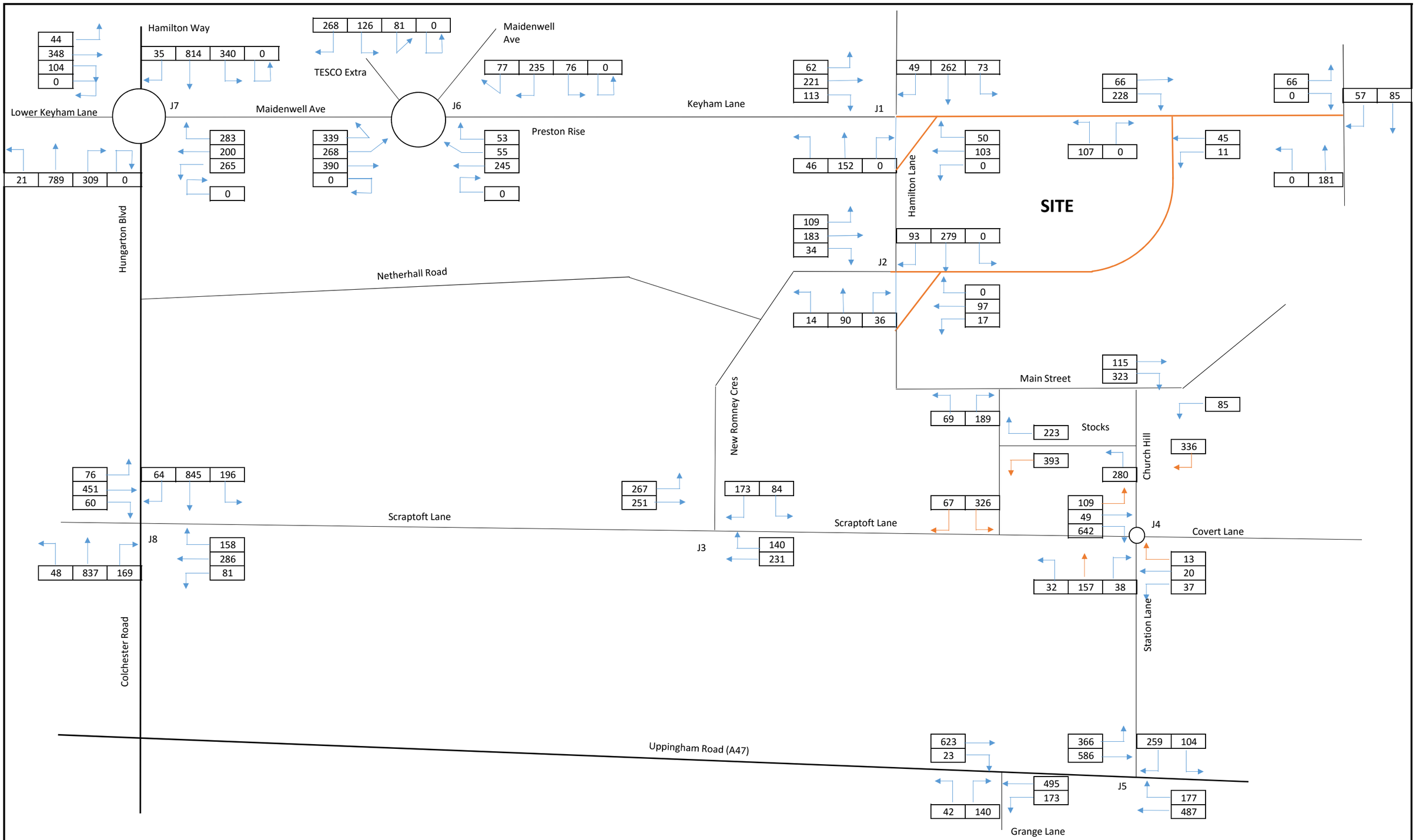


RPS

13th April 2016 Surveys
WYG 2015 Traffic Flows

Project Name: Scraptoft
Project Number: JNY8843

Re-Distributed Base + Dev
AM PEAK (08:00 - 09:00)
All Vehicles
FIGURE 14

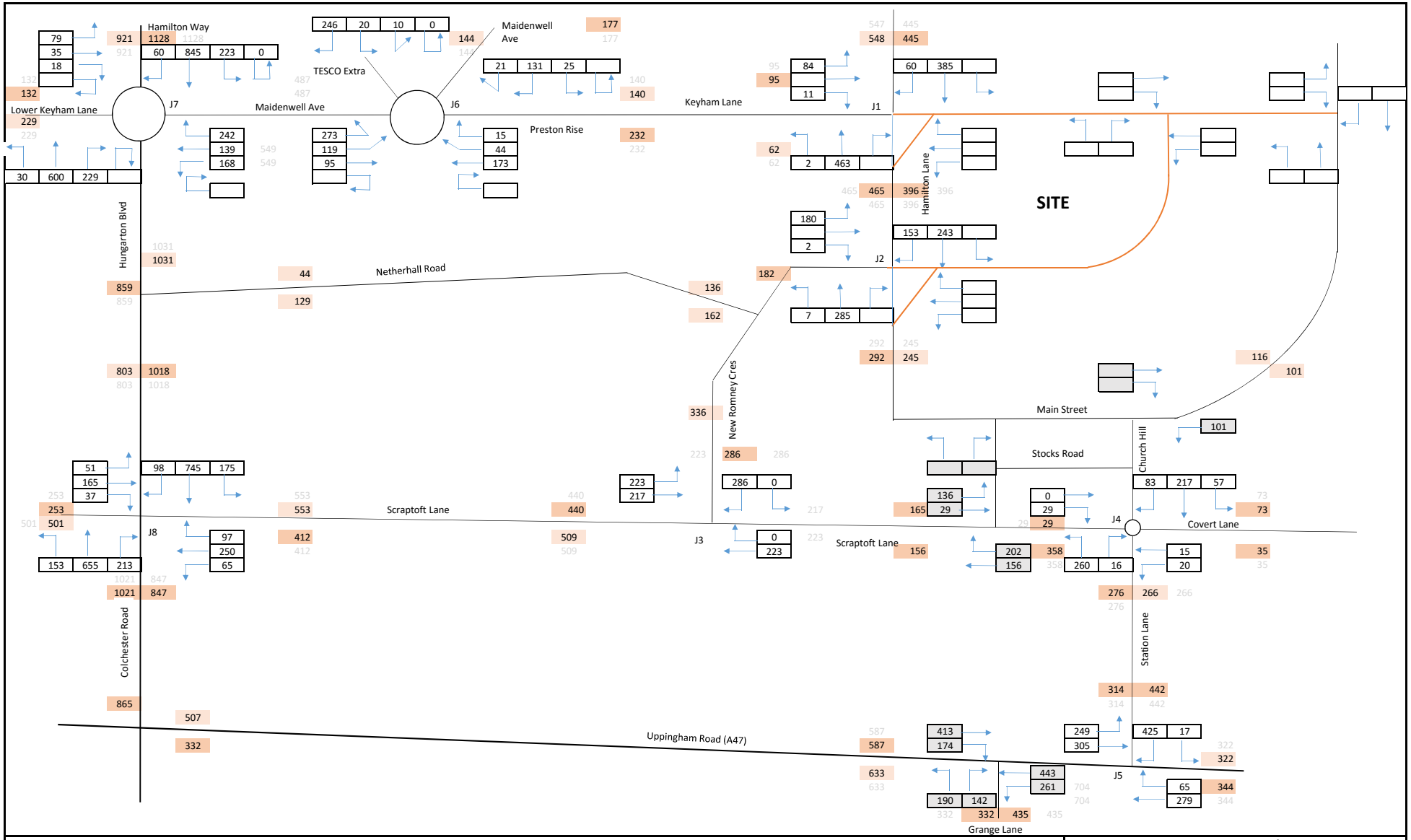


RPS

13th April 2016 Surveys
WYG 2015 Traffic Flows

Project NPMe: Scraptoft
Project Number: JNY8843

Re-Distributed Base + Dev Flows
PM PEAK (17:00 - 18:00)
All Vehicles
FIGURE 15



Data obtained from LLITM - turning proportions based on existing survey data

Project Name: Scraptoft

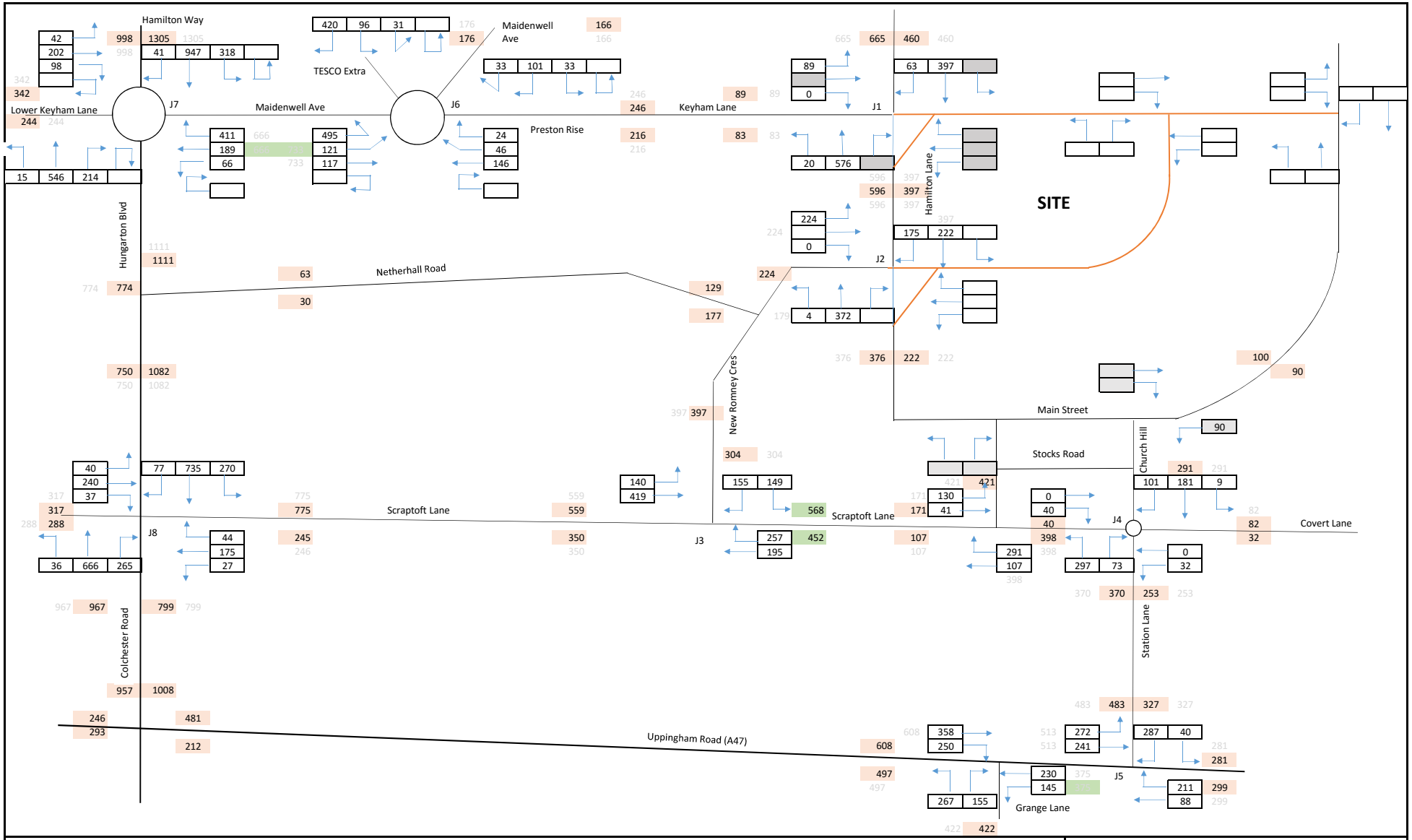
Project Number: JNY8843

2026 LLITM Flows

AM PEAK (08:00 - 09:00)

PCU's

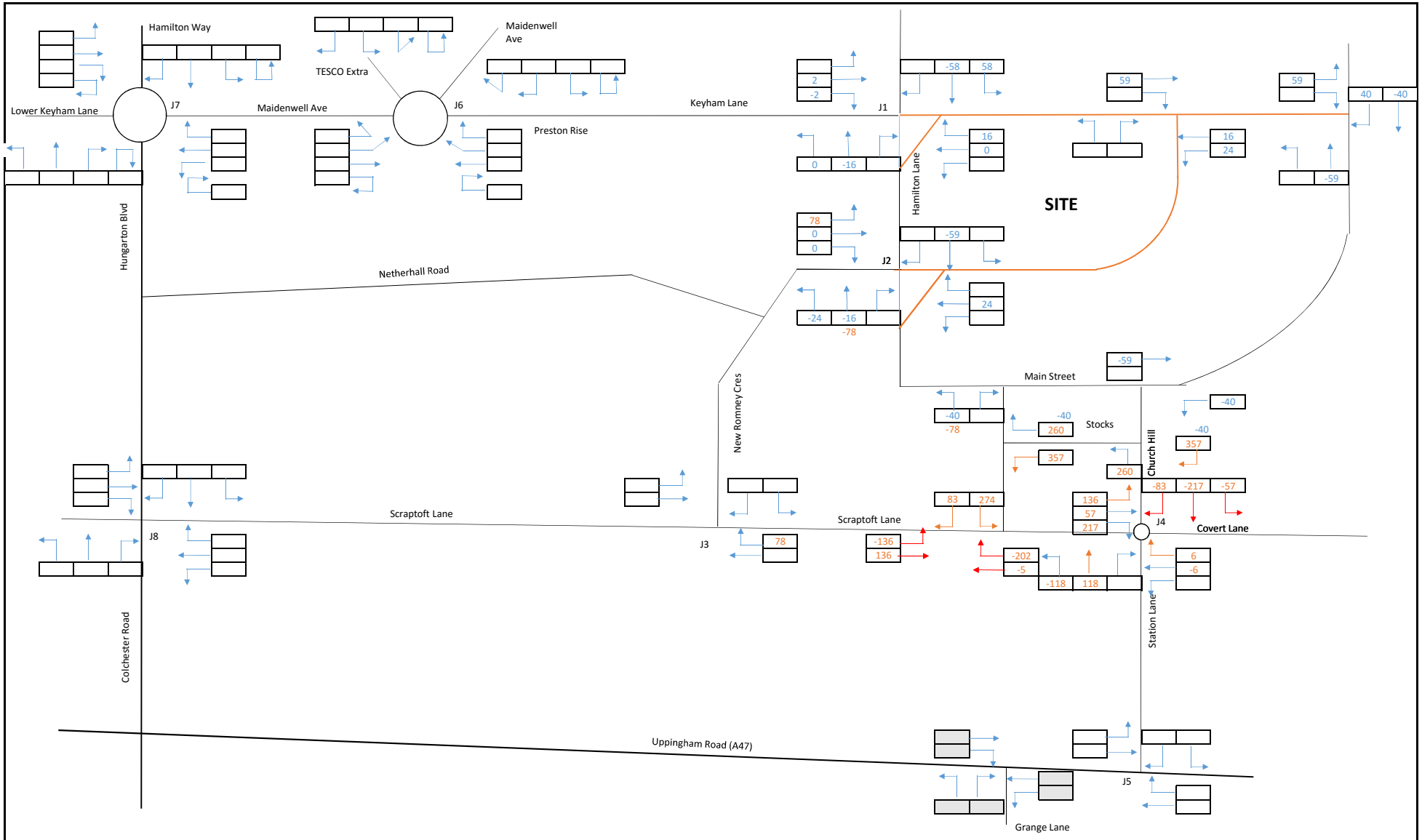
FIGURE 16



Data obtained from LLITM - turning proportions based on existing survey data

Project Name: Scraptoft
Project Number: JNY8843

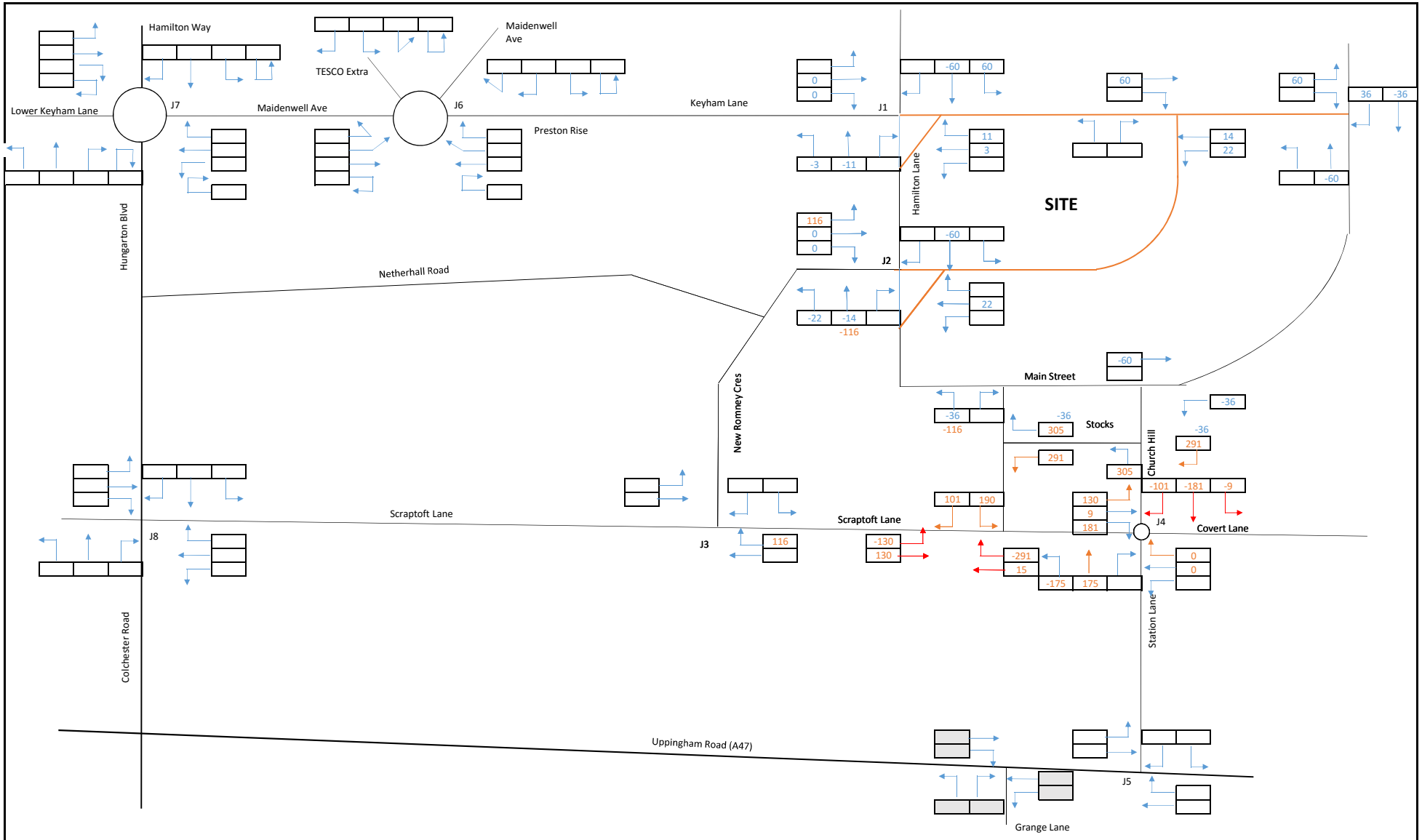
2026 LLITM flows
PM PEAK (17:00 - 18:00)
PCU's
FIGURE 17



RPS

Project Name: Scraptoft
Project Number: JNY8843

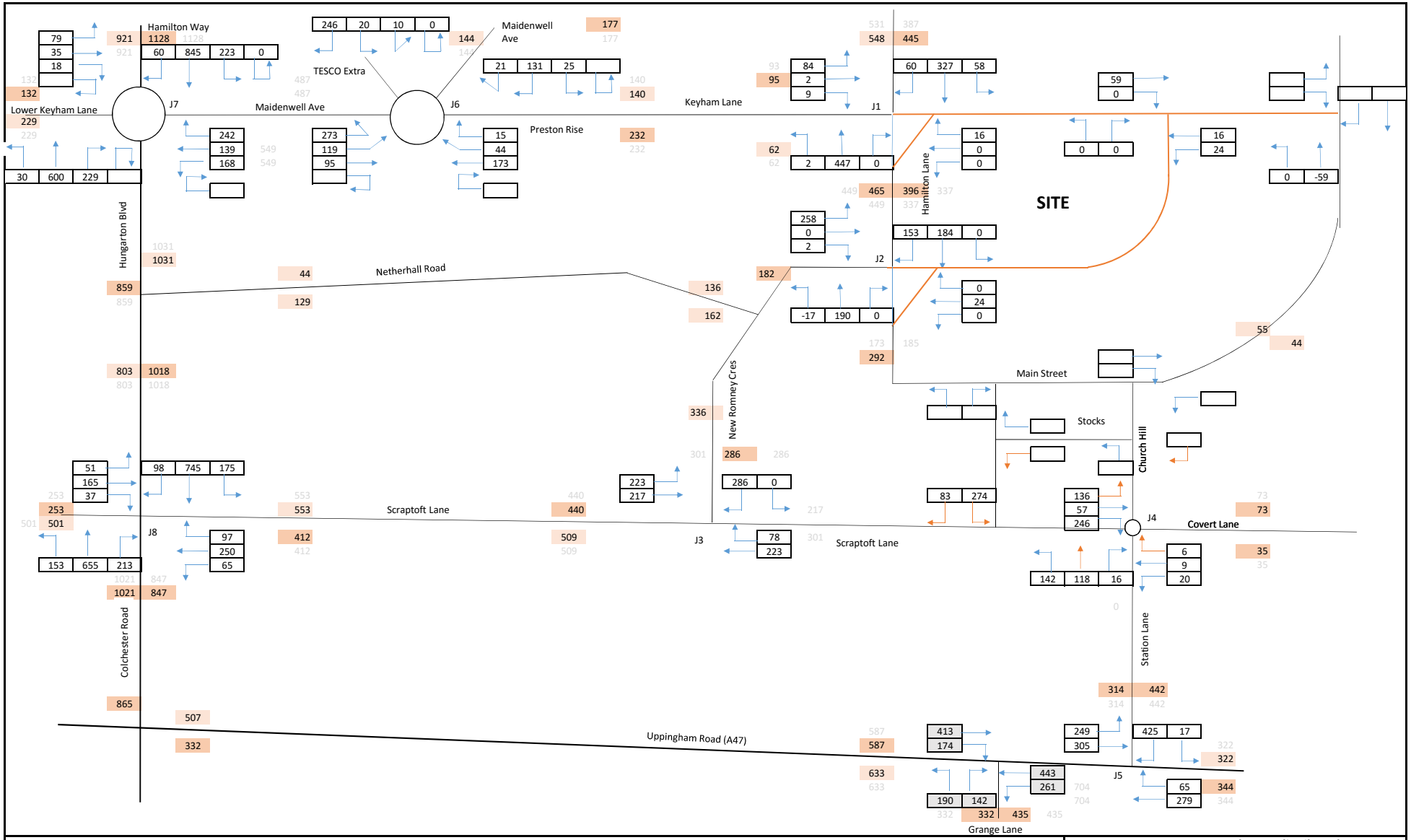
Redistribtion of LLITM Traffic Flows
AM PEAK (08:00 - 09:00)
All Vehicles
FIGURE 18



RPS

Project NPMe: Scraptoft
Project Number: JNY8843

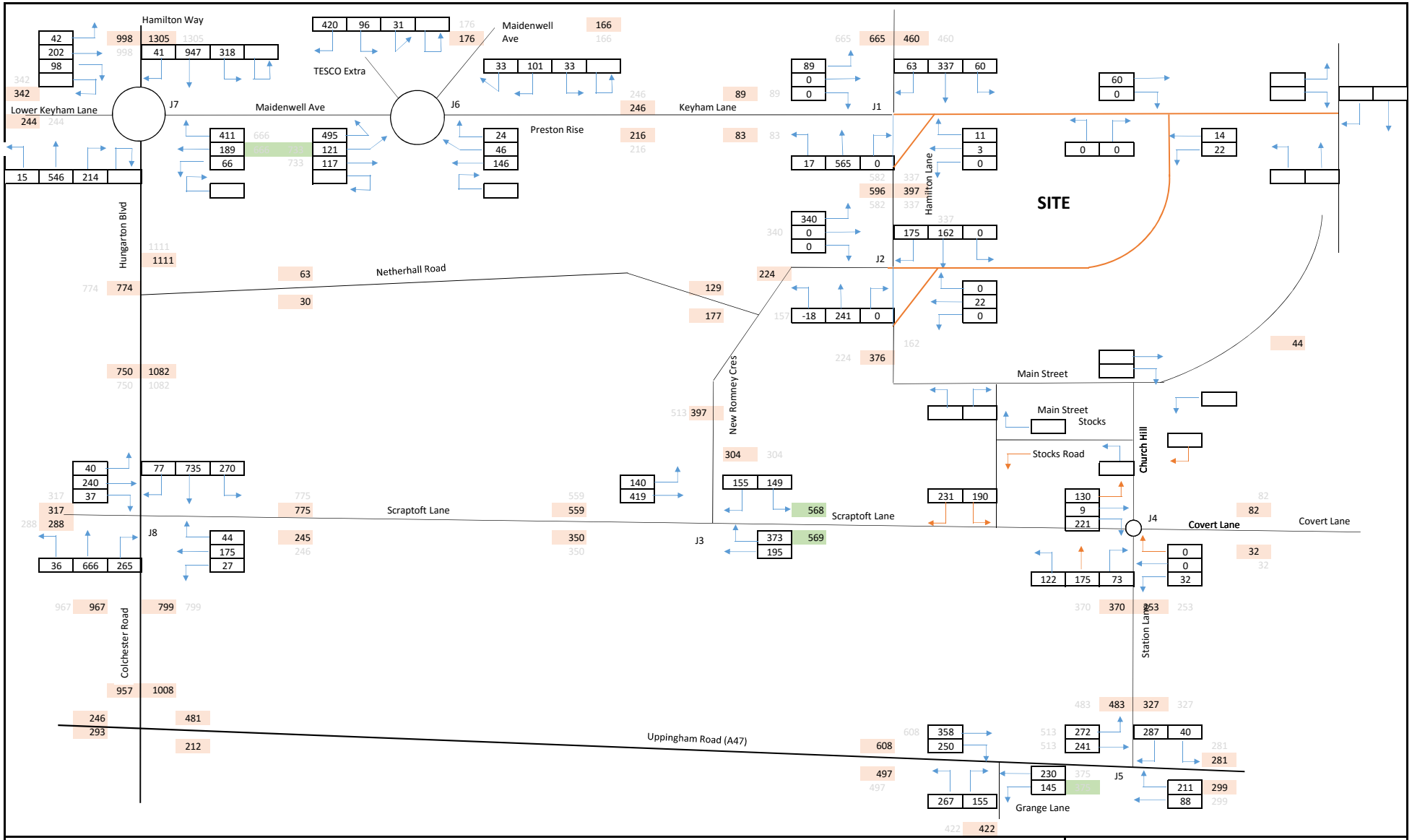
Redistribtion of LLITM Traffic Flows
PM PEAK (17:00 - 18:00)
All Vehicles
FIGURE 19



RPS

Project Name: Scraptoft
Project Number: JNY8843

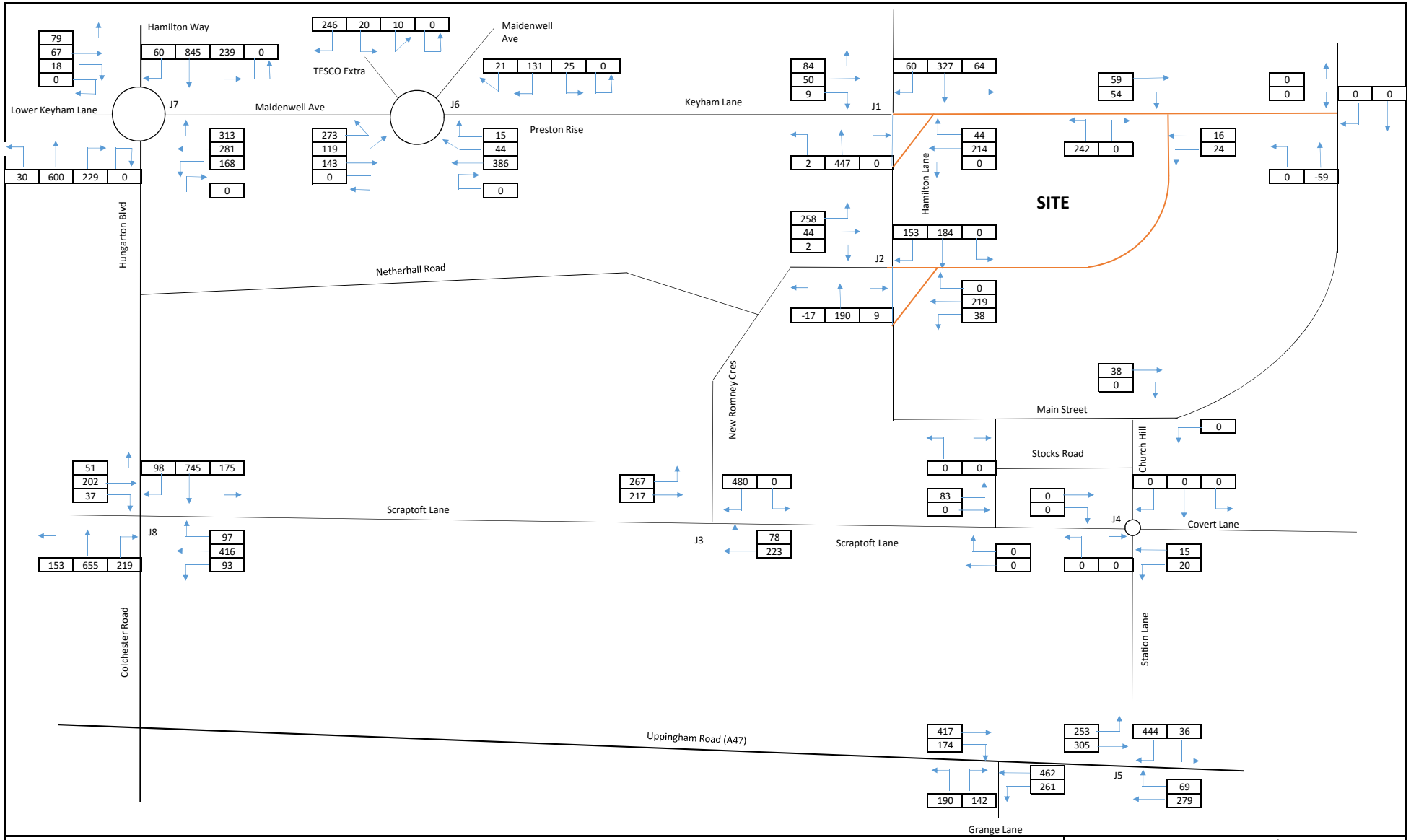
2026 LLITM Flows redistributed
AM PEAK (08:00 - 09:00)
PCU's
FIGURE 20



RPS

Project Name: Scraptoft
Project Number: JNY8843

2026 LLITM Flows redistributed
PM PEAK (17:00 - 18:00)
PCU's
FIGURE 21



RPS

Project Name: Scraptoft

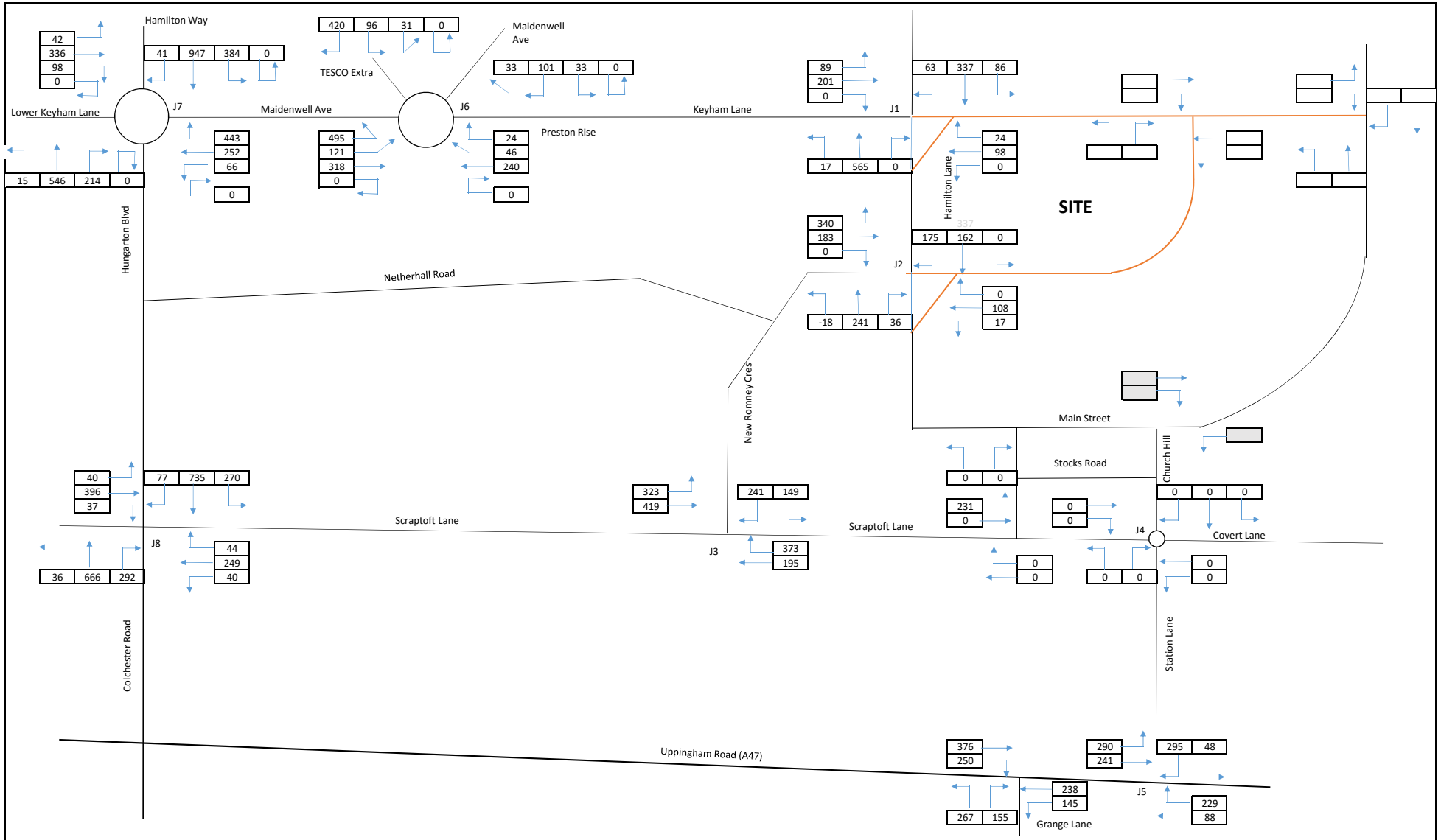
Project Number: JNY8843

2026 LLITM Flows

Including Land North Of Scraptoft Development

AM PEAK (08:00 - 09:00) PCU's

FIGURE 22



RPS

Project Name: Scraptoft

Project Number: JNY8843

2026 LLITM flows

Including Land North Of Scraptoft Development

PM PEAK (17:00 - 18:00) PCU's

FIGURE 23

APPENDIX G – CAPACITY ASSESSMENTS

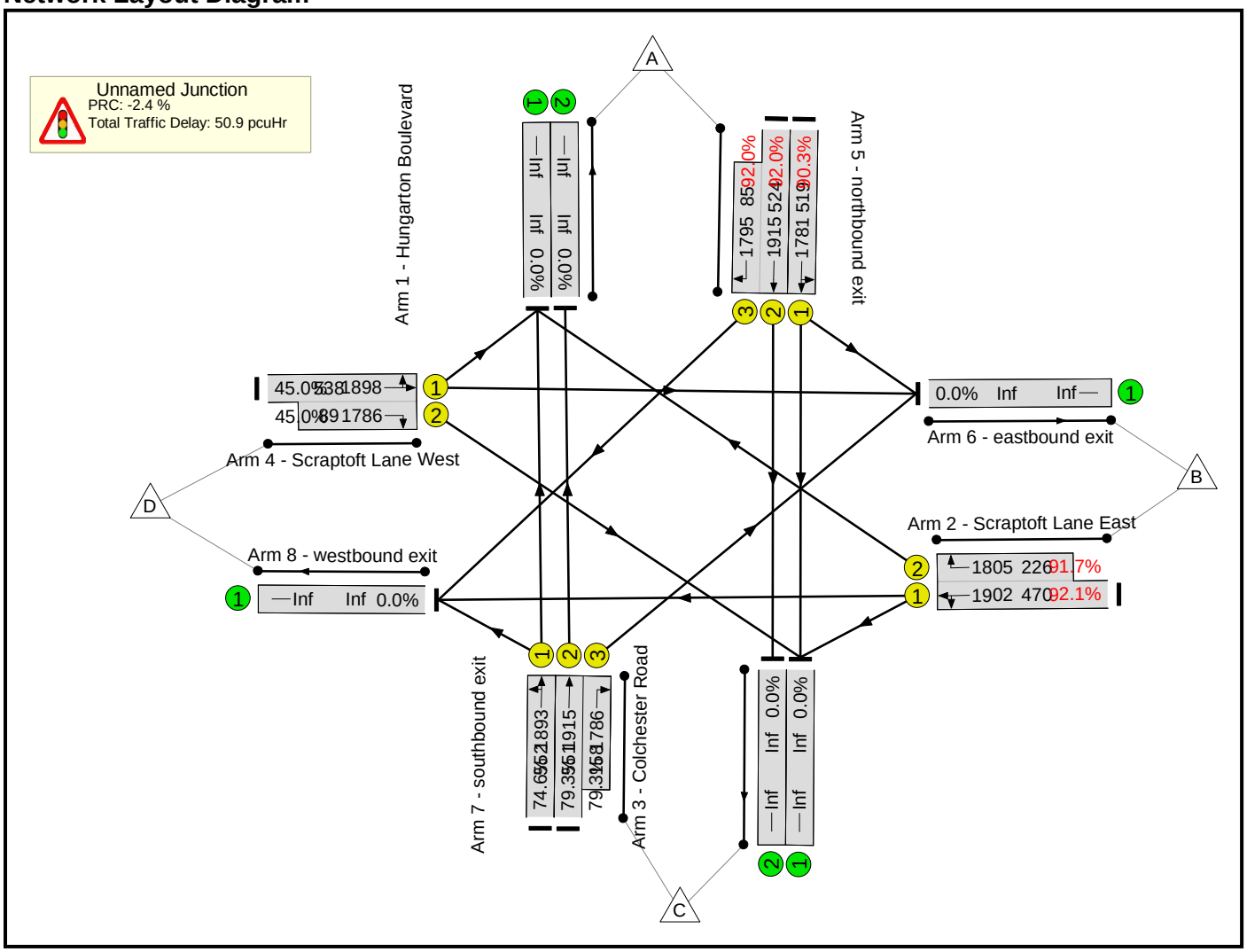
Basic Results Summary

User and Project Details

Project:	**JNY8843 Scraptoft**
Title:	**Colchester Road/ Scraptoft Lane**
Location:	
File name:	A563-Scraptoft Lane Existing Layout.lsg3x
Author:	Pauline Pettitt
Company:	RPS Transport
Address:	Milton Park, Abingdon
Notes:	

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

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Colchester Road/ Scraptoft Lane	-	-	-		-	-	-	-	-	-	**92.1%**	**0**	**0**	**0**	**50.9**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**92.1%**	**0**	**0**	**0**	**50.9**	-	-
1/1	Hungarton Boulevard Left Ahead	U	A		1	34	-	469	1781	519	90.3%	-	-	-	9.3	71.6	19.0
1/2+1/3	Hungarton Boulevard Ahead Right	U	A B		1	34:14	-	560	1915:1795	524+85	92.0 : 92.0%	-	-	-	11.2	72.3	21.3
2/1+2/2	Scraptoft Lane East Right Left Ahead	U	G H		1	32:14	-	640	1902:1805	470+226	92.1 : 91.7%	-	-	-	12.8	72.0	19.4
3/1	Colchester Road Ahead Left	U	C		1	34	-	412	1893	552	74.6%	-	-	-	5.8	51.1	13.8
3/2+3/3	Colchester Road Ahead Right	U	C D		1	34:14	-	562	1915:1786	551+158	79.3 : 79.3%	-	-	-	8.3	53.3	15.2
4/1+4/2	Scraptoft Lane West Left Ahead Right	U	E F		1	33:14	-	282	1898:1786	538+89	45.0 : 45.0%	-	-	-	3.3	42.2	7.0

C1

PRC for Signalled Lanes (%): -2.4
PRC Over All Lanes (%): -2.4

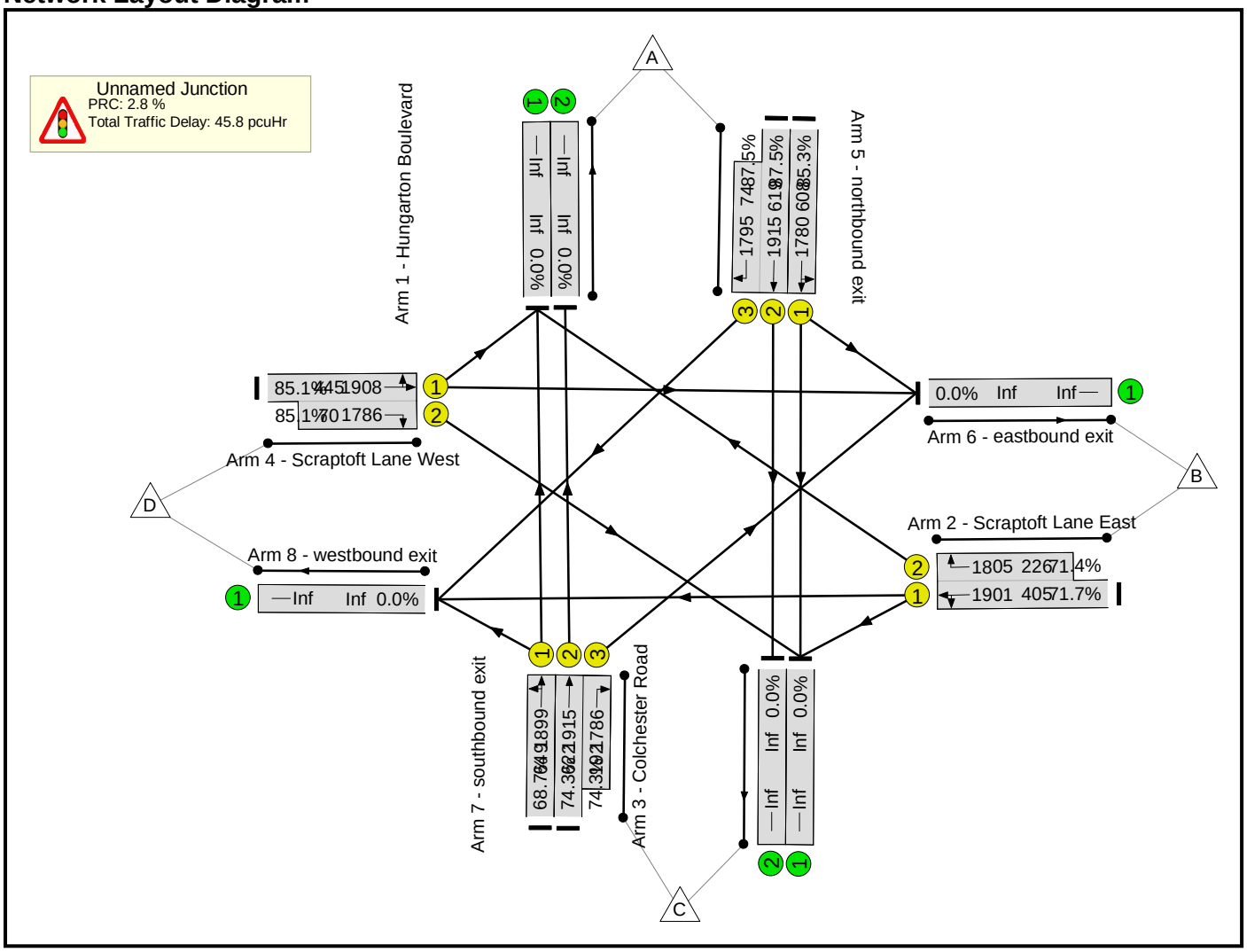
Total Delay for Signalled Lanes (pcuHr): 50.85
Total Delay Over All Lanes(pcuHr): 50.85

Cycle Time (s): 120

Basic Results Summary

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

Network Layout Diagram



Basic Results Summary

Network Results

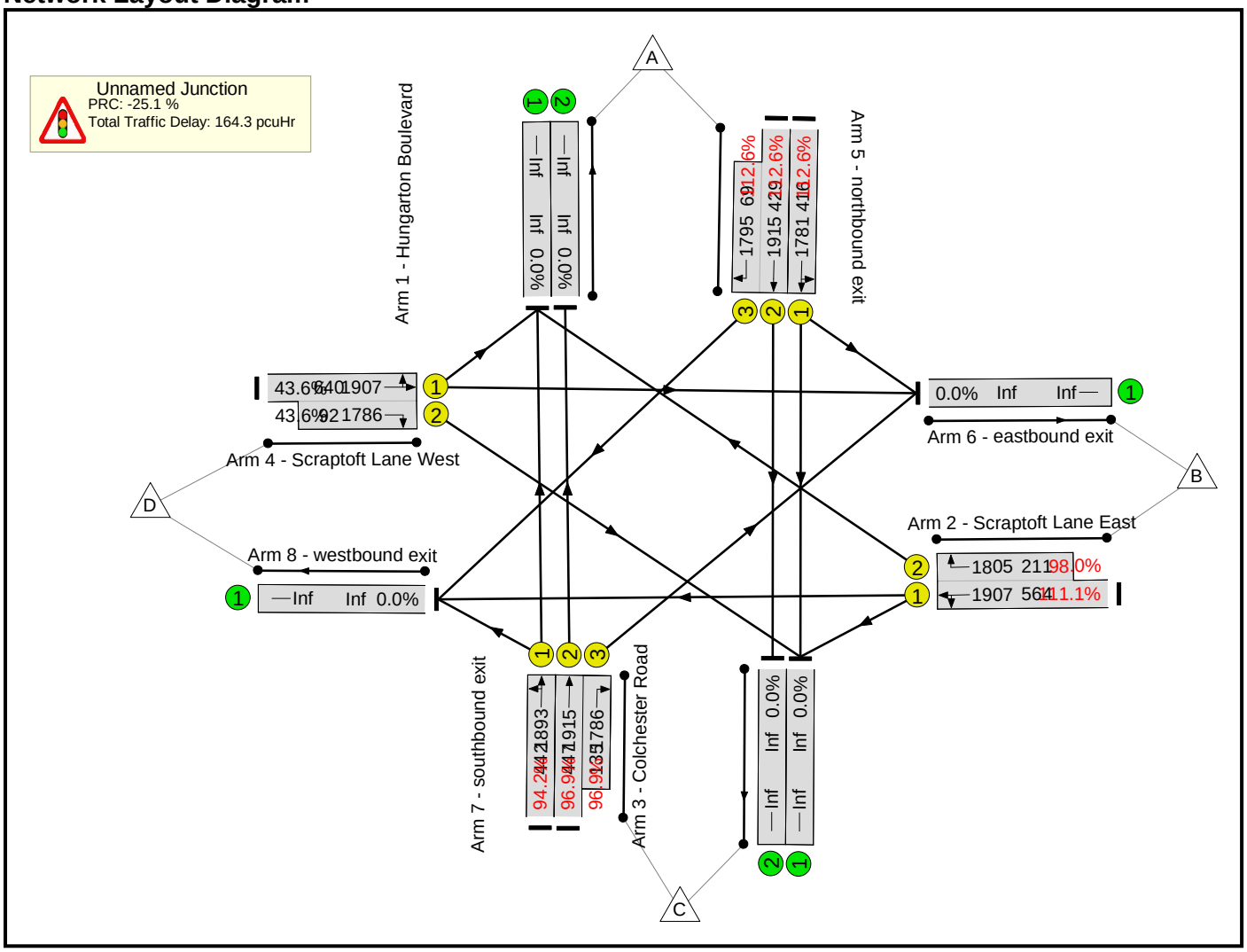
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Colchester Road/ Scraptoft Lane	-	-	-		-	-	-	-	-	-	**87.5%**	**0**	**0**	**0**	**45.8**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**87.5%**	**0**	**0**	**0**	**45.8**	-	-
1/1	Hungarton Boulevard Left Ahead	U	A		1	40	-	519	1780	608	85.3%	-	-	-	8.0	55.7	18.7
1/2+1/3	Hungarton Boulevard Ahead Right	U	A B		1	40:14	-	607	1915:1795	619+74	87.5 : 87.5%	-	-	-	9.6	57.0	20.9
2/1+2/2	Scraptoft Lane East Right Left Ahead	U	G H		1	26:14	-	451	1901:1805	405+226	71.7 : 71.4%	-	-	-	6.9	55.3	10.0
3/1	Colchester Road Ahead Left	U	C		1	40	-	446	1899	649	68.7%	-	-	-	5.3	42.8	13.8
3/2+3/3	Colchester Road Ahead Right	U	C D		1	40:14	-	605	1915:1786	622+192	74.3 : 74.3%	-	-	-	7.8	46.5	14.8
4/1+4/2	Scraptoft Lane West Left Ahead Right	U	E F		1	27:14	-	439	1908:1786	445+70	85.1 : 85.1%	-	-	-	8.1	66.4	14.7

C1 PRC for Signalled Lanes (%): 2.8 Total Delay for Signalled Lanes (pcuHr): 45.77 Cycle Time (s): 120
PRC Over All Lanes (%): 2.8 Total Delay Over All Lanes(pcuHr): 45.77

Basic Results Summary

Scenario 3: 'Scenario 3' (FG3: 'Redistributed Base + Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Colchester Road/ Scraptoft Lane	-	-	-		-	-	-	-	-	-	**112.6%**	**0**	**0**	**0**	**164.3**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**112.6%**	**0**	**0**	**0**	**164.3**	-	-
1/1	Hungarton Boulevard Left Ahead	U	A		1	27	-	468	1781	416	112.6%	-	-	-	39.3	301.9	47.5
1/2+1/3	Hungarton Boulevard Ahead Right	U	A B		1	27:14	-	561	1915:1795	429+69	112.6 : 112.6%	-	-	-	45.8	294.0	55.9
2/1+2/2	Scraptoft Lane East Right Left Ahead	U	G H		1	39:14	-	834	1907:1805	564+211	111.1 : 98.0%	-	-	-	49.7	214.4	66.3
3/1	Colchester Road Ahead Left	U	C		1	27	-	416	1893	442	94.2%	-	-	-	10.9	93.9	19.1
3/2+3/3	Colchester Road Ahead Right	U	C D		1	27:14	-	564	1915:1786	447+135	96.9 : 96.9%	-	-	-	15.5	98.8	22.4
4/1+4/2	Scraptoft Lane West Left Ahead Right	U	E F		1	40:14	-	319	1907:1786	640+92	43.6 : 43.6%	-	-	-	3.3	36.9	7.5

C1

PRC for Signalled Lanes (%): -25.1
PRC Over All Lanes (%): -25.1

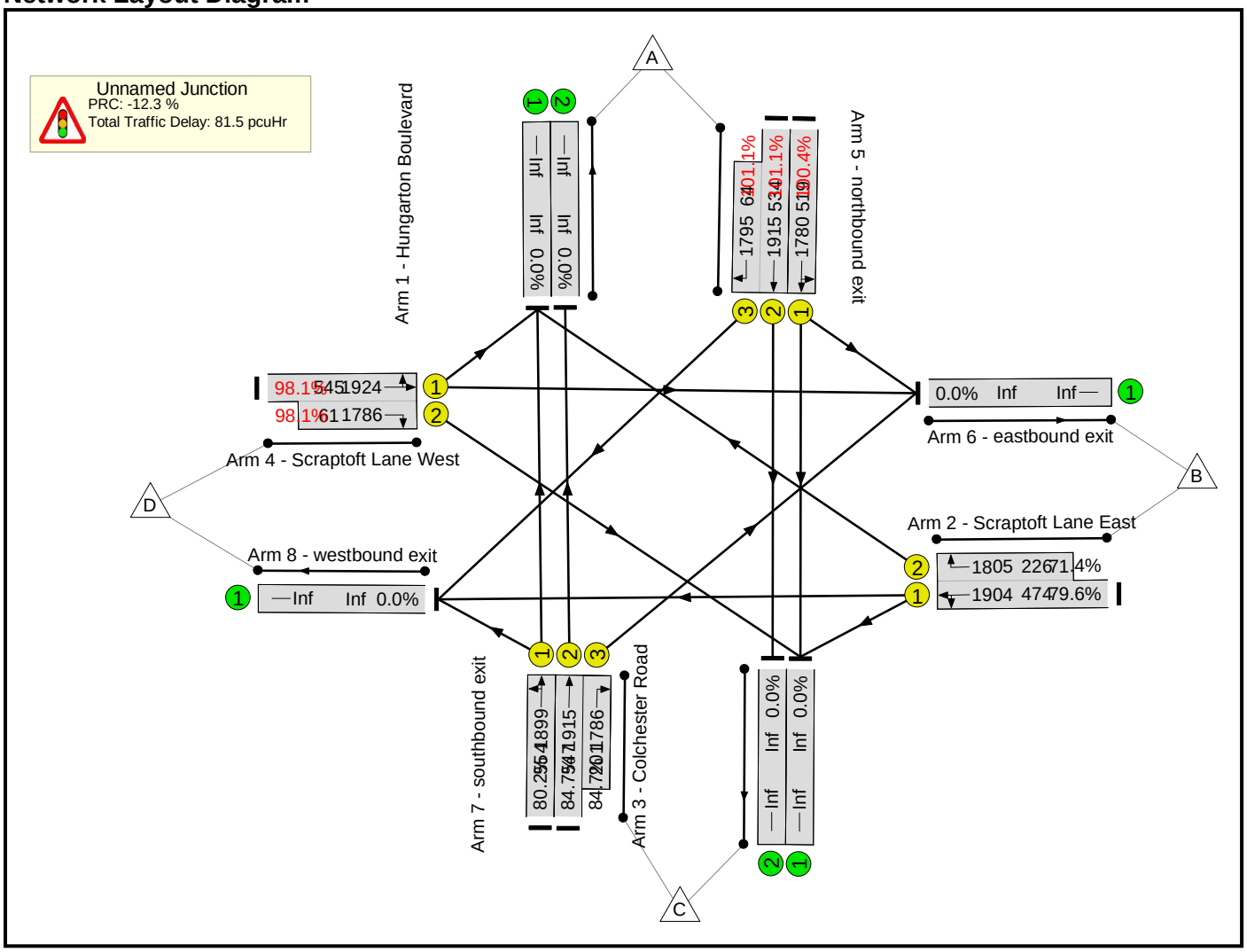
Total Delay for Signalled Lanes (pcuHr): 164.33
Total Delay Over All Lanes(pcuHr): 164.33

Cycle Time (s): 120

Basic Results Summary

Scenario 4: 'Scenario 4' (FG4: 'Redistributed Base + Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Colchester Road/ Scraptoft Lane	-	-	-		-	-	-	-	-	-	**101.1%**	**0**	**0**	**0**	**81.5**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**101.1%**	**0**	**0**	**0**	**81.5**	-	-
1/1	Hungarton Boulevard Left Ahead	U	A		1	34	-	521	1780	519	100.4%	-	-	-	18.1	125.3	29.3
1/2+1/3	Hungarton Boulevard Ahead Right	U	A B		1	34:14	-	605	1915:1795	534+64	101.1 : 101.1%	-	-	-	21.5	127.9	33.5
2/1+2/2	Scraptoft Lane East Right Left Ahead	U	G H		1	32:14	-	538	1904:1805	474+226	79.6 : 71.4%	-	-	-	8.0	53.6	12.9
3/1	Colchester Road Ahead Left	U	C		1	34	-	444	1899	554	80.2%	-	-	-	6.8	55.1	15.5
3/2+3/3	Colchester Road Ahead Right	U	C D		1	34:14	-	634	1915:1786	547+201	84.7 : 84.7%	-	-	-	10.2	57.8	17.1
4/1+4/2	Scraptoft Lane West Left Ahead Right	U	E F		1	33:14	-	595	1924:1786	545+61	98.1 : 98.1%	-	-	-	16.8	101.9	27.5

C1

PRC for Signalled Lanes (%): -12.3
PRC Over All Lanes (%): -12.3

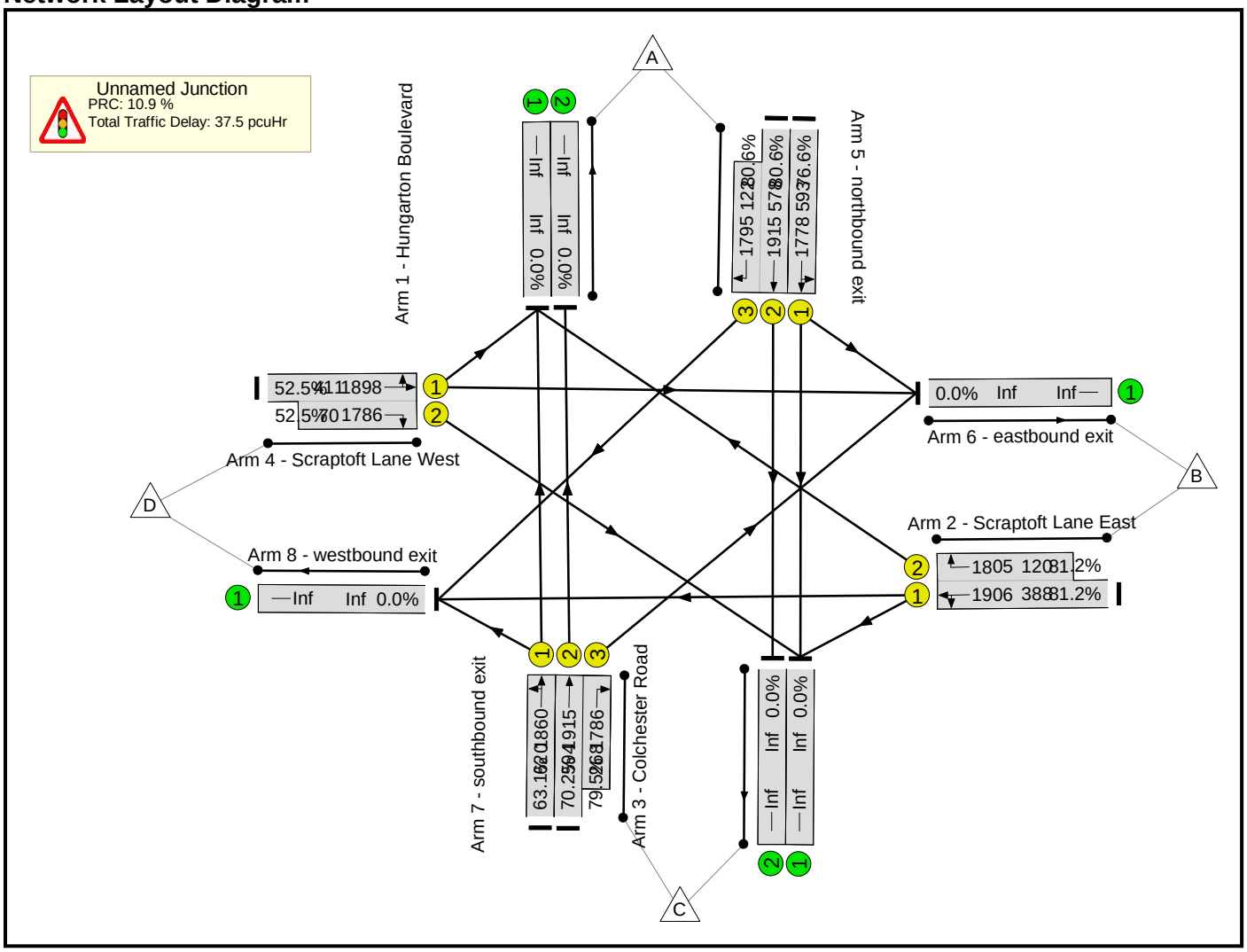
Total Delay for Signalled Lanes (pcuHr): 81.45
Total Delay Over All Lanes(pcuHr): 81.45

Cycle Time (s): 120

Basic Results Summary

Scenario 5: 'Scenario 5' (FG5: '2026 LLITM Flows AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Colchester Road/ Scraptoft Lane	-	-	-		-	-	-	-	-	-	**81.2%**	**0**	**0**	**0**	**37.5**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**81.2%**	**0**	**0**	**0**	**37.5**	-	-
1/1	Hungarton Boulevard Left Ahead	U	A		1	39	-	454	1778	593	76.6%	-	-	-	6.1	48.5	15.1
1/2+1/3	Hungarton Boulevard Ahead Right	U	A B		1	39:17	-	564	1915:1795	578+122	80.6 : 80.6%	-	-	-	7.8	50.1	16.9
2/1+2/2	Scraptoft Lane East Right Left Ahead	U	G H		1	24:14	-	412	1906:1805	388+120	81.2 : 81.2%	-	-	-	7.3	63.9	12.0
3/1	Colchester Road Ahead Left	U	C		1	39	-	391	1860	620	63.1%	-	-	-	4.5	41.6	11.8
3/2+3/3	Colchester Road Ahead Right	U	C D		1	39:17	-	630	1915:1786	594+268	70.2 : 79.5%	-	-	-	8.2	46.9	13.2
4/1+4/2	Scraptoft Lane West Left Ahead Right	U	E F		1	25:14	-	253	1898:1786	411+70	52.5 : 52.5%	-	-	-	3.5	50.2	6.9

C1

PRC for Signalled Lanes (%): 10.9
PRC Over All Lanes (%): 10.9

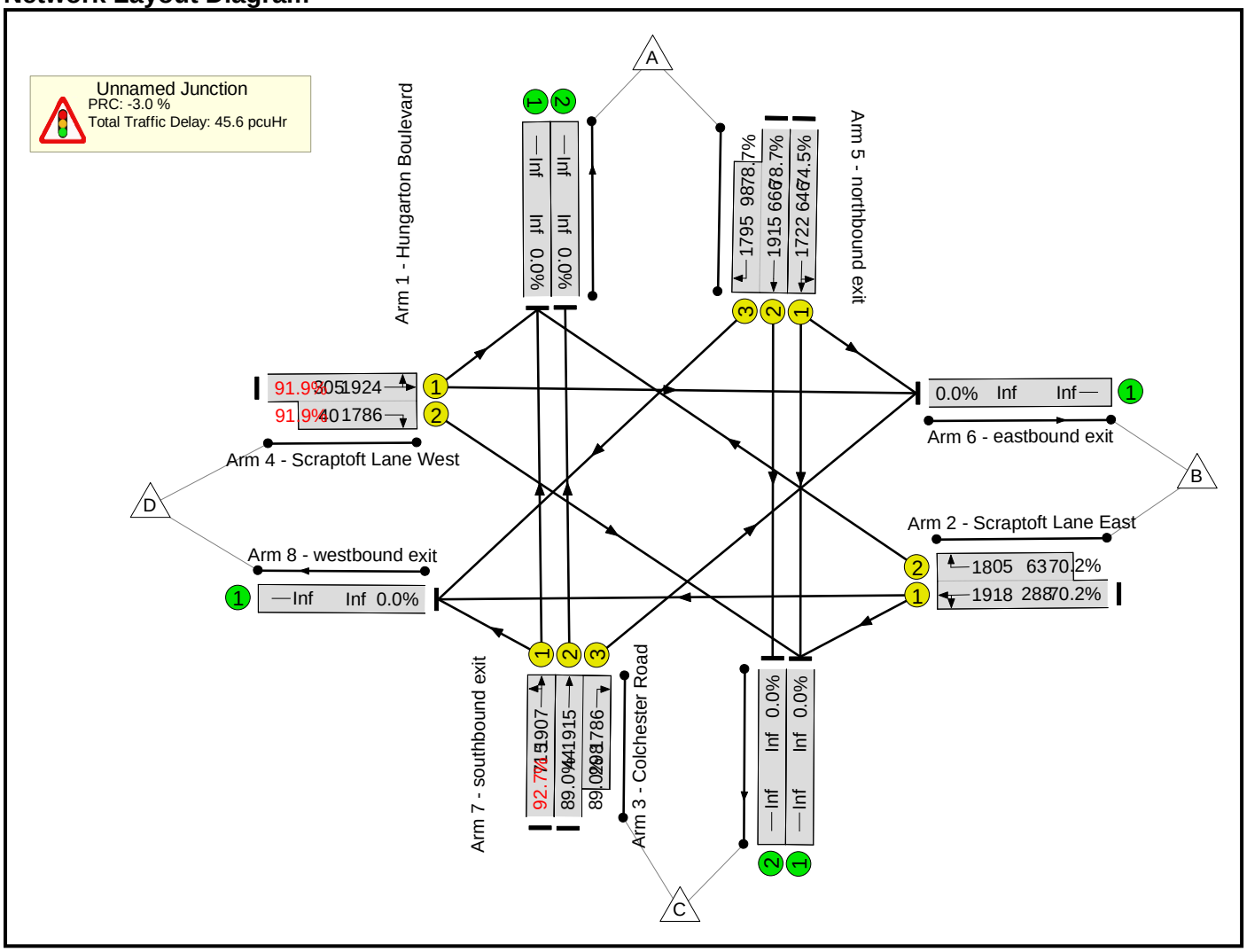
Total Delay for Signalled Lanes (pcuHr): 37.52
Total Delay Over All Lanes(pcuHr): 37.52

Cycle Time (s): 120

Basic Results Summary

Scenario 6: 'Scenario 6' (FG6: '2026 LLITM Flows PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Colchester Road/ Scraptoft Lane	-	-	-		-	-	-	-	-	-	**92.7%**	**0**	**0**	**0**	**45.6**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**92.7%**	**0**	**0**	**0**	**45.6**	-	-
1/1	Hungarton Boulevard Left Ahead	U	A		1	44	-	481	1722	646	74.5%	-	-	-	5.8	43.3	15.3
1/2+1/3	Hungarton Boulevard Ahead Right	U	A B		1	44:19	-	601	1915:1795	666+98	78.7 : 78.7%	-	-	-	7.5	44.7	17.9
2/1+2/2	Scraptoft Lane East Right Left Ahead	U	G H		1	17:14	-	246	1918:1805	288+63	70.2 : 70.2%	-	-	-	4.4	65.1	7.5
3/1	Colchester Road Ahead Left	U	C		1	44	-	663	1907	715	92.7%	-	-	-	11.9	64.6	26.3
3/2+3/3	Colchester Road Ahead Right	U	C D		1	44:19	-	304	1915:1786	44+298	89.0 : 89.0%	-	-	-	7.3	86.3	12.0
4/1+4/2	Scraptoft Lane West Left Ahead Right	U	E F		1	18:14	-	317	1924:1786	305+40	91.9 : 91.9%	-	-	-	8.7	98.7	13.5

C1

PRC for Signalled Lanes (%): -3.0
PRC Over All Lanes (%): -3.0

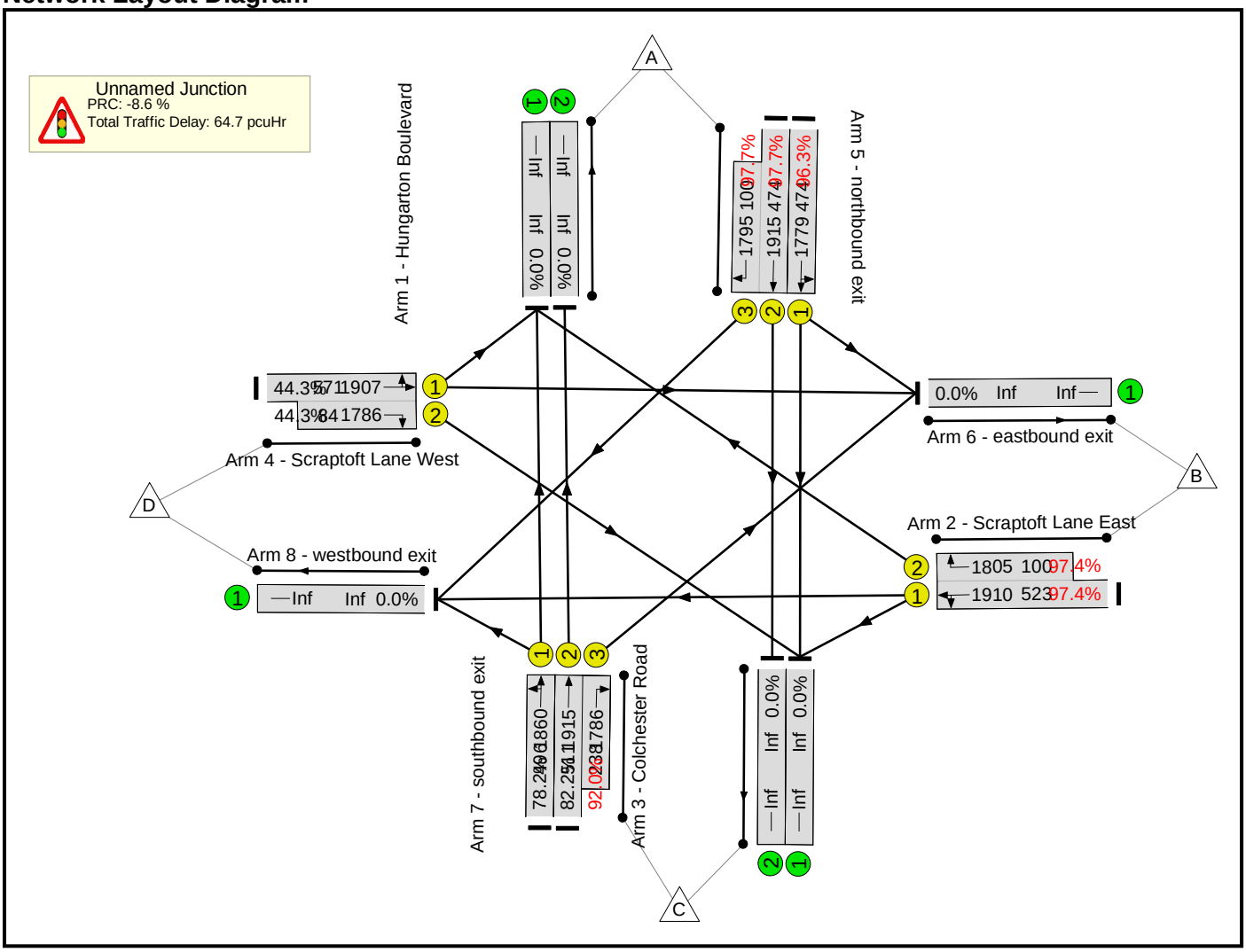
Total Delay for Signalled Lanes (pcuHr): 45.57
Total Delay Over All Lanes(pcuHr): 45.57

Cycle Time (s): 120

Basic Results Summary

Scenario 7: 'Scenario 7' (FG7: '2026 LLITM Flows AM Plus Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Colchester Road/ Scraptoft Lane	-	-	-		-	-	-	-	-	-	**97.7%**	**0**	**0**	**0**	**64.7**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**97.7%**	**0**	**0**	**0**	**64.7**	-	-
1/1	Hungarton Boulevard Left Ahead	U	A		1	31	-	457	1779	474	96.3%	-	-	-	12.7	100.1	22.2
1/2+1/3	Hungarton Boulevard Ahead Right	U	A B		1	31:15	-	561	1915:1795	474+100	97.7 : 97.7%	-	-	-	15.8	101.6	25.6
2/1+2/2	Scraptoft Lane East Right Left Ahead	U	G H		1	34:14	-	606	1910:1805	523+100	97.4 : 97.4%	-	-	-	16.0	95.3	26.4
3/1	Colchester Road Ahead Left	U	C		1	31	-	388	1860	496	78.2%	-	-	-	6.1	56.9	13.7
3/2+3/3	Colchester Road Ahead Right	U	C D		1	31:15	-	639	1915:1786	511+238	82.2 : 92.0%	-	-	-	10.7	60.4	15.8
4/1+4/2	Scraptoft Lane West Left Ahead Right	U	E F		1	35:14	-	290	1907:1786	571+84	44.3 : 44.3%	-	-	-	3.3	40.5	7.1

C1

PRC for Signalled Lanes (%): -8.6
PRC Over All Lanes (%): -8.6

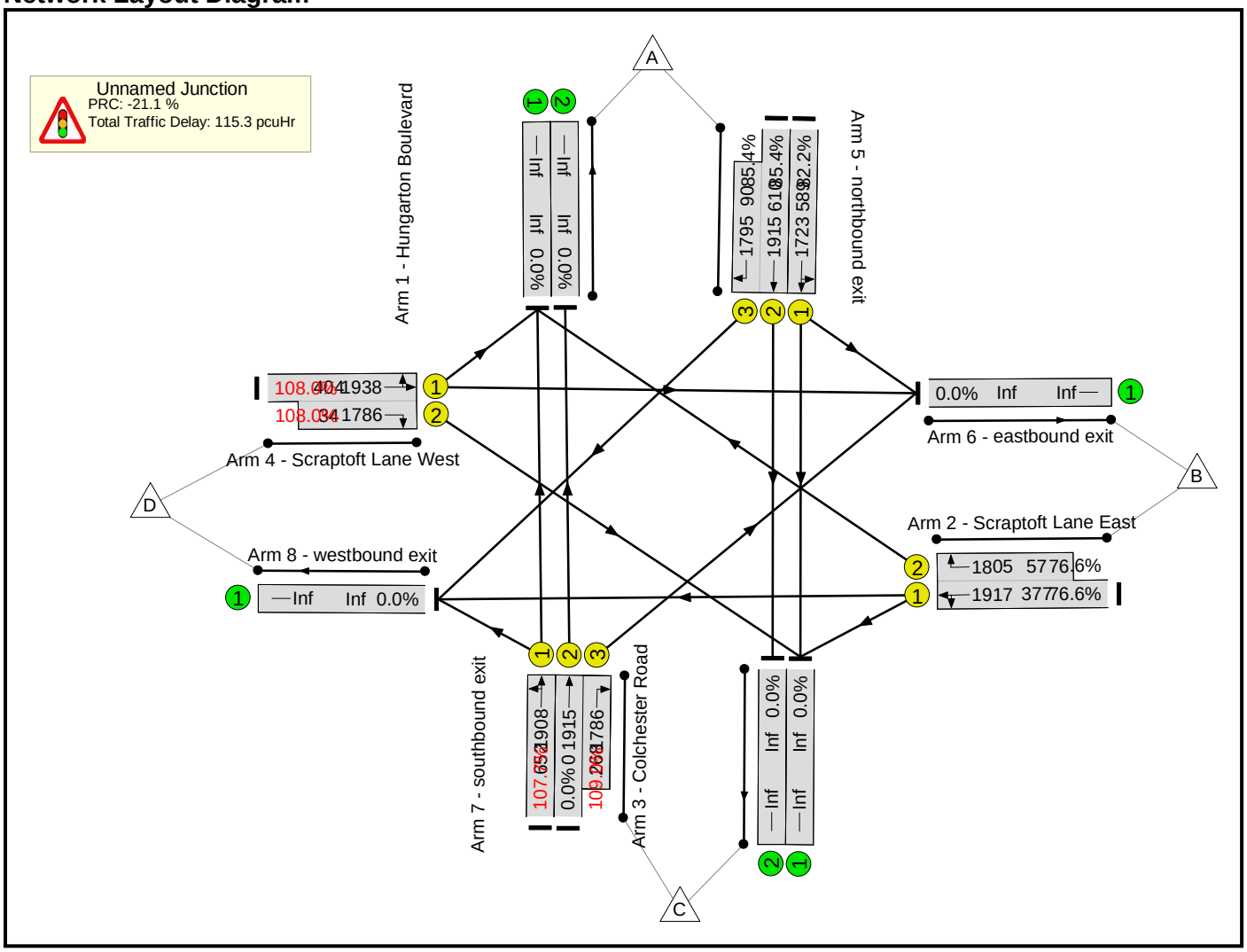
Total Delay for Signalled Lanes (pcuHr): 64.69
Total Delay Over All Lanes(pcuHr): 64.69

Cycle Time (s): 120

Basic Results Summary

Scenario 8: 'Scenario 8' (FG8: '2026 LLITM Flows PM Plus Dev', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Colchester Road/ Scraptoft Lane	-	-	-		-	-	-	-	-	-	**109.0%**	**0**	**0**	**0**	**115.3**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**109.0%**	**0**	**0**	**0**	**115.3**	-	-
1/1	Hungarton Boulevard Left Ahead	U	A		1	40	-	484	1723	589	82.2%	-	-	-	7.1	52.7	16.9
1/2+1/3	Hungarton Boulevard Ahead Right	U	A B		1	40:17	-	598	1915:1795	610+90	85.4 : 85.4%	-	-	-	8.9	53.8	19.8
2/1+2/2	Scraptoft Lane East Right Left Ahead	U	G H		1	23:14	-	333	1917:1805	377+57	76.6 : 76.6%	-	-	-	5.8	62.6	10.7
3/1	Colchester Road Ahead Left	U	C		1	40	-	702	1908	652	107.7%	-	-	-	41.4	212.3	55.8
3/2+3/3	Colchester Road Ahead Right	U	C D		1	40:17	-	292	1915:1786	0+268	0.0 : 109.0%	-	-	-	21.8	268.8	27.0
4/1+4/2	Scraptoft Lane West Left Ahead Right	U	E F		1	24:14	-	473	1938:1786	404+34	108.0 : 108.0%	-	-	-	30.3	230.4	38.3

C1

PRC for Signalled Lanes (%): -21.1
PRC Over All Lanes (%): -21.1

Total Delay for Signalled Lanes (pcuHr): 115.28
Total Delay Over All Lanes(pcuHr): 115.28

Cycle Time (s): 120

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

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Filename: Proposed Northern Access 090816.j9
Path: P:\JNY8843 - Scraptoft, Leicestershire\Transport\Picady
Report generation date: 09/08/2016 13:12:54

Summary of junction performance

	AM							PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	Redistributed Base + Dev												
Stream B-ACD	1.1	12.70	0.52	B	7.39	A	18 % [Stream D-C]	0.5	8.61	0.34	A	11.07	B
Stream A-B													
Stream A-C													
Stream A-D													
Stream AB-CD	1.2	11.03	0.52	B				0.8	11.08	0.42	B		
Stream AB-C													
Stream D-AB	1.0	14.04	0.49	B				3.3	33.83	0.78	D		
Stream D-C	0.4	22.03	0.30	C				0.6	39.14	0.37	E		
Stream C-D													
Stream C-A													
Stream C-B													
Stream CD-AB	1.0	12.23	0.49	B				2.5	15.06	0.68	C		
Stream CD-A													

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Hamilton Lane/Keyham La W/Site
Location	Scraptoft, Leics
Site number	
Date	02/06/2016
Version	
Status	Proposed Northern Site Access
Identifier	
Client	
Jobnumber	JNY8843
Enumerator	EUR"pauline.pettitt
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Redistributed Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Left-Right Stagger	Two-way	7.39	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	18	Stream D-C

Arms

Arms

Arm	Name	Description	Arm type
A	Proposed Site Access		Major
B	Hamilton Lane South		Minor
C	Keyham Lane West		Major
D	Hamilton Lane North		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Proposed Site Access	6.00		✓	2.20	120.0	✓	2.00
C - Keyham Lane West	6.00		✓	2.20	130.0	✓	2.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Hamilton Lane South	One lane	2.80								165	120
D - Hamilton Lane North	One lane plus flare		4.40	2.20	2.20	2.20	2.20		1.00	120	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	643.457	-	-	-	-	-	0.249	0.249	0.249	-	-
1	B-A	582.095	0.106	0.268	0.268	-	-	0.169	0.383	-	0.169	0.383
1	B-CD	685.475	0.105	0.266	0.266	-	-	-	-	-	-	-
1	CD-B	649.248	0.252	0.252	0.252	-	-	-	-	-	-	-
1	D-AB	607.121	-	-	-	-	-	0.235	0.235	0.093	-	-
1	D-C	423.492	-	0.123	0.279	0.123	0.279	0.195	0.195	0.077	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Proposed Site Access		ONE HOUR	✓	316.00	100.000
B - Hamilton Lane South		ONE HOUR	✓	276.00	100.000
C - Keyham Lane West		ONE HOUR	✓	169.00	100.000
D - Hamilton Lane North		ONE HOUR	✓	290.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - Keyham Lane West	D - Hamilton Lane North
From	A - Proposed Site Access	0.000	0.000	228.000	88.000
	B - Hamilton Lane South	0.000	0.000	82.000	194.000
	C - Keyham Lane West	58.000	59.000	0.000	52.000
	D - Hamilton Lane North	39.000	186.000	65.000	0.000

Proportions

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - Keyham Lane West	D - Hamilton Lane North
From	A - Proposed Site Access	0.00	0.00	0.72	0.28
	B - Hamilton Lane South	0.00	0.00	0.30	0.70
	C - Keyham Lane West	0.34	0.35	0.00	0.31
	D - Hamilton Lane North	0.13	0.64	0.22	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - Keyham Lane West	D - Hamilton Lane North
From	A - Proposed Site Access	0	0	0	0
	B - Hamilton Lane South	0	0	1	1
	C - Keyham Lane West	0	2	0	0
	D - Hamilton Lane North	0	2	0	0

Average PCU Per Veh

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - Keyham Lane West	D - Hamilton Lane North
From	A - Proposed Site Access	1.000	1.000	1.000	1.000
	B - Hamilton Lane South	1.000	1.000	1.010	1.010
	C - Keyham Lane West	1.000	1.020	1.000	1.000
	D - Hamilton Lane North	1.000	1.020	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.52	12.70	1.1	B	253.26	379.89
A-B					0.00	0.00
A-C					209.22	313.83
A-D					80.75	121.13
AB-CD	0.52	11.03	1.2	B	285.35	428.03
AB-C					257.53	386.30
D-AB	0.49	14.04	1.0	B	206.46	309.70
D-C	0.30	22.03	0.4	C	59.65	89.47
C-D					47.72	71.57
C-A					53.22	79.83
C-B					54.14	81.21
CD-AB	0.49	12.23	1.0	B	231.44	347.15
CD-A					82.08	123.13

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	207.79	207.79	51.95	0.00	616.13	0.337	205.78	0.0	0.5	8.731	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	171.65	171.65	42.91	0.00			171.65				
A-D	66.25	66.25	16.56	0.00			66.25				
AB-CD	220.78	220.78	55.20	0.00	635.82	0.347	218.59	0.0	0.5	8.588	A
AB-C	222.90	222.90	55.72	0.00			222.90				
D-AB	169.39	169.39	42.35	0.00	546.96	0.310	167.62	0.0	0.4	9.448	A
D-C	48.94	48.94	12.23	0.00	306.36	0.160	48.19	0.0	0.2	13.904	B
C-D	39.15	39.15	9.79	0.00			39.15				
C-A	43.67	43.67	10.92	0.00			43.67				
C-B	44.42	44.42	11.10	0.00			44.42				
CD-AB	185.40	185.40	46.35	0.00	585.47	0.317	183.55	0.0	0.5	8.918	A
CD-A	70.30	70.30	17.58	0.00			70.30				

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	248.12	248.12	62.03	0.00	603.99	0.411	247.38	0.5	0.7	10.074	B
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	204.97	204.97	51.24	0.00			204.97				
A-D	79.11	79.11	19.78	0.00			79.11				
AB-CD	274.00	274.00	68.50	0.00	651.12	0.421	273.11	0.5	0.8	9.512	A
AB-C	257.47	257.47	64.37	0.00			257.47				
D-AB	202.27	202.27	50.57	0.00	531.75	0.380	201.63	0.4	0.6	10.883	B
D-C	58.43	58.43	14.61	0.00	278.02	0.210	58.14	0.2	0.3	16.349	C
C-D	46.75	46.75	11.69	0.00			46.75				
C-A	52.14	52.14	13.04	0.00			52.14				
C-B	53.04	53.04	13.26	0.00			53.04				
CD-AB	224.99	224.99	56.25	0.00	580.11	0.388	224.30	0.5	0.6	10.102	B
CD-A	81.81	81.81	20.45	0.00			81.81				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	303.88	303.88	75.97	0.00	587.20	0.518	302.45	0.7	1.0	12.576	B
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	251.03	251.03	62.76	0.00			251.03				
A-D	96.89	96.89	24.22	0.00			96.89				
AB-CD	358.45	358.45	89.61	0.00	686.53	0.522	356.65	0.8	1.2	10.893	B
AB-C	291.92	291.92	72.98	0.00			291.92				
D-AB	247.73	247.73	61.93	0.00	504.95	0.491	246.40	0.6	0.9	13.850	B
D-C	71.57	71.57	17.89	0.00	236.05	0.303	70.92	0.3	0.4	21.714	C
C-D	57.25	57.25	14.31	0.00			57.25				
C-A	63.86	63.86	15.96	0.00			63.86				
C-B	64.96	64.96	16.24	0.00			64.96				
CD-AB	281.37	281.37	70.34	0.00	576.90	0.488	280.04	0.6	1.0	12.087	B
CD-A	93.84	93.84	23.46	0.00			93.84				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	303.88	303.88	75.97	0.00	587.20	0.518	303.83	1.0	1.1	12.702	B
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	251.03	251.03	62.76	0.00			251.03				
A-D	96.89	96.89	24.22	0.00			96.89				
AB-CD	359.94	359.94	89.98	0.00	687.14	0.524	359.82	1.2	1.2	11.032	B
AB-C	291.81	291.81	72.95	0.00			291.81				
D-AB	247.73	247.73	61.93	0.00	503.94	0.492	247.67	0.9	1.0	14.039	B
D-C	71.57	71.57	17.89	0.00	234.90	0.305	71.53	0.4	0.4	22.033	C
C-D	57.25	57.25	14.31	0.00			57.25				
C-A	63.86	63.86	15.96	0.00			63.86				
C-B	64.96	64.96	16.24	0.00			64.96				
CD-AB	282.60	282.60	70.65	0.00	577.05	0.490	282.52	1.0	1.0	12.230	B
CD-A	93.89	93.89	23.47	0.00			93.89				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	248.12	248.12	62.03	0.00	603.99	0.411	249.51	1.1	0.7	10.197	B
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	204.97	204.97	51.24	0.00			204.97				
A-D	79.11	79.11	19.78	0.00			79.11				
AB-CD	275.91	275.91	68.98	0.00	651.69	0.423	277.65	1.2	0.8	9.679	A
AB-C	257.67	257.67	64.42	0.00			257.67				
D-AB	202.27	202.27	50.57	0.00	530.70	0.381	203.57	1.0	0.6	11.049	B
D-C	58.43	58.43	14.61	0.00	276.51	0.211	59.06	0.4	0.3	16.603	C
C-D	46.75	46.75	11.69	0.00			46.75				
C-A	52.14	52.14	13.04	0.00			52.14				
C-B	53.04	53.04	13.26	0.00			53.04				
CD-AB	226.73	226.73	56.68	0.00	580.17	0.391	228.01	1.0	0.7	10.259	B
CD-A	82.02	82.02	20.50	0.00			82.02				

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	207.79	207.79	51.95	0.00	616.13	0.337	208.56	0.7	0.5	8.849	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	171.65	171.65	42.91	0.00			171.65				
A-D	66.25	66.25	16.56	0.00			66.25				
AB-CD	223.05	223.05	55.76	0.00	636.40	0.350	224.01	0.8	0.6	8.755	A
AB-C	223.41	223.41	55.85	0.00			223.41				
D-AB	169.39	169.39	42.35	0.00	546.02	0.310	170.08	0.6	0.5	9.593	A
D-C	48.94	48.94	12.23	0.00	304.65	0.161	49.25	0.3	0.2	14.115	B
C-D	39.15	39.15	9.79	0.00			39.15				
C-A	43.67	43.67	10.92	0.00			43.67				
C-B	44.42	44.42	11.10	0.00			44.42				
CD-AB	187.53	187.53	46.88	0.00	585.62	0.320	188.27	0.7	0.5	9.076	A
CD-A	70.63	70.63	17.66	0.00			70.63				

Redistributed Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Left-Right Stagger	Two-way	11.07	B

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Proposed Site Access		ONE HOUR	✓	153.00	100.000
B - Hamilton Lane South		ONE HOUR	✓	198.00	100.000
C - Keyham Lane West		ONE HOUR	✓	396.00	100.000
D - Hamilton Lane North		ONE HOUR	✓	384.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - Keyham Lane West	D - Hamilton Lane North
From	A - Proposed Site Access	0.000	0.000	103.000	50.000
	B - Hamilton Lane South	0.000	0.000	46.000	152.000
	C - Keyham Lane West	221.000	113.000	0.000	62.000
	D - Hamilton Lane North	73.000	262.000	49.000	0.000

Proportions

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - Keyham Lane West	D - Hamilton Lane North
From	A - Proposed Site Access	0.00	0.00	0.67	0.33
	B - Hamilton Lane South	0.00	0.00	0.23	0.77
	C - Keyham Lane West	0.56	0.29	0.00	0.16
	D - Hamilton Lane North	0.19	0.68	0.13	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - Keyham Lane West	D - Hamilton Lane North
From	A - Proposed Site Access	0	0	0	0
	B - Hamilton Lane South	0	0	0	1
	C - Keyham Lane West	0	1	0	0
	D - Hamilton Lane North	0	0	0	0

Average PCU Per Veh

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - Keyham Lane West	D - Hamilton Lane North
From	A - Proposed Site Access	1.000	1.000	1.000	1.000
	B - Hamilton Lane South	1.000	1.000	1.000	1.010
	C - Keyham Lane West	1.000	1.010	1.000	1.000
	D - Hamilton Lane North	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.34	8.61	0.5	A	181.69	272.53
A-B					0.00	0.00
A-C					94.51	141.77
A-D					45.88	68.82
AB-CD	0.42	11.08	0.8	B	191.65	287.47
AB-C					130.24	195.35
D-AB	0.78	33.83	3.3	D	307.40	461.10
D-C	0.37	39.14	0.6	E	44.96	67.44
C-D					56.89	85.34
C-A					202.79	304.19
C-B					103.69	155.54
CD-AB	0.68	15.06	2.5	C	399.20	598.80
CD-A					214.06	321.09

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	149.06	149.06	37.27	0.00	649.89	0.229	147.89	0.0	0.3	7.156	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	77.54	77.54	19.39	0.00			77.54				
A-D	37.64	37.64	9.41	0.00			37.64				
AB-CD	153.36	153.36	38.34	0.00	572.86	0.268	151.90	0.0	0.4	8.524	A
AB-C	109.71	109.71	27.43	0.00			109.71				
D-AB	252.21	252.21	63.05	0.00	527.81	0.478	248.64	0.0	0.9	12.742	B
D-C	36.89	36.89	9.22	0.00	269.90	0.137	36.27	0.0	0.2	15.369	C
C-D	46.68	46.68	11.67	0.00			46.68				
C-A	166.38	166.38	41.60	0.00			166.38				
C-B	85.07	85.07	21.27	0.00			85.07				
CD-AB	300.00	300.00	75.00	0.00	663.67	0.452	296.55	0.0	0.9	9.730	A
CD-A	200.09	200.09	50.02	0.00			200.09				

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	178.00	178.00	44.50	0.00	644.00	0.276	177.66	0.3	0.4	7.714	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	92.59	92.59	23.15	0.00			92.59				
A-D	44.95	44.95	11.24	0.00			44.95				
AB-CD	186.21	186.21	46.55	0.00	565.11	0.330	185.69	0.4	0.5	9.477	A
AB-C	129.00	129.00	32.25	0.00			129.00				
D-AB	301.16	301.16	75.29	0.00	507.16	0.594	299.12	0.9	1.4	17.129	C
D-C	44.05	44.05	11.01	0.00	226.45	0.195	43.73	0.2	0.2	19.666	C
C-D	55.74	55.74	13.93	0.00			55.74				
C-A	198.67	198.67	49.67	0.00			198.67				
C-B	101.58	101.58	25.40	0.00			101.58				
CD-AB	378.99	378.99	94.75	0.00	692.23	0.548	377.18	0.9	1.3	11.399	B
CD-A	220.39	220.39	55.10	0.00			220.39				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	218.00	218.00	54.50	0.00	635.85	0.343	217.45	0.4	0.5	8.593	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	113.41	113.41	28.35	0.00			113.41				
A-D	55.05	55.05	13.76	0.00			55.05				
AB-CD	234.16	234.16	58.54	0.00	559.59	0.418	233.18	0.5	0.7	11.007	B
AB-C	151.75	151.75	37.94	0.00			151.75				
D-AB	368.84	368.84	92.21	0.00	473.94	0.778	362.19	1.4	3.1	30.504	D
D-C	53.95	53.95	13.49	0.00	151.37	0.356	52.80	0.2	0.5	36.113	E
C-D	68.26	68.26	17.07	0.00			68.26				
C-A	243.33	243.33	60.83	0.00			243.33				
C-B	124.42	124.42	31.10	0.00			124.42				
CD-AB	506.50	506.50	126.63	0.00	751.76	0.674	502.23	1.3	2.4	14.363	B
CD-A	223.43	223.43	55.86	0.00			223.43				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	218.00	218.00	54.50	0.00	635.85	0.343	217.99	0.5	0.5	8.615	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	113.41	113.41	28.35	0.00			113.41				
A-D	55.05	55.05	13.76	0.00			55.05				
AB-CD	234.64	234.64	58.66	0.00	559.67	0.419	234.60	0.7	0.8	11.082	B
AB-C	151.80	151.80	37.95	0.00			151.80				
D-AB	368.84	368.84	92.21	0.00	472.27	0.781	367.94	3.1	3.3	33.826	D
D-C	53.95	53.95	13.49	0.00	145.46	0.371	53.78	0.5	0.6	39.136	E
C-D	68.26	68.26	17.07	0.00			68.26				
C-A	243.33	243.33	60.83	0.00			243.33				
C-B	124.42	124.42	31.10	0.00			124.42				
CD-AB	514.70	514.70	128.67	0.00	755.54	0.681	514.07	2.4	2.5	15.059	C
CD-A	220.98	220.98	55.25	0.00			220.98				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	178.00	178.00	44.50	0.00	644.00	0.276	178.52	0.5	0.4	7.744	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	92.59	92.59	23.15	0.00			92.59				
A-D	44.95	44.95	11.24	0.00			44.95				
AB-CD	186.93	186.93	46.73	0.00	565.16	0.331	187.87	0.8	0.5	9.566	A
AB-C	129.14	129.14	32.28	0.00			129.14				
D-AB	301.16	301.16	75.29	0.00	505.52	0.596	308.14	3.3	1.5	18.829	C
D-C	44.05	44.05	11.01	0.00	220.82	0.199	45.28	0.6	0.3	20.644	C
C-D	55.74	55.74	13.93	0.00			55.74				
C-A	198.67	198.67	49.67	0.00			198.67				
C-B	101.58	101.58	25.40	0.00			101.58				
CD-AB	389.18	389.18	97.30	0.00	696.10	0.559	393.35	2.5	1.5	12.104	B
CD-A	219.22	219.22	54.81	0.00			219.22				

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	149.06	149.06	37.27	0.00	649.89	0.229	149.41	0.4	0.3	7.199	A
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	77.54	77.54	19.39	0.00			77.54				
A-D	37.64	37.64	9.41	0.00			37.64				
AB-CD	154.59	154.59	38.65	0.00	572.97	0.270	155.13	0.5	0.4	8.628	A
AB-C	110.01	110.01	27.50	0.00			110.01				
D-AB	252.21	252.21	63.05	0.00	526.97	0.479	254.60	1.5	0.9	13.330	B
D-C	36.89	36.89	9.22	0.00	266.95	0.138	37.26	0.3	0.2	15.699	C
C-D	46.68	46.68	11.67	0.00			46.68				
C-A	166.38	166.38	41.60	0.00			166.38				
C-B	85.07	85.07	21.27	0.00			85.07				
CD-AB	305.82	305.82	76.46	0.00	665.44	0.460	308.07	1.5	0.9	10.151	B
CD-A	200.23	200.23	50.06	0.00			200.23				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

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Filename: Proposed Southern Access Hamilton Lane N widened090816.j9
Path: P:\JNY8843 - Scraptoft, Leicestershire\Transport\Picady
Report generation date: 09/08/2016 12:37:59

Summary of junction performance

	AM							PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	Redistributed Base + Dev												
Stream B-ACD	0.3	7.18	0.23	A	4.40	A	83 % [Stream D-C]	0.3	8.00	0.26	A	7.69	A
Stream A-B													
Stream A-C													
Stream A-D													
Stream AB-C													
Stream AB-D	0.3	7.06	0.21	A				0.2	6.93	0.16	A		
Stream D-AB	0.6	10.32	0.37	B				1.5	18.10	0.61	C		
Stream D-C	0.2	12.40	0.16	B				0.5	16.48	0.32	C		
Stream C-D													
Stream C-A													
Stream C-B													
Stream CD-AB	0.6	8.64	0.36	A				1.6	10.78	0.58	B		
Stream CD-A													

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Hamilton Lane/New Romney Crescent/Site
Location	Scraptoft, Leics
Site number	
Date	02/06/2016
Version	
Status	Proposed Southern Site Access
Identifier	
Client	
Jobnumber	JNY8843
Enumerator	EUR"pauline.pettitt
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Redistributed Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Left-Right Stagger	Two-way	4.40	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	83	Stream D-C

Arms

Arms

Arm	Name	Description	Arm type
A	Proposed Site Access		Major
B	Hamilton Lane South		Minor
C	New Romney Crescent		Major
D	Hamilton Lane North		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Proposed Site Access	7.30			250.0		-
C - New Romney Crescent	7.30			230.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Hamilton Lane South	One lane	3.20								120	180
D - Hamilton Lane North	One lane plus flare		4.40	2.20	2.20	2.20	2.20		2.00	180	58

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
1	AB-D	718.741	-	-	-	-	-	0.263	0.263	0.263	-	-
1	B-A	621.511	0.107	0.270	0.270	-	-	0.170	0.386	-	0.170	0.386
1	B-CD	752.015	0.109	0.275	0.275	-	-	-	-	-	-	-
1	CD-B	707.159	0.258	0.258	0.258	-	-	-	-	-	-	-
1	D-AB	624.263	-	-	-	-	-	0.228	0.228	0.090	-	-
1	D-C	448.937	-	0.123	0.279	0.123	0.279	0.195	0.195	0.077	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Proposed Site Access		ONE HOUR	✓	251.00	100.000
B - Hamilton Lane South		ONE HOUR	✓	135.00	100.000
C - New Romney Crescent		ONE HOUR	✓	217.00	100.000
D - Hamilton Lane North		ONE HOUR	✓	236.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - New Romney Crescent	D - Hamilton Lane North
From	A - Proposed Site Access	0.000	38.000	213.000	0.000
	B - Hamilton Lane South	9.000	0.000	5.000	121.000
	C - New Romney Crescent	47.000	12.000	0.000	158.000
	D - Hamilton Lane North	0.000	185.000	51.000	0.000

Proportions

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - New Romney Crescent	D - Hamilton Lane North
From	A - Proposed Site Access	0.00	0.15	0.85	0.00
	B - Hamilton Lane South	0.07	0.00	0.04	0.90
	C - New Romney Crescent	0.22	0.06	0.00	0.73
	D - Hamilton Lane North	0.00	0.78	0.22	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - New Romney Crescent	D - Hamilton Lane North
From	A - Proposed Site Access	0	0	0	0
	B - Hamilton Lane South	0	0	0	2
	C - New Romney Crescent	0	0	0	0
	D - Hamilton Lane North	0	3	1	0

Average PCU Per Veh

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - New Romney Crescent	D - Hamilton Lane North
From	A - Proposed Site Access	1.000	1.000	1.000	1.000
	B - Hamilton Lane South	1.000	1.000	1.000	1.020
	C - New Romney Crescent	1.000	1.000	1.000	1.000
	D - Hamilton Lane North	1.000	1.030	1.010	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.23	7.18	0.3	A	123.88	185.82
A-B					34.87	52.30
A-C					195.45	293.18
A-D					0.00	0.00
AB-C					200.04	300.05
AB-D	0.21	7.06	0.3	A	110.93	166.39
D-AB	0.37	10.32	0.6	B	169.76	254.64
D-C	0.16	12.40	0.2	B	46.80	70.20
C-D					144.98	217.48
C-A					43.13	64.69
C-B					11.01	16.52
CD-AB	0.36	8.64	0.6	A	193.55	290.32
CD-A					30.13	45.20

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	101.63	101.63	25.41	0.00	675.55	0.150	100.93	0.0	0.2	6.257	A
A-B	28.61	28.61	7.15	0.00			28.61				
A-C	160.36	160.36	40.09	0.00			160.36				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	164.10	164.10	41.02	0.00			164.10				
AB-D	90.47	90.47	22.62	0.00	662.57	0.137	89.84	0.0	0.2	6.279	A
D-AB	139.28	139.28	34.82	0.00	570.95	0.244	138.00	0.0	0.3	8.292	A
D-C	38.40	38.40	9.60	0.00	380.21	0.101	37.95	0.0	0.1	10.504	B
C-D	118.95	118.95	29.74	0.00			118.95				
C-A	35.38	35.38	8.85	0.00			35.38				
C-B	9.03	9.03	2.26	0.00			9.03				
CD-AB	155.26	155.26	38.82	0.00	663.06	0.234	154.00	0.0	0.3	7.051	A
CD-A	27.16	27.16	6.79	0.00			27.16				

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	121.36	121.36	30.34	0.00	664.85	0.183	121.18	0.2	0.2	6.620	A
A-B	34.16	34.16	8.54	0.00			34.16				
A-C	191.48	191.48	47.87	0.00			191.48				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	195.97	195.97	48.99	0.00			195.97				
AB-D	108.61	108.61	27.15	0.00	654.40	0.166	108.45	0.2	0.2	6.592	A
D-AB	166.31	166.31	41.58	0.00	563.33	0.295	165.93	0.3	0.4	9.048	A
D-C	45.85	45.85	11.46	0.00	366.47	0.125	45.73	0.1	0.1	11.224	B
C-D	142.04	142.04	35.51	0.00			142.04				
C-A	42.25	42.25	10.56	0.00			42.25				
C-B	10.79	10.79	2.70	0.00			10.79				
CD-AB	188.73	188.73	47.18	0.00	658.51	0.287	188.33	0.3	0.4	7.654	A
CD-A	30.24	30.24	7.56	0.00			30.24				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	148.64	148.64	37.16	0.00	650.01	0.229	148.35	0.2	0.3	7.170	A
A-B	41.84	41.84	10.46	0.00			41.84				
A-C	234.52	234.52	58.63	0.00			234.52				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	240.01	240.01	60.00	0.00			240.01				
AB-D	132.96	132.96	33.24	0.00	643.11	0.207	132.72	0.2	0.3	7.050	A
D-AB	203.69	203.69	50.92	0.00	552.49	0.369	203.05	0.4	0.6	10.282	B
D-C	56.15	56.15	14.04	0.00	346.55	0.162	55.95	0.1	0.2	12.379	B
C-D	173.96	173.96	43.49	0.00			173.96				
C-A	51.75	51.75	12.94	0.00			51.75				
C-B	13.21	13.21	3.30	0.00			13.21				
CD-AB	234.90	234.90	58.72	0.00	652.34	0.360	234.22	0.4	0.6	8.605	A
CD-A	33.11	33.11	8.28	0.00			33.11				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	148.64	148.64	37.16	0.00	649.94	0.229	148.63	0.3	0.3	7.180	A
A-B	41.84	41.84	10.46	0.00			41.84				
A-C	234.52	234.52	58.63	0.00			234.52				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	240.02	240.02	60.01	0.00			240.02				
AB-D	133.22	133.22	33.30	0.00	643.11	0.207	133.21	0.3	0.3	7.059	A
D-AB	203.69	203.69	50.92	0.00	552.39	0.369	203.67	0.6	0.6	10.321	B
D-C	56.15	56.15	14.04	0.00	346.35	0.162	56.15	0.2	0.2	12.404	B
C-D	173.96	173.96	43.49	0.00			173.96				
C-A	51.75	51.75	12.94	0.00			51.75				
C-B	13.21	13.21	3.30	0.00			13.21				
CD-AB	235.58	235.58	58.89	0.00	652.39	0.361	235.55	0.6	0.6	8.639	A
CD-A	33.05	33.05	8.26	0.00			33.05				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	121.36	121.36	30.34	0.00	664.75	0.183	121.64	0.3	0.2	6.631	A
A-B	34.16	34.16	8.54	0.00			34.16				
A-C	191.48	191.48	47.87	0.00			191.48				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	195.99	195.99	49.00	0.00			195.99				
AB-D	109.03	109.03	27.26	0.00	654.40	0.167	109.26	0.3	0.2	6.608	A
D-AB	166.31	166.31	41.58	0.00	563.18	0.295	166.93	0.6	0.4	9.099	A
D-C	45.85	45.85	11.46	0.00	366.21	0.125	46.04	0.2	0.1	11.250	B
C-D	142.04	142.04	35.51	0.00			142.04				
C-A	42.25	42.25	10.56	0.00			42.25				
C-B	10.79	10.79	2.70	0.00			10.79				
CD-AB	189.80	189.80	47.45	0.00	658.58	0.288	190.45	0.6	0.4	7.702	A
CD-A	30.17	30.17	7.54	0.00			30.17				

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	101.63	101.63	25.41	0.00	675.39	0.150	101.82	0.2	0.2	6.277	A
A-B	28.61	28.61	7.15	0.00			28.61				
A-C	160.36	160.36	40.09	0.00			160.36				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	164.13	164.13	41.03	0.00			164.13				
AB-D	91.26	91.26	22.82	0.00	662.57	0.138	91.43	0.2	0.2	6.306	A
D-AB	139.28	139.28	34.82	0.00	570.68	0.244	139.67	0.4	0.3	8.361	A
D-C	38.40	38.40	9.60	0.00	379.80	0.101	38.52	0.1	0.1	10.554	B
C-D	118.95	118.95	29.74	0.00			118.95				
C-A	35.38	35.38	8.85	0.00			35.38				
C-B	9.03	9.03	2.26	0.00			9.03				
CD-AB	157.03	157.03	39.26	0.00	663.12	0.237	157.44	0.4	0.3	7.126	A
CD-A	27.06	27.06	6.76	0.00			27.06				

Redistributed Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	Left-Right Stagger	Two-way	7.69	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Proposed Site Access		ONE HOUR	✓	114.00	100.000
B - Hamilton Lane South		ONE HOUR	✓	140.00	100.000
C - New Romney Crescent		ONE HOUR	✓	326.00	100.000
D - Hamilton Lane North		ONE HOUR	✓	372.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - New Romney Crescent	D - Hamilton Lane North
From	A - Proposed Site Access	0.000	17.000	97.000	0.000
	B - Hamilton Lane South	36.000	0.000	14.000	90.000
	C - New Romney Crescent	183.000	34.000	0.000	109.000
	D - Hamilton Lane North	0.000	279.000	93.000	0.000

Proportions

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - New Romney Crescent	D - Hamilton Lane North
From	A - Proposed Site Access	0.00	0.15	0.85	0.00
	B - Hamilton Lane South	0.26	0.00	0.10	0.64
	C - New Romney Crescent	0.56	0.10	0.00	0.33
	D - Hamilton Lane North	0.00	0.75	0.25	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - New Romney Crescent	D - Hamilton Lane North
From	A - Proposed Site Access	0	0	0	0
	B - Hamilton Lane South	0	0	0	1
	C - New Romney Crescent	0	0	0	0
	D - Hamilton Lane North	0	1	0	0

Average PCU Per Veh

		To			
		A - Proposed Site Access	B - Hamilton Lane South	C - New Romney Crescent	D - Hamilton Lane North
From	A - Proposed Site Access	1.000	1.000	1.000	1.000
	B - Hamilton Lane South	1.000	1.000	1.000	1.010
	C - New Romney Crescent	1.000	1.000	1.000	1.000
	D - Hamilton Lane North	1.000	1.010	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.26	8.00	0.3	A	128.47	192.70
A-B					15.60	23.40
A-C					89.01	133.51
A-D					0.00	0.00
AB-C					101.84	152.76
AB-D	0.16	6.93	0.2	A	82.50	123.75
D-AB	0.61	18.10	1.5	C	256.02	384.02
D-C	0.32	16.48	0.5	C	85.34	128.01
C-D					100.02	150.03
C-A					167.92	251.89
C-B					31.20	46.80
CD-AB	0.58	10.78	1.6	B	367.80	551.70
CD-A					86.91	130.37

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	105.40	105.40	26.35	0.00	642.90	0.164	104.62	0.0	0.2	6.678	A
A-B	12.80	12.80	3.20	0.00			12.80				
A-C	73.03	73.03	18.26	0.00			73.03				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	83.49	83.49	20.87	0.00			83.49				
AB-D	67.26	67.26	16.81	0.00	647.78	0.104	66.80	0.0	0.1	6.187	A
D-AB	210.05	210.05	52.51	0.00	545.31	0.385	207.59	0.0	0.6	10.586	B
D-C	70.02	70.02	17.50	0.00	382.77	0.183	69.13	0.0	0.2	11.447	B
C-D	82.06	82.06	20.52	0.00			82.06				
C-A	137.77	137.77	34.44	0.00			137.77				
C-B	25.60	25.60	6.40	0.00			25.60				
CD-AB	284.28	284.28	71.07	0.00	764.70	0.372	281.62	0.0	0.7	7.422	A
CD-A	86.67	86.67	21.67	0.00			86.67				

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	125.86	125.86	31.46	0.00	627.29	0.201	125.64	0.2	0.2	7.172	A
A-B	15.28	15.28	3.82	0.00			15.28				
A-C	87.20	87.20	21.80	0.00			87.20				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	99.77	99.77	24.94	0.00			99.77				
AB-D	80.77	80.77	20.19	0.00	635.39	0.127	80.65	0.1	0.1	6.487	A
D-AB	250.82	250.82	62.70	0.00	529.56	0.474	249.76	0.6	0.9	12.815	B
D-C	83.61	83.61	20.90	0.00	361.40	0.231	83.30	0.2	0.3	12.930	B
C-D	97.99	97.99	24.50	0.00			97.99				
C-A	164.51	164.51	41.13	0.00			164.51				
C-B	30.57	30.57	7.64	0.00			30.57				
CD-AB	355.34	355.34	88.84	0.00	777.73	0.457	354.18	0.7	1.0	8.497	A
CD-A	89.50	89.50	22.38	0.00			89.50				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	154.14	154.14	38.54	0.00	605.16	0.255	153.79	0.2	0.3	7.969	A
A-B	18.72	18.72	4.68	0.00			18.72				
A-C	106.80	106.80	26.70	0.00			106.80				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	122.18	122.18	30.54	0.00			122.18				
AB-D	98.86	98.86	24.72	0.00	618.26	0.160	98.69	0.1	0.2	6.927	A
D-AB	307.18	307.18	76.80	0.00	506.00	0.607	304.79	0.9	1.5	17.675	C
D-C	102.39	102.39	25.60	0.00	322.00	0.318	101.76	0.3	0.5	16.294	C
C-D	120.01	120.01	30.00	0.00			120.01				
C-A	201.49	201.49	50.37	0.00			201.49				
C-B	37.43	37.43	9.36	0.00			37.43				
CD-AB	457.76	457.76	114.44	0.00	795.72	0.575	455.38	1.0	1.6	10.561	B
CD-A	85.96	85.96	21.49	0.00			85.96				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	154.14	154.14	38.54	0.00	604.26	0.255	154.13	0.3	0.3	7.997	A
A-B	18.72	18.72	4.68	0.00			18.72				
A-C	106.80	106.80	26.70	0.00			106.80				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	122.21	122.21	30.55	0.00			122.21				
AB-D	99.09	99.09	24.77	0.00	618.26	0.160	99.08	0.2	0.2	6.933	A
D-AB	307.18	307.18	76.80	0.00	505.59	0.608	307.04	1.5	1.5	18.096	C
D-C	102.39	102.39	25.60	0.00	320.69	0.319	102.36	0.5	0.5	16.483	C
C-D	120.01	120.01	30.00	0.00			120.01				
C-A	201.49	201.49	50.37	0.00			201.49				
C-B	37.43	37.43	9.36	0.00			37.43				
CD-AB	460.88	460.88	115.22	0.00	796.19	0.579	460.71	1.6	1.6	10.778	B
CD-A	85.09	85.09	21.27	0.00			85.09				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	125.86	125.86	31.46	0.00	626.03	0.201	126.20	0.3	0.3	7.209	A
A-B	15.28	15.28	3.82	0.00			15.28				
A-C	87.20	87.20	21.80	0.00			87.20				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	99.82	99.82	24.96	0.00			99.82				
AB-D	81.13	81.13	20.28	0.00	635.39	0.128	81.30	0.2	0.1	6.500	A
D-AB	250.82	250.82	62.70	0.00	529.09	0.474	253.16	1.5	0.9	13.154	B
D-C	83.61	83.61	20.90	0.00	360.26	0.232	84.22	0.5	0.3	13.072	B
C-D	97.99	97.99	24.50	0.00			97.99				
C-A	164.51	164.51	41.13	0.00			164.51				
C-B	30.57	30.57	7.64	0.00			30.57				
CD-AB	359.76	359.76	89.94	0.00	778.42	0.462	362.06	1.6	1.0	8.713	A
CD-A	88.47	88.47	22.12	0.00			88.47				

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	105.40	105.40	26.35	0.00	641.61	0.164	105.62	0.3	0.2	6.721	A
A-B	12.80	12.80	3.20	0.00			12.80				
A-C	73.03	73.03	18.26	0.00			73.03				
A-D	0.00	0.00	0.00	0.00			0.00				
AB-C	83.59	83.59	20.90	0.00			83.59				
AB-D	67.90	67.90	16.98	0.00	647.78	0.105	68.02	0.1	0.1	6.212	A
D-AB	210.05	210.05	52.51	0.00	544.76	0.386	211.19	0.9	0.6	10.828	B
D-C	70.02	70.02	17.50	0.00	381.94	0.183	70.33	0.3	0.2	11.566	B
C-D	82.06	82.06	20.52	0.00			82.06				
C-A	137.77	137.77	34.44	0.00			137.77				
C-B	25.60	25.60	6.40	0.00			25.60				
CD-AB	288.78	288.78	72.19	0.00	765.22	0.377	290.03	1.0	0.7	7.607	A
CD-A	85.78	85.78	21.45	0.00			85.78				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

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Filename: Scraptoft La-New Romney Cres090816.j9
Path: P:\JNY8843 - Scraptoft, Leicestershire\Transport\Picady
Report generation date: 09/08/2016 12:27:49

Summary of junction performance

	AM							PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	Redistributed Base + Dev												
Stream B-C	0.4	13.91	0.28	B	10.11	B	6 % [Stream B-A]	0.2	8.94	0.19	A	4.47	A
Stream B-A	2.3	26.87	0.71	D				0.8	16.21	0.46	C		
Stream C-AB	0.7	7.46	0.35	A				0.7	7.82	0.34	A		
Stream C-A													
Stream A-B													
Stream A-C													
	2016 Base No Dev												
Stream B-C	0.2	6.74	0.16	A	2.86	A	102 % [Stream B-A]	0.2	6.83	0.15	A	2.37	A
Stream B-A	0.3	9.57	0.22	A				0.3	9.92	0.21	A		
Stream C-AB	0.3	5.64	0.15	A				0.2	5.57	0.13	A		
Stream C-A													
Stream A-B													
Stream A-C													

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Scraptoft Lane/New Romney Crescent
Location	Scraptoft, Leics
Site number	
Date	02/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8843
Enumerator	EUR"pauline.pettitt
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
2016 Base No Dev	AM	ONE HOUR	07:45	09:15	15	✓
2016 Base No Dev	PM	ONE HOUR	16:45	18:15	15	✓

Redistributed Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - New Romney Crescent - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	10.11	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Scraptoft Lane West		Major
B	New Romney Crescent		Minor
C	Scraptoft Lane East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Scraptoft Lane East	7.30			200.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - New Romney Crescent	One lane plus flare	10.00	4.50	3.50	3.50	3.50	✓	1.00	100	150

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	657.270	0.113	0.285	0.180	0.408
1	B-C	721.514	0.104	0.264	-	-
1	C-B	689.785	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Scraptoft Lane West		ONE HOUR	✓	284.00	100.000
B - New Romney Crescent		ONE HOUR	✓	378.00	100.000
C - Scraptoft Lane East		ONE HOUR	✓	377.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.000	111.000	173.000
	B - New Romney Crescent	288.000	0.000	90.000
	C - Scraptoft Lane East	217.000	160.000	0.000

Proportions

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.00	0.39	0.61
	B - New Romney Crescent	0.76	0.00	0.24
	C - Scraptoft Lane East	0.58	0.42	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0	1	7
	B - New Romney Crescent	1	0	3
	C - Scraptoft Lane East	3	4	0

Average PCU Per Veh

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	1.000	1.010	1.070
	B - New Romney Crescent	1.010	1.000	1.030
	C - Scraptoft Lane East	1.030	1.040	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.28	13.91	0.4	B	82.59	123.88
B-A	0.71	26.87	2.3	D	264.27	396.41
C-AB	0.35	7.46	0.7	A	204.23	306.34
C-A					141.72	212.57
A-B					101.86	152.78
A-C					158.75	238.12

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67.76	67.76	16.94	0.00	549.64	0.123	67.20	0.0	0.1	7.455	A
B-A	216.82	216.82	54.21	0.00	518.72	0.418	214.01	0.0	0.7	11.712	B
C-AB	155.96	155.96	38.99	0.00	715.36	0.218	154.59	0.0	0.3	6.413	A
C-A	127.87	127.87	31.97	0.00			127.87				
A-B	83.57	83.57	20.89	0.00			83.57				
A-C	130.24	130.24	32.56	0.00			130.24				

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80.91	80.91	20.23	0.00	487.59	0.166	80.68	0.1	0.2	8.843	A
B-A	258.91	258.91	64.73	0.00	490.75	0.528	257.40	0.7	1.1	15.324	C
C-AB	196.69	196.69	49.17	0.00	726.79	0.271	196.20	0.3	0.5	6.789	A
C-A	142.23	142.23	35.56	0.00			142.23				
A-B	99.79	99.79	24.95	0.00			99.79				
A-C	155.52	155.52	38.88	0.00			155.52				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99.09	99.09	24.77	0.00	365.74	0.271	98.42	0.2	0.4	13.434	B
B-A	317.09	317.09	79.27	0.00	450.24	0.704	312.68	1.1	2.2	25.371	D
C-AB	259.53	259.53	64.88	0.00	742.98	0.349	258.63	0.5	0.7	7.439	A
C-A	155.55	155.55	38.89	0.00			155.55				
A-B	122.21	122.21	30.55	0.00			122.21				
A-C	190.48	190.48	47.62	0.00			190.48				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99.09	99.09	24.77	0.00	357.80	0.277	99.04	0.4	0.4	13.908	B
B-A	317.09	317.09	79.27	0.00	449.70	0.705	316.71	2.2	2.3	26.869	D
C-AB	259.79	259.79	64.95	0.00	743.24	0.350	259.77	0.7	0.7	7.464	A
C-A	155.29	155.29	38.82	0.00			155.29				
A-B	122.21	122.21	30.55	0.00			122.21				
A-C	190.48	190.48	47.62	0.00			190.48				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80.91	80.91	20.23	0.00	479.97	0.169	81.60	0.4	0.2	9.051	A
B-A	258.91	258.91	64.73	0.00	490.22	0.528	263.39	2.3	1.2	16.166	C
C-AB	197.01	197.01	49.25	0.00	727.19	0.271	197.89	0.7	0.5	6.819	A
C-A	141.90	141.90	35.48	0.00			141.90				
A-B	99.79	99.79	24.95	0.00			99.79				
A-C	155.52	155.52	38.88	0.00			155.52				

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67.76	67.76	16.94	0.00	545.41	0.124	68.00	0.2	0.1	7.543	A
B-A	216.82	216.82	54.21	0.00	518.07	0.419	218.51	1.2	0.7	12.084	B
C-AB	156.38	156.38	39.09	0.00	715.71	0.219	156.89	0.5	0.4	6.451	A
C-A	127.45	127.45	31.86	0.00			127.45				
A-B	83.57	83.57	20.89	0.00			83.57				
A-C	130.24	130.24	32.56	0.00			130.24				

Redistributed Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - New Romney Crescent - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	4.47	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Scraptoft Lane West		ONE HOUR	✓	518.00	100.000
B - New Romney Crescent		ONE HOUR	✓	257.00	100.000
C - Scraptoft Lane East		ONE HOUR	✓	371.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.000	267.000	251.000
	B - New Romney Crescent	173.000	0.000	84.000
	C - Scraptoft Lane East	231.000	140.000	0.000

Proportions

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.00	0.52	0.48
	B - New Romney Crescent	0.67	0.00	0.33
	C - Scraptoft Lane East	0.62	0.38	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0	1	2
	B - New Romney Crescent	1	0	2
	C - Scraptoft Lane East	6	3	0

Average PCU Per Veh

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	1.000	1.010	1.020
	B - New Romney Crescent	1.010	1.000	1.020
	C - Scraptoft Lane East	1.060	1.030	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.19	8.94	0.2	A	77.08	115.62
B-A	0.46	16.21	0.8	C	158.75	238.12
C-AB	0.34	7.82	0.7	A	187.45	281.18
C-A					152.98	229.47
A-B					245.00	367.51
A-C					230.32	345.48

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	63.24	63.24	15.81	0.00	595.42	0.106	62.77	0.0	0.1	6.753	A
B-A	130.24	130.24	32.56	0.00	486.92	0.267	128.80	0.0	0.4	10.013	B
C-AB	140.88	140.88	35.22	0.00	687.96	0.205	139.56	0.0	0.3	6.556	A
C-A	138.43	138.43	34.61	0.00			138.43				
A-B	201.01	201.01	50.25	0.00			201.01				
A-C	188.97	188.97	47.24	0.00			188.97				

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75.51	75.51	18.88	0.00	559.65	0.135	75.37	0.1	0.2	7.432	A
B-A	155.52	155.52	38.88	0.00	456.03	0.341	154.93	0.4	0.5	11.932	B
C-AB	179.65	179.65	44.91	0.00	693.92	0.259	179.14	0.3	0.5	6.993	A
C-A	153.87	153.87	38.47	0.00			153.87				
A-B	240.03	240.03	60.01	0.00			240.03				
A-C	225.64	225.64	56.41	0.00			225.64				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92.49	92.49	23.12	0.00	496.84	0.186	92.20	0.2	0.2	8.890	A
B-A	190.48	190.48	47.62	0.00	412.65	0.462	189.18	0.5	0.8	16.015	C
C-AB	241.25	241.25	60.31	0.00	703.15	0.343	240.24	0.5	0.7	7.777	A
C-A	167.23	167.23	41.81	0.00			167.23				
A-B	293.97	293.97	73.49	0.00			293.97				
A-C	276.36	276.36	69.09	0.00			276.36				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92.49	92.49	23.12	0.00	495.24	0.187	92.48	0.2	0.2	8.938	A
B-A	190.48	190.48	47.62	0.00	412.33	0.462	190.42	0.8	0.8	16.212	C
C-AB	241.57	241.57	60.39	0.00	703.46	0.343	241.54	0.7	0.7	7.818	A
C-A	166.91	166.91	41.73	0.00			166.91				
A-B	293.97	293.97	73.49	0.00			293.97				
A-C	276.36	276.36	69.09	0.00			276.36				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75.51	75.51	18.88	0.00	557.96	0.135	75.79	0.2	0.2	7.472	A
B-A	155.52	155.52	38.88	0.00	455.62	0.341	156.79	0.8	0.5	12.099	B
C-AB	180.04	180.04	45.01	0.00	694.35	0.259	181.01	0.7	0.5	7.047	A
C-A	153.48	153.48	38.37	0.00			153.48				
A-B	240.03	240.03	60.01	0.00			240.03				
A-C	225.64	225.64	56.41	0.00			225.64				

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	63.24	63.24	15.81	0.00	593.96	0.106	63.39	0.2	0.1	6.788	A
B-A	130.24	130.24	32.56	0.00	486.36	0.268	130.87	0.5	0.4	10.146	B
C-AB	141.34	141.34	35.33	0.00	688.29	0.205	141.88	0.5	0.3	6.610	A
C-A	137.97	137.97	34.49	0.00			137.97				
A-B	201.01	201.01	50.25	0.00			201.01				
A-C	188.97	188.97	47.24	0.00			188.97				

2016 Base No Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - New Romney Crescent - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	2.86	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2016 Base No Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Scraptoft Lane West		ONE HOUR	✓	240.00	100.000
B - New Romney Crescent		ONE HOUR	✓	184.00	100.000
C - Scraptoft Lane East		ONE HOUR	✓	288.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.000	67.000	173.000
	B - New Romney Crescent	94.000	0.000	90.000
	C - Scraptoft Lane East	217.000	71.000	0.000

Proportions

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.00	0.28	0.72
	B - New Romney Crescent	0.51	0.00	0.49
	C - Scraptoft Lane East	0.75	0.25	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0	1	7
	B - New Romney Crescent	1	0	3
	C - Scraptoft Lane East	3	4	0

Average PCU Per Veh

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	1.000	1.010	1.070
	B - New Romney Crescent	1.010	1.000	1.030
	C - Scraptoft Lane East	1.030	1.040	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.16	6.74	0.2	A	82.59	123.88
B-A	0.22	9.57	0.3	A	86.26	129.38
C-AB	0.15	5.64	0.3	A	89.94	134.91
C-A					174.34	261.50
A-B					61.48	92.22
A-C					158.75	238.12

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67.76	67.76	16.94	0.00	671.75	0.101	67.31	0.0	0.1	5.952	A
B-A	70.77	70.77	17.69	0.00	524.47	0.135	70.15	0.0	0.2	7.914	A
C-AB	68.38	68.38	17.09	0.00	721.91	0.095	67.82	0.0	0.1	5.501	A
C-A	148.45	148.45	37.11	0.00			148.45				
A-B	50.44	50.44	12.61	0.00			50.44				
A-C	130.24	130.24	32.56	0.00			130.24				

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80.91	80.91	20.23	0.00	656.36	0.123	80.80	0.1	0.1	6.252	A
B-A	84.50	84.50	21.13	0.00	505.76	0.167	84.33	0.2	0.2	8.538	A
C-AB	86.89	86.89	21.72	0.00	735.27	0.118	86.71	0.1	0.2	5.555	A
C-A	172.02	172.02	43.00	0.00			172.02				
A-B	60.23	60.23	15.06	0.00			60.23				
A-C	155.52	155.52	38.88	0.00			155.52				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99.09	99.09	24.77	0.00	633.61	0.156	98.91	0.1	0.2	6.731	A
B-A	103.50	103.50	25.87	0.00	479.61	0.216	103.20	0.2	0.3	9.556	A
C-AB	114.39	114.39	28.60	0.00	753.02	0.152	114.11	0.2	0.3	5.638	A
C-A	202.71	202.71	50.68	0.00			202.71				
A-B	73.77	73.77	18.44	0.00			73.77				
A-C	190.48	190.48	47.62	0.00			190.48				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99.09	99.09	24.77	0.00	633.42	0.156	99.09	0.2	0.2	6.736	A
B-A	103.50	103.50	25.87	0.00	479.53	0.216	103.49	0.3	0.3	9.573	A
C-AB	114.46	114.46	28.62	0.00	753.11	0.152	114.46	0.3	0.3	5.641	A
C-A	202.63	202.63	50.66	0.00			202.63				
A-B	73.77	73.77	18.44	0.00			73.77				
A-C	190.48	190.48	47.62	0.00			190.48				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80.91	80.91	20.23	0.00	656.07	0.123	81.08	0.2	0.1	6.262	A
B-A	84.50	84.50	21.13	0.00	505.66	0.167	84.79	0.3	0.2	8.559	A
C-AB	86.99	86.99	21.75	0.00	735.41	0.118	87.26	0.3	0.2	5.559	A
C-A	171.92	171.92	42.98	0.00			171.92				
A-B	60.23	60.23	15.06	0.00			60.23				
A-C	155.52	155.52	38.88	0.00			155.52				

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67.76	67.76	16.94	0.00	671.31	0.101	67.87	0.1	0.1	5.966	A
B-A	70.77	70.77	17.69	0.00	524.28	0.135	70.95	0.2	0.2	7.944	A
C-AB	68.53	68.53	17.13	0.00	722.05	0.095	68.71	0.2	0.1	5.511	A
C-A	148.29	148.29	37.07	0.00			148.29				
A-B	50.44	50.44	12.61	0.00			50.44				
A-C	130.24	130.24	32.56	0.00			130.24				

2016 Base No Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - New Romney Crescent - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	2.37	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2016 Base No Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Scraptoft Lane West		ONE HOUR	✓	335.00	100.000
B - New Romney Crescent		ONE HOUR	✓	171.00	100.000
C - Scraptoft Lane East		ONE HOUR	✓	290.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.000	84.000	251.000
	B - New Romney Crescent	87.000	0.000	84.000
	C - Scraptoft Lane East	231.000	59.000	0.000

Proportions

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.00	0.25	0.75
	B - New Romney Crescent	0.51	0.00	0.49
	C - Scraptoft Lane East	0.80	0.20	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0	1	2
	B - New Romney Crescent	1	0	2
	C - Scraptoft Lane East	6	3	0

Average PCU Per Veh

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	1.000	1.010	1.020
	B - New Romney Crescent	1.010	1.000	1.020
	C - Scraptoft Lane East	1.060	1.030	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.15	6.83	0.2	A	77.08	115.62
B-A	0.21	9.92	0.3	A	79.83	119.75
C-AB	0.13	5.57	0.2	A	76.88	115.32
C-A					189.23	283.84
A-B					77.08	115.62
A-C					230.32	345.48

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	63.24	63.24	15.81	0.00	664.27	0.095	62.82	0.0	0.1	5.982	A
B-A	65.50	65.50	16.37	0.00	510.02	0.128	64.91	0.0	0.1	8.077	A
C-AB	57.91	57.91	14.48	0.00	717.73	0.081	57.42	0.0	0.1	5.451	A
C-A	160.42	160.42	40.10	0.00			160.42				
A-B	63.24	63.24	15.81	0.00			63.24				
A-C	188.97	188.97	47.24	0.00			188.97				

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75.51	75.51	18.88	0.00	646.17	0.117	75.41	0.1	0.1	6.307	A
B-A	78.21	78.21	19.55	0.00	488.60	0.160	78.04	0.1	0.2	8.764	A
C-AB	74.14	74.14	18.53	0.00	729.48	0.102	73.97	0.1	0.2	5.491	A
C-A	186.57	186.57	46.64	0.00			186.57				
A-B	75.51	75.51	18.88	0.00			75.51				
A-C	225.64	225.64	56.41	0.00			225.64				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92.49	92.49	23.12	0.00	619.74	0.149	92.32	0.1	0.2	6.824	A
B-A	95.79	95.79	23.95	0.00	458.73	0.209	95.50	0.2	0.3	9.902	A
C-AB	98.44	98.44	24.61	0.00	745.27	0.132	98.18	0.2	0.2	5.563	A
C-A	220.85	220.85	55.21	0.00			220.85				
A-B	92.49	92.49	23.12	0.00			92.49				
A-C	276.36	276.36	69.09	0.00			276.36				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92.49	92.49	23.12	0.00	619.55	0.149	92.48	0.2	0.2	6.829	A
B-A	95.79	95.79	23.95	0.00	458.67	0.209	95.78	0.3	0.3	9.920	A
C-AB	98.51	98.51	24.63	0.00	745.34	0.132	98.51	0.2	0.2	5.570	A
C-A	220.78	220.78	55.20	0.00			220.78				
A-B	92.49	92.49	23.12	0.00			92.49				
A-C	276.36	276.36	69.09	0.00			276.36				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75.51	75.51	18.88	0.00	645.89	0.117	75.68	0.2	0.1	6.314	A
B-A	78.21	78.21	19.55	0.00	488.52	0.160	78.49	0.3	0.2	8.787	A
C-AB	74.23	74.23	18.56	0.00	729.58	0.102	74.48	0.2	0.2	5.508	A
C-A	186.47	186.47	46.62	0.00			186.47				
A-B	75.51	75.51	18.88	0.00			75.51				
A-C	225.64	225.64	56.41	0.00			225.64				

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	63.24	63.24	15.81	0.00	663.84	0.095	63.35	0.1	0.1	5.997	A
B-A	65.50	65.50	16.37	0.00	509.87	0.128	65.67	0.2	0.1	8.109	A
C-AB	58.06	58.06	14.51	0.00	717.80	0.081	58.22	0.2	0.1	5.468	A
C-A	160.27	160.27	40.07	0.00			160.27				
A-B	63.24	63.24	15.81	0.00			63.24				
A-C	188.97	188.97	47.24	0.00			188.97				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Scraptoft La-New Romney Cres_imp090816.j9
Path: P:\JNY8843 - Scraptoft, Leicestershire\Transport\Picady
Report generation date: 09/08/2016 13:30:59

Summary of junction performance

	AM							PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	Redistributed Base + Dev												
Stream B-C	0.3	11.81	0.25	B	9.45	A	8 % [Stream B-A]	0.2	8.58	0.18	A	4.40	A
Stream B-A	2.1	25.12	0.69	D				0.8	15.89	0.46	C		
Stream C-AB	0.7	7.46	0.35	A				0.7	7.82	0.34	A		
Stream C-A													
Stream A-B													
Stream A-C													

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Scraptoft Lane/New Romney Crescent
Location	Scraptoft, Leics
Site number	
Date	02/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8843
Enumerator	EUR"pauline.pettitt
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Redistributed Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	9.45	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	8	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Scraptoft Lane West		Major
B	New Romney Crescent		Minor
C	Scraptoft Lane East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Scraptoft Lane East	7.30			200.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - New Romney Crescent	One lane plus flare	10.00	6.00	6.00	3.50	3.50	✓	2.00	100	150

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	658.077	0.113	0.286	0.180	0.408
1	B-C	691.997	0.100	0.253	-	-
1	C-B	689.785	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Scraptoft Lane West		ONE HOUR	✓	284.00	100.000
B - New Romney Crescent		ONE HOUR	✓	378.00	100.000
C - Scraptoft Lane East		ONE HOUR	✓	377.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.000	111.000	173.000
	B - New Romney Crescent	288.000	0.000	90.000
	C - Scraptoft Lane East	217.000	160.000	0.000

Proportions

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.00	0.39	0.61
	B - New Romney Crescent	0.76	0.00	0.24
	C - Scraptoft Lane East	0.58	0.42	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0	1	7
	B - New Romney Crescent	1	0	3
	C - Scraptoft Lane East	3	4	0

Average PCU Per Veh

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	1.000	1.010	1.070
	B - New Romney Crescent	1.010	1.000	1.030
	C - Scraptoft Lane East	1.030	1.040	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	11.81	0.3	B	82.59	123.88
B-A	0.69	25.12	2.1	D	264.27	396.41
C-AB	0.35	7.46	0.7	A	204.23	306.34
C-A					141.72	212.57
A-B					101.86	152.78
A-C					158.75	238.12

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67.76	67.76	16.94	0.00	550.44	0.123	67.20	0.0	0.1	7.442	A
B-A	216.82	216.82	54.21	0.00	521.74	0.416	214.04	0.0	0.7	11.600	B
C-AB	155.96	155.96	38.99	0.00	715.36	0.218	154.59	0.0	0.3	6.413	A
C-A	127.87	127.87	31.97	0.00			127.87				
A-B	83.57	83.57	20.89	0.00			83.57				
A-C	130.24	130.24	32.56	0.00			130.24				

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80.91	80.91	20.23	0.00	505.81	0.160	80.71	0.1	0.2	8.465	A
B-A	258.91	258.91	64.73	0.00	495.73	0.522	257.46	0.7	1.1	15.013	C
C-AB	196.69	196.69	49.17	0.00	726.79	0.271	196.20	0.3	0.5	6.789	A
C-A	142.23	142.23	35.56	0.00			142.23				
A-B	99.79	99.79	24.95	0.00			99.79				
A-C	155.52	155.52	38.88	0.00			155.52				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99.09	99.09	24.77	0.00	410.10	0.242	98.59	0.2	0.3	11.538	B
B-A	317.09	317.09	79.27	0.00	459.50	0.690	313.09	1.1	2.1	23.939	C
C-AB	259.53	259.53	64.88	0.00	742.98	0.349	258.63	0.5	0.7	7.439	A
C-A	155.55	155.55	38.89	0.00			155.55				
A-B	122.21	122.21	30.55	0.00			122.21				
A-C	190.48	190.48	47.62	0.00			190.48				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99.09	99.09	24.77	0.00	403.90	0.245	99.06	0.3	0.3	11.807	B
B-A	317.09	317.09	79.27	0.00	459.26	0.690	316.78	2.1	2.1	25.116	D
C-AB	259.79	259.79	64.95	0.00	743.24	0.350	259.77	0.7	0.7	7.464	A
C-A	155.29	155.29	38.82	0.00			155.29				
A-B	122.21	122.21	30.55	0.00			122.21				
A-C	190.48	190.48	47.62	0.00			190.48				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80.91	80.91	20.23	0.00	500.49	0.162	81.41	0.3	0.2	8.601	A
B-A	258.91	258.91	64.73	0.00	495.47	0.523	262.93	2.1	1.1	15.736	C
C-AB	197.01	197.01	49.25	0.00	727.19	0.271	197.89	0.7	0.5	6.819	A
C-A	141.90	141.90	35.48	0.00			141.90				
A-B	99.79	99.79	24.95	0.00			99.79				
A-C	155.52	155.52	38.88	0.00			155.52				

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67.76	67.76	16.94	0.00	547.44	0.124	67.97	0.2	0.1	7.513	A
B-A	216.82	216.82	54.21	0.00	521.23	0.416	218.44	1.1	0.7	11.953	B
C-AB	156.38	156.38	39.09	0.00	715.71	0.219	156.89	0.5	0.4	6.451	A
C-A	127.45	127.45	31.86	0.00			127.45				
A-B	83.57	83.57	20.89	0.00			83.57				
A-C	130.24	130.24	32.56	0.00			130.24				

Redistributed Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	4.40	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Scraptoft Lane West		ONE HOUR	✓	518.00	100.000
B - New Romney Crescent		ONE HOUR	✓	257.00	100.000
C - Scraptoft Lane East		ONE HOUR	✓	371.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.000	267.000	251.000
	B - New Romney Crescent	173.000	0.000	84.000
	C - Scraptoft Lane East	231.000	140.000	0.000

Proportions

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.00	0.52	0.48
	B - New Romney Crescent	0.67	0.00	0.33
	C - Scraptoft Lane East	0.62	0.38	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0	1	2
	B - New Romney Crescent	1	0	2
	C - Scraptoft Lane East	6	3	0

Average PCU Per Veh

		To		
		A - Scraptoft Lane West	B - New Romney Crescent	C - Scraptoft Lane East
From	A - Scraptoft Lane West	1.000	1.010	1.020
	B - New Romney Crescent	1.010	1.000	1.020
	C - Scraptoft Lane East	1.060	1.030	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.18	8.58	0.2	A	77.08	115.62
B-A	0.46	15.89	0.8	C	158.75	238.12
C-AB	0.34	7.82	0.7	A	187.45	281.18
C-A					152.98	229.47
A-B					245.00	367.51
A-C					230.32	345.48

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	63.24	63.24	15.81	0.00	588.39	0.107	62.76	0.0	0.1	6.843	A
B-A	130.24	130.24	32.56	0.00	488.14	0.267	128.81	0.0	0.4	9.979	A
C-AB	140.88	140.88	35.22	0.00	687.96	0.205	139.56	0.0	0.3	6.556	A
C-A	138.43	138.43	34.61	0.00			138.43				
A-B	201.01	201.01	50.25	0.00			201.01				
A-C	188.97	188.97	47.24	0.00			188.97				

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75.51	75.51	18.88	0.00	560.22	0.135	75.37	0.1	0.2	7.423	A
B-A	155.52	155.52	38.88	0.00	458.24	0.339	154.94	0.4	0.5	11.845	B
C-AB	179.65	179.65	44.91	0.00	693.92	0.259	179.14	0.3	0.5	6.993	A
C-A	153.87	153.87	38.47	0.00			153.87				
A-B	240.03	240.03	60.01	0.00			240.03				
A-C	225.64	225.64	56.41	0.00			225.64				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92.49	92.49	23.12	0.00	513.02	0.180	92.23	0.2	0.2	8.550	A
B-A	190.48	190.48	47.62	0.00	417.03	0.457	189.23	0.5	0.8	15.714	C
C-AB	241.25	241.25	60.31	0.00	703.15	0.343	240.24	0.5	0.7	7.777	A
C-A	167.23	167.23	41.81	0.00			167.23				
A-B	293.97	293.97	73.49	0.00			293.97				
A-C	276.36	276.36	69.09	0.00			276.36				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92.49	92.49	23.12	0.00	511.87	0.181	92.48	0.2	0.2	8.583	A
B-A	190.48	190.48	47.62	0.00	416.78	0.457	190.43	0.8	0.8	15.894	C
C-AB	241.57	241.57	60.39	0.00	703.46	0.343	241.54	0.7	0.7	7.818	A
C-A	166.91	166.91	41.73	0.00			166.91				
A-B	293.97	293.97	73.49	0.00			293.97				
A-C	276.36	276.36	69.09	0.00			276.36				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75.51	75.51	18.88	0.00	558.91	0.135	75.76	0.2	0.2	7.453	A
B-A	155.52	155.52	38.88	0.00	457.90	0.340	156.74	0.8	0.5	12.000	B
C-AB	180.04	180.04	45.01	0.00	694.35	0.259	181.01	0.7	0.5	7.047	A
C-A	153.48	153.48	38.37	0.00			153.48				
A-B	240.03	240.03	60.01	0.00			240.03				
A-C	225.64	225.64	56.41	0.00			225.64				

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	63.24	63.24	15.81	0.00	587.20	0.108	63.38	0.2	0.1	6.876	A
B-A	130.24	130.24	32.56	0.00	487.63	0.267	130.86	0.5	0.4	10.107	B
C-AB	141.34	141.34	35.33	0.00	688.29	0.205	141.88	0.5	0.3	6.610	A
C-A	137.97	137.97	34.49	0.00			137.97				
A-B	201.01	201.01	50.25	0.00			201.01				
A-C	188.97	188.97	47.24	0.00			188.97				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.0.4211 []

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Scraptoft La-Scraptoft Rise (one-way change)090816.j9
Path: P:\JNY8843 - Scraptoft, Leicestershire\Transport\Picady
Report generation date: 09/08/2016 13:39:51

»Redistributed Base + Dev, AM
»Redistributed Base + Dev, PM

Summary of junction performance

	AM							PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	Redistributed Base + Dev												
Stream B-C	1.0	9.69	0.50	A	4.08	A	55 % [Stream B-C]	1.0	10.02	0.50	B	4.87	A
Stream B-A	0.1	7.93	0.13	A				0.2	7.69	0.14	A		
Stream C-AB	0.0	0.00	0.00	A				0.0	0.00	0.00	A		
Stream C-A													
Stream A-B													
Stream A-C													

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Scraptoft Lane/Scraptoft Rise
Location	Scraptoft, Leics
Site number	
Date	02/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8843
Enumerator	EUR"pauline.pettitt
Description	One-way system amended (Scraptoft Rise southbound only)

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Redistributed Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	4.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	55	Stream B-C

Arms

Arms

Arm	Name	Description	Arm type
A	Scraptoft Lane West		Major
B	Scraptoft Rise		Minor
C	Scraptoft Lane East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Scraptoft Lane East	7.30			200.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Scraptoft Rise	One lane plus flare	10.00	10.00	10.00	9.50	6.70		4.00	63	195

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	669.567	0.115	0.291	0.183	0.415
1	B-C	896.209	0.130	0.328	-	-
1	C-B	689.785	0.252	0.252	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Scraptoft Lane West		ONE HOUR	✓	263.00	100.000
B - Scraptoft Rise		ONE HOUR	✓	398.00	100.000
C - Scraptoft Lane East		ONE HOUR	✓	262.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Scraptoft Lane West	B - Scraptoft Rise	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.000	0.000	263.000
	B - Scraptoft Rise	61.000	0.000	337.000
	C - Scraptoft Lane East	262.000	0.000	0.000

Proportions

		To		
		A - Scraptoft Lane West	B - Scraptoft Rise	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.00	0.00	1.00
	B - Scraptoft Rise	0.15	0.00	0.85
	C - Scraptoft Lane East	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Scraptoft Lane West	B - Scraptoft Rise	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0	0	4
	B - Scraptoft Rise	0	0	4
	C - Scraptoft Lane East	2	0	0

Average PCU Per Veh

		To		
		A - Scraptoft Lane West	B - Scraptoft Rise	C - Scraptoft Lane East
From	A - Scraptoft Lane West	1.000	1.000	1.040
	B - Scraptoft Rise	1.000	1.000	1.040
	C - Scraptoft Lane East	1.020	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.50	9.69	1.0	A	309.24	463.86
B-A	0.13	7.93	0.1	A	55.97	83.96
C-AB	0.00	0.00	0.0	A	0.00	0.00
C-A					240.42	360.62
A-B					0.00	0.00
A-C					241.33	362.00

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	253.71	253.71	63.43	0.00	780.90	0.325	251.81	0.0	0.5	6.779	A
B-A	45.92	45.92	11.48	0.00	572.27	0.080	45.58	0.0	0.1	6.830	A
C-AB	0.00	0.00	0.00	0.00	631.55	0.000	0.00	0.0	0.0	0.000	A
C-A	197.25	197.25	49.31	0.00			197.25				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	198.00	198.00	49.50	0.00			198.00				

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	302.96	302.96	75.74	0.00	764.75	0.396	302.27	0.5	0.6	7.772	A
B-A	54.84	54.84	13.71	0.00	552.17	0.099	54.75	0.1	0.1	7.237	A
C-AB	0.00	0.00	0.00	0.00	621.57	0.000	0.00	0.0	0.0	0.000	A
C-A	235.53	235.53	58.88	0.00			235.53				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	236.43	236.43	59.11	0.00			236.43				

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	371.04	371.04	92.76	0.00	742.33	0.500	369.72	0.6	1.0	9.625	A
B-A	67.16	67.16	16.79	0.00	521.00	0.129	67.01	0.1	0.1	7.927	A
C-AB	0.00	0.00	0.00	0.00	607.77	0.000	0.00	0.0	0.0	0.000	A
C-A	288.47	288.47	72.12	0.00			288.47				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	289.57	289.57	72.39	0.00			289.57				

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	371.04	371.04	92.76	0.00	742.27	0.500	371.00	1.0	1.0	9.693	A
B-A	67.16	67.16	16.79	0.00	520.84	0.129	67.16	0.1	0.1	7.934	A
C-AB	0.00	0.00	0.00	0.00	607.77	0.000	0.00	0.0	0.0	0.000	A
C-A	288.47	288.47	72.12	0.00			288.47				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	289.57	289.57	72.39	0.00			289.57				

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	302.96	302.96	75.74	0.00	764.67	0.396	304.25	1.0	0.7	7.840	A
B-A	54.84	54.84	13.71	0.00	552.09	0.099	54.98	0.1	0.1	7.243	A
C-AB	0.00	0.00	0.00	0.00	621.57	0.000	0.00	0.0	0.0	0.000	A
C-A	235.53	235.53	58.88	0.00			235.53				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	236.43	236.43	59.11	0.00			236.43				

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	253.71	253.71	63.43	0.00	780.75	0.325	254.43	0.7	0.5	6.851	A
B-A	45.92	45.92	11.48	0.00	572.23	0.080	46.02	0.1	0.1	6.841	A
C-AB	0.00	0.00	0.00	0.00	631.55	0.000	0.00	0.0	0.0	0.000	A
C-A	197.25	197.25	49.31	0.00			197.25				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	198.00	198.00	49.50	0.00			198.00				

Redistributed Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - untitled	untitled	T-Junction	Two-way	4.87	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Scraptoft Lane West		ONE HOUR	✓	335.00	100.000
B - Scraptoft Rise		ONE HOUR	✓	393.00	100.000
C - Scraptoft Lane East		ONE HOUR	✓	52.00	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Scraptoft Lane West	B - Scraptoft Rise	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.000	0.000	335.000
	B - Scraptoft Rise	67.000	0.000	326.000
	C - Scraptoft Lane East	52.000	0.000	0.000

Proportions

		To		
		A - Scraptoft Lane West	B - Scraptoft Rise	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0.00	0.00	1.00
	B - Scraptoft Rise	0.17	0.00	0.83
	C - Scraptoft Lane East	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - Scraptoft Lane West	B - Scraptoft Rise	C - Scraptoft Lane East
From	A - Scraptoft Lane West	0	0	2
	B - Scraptoft Rise	0	0	4
	C - Scraptoft Lane East	6	0	0

Average PCU Per Veh

		To		
		A - Scraptoft Lane West	B - Scraptoft Rise	C - Scraptoft Lane East
From	A - Scraptoft Lane West	1.000	1.000	1.020
	B - Scraptoft Rise	1.000	1.000	1.040
	C - Scraptoft Lane East	1.060	1.000	1.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.50	10.02	1.0	B	299.14	448.71
B-A	0.14	7.69	0.2	A	61.48	92.22
C-AB	0.00	0.00	0.0	A	0.00	0.00
C-A					47.72	71.57
A-B					0.00	0.00
A-C					307.40	461.10

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	245.43	245.43	61.36	0.00	763.94	0.321	243.56	0.0	0.5	6.893	A
B-A	50.44	50.44	12.61	0.00	586.59	0.086	50.07	0.0	0.1	6.705	A
C-AB	0.00	0.00	0.00	0.00	606.72	0.000	0.00	0.0	0.0	0.000	A
C-A	39.15	39.15	9.79	0.00			39.15				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	252.21	252.21	63.05	0.00			252.21				

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	293.07	293.07	73.27	0.00	744.68	0.394	292.38	0.5	0.6	7.947	A
B-A	60.23	60.23	15.06	0.00	569.29	0.106	60.14	0.1	0.1	7.070	A
C-AB	0.00	0.00	0.00	0.00	594.50	0.000	0.00	0.0	0.0	0.000	A
C-A	46.75	46.75	11.69	0.00			46.75				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	301.16	301.16	75.29	0.00			301.16				

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	358.93	358.93	89.73	0.00	718.09	0.500	357.58	0.6	1.0	9.948	A
B-A	73.77	73.77	18.44	0.00	541.73	0.136	73.61	0.1	0.2	7.688	A
C-AB	0.00	0.00	0.00	0.00	577.60	0.000	0.00	0.0	0.0	0.000	A
C-A	57.25	57.25	14.31	0.00			57.25				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	368.84	368.84	92.21	0.00			368.84				

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	358.93	358.93	89.73	0.00	718.04	0.500	358.89	1.0	1.0	10.020	B
B-A	73.77	73.77	18.44	0.00	541.56	0.136	73.77	0.2	0.2	7.695	A
C-AB	0.00	0.00	0.00	0.00	577.60	0.000	0.00	0.0	0.0	0.000	A
C-A	57.25	57.25	14.31	0.00			57.25				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	368.84	368.84	92.21	0.00			368.84				

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	293.07	293.07	73.27	0.00	744.60	0.394	294.39	1.0	0.7	8.021	A
B-A	60.23	60.23	15.06	0.00	569.21	0.106	60.38	0.2	0.1	7.076	A
C-AB	0.00	0.00	0.00	0.00	594.50	0.000	0.00	0.0	0.0	0.000	A
C-A	46.75	46.75	11.69	0.00			46.75				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	301.16	301.16	75.29	0.00			301.16				

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	245.43	245.43	61.36	0.00	763.78	0.321	246.15	0.7	0.5	6.966	A
B-A	50.44	50.44	12.61	0.00	586.56	0.086	50.54	0.1	0.1	6.719	A
C-AB	0.00	0.00	0.00	0.00	606.72	0.000	0.00	0.0	0.0	0.000	A
C-A	39.15	39.15	9.79	0.00			39.15				
A-B	0.00	0.00	0.00	0.00			0.00				
A-C	252.21	252.21	63.05	0.00			252.21				

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junctions 9_Mini Rdbt Station Lane_Scraptoft Lane.j9
Path: P:\JNY8843 - Scraptoft, Leicestershire\Transport\Arcady\Existing Mini Rdbt
Report generation date: 09/06/2016 09:45:43

Summary of junction performance

	AM Peak 0800 - 0900					PM Peak 1700 - 1800				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Station Lane/ Scraptoft Lane Mini rdbt - 2016									
Arm A	0.8	7.33	0.44	A	81 % [Arm A]	0.6	6.45	0.36	A	109 % [Arm A]
Arm B	0.3	7.05	0.20	A		0.1	5.04	0.08	A	
Arm C	0.7	6.30	0.42	A		0.2	4.44	0.16	A	
Arm D	0.2	5.09	0.18	A		0.6	6.99	0.37	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	09/06/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EUR"Melanie.Alee
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2016	AM Peak 0800 - 0900	ONE HOUR	07:45	09:15	15	✓

2016	PM Peak 1700 - 1800	ONE HOUR	16:45	18:15	15	✓

Station Lane Scraptoft Lane Mini rdbt - AM Pea - 9

Data Errors and arnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction □reat results with caution. See User □uide for details.[Arms A and C have 74□ of the total flow for the roundabout for one or more time segments]

Analysis Set Details

ID	ame	Include in report	etwor flow scaling factor ()	etwor capacity scaling factor ()
AJY	Station Lane/ Scraptoft Lane Mini rdbt	✓	100.000	100.000

Junction etwor

Junctions

Junction	ame	Junction Type	Arm order	Junction Delay (s)	Junction LOS
	untitled	Mini-roundabout	A,□,C,D	6.59	A

Junction etwor Options

Driving side	Lighting	Road surface	In London	etwor residual capacity ()	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		81	Arm A

Arms

Arms

Arm	ame	Description
A	Church Hill	Exit Only
	Covert Lane	
C	Station Lane	
D	Scraptoft Lane	

Capacity Options

Arm	Minimum capacity (PCUhr)	Maimum capacity (PCUhr)	Assume flat start profile	Initial queue (PCU)
A	0.00	99999.00		0.00
	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Mini Roundabout eometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to net arm (m)	Entry corner erb line distance (m)	radient over m ()	erbed central island
A	5.10	3.70	5.70	5.2	10.90	7.60	0.0	✓

	3.50	3.50	3.50	0.0	12.60	8.50	0.0	
C	3.60	3.60	4.90	5.0	8.60	4.60	0.0	
D	3.00	3.00	3.50	1.0	9.90	11.10	0.0	

Slope Intercept Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCUhr)
A	0.540	991.983
	0.610	970.285
C	0.640	1088.710
D	0.601	893.866

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DAM	2016	AM Peak 0800 - 0900	ONE HOUR	07:45	09:15	15	✓

Vehicle mi varies over turn	Vehicle mi varies over entry	Vehicle mi source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Lined arm	Profile type	Use O-D data	Average Demand (PCUhr)	Scaling Factor ()
A		ONE HOUR	✓	360.00	100.000
		ONE HOUR	✓	118.00	100.000
C		ONE HOUR	✓	386.00	100.000
D		ONE HOUR	✓	142.00	100.000

Origin-Destination Data

Demand (PCUhr)

		To			
		A		C	D
From	A	0.000	10.000	289.000	61.000
		0.000	0.000	62.000	56.000
	C	0.000	23.000	0.000	363.000
	D	0.000	13.000	129.000	0.000

Proportions

		To			
		A		C	D
From	A	0.00	0.03	0.80	0.17
		0.00	0.00	0.53	0.47
	C	0.00	0.06	0.00	0.94
	D	0.00	0.09	0.91	0.00

Vehicle Mi

Heavy Vehicle proportion

	To				
		A		C	D
	A	0	0	2	0

Average PCU Per Veh

	To				
		A		C	D
	A	1.000	1.000	1.017	1.000

From		0	0	2	2
	C	0	13	0	1
	D	0	0	2	0

From		1.000	1.000	1.015	1.017
	C	1.000	1.130	1.000	1.011
	D	1.000	1.000	1.023	1.000

Results

Results Summary for whole modelled period

Arm	Ma RFC	Ma delay (s)	Ma Queue (PCU)	Ma LOS	Average Demand (PCUhr)	Total Junction Arrivals (PCU)
A	0.44	7.33	0.8	A	330.34	495.51
	0.20	7.05	0.3	A	108.28	162.42
C	0.42	6.30	0.7	A	354.20	531.30
D	0.18	5.09	0.2	A	130.30	195.45

Main Results for each time segment

Main results: (: -:)

Arm	Total Demand (PCUhr)	Junction Arrivals (PCU)	Circulating flow (PCUhr)	Capacity (PCUhr)	RFC	Throughput (PCUhr)	Throughput (eit side) (PCUhr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	271.03	67.76	123.57	925.22	0.293	269.36	0.00	0.0	0.4	5.551	A
	88.84	22.21	358.49	751.62	0.118	88.30	34.44	0.0	0.1	5.509	A
C	290.60	72.65	87.54	1032.69	0.281	289.02	359.24	0.0	0.4	4.915	A
D	106.91	26.73	17.22	883.52	0.121	106.35	359.34	0.0	0.1	4.726	A

Main results: (: -:)

Arm	Total Demand (PCUhr)	Junction Arrivals (PCU)	Circulating flow (PCUhr)	Capacity (PCUhr)	RFC	Throughput (PCUhr)	Throughput (eit side) (PCUhr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	323.63	80.91	148.17	911.93	0.355	323.09	0.00	0.4	0.6	6.192	A
	106.08	26.52	429.97	708.02	0.150	105.91	41.30	0.1	0.2	6.073	A
C	347.01	86.75	105.01	1021.52	0.340	346.51	430.87	0.4	0.5	5.423	A
D	127.66	31.91	20.65	881.46	0.145	127.53	430.87	0.1	0.2	4.874	A

Main results: (: -:)

Arm	Total Demand (PCUhr)	Junction Arrivals (PCU)	Circulating flow (PCUhr)	Capacity (PCUhr)	RFC	Throughput (PCUhr)	Throughput (eit side) (PCUhr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	396.37	99.09	181.43	893.96	0.443	395.39	0.00	0.6	0.8	7.303	A
	129.92	32.48	526.27	649.28	0.200	129.62	50.55	0.2	0.3	7.035	A
C	424.99	106.25	128.51	1006.47	0.422	424.13	527.38	0.5	0.7	6.280	A
D	156.34	39.09	25.27	878.68	0.178	156.15	527.37	0.2	0.2	5.085	A

Main results: (: -:)

Arm	Total Demand (PCUhr)	Junction Arrivals (PCU)	Circulating flow (PCUhr)	Capacity (PCUhr)	RFC	Throughput (PCUhr)	Throughput (eit side) (PCUhr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	396.37	99.09	181.66	893.83	0.443	396.34	0.00	0.8	0.8	7.334	A
	129.92	32.48	527.36	648.61	0.200	129.91	50.64	0.3	0.3	7.050	A
C	424.99	106.25	128.81	1006.28	0.422	424.98	528.47	0.7	0.7	6.300	A
D	156.34	39.09	25.32	878.65	0.178	156.34	528.47	0.2	0.2	5.087	A

Main results: (: -9:)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	!!!!!	!!!!	!!!!!	!!!!!	!!!!	!!!!!	!!!	!!	!!	!!!!	!
B	!!!!!	!!!!	!!!!!	!!!!!	!!!!	!!!!!	!!!!	!!	!!	!!!!	!
C	!!!!!	!!!!	!!!!!	!!!!!!	!!!!	!!!!!	!!!!!	!!	!!	!!!!	!
D	!!!!!	!!!!	!!!!	!!!!!	!!!!	!!!!!	!!!!!	!!	!!	!!!!	!

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	!!!!!	!!!!	!!!!!	!!!!!	!!!!	!!!!!	!!!	!!	!!	!!!!	!
B	!!!!	!!!!	!!!!!	!!!!!	!!!!	!!!!	!!!!	!!	!!	!!!!	!
C	!!!!!	!!!!	!!!!	!!!!!!	!!!!	!!!!!	!!!!!	!!	!!	!!!!	!
D	!!!!!	!!!!	!!!!	!!!!!	!!!!	!!!!!	!!!!!	!!	!!	!!!!	!

Station Lane/ Scraptoft Lane Mini rdt - 01
PM Pea 100 - 100

Data Errors and arnings

Severity	Area	tem	Description

Analysis Set Details

D	ame	nclude in report	etwor flow scaling factor ()	etwor capacity scaling factor ()
AJ		✓		

Junction etwor

Junctions

Junction	ame	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1					

Junction etwor Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundaout eometry

[same as above]

Slope / ntercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

D	Scenario name	Time Period name	Traffic profile type	Model start time (:mm)	Model finish time (:mm)	Time segment length (min)	Run automatically

DPM	!!!!	!! !! !!!!!!!!!! !!!!	!!!!!!!!	!!!!!	!!!!!	!!	✓

ehicle mix varies over turn	ehicle mix varies over entry	ehicle mix source	PCU Factor for a (PCU)
✓	✓	!!!!!!!!!!!!	!!!!

Demand overview (Traffic)

Arm	Lined arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor ()
A		!!!!!!!!	✓	!!!!!	!!!!!!
B		!!!!!!!!	✓	!!!!!	!!!!!!
C		!!!!!!!!	✓	!!!!!	!!!!!!
D		!!!!!!!!	✓	!!!!!	!!!!!!

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	!!!!	!!!!!	!!!!!!	!!!!!!
	B	!!!!	!!!!	!!!!	!!!!!
	C	!!!!!	!!!!!	!!!!	!!!!!
	D	!!!!!	!!!!!!	!!!!!	!!!!

Proportions

		To			
		A	B	C	D
From	A	!!!	!!!	!!!	!!!
	B	!!!	!!!	!!!	!!!
	C	!!!	!!!	!!!	!!!
	D	!!!	!!!	!!!	!!!

ehicle Mix

eavy ehicle proportion

		To			
		A	B	C	D
From	A	!	!	!	!
	B	!	!	!	!
	C	!	!	!	!
	D	!	!	!	!

Average PCU Per eh

		To			
		A	B	C	D
From	A	!!!!!	!!!!!	!!!!!	!!!!!
	B	!!!!!	!!!!!	!!!!!	!!!!!
	C	!!!!!	!!!!!	!!!!!	!!!!!
	D	!!!!!	!!!!!	!!!!!	!!!!!

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max ueue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	!!!	!!!	!!	!	!!!!!	!!!!!
B	!!!	!!!	!!	!	!!!!	!!!!
C	!!!	!!!	!!	!	!!!!!	!!!!!
D	!!!	!!!	!!	!	!!!!!	!!!!!

Main Results for each time segment

Main results: (1:5 -1:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
B	!!!!!	!!!!	!!!!!!	!!!!!!	!!!!	!!!!!	!!!!!!	!!!	!!!	!!!!!	!
C	!!!!!!	!!!!!	!!!!!!	!!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
D	!!!!!!	!!!!!	!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!

Main results: (1:00 -1:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
B	!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!	!!!!!!	!!!	!!!	!!!!!	!
C	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
D	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!

Main results: (1:15 -1:0)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
B	!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!	!!!!!!	!!!	!!!	!!!!!	!
C	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
D	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!

Main results: (1:0 -1:5)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
B	!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!	!!!!!!	!!!	!!!	!!!!!	!
C	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
D	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!

Main results: (1:5 -1:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
B	!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!	!!!!!!	!!!	!!!	!!!!!	!
C	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
D	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!

Main results: (1:00 -1:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	!!!!!!	!!!!!	!!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
B	!!!!!	!!!!	!!!!!!	!!!!!!	!!!!	!!!!!	!!!!!!	!!!	!!!	!!!!!	!
C	!!!!!!	!!!!!	!!!!!!	!!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!
D	!!!!!!	!!!!!	!!!!!	!!!!!!	!!!!	!!!!!!	!!!!!!	!!!	!!!	!!!!!	!

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Church Hill mini (one-way change)_imp.j9
Path: P:\JNY8843 - Scraptoft, Leicestershire\Transport\Arcady
Report generation date: 09/06/2016 15:14:14

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	Redistributed Base + Dev													
1 - Covert Lane	0.3	6.98	0.20	A	7.36	A	50 % [3 - Scraptoft Lane]	0.2	7.86	0.14	A	15.24	C	10 % [3 - Scraptoft Lane]
2 - Station Lane	0.8	6.29	0.43	A				0.3	4.68	0.25	A			
3 - Scraptoft Lane	1.2	8.31	0.55	A				4.1	19.35	0.81	C			
4 - Church Hill (exit only)	0.0	0.00	0.00	A				0.0	0.00	0.00	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Covert Lane/Station Lane/Scraptoft Lane/Church Hill mini rbt
Location	Scraptoft, Leics
Site number	
Date	02/06/2016
Version	
Status	Proposed amendment
Identifier	
Client	
Jobnumber	JNY8843
Enumerator	EUR"pauline.pettitt
Description	One-way system amended - Church Lane changed from one-way southbound to northbound.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Redistributed ase Dev AM

Data Errors and arnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction˜ treat results with caution. See User ˜ uide for details.[Arms 2 and 3 have 88˜ of the total flow for the roundabout for one or more time segments]

Analysis Set Details

ID	Include in report	etwor flow scaling factor ()	etwor capacity scaling factor ()
A	✓	100.000	100.000

Junction etwor

Junctions

Junction	ame	Junction Type	Arm order	Junction Delay (s)	Junction LOS
- untitled	untitled	Mini-roundabout	1,2,3,4	7.36	A

Junction etwor Options

Driving side	Lighting	Road surface	In London	etwor residual capacity ()	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		50	3 - Scraptoft Lane

Arms

Arms

Arm	ame	Description
	Covert Lane	
	Station Lane	
	Scraptoft Lane	
	Church Hill (e˜it only)	One-way

Capacity Options

Arm	Minimum capacity (PCUhr)	Maimum capacity (PCUhr)	Assume flat start profile	Initial queue (PCU)
- Covert Lane	0.00	99999.00		0.00
- Station Lane	0.00	99999.00		0.00
- Scraptoft Lane	0.00	99999.00		0.00
- Church Hill (eit only)	0.00	99999.00		0.00

Mini Roundabout eometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to net arm (m)	Entry corner erb line distance (m)	radient over m ()	erbed central island
- Covert Lane	3.50	3.50	3.50	0.0	12.60	8.50	0.0	
- Station Lane	3.60	3.60	4.90	5.0	8.60	4.60	0.0	
- Scraptoft Lane	4.50	3.00	6.50	12.0	10.90	7.90	0.0	
- Church Hill (eit only)	5.00	5.00	5.00	0.0	10.00	7.00	0.0	

Slope Intercept Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCUhr)
- Covert Lane	0.610	970.285
- Station Lane	0.640	1066.010

- Scraptoft Lane	0.660	1128.762
- Church Hill (eit only)	0.666	1075.262

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D	Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mi varies over turn	Vehicle mi varies over entry	Vehicle mi source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Lined arm	Profile type	Use O-D data	Average Demand (Vehhr)	Scaling Factor ()
- Covert Lane		ONE HOUR	✓	118.00	100.000
- Station Lane		ONE HOUR	✓	395.00	100.000
- Scraptoft Lane		ONE HOUR	✓	487.00	100.000
- Church Hill (eit only)		ONE HOUR	✓	0.00	100.000

Origin-Destination Data

Demand (Vehhr)

		To			
		- Covert Lane	- Station Lane	- Scraptoft Lane	- Church Hill (eit only)
From	- Covert Lane	0.000	62.000	36.000	20.000
	- Station Lane	23.000	0.000	223.000	149.000
	- Scraptoft Lane	23.000	456.000	0.000	8.000
	- Church Hill (eit only)	0.000	0.000	0.000	0.000

Proportions

		To			
		- Covert Lane	- Station Lane	- Scraptoft Lane	- Church Hill (eit only)
From	- Covert Lane	0.00	0.53	0.31	0.17
	- Station Lane	0.06	0.00	0.56	0.38
	- Scraptoft Lane	0.05	0.94	0.00	0.02
	- Church Hill (eit only)	0.25	0.25	0.25	0.25

Vehicle Mi

Heavy Vehicle proportion

		To			
		- Covert Lane	- Station Lane	- Scraptoft Lane	- Church Hill (eit only)
From	- Covert Lane	0	2	3	0
	- Station Lane	13	0	2	0
	- Scraptoft Lane	0	2	0	0
	- Church Hill (eit only)	0	0	0	0

Average PCU Per Veh

		To			
		- Covert Lane	- Station Lane	- Scraptoft Lane	- Church Hill (eit only)
From	- Covert Lane	1.000	1.020	1.030	1.000
	- Station Lane	1.130	1.000	1.020	1.000
	- Scraptoft Lane	1.000	1.020	1.000	1.000
	- Church Hill (eit only)	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Ma RFC	Ma delay (s)	Ma Queue (Veh)	Ma LOS	Average Demand (Vehhr)	Total Junction Arrivals (Veh)

- Covert Lane	0.20	6.98	0.3	A	108.28	162.42
- Station Lane	0.43	6.29	0.8	A	362.46	543.69
- Scraptoft Lane	0.55	8.31	1.2	A	446.88	670.32
- Church Hill (eit only)	0.00	0.00	0.0	A	0.00	0.00

Main Results for each time segment

Main results: (: -:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	88.84	22.21	341.20	743.39	0.120	88.30	34.43	0.0	0.1	5.490	A
- Station Lane	297.38	74.34	41.90	1019.45	0.292	295.74	387.59	0.0	0.4	4.963	A
- Scraptoft Lane	366.64	91.66	143.75	1013.50	0.362	364.39	193.90	0.0	0.6	5.527	A
- Church Hill (eit only)	0.00	0.00	375.63	818.88	0.000	0.00	132.51	0.0	0.0	0.000	A

Main results: (: -:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	106.08	26.52	409.13	701.94	0.151	105.91	41.28	0.1	0.2	6.038	A
- Station Lane	355.10	88.77	50.26	1014.10	0.350	354.60	464.78	0.4	0.5	5.459	A
- Scraptoft Lane	437.80	109.45	172.36	994.69	0.440	436.94	232.50	0.6	0.8	6.443	A
- Church Hill (eit only)	0.00	0.00	450.41	767.84	0.000	0.00	158.89	0.0	0.0	0.000	A

Main results: (: -:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	129.92	32.48	500.43	646.23	0.201	129.63	50.51	0.2	0.2	6.966	A
- Station Lane	434.90	108.73	61.52	1006.89	0.432	434.03	568.54	0.5	0.8	6.275	A
- Scraptoft Lane	536.20	134.05	210.97	969.30	0.553	534.45	284.58	0.8	1.2	8.245	A
- Church Hill (eit only)	0.00	0.00	550.94	699.22	0.000	0.00	194.47	0.0	0.0	0.000	A

Main results: (: -:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	129.92	32.48	502.02	645.26	0.201	129.91	50.64	0.2	0.3	6.984	A
- Station Lane	434.90	108.73	61.65	1006.81	0.432	434.89	570.28	0.8	0.8	6.294	A
- Scraptoft Lane	536.20	134.05	211.39	969.03	0.553	536.15	285.15	1.2	1.2	8.313	A
- Church Hill (eit only)	0.00	0.00	552.66	698.05	0.000	0.00	194.87	0.0	0.0	0.000	A

Main results: (: -9:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	106.08	26.52	411.54	700.46	0.151	106.36	41.48	0.3	0.2	6.064	A
- Station Lane	355.10	88.77	50.48	1013.96	0.350	355.95	467.43	0.8	0.5	5.479	A
- Scraptoft Lane	437.80	109.45	173.02	994.25	0.440	439.52	233.40	1.2	0.8	6.508	A
- Church Hill (eit only)	0.00	0.00	453.03	766.06	0.000	0.00	159.52	0.0	0.0	0.000	A

Main results: (9: -9:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	88.84	22.21	344.14	741.59	0.120	89.01	34.70	0.2	0.1	5.517	A
- Station Lane	297.38	74.34	42.24	1019.24	0.292	297.89	390.91	0.5	0.4	4.995	A
- Scraptoft Lane	366.64	91.66	144.80	1012.81	0.362	367.53	195.33	0.8	0.6	5.586	A
- Church Hill (eit only)	0.00	0.00	378.84	816.69	0.000	0.00	133.49	0.0	0.0	0.000	A

Redistributed ase Dev PM

Data Errors and arnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction˜ treat results with caution. See User ˜ uide for details.[Arms 1 and 3 have 77˜ of the total flow for the roundabout for one or more time segments][Arms 2 and 3 have 93˜ of the total flow for the roundabout for one or more time segments][Arms 3 and 4 have 70˜ of the total flow for the roundabout for one or more time segments]

Analysis Set Details

ID	Include in report	etwor flow scaling factor ()	etwor capacity scaling factor ()
A	✓	100.000	100.000

Junction etwor

Junctions

Junction	ame	Junction Type	Arm order	Junction Delay (s)	Junction LOS
- untitled	untitled	Mini-roundabout	1,2,3,4	15.24	C

Junction etwor Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout eometry

[same as above]

Slope Intercept Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D	Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mi varies over turn	Vehicle mi varies over entry	Vehicle mi source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Lined arm	Profile type	Use O-D data	Average Demand (Vehhr)	Scaling Factor ()
- Covert Lane		ONE HOUR	✓	70.00	100.000
- Station Lane		ONE HOUR	✓	228.00	100.000

3 - Scraptoft Lane			✓		
4 - Church Hill (exit only)			✓		

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Covert Lane	2 - Station Lane	3 - Scraptoft Lane	4 - Church Hill (exit only)
From	1 - Covert Lane				
	2 - Station Lane				
	3 - Scraptoft Lane				
	4 - Church Hill (exit only)				

Proportions

		To			
		1 - Covert Lane	2 - Station Lane	3 - Scraptoft Lane	4 - Church Hill (exit only)
From	1 - Covert Lane				
	2 - Station Lane				
	3 - Scraptoft Lane				
	4 - Church Hill (exit only)				

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Covert Lane	2 - Station Lane	3 - Scraptoft Lane	4 - Church Hill (exit only)
From	1 - Covert Lane				
	2 - Station Lane				
	3 - Scraptoft Lane				
	4 - Church Hill (exit only)				

Average PCU Per Veh

		To			
		1 - Covert Lane	2 - Station Lane	3 - Scraptoft Lane	4 - Church Hill (exit only)
From	1 - Covert Lane				
	2 - Station Lane				
	3 - Scraptoft Lane				
	4 - Church Hill (exit only)				

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Covert Lane						
2 - Station Lane						
3 - Scraptoft Lane						
4 - Church Hill (exit only)						

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (17:00-17:15)

	Total Demand	Junction	Circulating flow	Capacity		Throughput	Throughput (exit	Start	End	Delay	

Arm	(Veh/hr)	Arrivals (Veh)	(Veh/hr)	(Veh/hr)	RFC	(Veh/hr)	side) (Veh/hr)	queue (Veh)	queue (Veh)	(s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (17:45-1˜:00)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (1˜:00-1˜:15)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Church Hill mini (one-way change).j9
Path: P:\JNY8843 - Scraptoft, Leicestershire\Transport\Arcady
Report generation date: 09/06/2016 09:43:45

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	Redistributed Base + Dev													
1 - Covert Lane	0.3	6.98	0.20	A	10.89	B	20 % [3 - Scraptoft Lane]	0.2	7.55	0.14	A	82.35	F	-13 % [3 - Scraptoft Lane]
2 - Station Lane	0.8	6.32	0.43	A				0.3	4.70	0.25	A			
3 - Scraptoft Lane	2.3	15.56	0.70	C				25.8	114.49	1.03	F			
4 - Church Hill (exit only)	0.0	0.00	0.00	A				0.0	0.00	0.00	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Covert Lane/Station Lane/Scraptoft Lane/Church Hill mini rbt
Location	Scraptoft, Leics
Site number	
Date	02/06/2016
Version	
Status	Proposed amendment
Identifier	
Client	
Jobnumber	JNY8843
Enumerator	EUR"pauline.peltilt
Description	One-way system amended - Church Lane changed from one-way southbound to northbound.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Redistributed ase Dev AM

Data Errors and arnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction treat results with caution. See User uide for details.[Arms 2 and 3 have 88 of the total flow for the roundabout for one or more time segments]

Analysis Set Details

ID	Include in report	etwor flow scaling factor ()	etwor capacity scaling factor ()
A	✓	100.000	100.000

Junction etwor

Junctions

Junction	ame	Junction Type	Arm order	Junction Delay (s)	Junction LOS
- untitled	untitled	Mini-roundabout	1,2,3,4	10.89	B

Junction etwor Options

Driving side	Lighting	Road surface	In London	etwor residual capacity ()	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		20	3 - Scraptoft Lane

Arms

Arms

Arm	ame	Description
	Covert Lane	
	Station Lane	
	Scraptoft Lane	
	Church Hill (eit only)	One-way

Capacity Options

Arm	Minimum capacity (PCUhr)	Maimum capacity (PCUhr)	Assume flat start profile	Initial queue (PCU)
- Covert Lane	0.00	99999.00		0.00
- Station Lane	0.00	99999.00		0.00
- Scraptoft Lane	0.00	99999.00		0.00
- Church Hill (eit only)	0.00	99999.00		0.00

Mini Roundabout eometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to net arm (m)	Entry corner erb line distance (m)	radient over m ()	erbed central island
- Covert Lane	3.50	3.50	3.50	0.0	12.60	8.50	0.0	
- Station Lane	3.60	3.60	4.90	5.0	8.60	4.60	0.0	
- Scraptoft Lane	3.00	3.00	3.50	1.0	11.00	8.00	0.0	
- Church Hill (eit only)	5.00	5.00	5.00	0.0	10.00	7.00	0.0	

Slope Intercept Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCUhr)
- Covert Lane	0.610	970.285
- Station Lane	0.640	1063.740

- Scraptoft Lane	0.598	909.512
- Church Hill (eit only)	0.666	1075.262

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D	Redistributed Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mi varies over turn	Vehicle mi varies over entry	Vehicle mi source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Lined arm	Profile type	Use O-D data	Average Demand (Vehhr)	Scaling Factor ()
- Covert Lane		ONE HOUR	✓	118.00	100.000
- Station Lane		ONE HOUR	✓	395.00	100.000
- Scraptoft Lane		ONE HOUR	✓	487.00	100.000
- Church Hill (eit only)		ONE HOUR	✓	0.00	100.000

Origin-Destination Data

Demand (Vehhr)

		To			
		- Covert Lane	- Station Lane	- Scraptoft Lane	- Church Hill (eit only)
From	- Covert Lane	0.000	62.000	36.000	20.000
	- Station Lane	23.000	0.000	223.000	149.000
	- Scraptoft Lane	23.000	456.000	0.000	8.000
	- Church Hill (eit only)	0.000	0.000	0.000	0.000

Proportions

		To			
		- Covert Lane	- Station Lane	- Scraptoft Lane	- Church Hill (eit only)
From	- Covert Lane	0.00	0.53	0.31	0.17
	- Station Lane	0.06	0.00	0.56	0.38
	- Scraptoft Lane	0.05	0.94	0.00	0.02
	- Church Hill (eit only)	0.25	0.25	0.25	0.25

Vehicle Mi

Heavy Vehicle proportion

		To			
		- Covert Lane	- Station Lane	- Scraptoft Lane	- Church Hill (eit only)
From	- Covert Lane	0	2	3	0
	- Station Lane	13	0	2	0
	- Scraptoft Lane	0	2	0	0
	- Church Hill (eit only)	0	0	0	0

Average PCU Per Veh

		To			
		- Covert Lane	- Station Lane	- Scraptoft Lane	- Church Hill (eit only)
From	- Covert Lane	1.000	1.020	1.030	1.000
	- Station Lane	1.130	1.000	1.020	1.000
	- Scraptoft Lane	1.000	1.020	1.000	1.000
	- Church Hill (eit only)	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Ma RFC	Ma delay (s)	Ma Queue (Veh)	Ma LOS	Average Demand (Vehhr)	Total Junction Arrivals (Veh)

- Covert Lane	0.20	6.98	0.3	A	108.28	162.42
- Station Lane	0.43	6.32	0.8	A	362.46	543.69
- Scraptoft Lane	0.70	15.56	2.3	C	446.88	670.32
- Church Hill (eit only)	0.00	0.00	0.0	A	0.00	0.00

Main Results for each time segment

Main results: (: -:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	88.84	22.21	340.23	743.98	0.119	88.30	34.38	0.0	0.1	5.485	A
- Station Lane	297.38	74.34	41.90	1017.22	0.292	295.74	386.63	0.0	0.4	4.979	A
- Scraptoft Lane	366.64	91.66	143.74	807.09	0.454	363.36	193.90	0.0	0.8	8.056	A
- Church Hill (eit only)	0.00	0.00	374.61	819.57	0.000	0.00	132.49	0.0	0.0	0.000	A

Main results: (: -:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	106.08	26.52	408.46	702.35	0.151	105.91	41.25	0.1	0.2	6.034	A
- Station Lane	355.10	88.77	50.26	1011.87	0.351	354.59	464.10	0.4	0.5	5.477	A
- Scraptoft Lane	437.80	109.45	172.36	790.03	0.554	436.22	232.50	0.8	1.2	10.128	B
- Church Hill (eit only)	0.00	0.00	449.71	768.32	0.000	0.00	158.88	0.0	0.0	0.000	A

Main results: (: -:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	129.92	32.48	498.35	647.50	0.201	129.63	50.41	0.2	0.2	6.949	A
- Station Lane	434.90	108.73	61.52	1004.67	0.433	434.03	566.46	0.5	0.8	6.300	A
- Scraptoft Lane	536.20	134.05	210.97	767.01	0.699	532.23	284.58	1.2	2.2	15.075	C
- Church Hill (eit only)	0.00	0.00	548.76	700.70	0.000	0.00	194.44	0.0	0.0	0.000	A

Main results: (: -:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	129.92	32.48	501.85	645.36	0.201	129.91	50.64	0.2	0.3	6.983	A
- Station Lane	434.90	108.73	61.65	1004.58	0.433	434.89	570.11	0.8	0.8	6.318	A
- Scraptoft Lane	536.20	134.05	211.39	766.76	0.699	535.97	285.15	2.2	2.3	15.555	C
- Church Hill (eit only)	0.00	0.00	552.49	698.17	0.000	0.00	194.87	0.0	0.0	0.000	A

Main results: (: -9:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	106.08	26.52	413.63	699.19	0.152	106.36	41.59	0.3	0.2	6.074	A
- Station Lane	355.10	88.77	50.48	1011.74	0.351	355.95	469.52	0.8	0.5	5.496	A
- Scraptoft Lane	437.80	109.45	173.02	789.63	0.554	441.75	233.40	2.3	1.3	10.463	B
- Church Hill (eit only)	0.00	0.00	455.22	764.57	0.000	0.00	159.55	0.0	0.0	0.000	A

Main results: (9: -9:)

Arm	Total Demand (Vehhr)	Junction Arrivals (Veh)	Circulating flow (Vehhr)	Capacity (Vehhr)	RFC	Throughput (Vehhr)	Throughput (eit side) (Vehhr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
- Covert Lane	88.84	22.21	344.90	741.13	0.120	89.01	34.74	0.2	0.1	5.521	A
- Station Lane	297.38	74.34	42.24	1017.01	0.292	297.89	391.67	0.5	0.4	5.009	A
- Scraptoft Lane	366.64	91.66	144.80	806.46	0.455	368.35	195.33	1.3	0.8	8.248	A
- Church Hill (eit only)	0.00	0.00	379.64	816.14	0.000	0.00	133.51	0.0	0.0	0.000	A

Redistributed ase Dev PM

Data Errors and arnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction□treat results with caution. See User □uide for details.[Arms 1 and 3 have 77□ of the total flow for the roundabout for one or more time segments][Arms 2 and 3 have 93□ of the total flow for the roundabout for one or more time segments][Arms 3 and 4 have 70□ of the total flow for the roundabout for one or more time segments]

Analysis Set Details

ID	Include in report	etwor flow scaling factor ()	etwor capacity scaling factor ()
A	✓	100.000	100.000

Junction etwor

Junctions

Junction	ame	Junction Type	Arm order	Junction Delay (s)	Junction LOS
- untitled	untitled	Mini-roundabout	1,2,3,4	82.35	F

Junction etwor Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Mini Roundabout eometry

[same as above]

Slope Intercept Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D	Redistributed Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mi varies over turn	Vehicle mi varies over entry	Vehicle mi source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Lined arm	Profile type	Use O-D data	Average Demand (Vehhr)	Scaling Factor ()
- Covert Lane		ONE HOUR	✓	70.00	100.000
- Station Lane		ONE HOUR	✓	228.00	100.000

3 - Scraptoft Lane			✓		
4 - Church Hill (exit only)			✓		

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Covert Lane	2 - Station Lane	3 - Scraptoft Lane	4 - Church Hill (exit only)
From	1 - Covert Lane				
	2 - Station Lane				
	3 - Scraptoft Lane				
	4 - Church Hill (exit only)				

Proportions

		To			
		1 - Covert Lane	2 - Station Lane	3 - Scraptoft Lane	4 - Church Hill (exit only)
From	1 - Covert Lane				
	2 - Station Lane				
	3 - Scraptoft Lane				
	4 - Church Hill (exit only)				

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Covert Lane	2 - Station Lane	3 - Scraptoft Lane	4 - Church Hill (exit only)
From	1 - Covert Lane				
	2 - Station Lane				
	3 - Scraptoft Lane				
	4 - Church Hill (exit only)				

Average PCU Per Veh

		To			
		1 - Covert Lane	2 - Station Lane	3 - Scraptoft Lane	4 - Church Hill (exit only)
From	1 - Covert Lane				
	2 - Station Lane				
	3 - Scraptoft Lane				
	4 - Church Hill (exit only)				

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Covert Lane						
2 - Station Lane						
3 - Scraptoft Lane						
4 - Church Hill (exit only)						

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (17:00-17:15)

	Total Demand	Junction	Circulating flow	Capacity		Throughput	Throughput (exit	Start	End	Delay	

Arm	(Veh/hr)	Arrivals (Veh)	(Veh/hr)	(Veh/hr)	RFC	(Veh/hr)	side) (Veh/hr)	queue (Veh)	queue (Veh)	(s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (17:45-1 :00)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

Main results: (1 :00-1 :15)

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Covert Lane											
2 - Station Lane											
3 - Scraptoft Lane											
4 - Church Hill (exit only)											

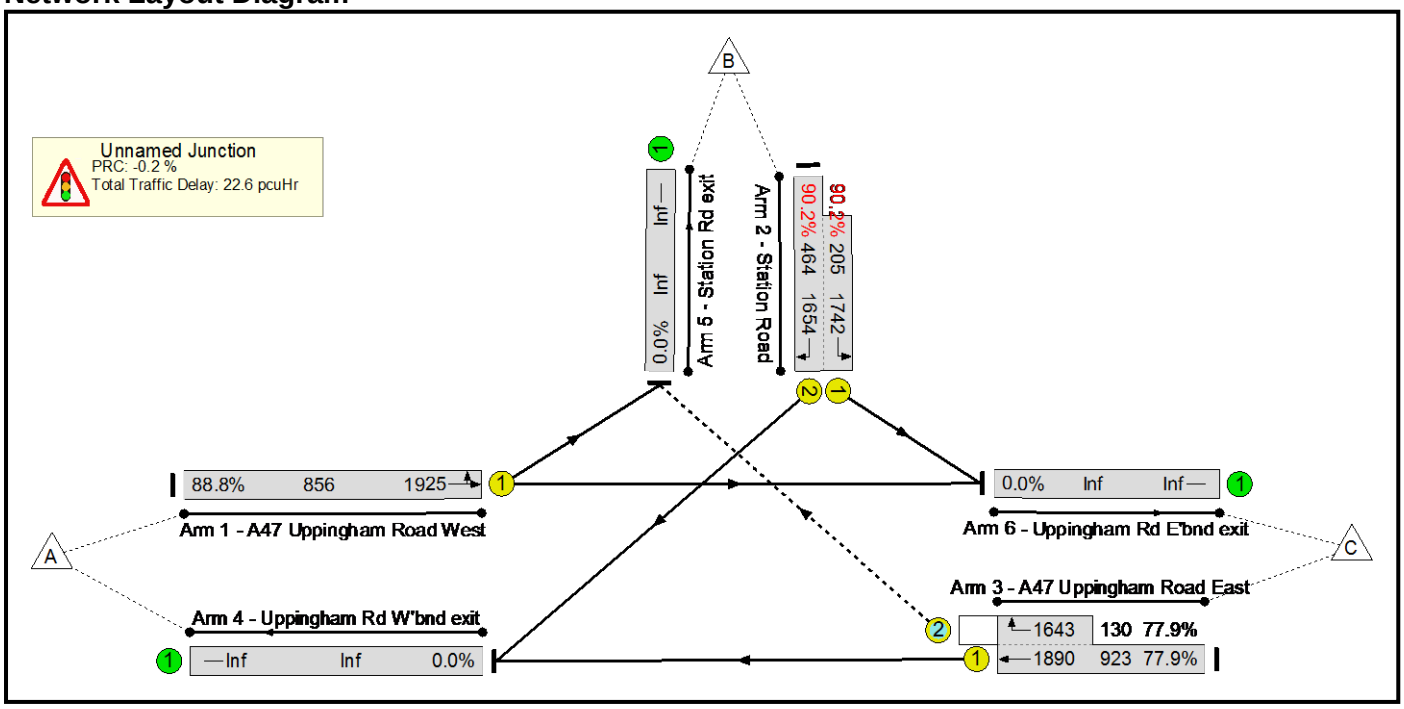
Basic Results Summary

User and Project Details

Project:	**JNY8843 Scraptoft**
Title:	**Junction of A47 Uppingham Road and Station Lane**
Location:	
File name:	A47-Station Road Existing layout.lsg3x
Author:	P Pettitt
Company:	RPS Transport
Address:	Milton Park, Abingdon
Notes:	

Scenario 9: 'Scenario 1b' (FG1: 'AM Peak Base', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction of A47 Uppingham Road and Station Lane	-	-	-		-	-	-	-	-	-	**90.2%**	**47**	**51**	**2**	**22.6**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**90.2%**	**47**	**51**	**2**	**22.6**	-	-
1/1	A47 Uppingham Road West Left Ahead	U	A		1	39	-	760	1925	856	88.8%	-	-	-	8.5	40.4	21.0
2/2+2/1	Station Road Right Left	U	D E		1	27:37	-	603	1654:1742	464+205	90.2 : 90.2%	-	-	-	8.3	49.4	14.3
3/1+3/2	A47 Uppingham Road East Ahead Right	U+O	B	C	1	49	4	820	1890:1643	923+130	77.9 : 77.9%	47	51	2	5.7	25.2	16.7

C1

PRC for Signalled Lanes (%): -0.2
PRC Over All Lanes (%): -0.2

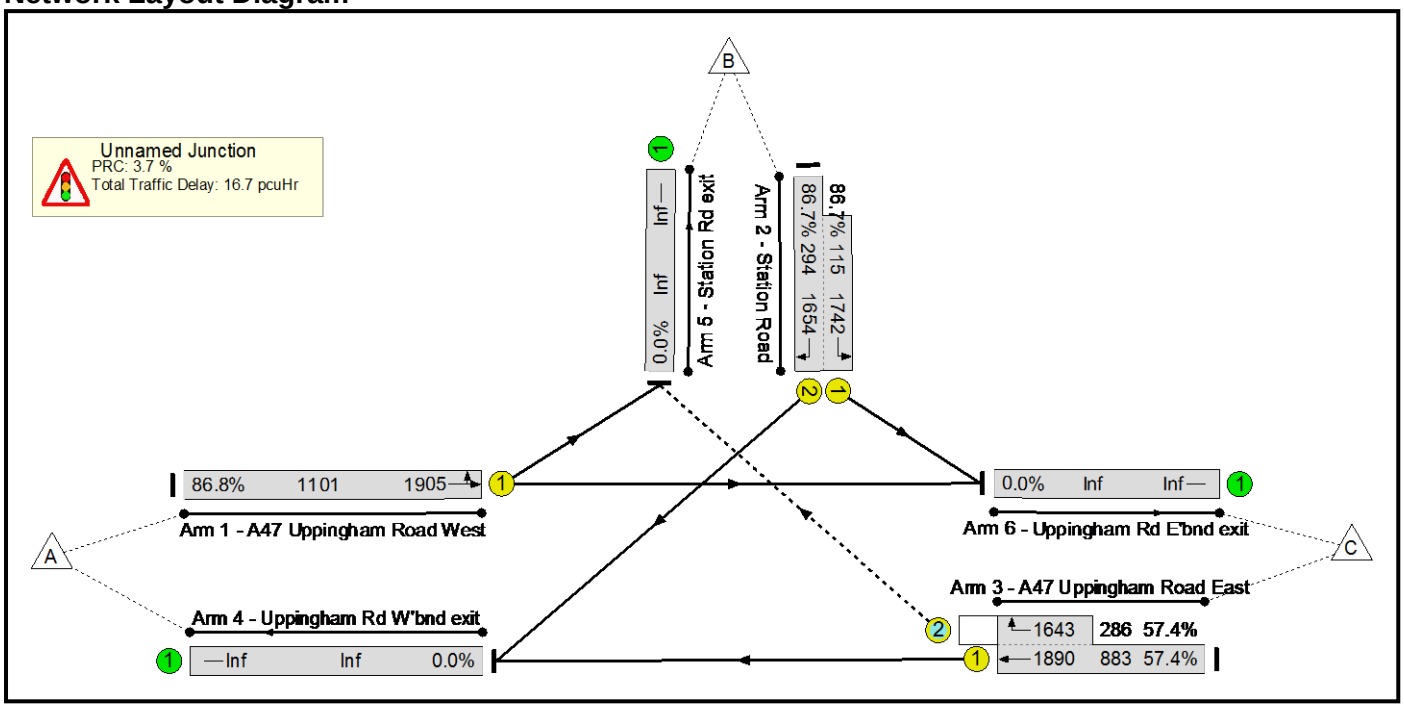
Total Delay for Signalled Lanes (pcuHr): 22.55
Total Delay Over All Lanes(pcuHr): 22.55

Cycle Time (s): 90

Basic Results Summary

Scenario 10: 'Scenario 2b' (FG2: 'PM Peak Base', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction of A47 Uppingham Road and Station Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**	**60**	**101**	**4**	**16.7**	**-**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**	**60**	**101**	**4**	**16.7**	**-**	**-**
1/1	A47 Uppingham Road West Left Ahead	U	A		1	51	-	955	1905	1101	86.8%	-	-	-	7.4	27.9	23.3
2/2+2/1	Station Road Right Left	U	D E		1	15:25	-	355	1654:1742	294+115	86.7 : 86.7%	-	-	-	6.2	62.5	9.1
3/1+3/2	A47 Uppingham Road East Ahead Right	U+O	B	C	1	61	4	671	1890:1643	883+286	57.4 : 57.4%	60	101	4	3.1	16.6	6.4

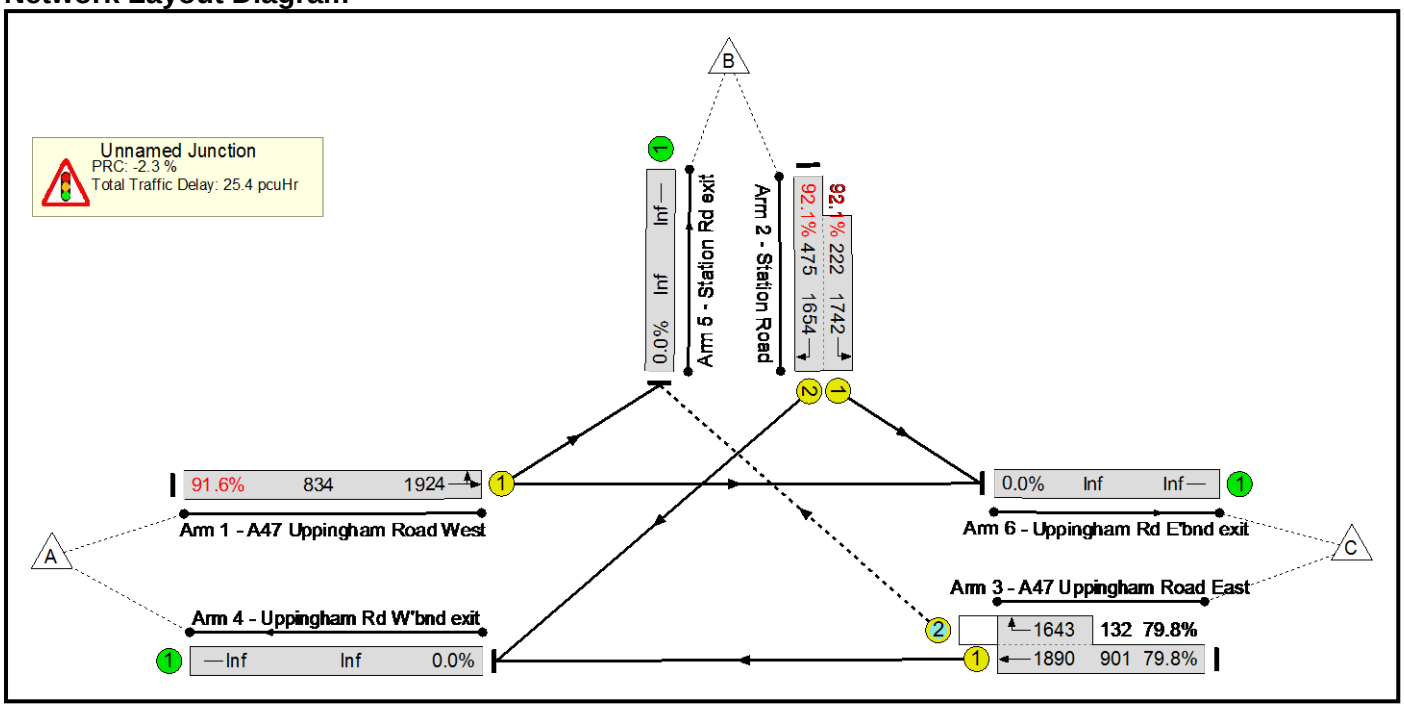
C1 PRC for Signalled Lanes (%): 3.7 Total Delay for Signalled Lanes (pcuHr): 16.66 Cycle Time (s): 90

PRC Over All Lanes (%): 3.7 Total Delay Over All Lanes(pcuHr): 16.66

Basic Results Summary

Scenario 11: 'Scenario 3b' (FG3: 'Redistributed Base + Dev AM Peak', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction of A47 Uppingham Road and Station Lane	-	-	-		-	-	-	-	-	-	**92.1%**	**34**	**69**	**2**	**25.4**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**92.1%**	**34**	**69**	**2**	**25.4**	-	-
1/1	A47 Uppingham Road West Left Ahead	U	A		1	38	-	764	1924	834	91.6%	-	-	-	9.9	46.7	22.6
2/2+2/1	Station Road Right Left	U	D E		1	28:38	-	641	1654:1742	475+222	92.1 : 92.1%	-	-	-	9.3	52.3	15.9
3/1+3/2	A47 Uppingham Road East Ahead Right	U+O	B	C	1	48	4	824	1890:1643	901+132	79.8 : 79.8%	34	69	2	6.2	27.0	17.5

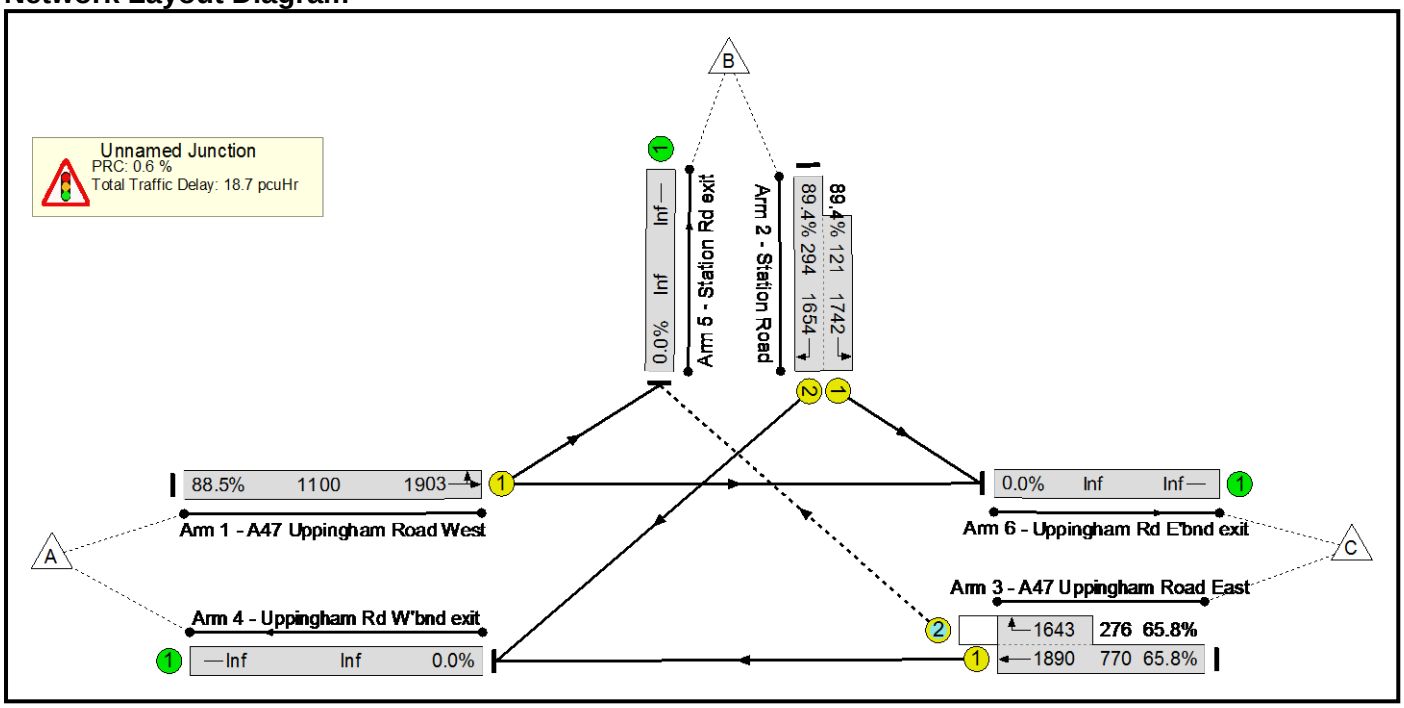
C1 PRC for Signalled Lanes (%): -2.3 Total Delay for Signalled Lanes (pcuHr): 25.38 Cycle Time (s): 90

PRC Over All Lanes (%): -2.3 Total Delay Over All Lanes(pcuHr): 25.38

Basic Results Summary

Scenario 12: 'Scenario 4b' (FG4: 'Redistributed Base + Dev Flows PM Peak', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction of A47 Uppingham Road and Station Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.4%**	**50**	**128**	**4**	**18.7**	**-**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.4%**	**50**	**128**	**4**	**18.7**	**-**	**-**
1/1	A47 Uppingham Road West Left Ahead	U	A		1	51	-	973	1903	1100	88.5%	-	-	-	8.1	29.9	24.4
2/2+2/1	Station Road Right Left	U	D E		1	15:25	-	371	1654:1742	294+121	89.4 : 89.4%	-	-	-	7.0	68.0	10.0
3/1+3/2	A47 Uppingham Road East Ahead Right	U+O	B	C	1	61	4	689	1890:1643	770+276	65.8 : 65.8%	50	128	4	3.6	18.9	6.7

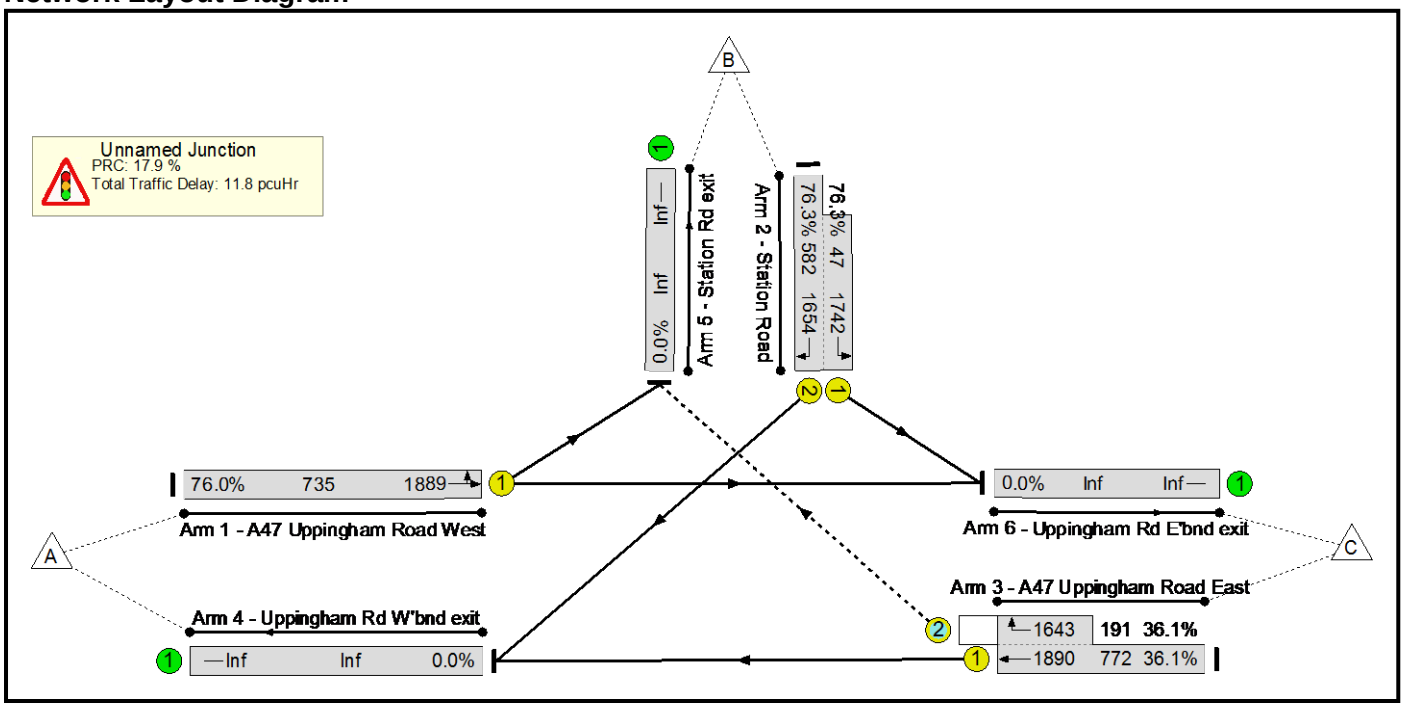
C1 PRC for Signalled Lanes (%): 0.6 Total Delay for Signalled Lanes (pcuHr): 18.70 Cycle Time (s): 90

PRC Over All Lanes (%): 0.6 Total Delay Over All Lanes(pcuHr): 18.70

Basic Results Summary

Scenario 13: 'Scenario 5b' (FG5: '2026 LLITM Flows incl. Land N of Scraptoft Dev AM', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction of A47 Uppingham Road and Station Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.3%**	**61**	**6**	**2**	**11.8**	**-**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.3%**	**61**	**6**	**2**	**11.8**	**-**	**-**
1/1	A47 Uppingham Road West Left Ahead	U	A		1	34	-	558	1889	735	76.0%	-	-	-	5.2	33.9	13.6
2/2+2/1	Station Road Right Left	U	D E		1	32:42	-	480	1654:1742	582+47	76.3 : 76.3%	-	-	-	4.8	35.6	11.4
3/1+3/2	A47 Uppingham Road East Ahead Right	U+O	B	C	1	44	4	348	1890:1643	772+191	36.1 : 36.1%	61	6	2	1.8	19.1	4.3

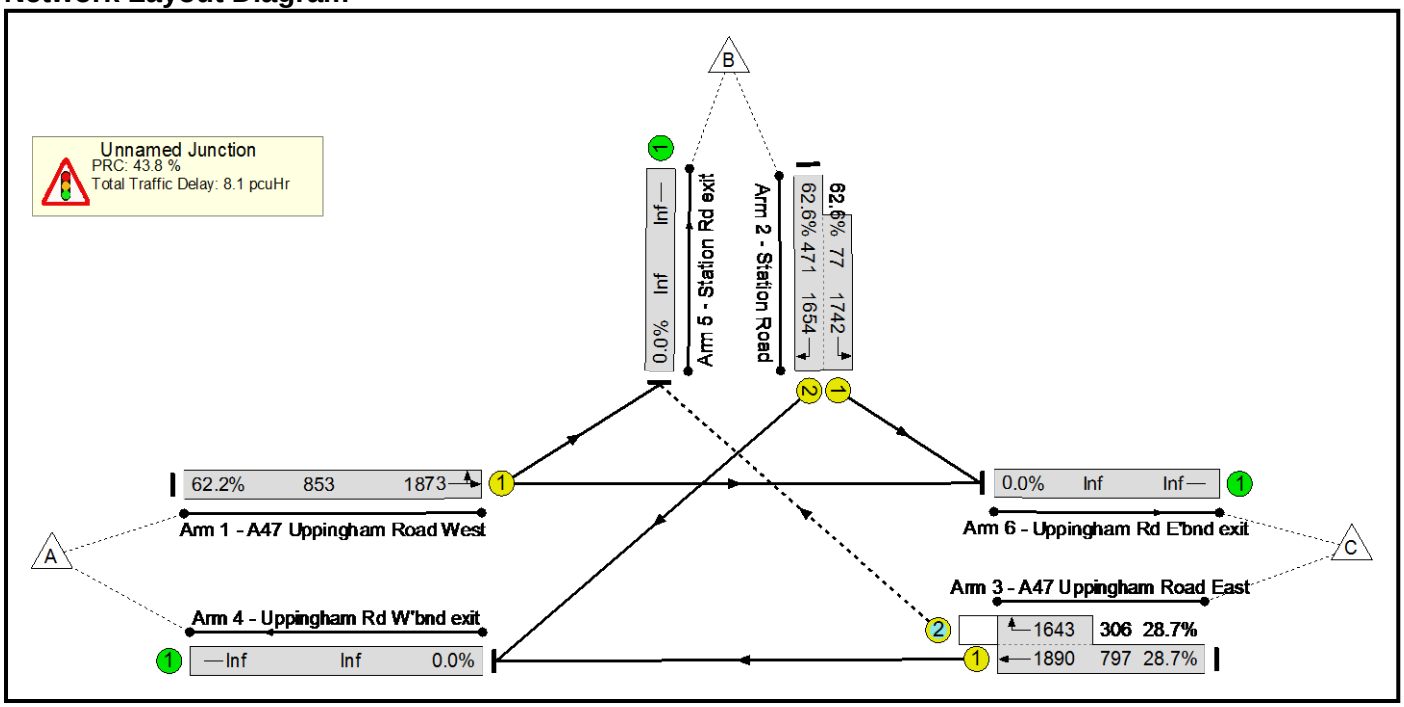
C1 PRC for Signalled Lanes (%): 17.9 Total Delay for Signalled Lanes (pcuHr): 11.85 Cycle Time (s): 90

PRC Over All Lanes (%): 17.9 Total Delay Over All Lanes(pcuHr): 11.85

Basic Results Summary

Scenario 14: 'Scenario 6b' (FG6: '2026 LLITM Flows incl. Land N of Scraptoft Dev PM', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction of A47 Uppingham Road and Station Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.6%**	**78**	**8**	**2**	**8.1**	**-**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.6%**	**78**	**8**	**2**	**8.1**	**-**	**-**
1/1	A47 Uppingham Road West Left Ahead	U	A		1	40	-	531	1873	853	62.2%	-	-	-	3.6	24.2	10.8
2/2+2/1	Station Road Right Left	U	D E		1	26:36	-	343	1654:1742	471+77	62.6 : 62.6%	-	-	-	3.2	34.0	7.1
3/1+3/2	A47 Uppingham Road East Ahead Right	U+O	B	C	1	50	4	317	1890:1643	797+306	28.7 : 28.7%	78	8	2	1.3	15.2	3.0

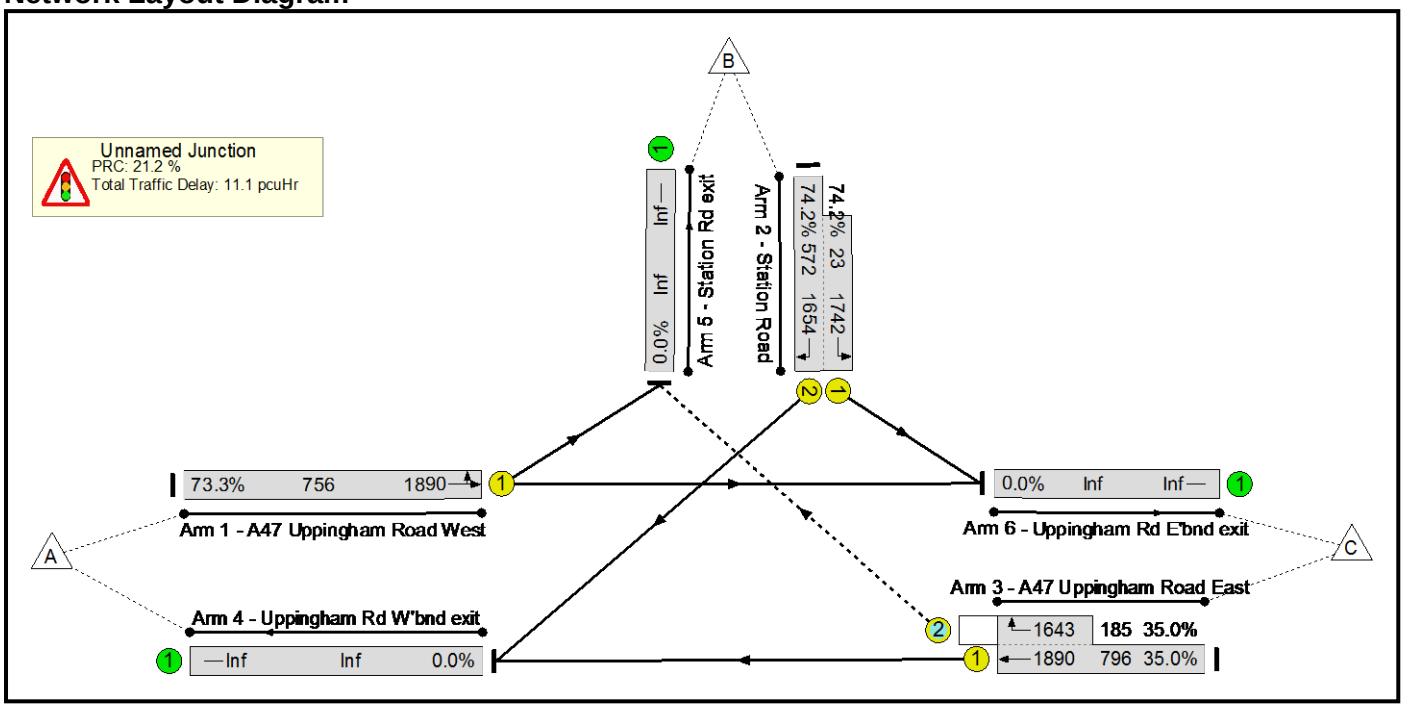
C1 PRC for Signalled Lanes (%): 43.8 Total Delay for Signalled Lanes (pcuHr): 8.14 Cycle Time (s): 90

PRC Over All Lanes (%): 43.8 Total Delay Over All Lanes(pcuHr): 8.14

Basic Results Summary

Scenario 15: 'Scenario 7b' (FG7: '2026 LLITM Flows incl. Land N of Scraptoft AM', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

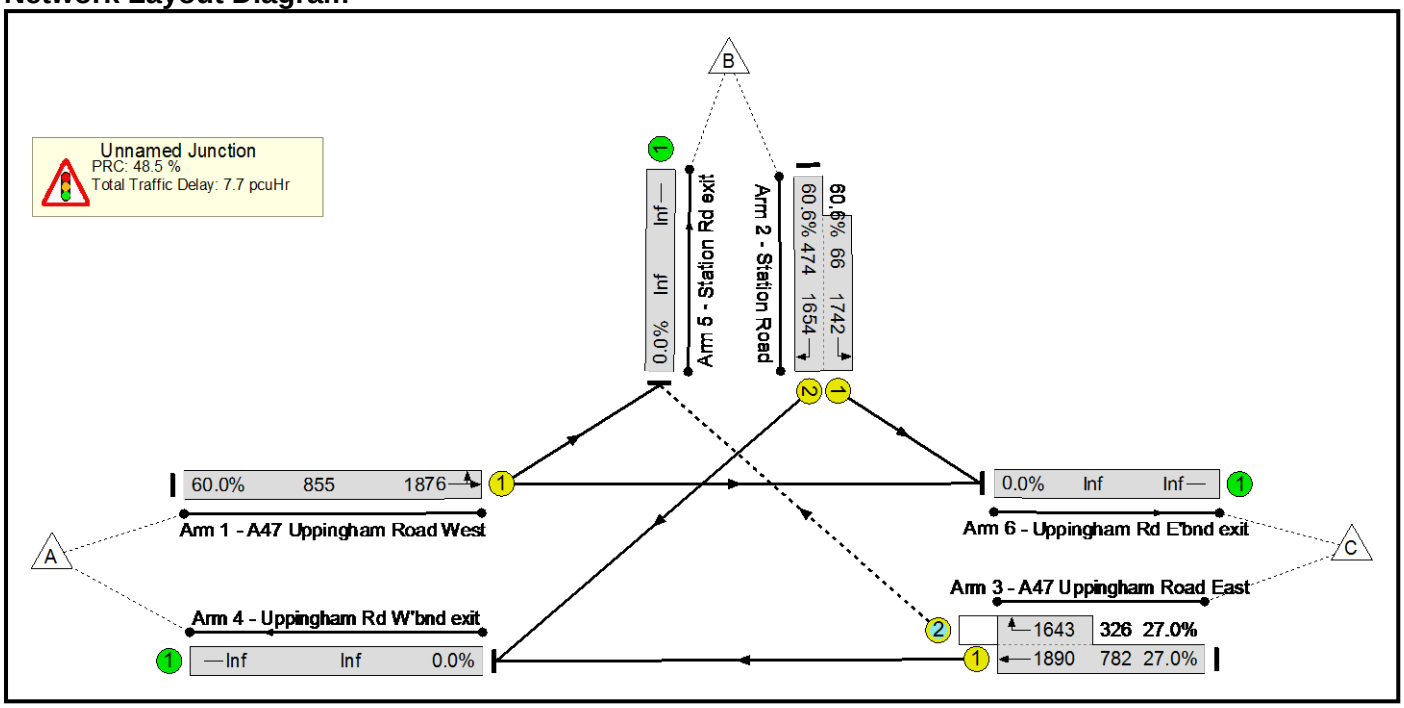
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction of A47 Uppingham Road and Station Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**	**58**	**6**	**1**	**11.1**	**-**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**	**58**	**6**	**1**	**11.1**	**-**	**-**
1/1	A47 Uppingham Road West Left Ahead	U	A		1	35	-	554	1890	756	73.3%	-	-	-	4.9	31.7	13.0
2/2+2/1	Station Road Right Left	U	D E		1	31:41	-	442	1654:1742	572+23	74.2 : 74.2%	-	-	-	4.4	36.2	10.7
3/1+3/2	A47 Uppingham Road East Ahead Right	U+O	B	C	1	45	4	344	1890:1643	796+185	35.0 : 35.0%	58	6	1	1.7	18.1	4.2

C1 PRC for Signalled Lanes (%): 21.2 Total Delay for Signalled Lanes (pcuHr): 11.06 Cycle Time (s): 90
PRC Over All Lanes (%): 21.2 Total Delay Over All Lanes(pcuHr): 11.06

Basic Results Summary

Scenario 16: 'Scenario 8b' (FG8: '2026 LLITM Flows incl. Land N of Scraptoft PM', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

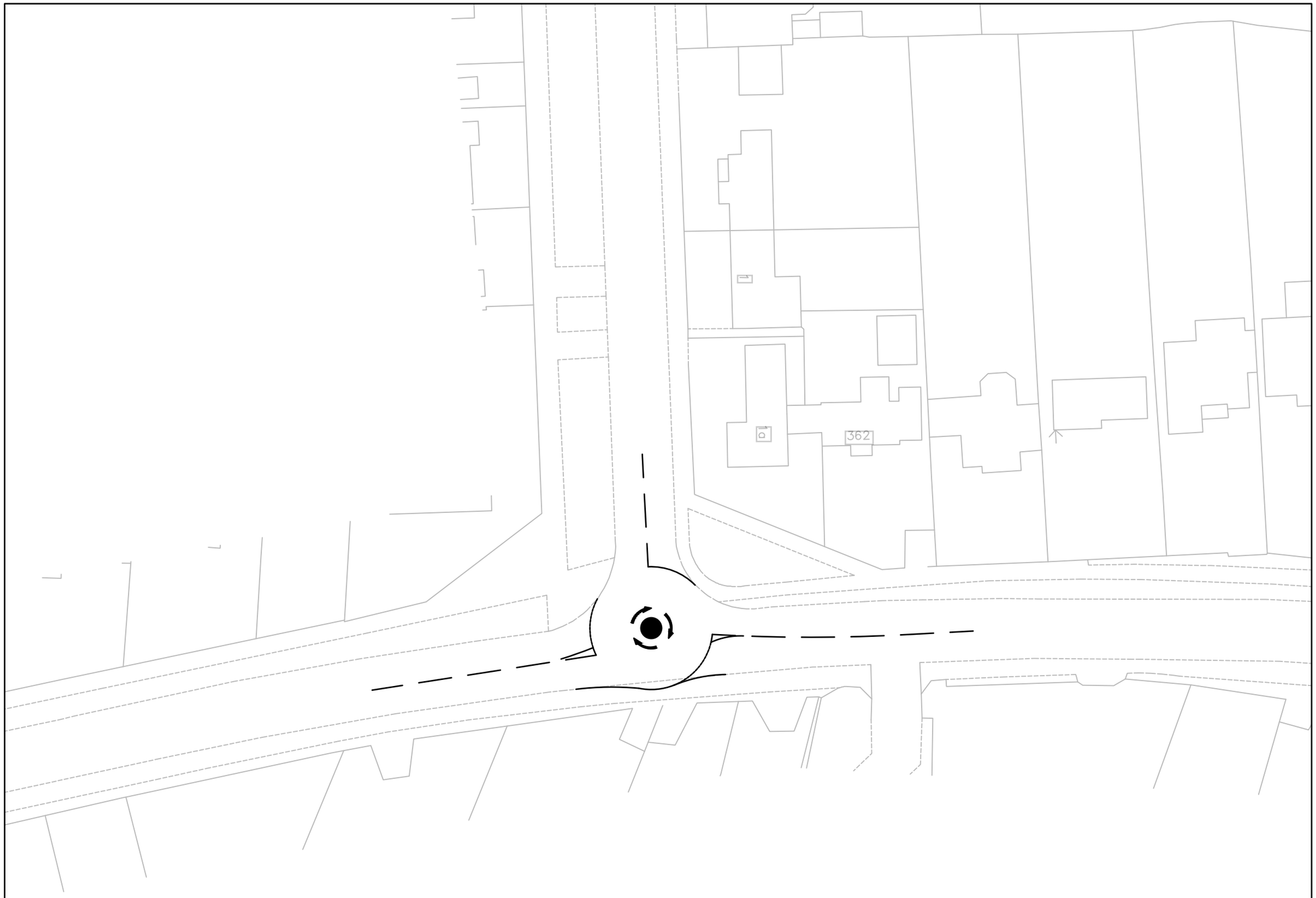
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction of A47 Uppingham Road and Station Lane	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.6%**	**78**	**8**	**2**	**7.7**	**-**	**-**
Unnamed Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.6%**	**78**	**8**	**2**	**7.7**	**-**	**-**
1/1	A47 Uppingham Road West Left Ahead	U	A		1	40	-	513	1876	855	60.0%	-	-	-	3.4	23.6	10.3
2/2+2/1	Station Road Right Left	U	D E		1	26:36	-	327	1654:1742	474+66	60.6 : 60.6%	-	-	-	3.1	33.8	6.8
3/1+3/2	A47 Uppingham Road East Ahead Right	U+O	B	C	1	50	4	299	1890:1643	782+326	27.0 : 27.0%	78	8	2	1.2	15.0	2.7

C1 PRC for Signalled Lanes (%): 48.5 Total Delay for Signalled Lanes (pcuHr): 7.68 Cycle Time (s): 90

PRC Over All Lanes (%): 48.5 Total Delay Over All Lanes(pcuHr): 7.68

APPENDIX H – POTENTIAL JUNCTION IMPROVEMENTS



NOTES

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Client Parkers of Leicester

Project Scraptoft

Title Romney Crescent/ Scraptoft Lane Proposed Mini Roundabout Arrangement

Status	Drawn By	Checked by
	MRA	BRP
Project Number	**Scale @ A3**	**Date Created**
JNY8843	1:500	09/06/2016

Drawing Number JNY8843 - 03

Rev

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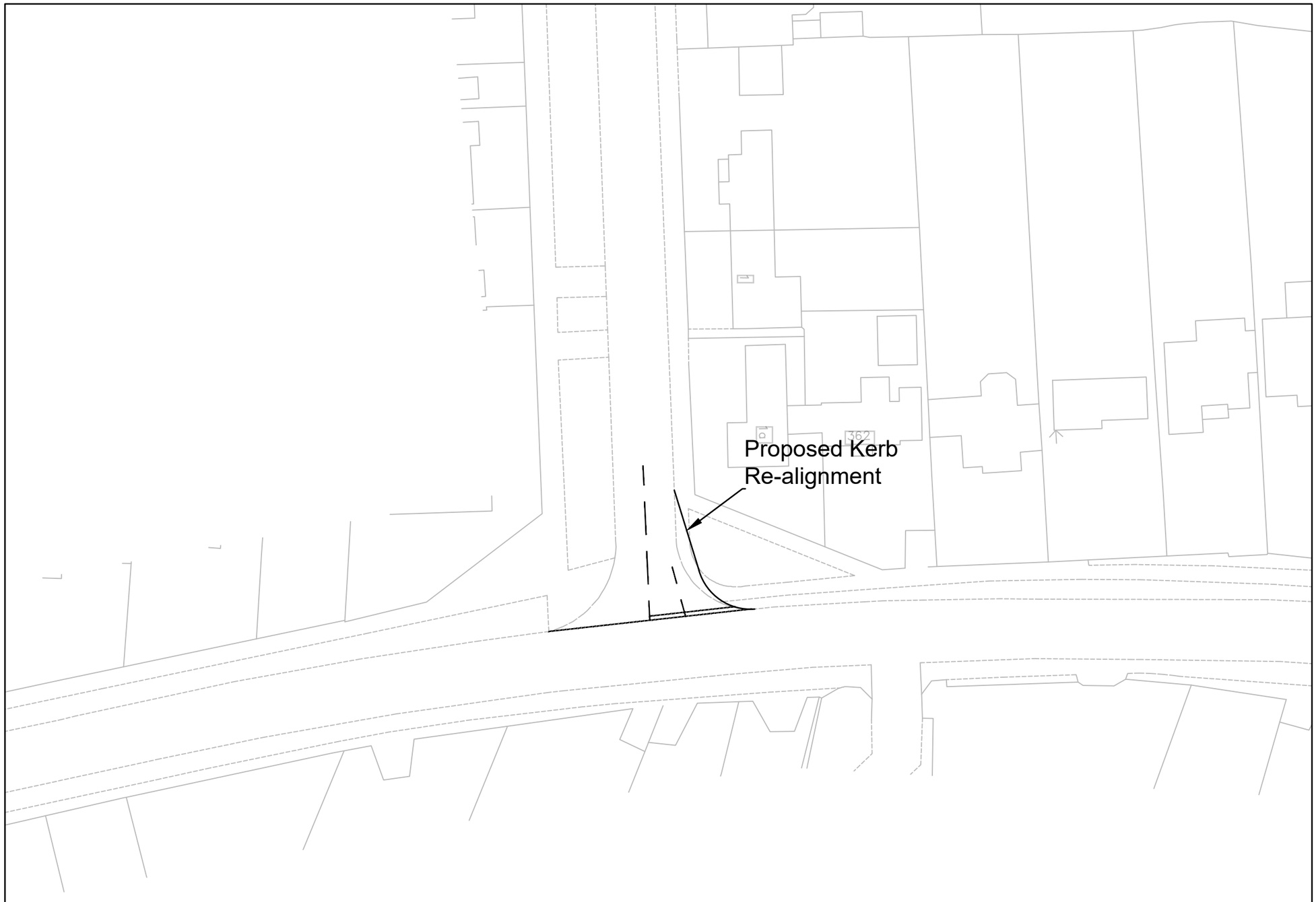

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Client Parkers of Leicester

Project Scraptoft

Title Romney Crescent/ Scraptoft Lane
Proposed Junction improvements

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Project Number	**Scale @ A3**	**Date Created**
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